Application No.: Exhibit No.: Witnesses: A.08-07-021 SCE-4 (Amended) G. Rodrigues



An EDISON INTERNATIONAL Company

(U 338-E)

SCE's 2009-2011 Energy Efficiency Program Plan Implementation Plans

Before the **Public Utilities Commission of the State of California**

Rosemead, California March 2009

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1. Program Name: On-line Buyer's Guide Program ID: SCE-L-001 Program Type: Core

2. Projected Program Budget Table

Table 1¹

SCE-L-001	Main Program Name / Sub-Program		Total Administrative Cost (Actual)		Total Marketing & Outreach (Actual)		Fotal Direct plementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)		
RESIDENTIAL											
	On-line Buyer's Guide	\$	292,463	\$	279,000	\$	788,537		\$	1,360,000	
	Market Research *	\$	219,347	\$	25,000	\$	27,317				
	Collateral *			\$	54,000	\$	81,952				
	Delivery *	\$	73,116	\$	200,000	\$	679,268				
	TOTAL:	\$	292,463	\$	279,000	\$	788,537	\$ -	\$	1,360,000	
	* Estimated budget allocation provided in this manner, per ED request. SCE does not budget or track program costs as indicated on this table.										

3. Program Description

a) Describe program

The On-line Buyer's Guide (OBG) is a new service and will provide SCE's residential customers with one web-based source for information and tools needed to overcome market barriers that prevent customers from purchasing energy efficient products and participating in energy efficiency programs. This guide will include technical information, a product database, a savings calculation tool, a shopping guide, rebate program information, and retailer information for products. The shopping guide includes customizable specifications for customers to print and take to the store.

The guide will provide an overview section that displays all energy efficiency products by category (e.g., appliances, heating and cooling equipment, lighting, etc.) with links to an informational discussion about the selected technology. Each technology category will start with a high level discussion on the product and what options are available in the market. With this basic understanding, the customer will be able to identify specific products of interest in the product database and use the calculator tools and rebate program information to figure out usage costs and potential savings.

<u>Total Administrative Cost</u> includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).

¹ Definition of Table 1 Column Headings:

<u>Total Direct Implementation</u> – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.

Total Marketing & Outreach includes all media buy costs and labor associated with marketing production. Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.

Total Budget is the sum of all other columns presented here

<u>Sub-Program</u>: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

Integrated with the technology discussion and shopper's guide, the portal will provide a link to all current applicable rebate programs and services offered by SCE, manufacturers and retail outlets. The shoppers guide will also explain the rebate requirements and provide downloadable or online applications to promote and facilitate IOU rebate program participation.

b) Statement of Problem and program solutions to overcome the problem

Promoting energy efficiency to the residential customer presents challenges but provides opportunities to promote energy efficiency and foster market transformation. Barriers continue to include lack of information or awareness of specific measures, technologies and practices. The OBG directly addresses the lack of transparency into the efficiency of many devices to bolster the decision-making shopping experience for consumers towards more energy efficient choices. The OBG is one of many pieces within SCE's portfolio designed to influence awareness to change attitudes and behaviors towards energy efficiency. In accordance with a goal of the California Long Term Energy Efficiency Strategic Plan (Strategic Plan), the On-line Buyer's Guide will seek to advance the awareness of comprehensive energy efficiency measures, in particular, those related to plug load efficiency. Consumers will also be kept informed with the latest innovations in residential energy efficiency.

c) <u>Program goals, strategies and measurable objectives</u>

The OBG will provide a portal for residential customers desiring a simple, yet interactive site to get comprehensive information about energy efficiency rebates and offers, programs and technologies in order to synergize customers to make informed decisions about energy efficiency. The program will consist of the following modules/components:

- Technology Discussion: An interactive experience intended to educate the customer on the state of technology in energy efficiency and what options are available in the market. This section will contain interactive diagrams and simulations to enrich customer awareness. In addition, the Technology Discussion module will integrate with the Topten USA internet based information system, which is modeled after a product currently available in Europe. The OBG will support the 'plug load' section of the Strategic Plan. This proposed tool for California customers will provide a guide to the most efficient products in a number of categories including televisions, appliances, computers, and even alternative fuel vehicles and will support the advanced metering initiative.
- Product Database: The product database will ultimately leverage existing third party product lists such as CEC, CEE, ARI and ENERGY STAR® and will provide specific product information as it relates to energy efficiency products in the market.
- Calculation Tools: A comprehensive calculation tool which will allow customers to estimate energy savings and other related savings for a variety of measures. Savings estimates will include all related kW, kWh, CO2 equivalent emissions to help increase public awareness of how more sustainably-informed product choices translate into the broader sphere of environmental impacts. This is a small

step towards shaping the public's perception of the broader importance of sustainability initiatives such as AB 32. In addition, to further reinforce the value of operational savings of more efficient choices, payback calculations will allow users to compare energy use across a range of products.

- Shoppers Guide: Will provide customers with product specific information in order to simplify the decision making process related to energy efficient purchases. The guide will provide a printable product shopping specification document and will provide the parameters to guide the customers energy efficient product purchases.
- Rebate/Incentive Programs: Integrated with the Technology Discussion and Shoppers Guide, the portal will provide a link to all current applicable rebate programs and services. The program will also explain the rebate requirements and provide downloadable or online applications to promote and facilitate rebate program participation. This component may also promote incentives available through demand response and CSI programs.
- Retailer List: The guide will provide up-to-date Retailer lists that provide energy efficient products and will provide retailer locations and availability of specific products intended to further enhance the customers' energy efficient buying experience.

d) <u>Target Audiences</u>

The OBG will target the Residential Sector. It is perceived the program will target 47% of the residential marketing broken down based upon SCE's Segmented Persona classification as outlined.

- Segment 1 (30%) Proactive savers and Conservers: Active money savers with high energy usage and high inquiry
- Segment 2 (17%) Conversationalists: Environmentally conscious customers with high energy usage

e) <u>Identify if and how this program will provide any elements of Workforce</u> <u>Education & Training</u>.

The OBG will not directly link to IOU WE&T efforts, however, a link on the OBG website will redirect inquiring participants towards broader IOU WE&T initiatives available.

4. Program Rationale and Expected Outcome

While the detailed goals will be defined as part of the design process, the conceptual goal of the OBG is to provide SCE's residential customers one location with all the information and tools to overcome the market barriers that prevent them from purchasing energy efficient products.

In addition the OBG will be an important component of future customer strategies with its "Self-Service" components. As SCE drives customers to a more independent and selfreliant approach to conserving energy and becoming more energy efficient, the program will provide easily-accessible information at the speed of the internet. The objectives of the OBG are outlined below:

- Increased knowledge and participation in DSM programs: The OBG will keep customers aware of the latest rebate offerings available by driving them to rebate and incentive offers. The program will also educate customers about residential appliances and equipment and how they affect their utility bills. The customers will have facilitated access to the survey program and energy usage data through the Home Energy Efficiency Survey (HEES) program.
- Provides a variety of new tools and services: a complete set of these tools (energy calculators, recommendations, etc) across all technologies currently does not exist for SCE's residential customers.
- Enhances Customer Experience (Self-Service): SCE customers have requested this tool for years, and using the OBG reduces the need for calls to the Customer Call Center (CCO) and inquiries via SCE.com. By providing customers instantaneous access to the information most relevant to their inquiry customer participation towards more sustainable energy choices is believed to be enhanced.
- Increased web presence: customers will be drawn to sce.com/energy efficiency for additional information on residential programs and other energy products/services.

a) If available, Quantitative Baseline and Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors, and can not be directly attributed to all program efforts. Specific market transformation metrics cannot be readily offered for this program at present.

Table 2 -Quantitative baseline metrics cannot be readily offered for this program

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors, and can not be directly attributed to all program efforts. Specific market transformation metrics cannot be readily offered for this program at present.

Table 3 – Market transformation metrics cannot be readily offered for this program

c) <u>Program Design to Overcome Barriers</u>

As defined as part of the design process, the conceptual goal of the OBG is to provide SCE's residential customers with direct access to all the information and tools needed to overcome market barriers that prevent them from purchasing energy efficient products. The objectives of the program are outlined below:

- New service Provide a useful tool to Californians that does not currently exist and is relevant to consumer needs in selecting the most efficient products available
- Ease of use a well designed online guide will make the information easy to access and disseminate

- Increased web presence customers will be drawn to the SCE website for additional information on other DSM programs, as well as providing a link to the statewide Topten USA website
- Increased rebate program participation customers will be aware of which energy efficient products qualify for SCE rebates
- Increased Home Energy Efficiency Survey Program participation customers will have facilitated access to the survey program and energy usage data.

d) **<u>Quantitative Program Targets</u>**

Table 4 – Targets to be provided when available.

e) Advancing Strategic Plan goals and objectives

In 2009-2011, the OBG program will align concepts to support the goals and strategies of the Strategic Plan as outlined:

- 2-1: Residential Sector including Low Income Deploy full-scale Whole-House programs The OBG will utilize the Technology Discussion Module to educate customers and will align information provided with the whole-house approach to guide customers towards the purchase of measures that promote plug-load efficiency.
- 2-2: Residential Sector including Low Income Promote effective decision making to create widespread demand for energy efficiency measures The OBG will endeavor to provide a platform to educate customers on the opportunities available for existing homes with whole-house programs. The program will utilize the Technology Discussion module and may integrate and direct customers to websites that provide targeted information. Drive customers toward making purchasing decisions towards energy efficiency projects.
- 2-3: Manage research into new/advanced cost effective Innovations to reduce energy use in existing homes The OBG will endeavor to provide a platform to educate customers on the opportunities available for existing homes with whole-house programs.
- 3-2: Residential Sector including Low Income In coordination with Strategy 2-2 above, develop public awareness of and demand for highly efficient products The OBG will aid in creating the public awareness and information to promote the purchase of more efficient products and create behavioral changes in the way products are perceived, used, and managed.
- 3-3: Residential Sector including Low Income Create demand for such products through market transformation activities The OBG will promote unbiased labels and Web sites such as Consumer Reports, and will support recommendations made my the Topten USA Initiative and other unbiased labels.
- 4-1: Residential Sector including Low Income Drive continual advances in lighting technology through research programs and design competitions The OBG will coordinate activities with other EE programs and retailers through the consumer electronics and rebate Programs to align information dissemination which will aid in developing public awareness and demand.
- 1-1: DSM Coordination and Integration Carry out integrated marketing of DSM

opportunities across all customer classes - The OBG will coordinate program objectives related to DSM and AMI Deployment as information becomes available. The Technology Discussion module may be used to educate customers on the AMI initiative specifics.

5. Program Implementation

a) Statewide IOU Coordination

i. Program name: On-line Buyer's Guide

ii. All program delivery mechanisms

The OBG will be a 100% web based program available thru the SCE.com portal. The program will also link to the HEES program available at SCE.com.

iii. Marketing materials and message

Collaboration with residential energy efficiency programs will be coordinated prior to launch and monitored throughout the program cycle. The OBG will develop a marketing campaign to promote this service to help customers make wise purchasing decisions for energy efficient products.

iv. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs, CBOs, non-governmental organizations, manufacturers, retailers, trade and business associations, as applicable

This website will coordinate with CEC, ARB, AQMD, local governments, and other stakeholders to ensure customers receive the comprehensive information on energy efficient products.

v. Similar IOU and POU programs

Other IOU's and POU's have begun providing services and information to customer's on-line similar to the offerings to be provided by the OBG. Florida Light and Power (FPL) as well as SMUD have dedicated website links that allow customers to purchase energy efficiency equipment or increase energy efficiency awareness. SCE's OBG aims to become the benchmark with its efforts, and will work with other utilities to expand this initiative. SCE may be interested in a shopping cart similar to FPL website, which allows customers to purchase energy efficient equipment

FPL Online Store Link: http://www.energyfederation.org/fpl/default.php

SMUD Educational Link:

http://www.smud.org/en/education-safety/Pages/index.aspx

b) Program delivery mechanisms

i. Funneling of program participants to resource programs

OBG will direct customers to participate in other resource programs e.g. HEER, ARP to increase participation in those programs.

ii. WE&T

The OBG will not directly link to IOU WE&T efforts, however, a link on the OBG website will redirect inquiring participants towards broader IOU WE&T initiatives available.

iii. Coordination with other programs

OBG will coordinate with the HEES program in particular and other DSM programs to encourage the adoption of energy efficiency measures e.g., residential rebates and incentive programs.

iv. Demand-side integration

The program will be implemented in close association with other DSM programs. OBG will be another starting point for residential customers to tap into the IOU's residential energy efficiency services. Through marketing, education and outreach, each program will encourage end-users to adopt multiple measures to gain the benefits associated with an integrated whole-house approach to energy efficiency.

v. Non-IOU programs

The program will promote non-utility programs (e.g. financing options, tax credits, and recycling) to further encourage customers to adopt energy efficiency measures.

vi. Other Not applicable

c) Marketing Plan

i. Market research and/or segmentation Not applicable

ii. Proposed behavior change theories application, if available

Behavior changes will include increased penetration of energy efficiency measures, purchase and installation of EE equipment, reductions in kW and kWh, and increased knowledge and awareness of energy efficient equipment and reduce market barriers.

iii. Proposed target audience/s, if applicable both primary and secondary

Residential customers in the market to replace or purchase new appliances or equipment for the home.

iv. Message development process, including pre-tests

Collaboration with residential energy efficiency programs will be coordinated prior to launch.

v. Delivery channels, if applicable include public relations and earned media activities

Online website, direct mail, and coordination with other residential energy efficiency and DSM programs.

vi. Plans for developing message concepts

Collaboration with residential energy efficiency programs including electricity, gas and water will be coordinated prior to launch and refined throughout the program cycle, as appropriate.

vii. Implementation timeline

- Program Launch Notice to proceed (NTP) + 5 days
- Milestone 1 The development of the Product Specifications NTP + 6 Months
- Milestone 2 Content Development and Interaction Design NTP + 9 Months
- Milestone 3 Software Development NTP + 12 Months
- Milestone 4 Program Launch (Version 1.0) NTP + 12 months

d) <u>Best Practices</u>

Although OBG will incorporate best practices, the program will utilize focus groups to ensure that it meets customer's expectations. The program will provide multiple levels of detail, clear printable specification sheets, and simple interactive tools.

e) <u>Innovation</u>

The OBG will provide customers with diagrams that explain how the technology works and fits in the home. It will also provide them with a comprehensive specification sheet that highlights the energy efficiency features (along with savings information) so that they know what products to buy and where to buy them.

f) Integrated/coordinated Demand Side Management

As designed, the current program will be focused on energy efficient products. In the future, the "Technology Discussion" module within the OBG site may either link or be used to educate customers on applicable AMI and DSM technologies, initiatives, and programs.

g) <u>Integration across resource types</u> (energy, water, air quality, etc.)

In conjunctions with the HEES program, the OBG program will pursue alliances with local municipalities and water agencies, as appropriate, and will promote energy conservation options across resource types.

h) <u>Pilots</u>

On-line Buyer's Guide is a new initiative

i) <u>EM&V</u>

The program is designed to incite action—to inform participants of opportunities to save money and provide resources to execute the recommendations. Some of the key objectives of the evaluation will be to measure how well the OBG is resulting in customer conservation actions, identify drivers of customer satisfaction, and collect suggestions for making the program more user-friendly.

The utilities plan to work together and with the Energy Division to develop a complete plan for 2009-2011 studies and budgets after the program plans are finalized and filed. This plan will be submitted to the CPUC in time for approval along with the program implementation plans.

Detailed plans for process evaluations and other evaluation efforts specific to this program will be developed after the final program design is approved by the CPUC and program implementation has begun, since final plans will be based on identified program design and implementation issues and questions. However, a brief description of the current, preliminary plans is provided here.

The OBG program has planned a preliminary process evaluation near the end of the first program year to address specifically how well the new program is being implemented, and to obtain recommendations on how to improve program operations. After the beginning of the last program year, a full process evaluation will address researchable issues based on the program theory and logic model. These issues will include the following:

- 1) How well OBG utilized best practices in web-based buying guides
- 2) How easy the OBG website was for customers to use
- 3) How easy it was for OBG visitors to adopt purchase recommendations
- What other barriers to adoption might exist after a customer visits the OBG website
- 5) Whether customers have other information needs after visiting the OBG website
- 6) Whether more customers were aware of IOU rebate programs
- Whether more customers understand the effect of residential appliances' contribution to their utility bills
- 8) Whether OBG's marketing efforts with programs such as HEES were wellcoordinated

To address these issues, the following major evaluation tasks will be completed:

- Logic model and program theory: The logic model and program theory will establish a starting point for all evaluation activities. The structure of the logic model, which links program activities and expected outcomes, will be a useful instrument for identifying specific program assumptions that can be tested using a survey or other primary data collection activities.
- In-depth interviews: In-depth interviews will be conducted with program managers and other key staff members. Program staff members will clarify program goals and gauge program progress, provide valuable insight into daily operations, and proposed research topics to be addressed during the evaluation.

- Participant survey: The primary data collection instrument will be a customer opted participant survey, fielded online. The survey will explore the participant experience with program services and address the research issues identified by the logic model to provide more in-depth interviews. When appropriate, results will be examined by survey mode (mail-in, online, in-home, and phone) to investigate how participants in the various modes compare with regard to the most effective marketing strategies, recommendation implementation rates, and measures of satisfaction.
- Program-specific data collection and review: Another key evaluation activity will involve a comprehensive review of all program documents. In particular, this evaluation will assess the effectiveness of the program's marketing materials and will identify which specific recommendations have been implemented. In addition, website tracking mechanisms will be employed to determine participation volume and trends.

6. Diagram of Program



7. Program Logic Model



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1. Program Name:Financial SolutionsProgram ID:SCE-L-002Program Type:Core

2. Projected Program Budget Table 1

							Integration Budget			
			Total			Total Direct		Allocated to other		
			Administrative Cost	t Total Marketing &		Implementation		Programs (If	grams (If Total Bud	
SCE-L-002	Main Program Name / Sub-Program		(Actual)	Outreach (Actual)		(Actual)		Applicable)	Program (Actual)	
NONRESIDENTIAL										
	Financial Solutions		\$ 3,030,498	\$ 1,2	217,035	s	19,730,468		\$	23,978,000
	<u></u> <u>T0</u>	TAL:	\$ 3,030,498	\$ 1,2	217,035	\$	19,730,468	\$-	\$	23,978,000

3. Projected Program Gross Impacts Table – by calendar year *Not Applicable, non-resource program.*

4. Program Description

a) <u>Describe program</u>

SCE's proposed Financial Services program is a non-resource program that provides customers additional options for financing energy efficiency projects. The program will be offered in conjunction with other core SCE programs to stimulate and enable higher levels of customer participation. This program supports the Strategic and complies with CPUC orders¹ on 2009-2011 IOU energy efficiency programs.

Program elements are the following:

- Nonresidential On-bill financing (OBF)
- Nonresidential third-party EE loan program
- AB811 energy efficiency for cities and counties
- Financial Services Working Group

OBF builds upon the experience of SCE's 2006-2008 pilot program, which provided financial assistance through direct installation of energy efficiency measures for small commercial customers (convenience and small grocery stores). OBF will be offered through other SCE programs, thereby facilitating the expansion of OBF in alignment with the Strategic Plan's Commercial Sector Strategy 2-6, (see Section 5.e below).

The Non-residential Third-Party EE Loan Program is a third-party implemented program to provide financial support for leasing or financing of projects costing more than \$25,000.

Through AB 811 support, SCE will work with jurisdictions that fall under AB811 to help inform local decision makers about the legislation, which provides for "financing" of energy efficiency projects via property tax bills and to identify financial sources to be tapped for energy efficiency projects.

¹ September 17, 2007 Interim order (R-06-04-010).

SCE commits to joining a statewide Financial Services Working Group to assess future options for financing, as well as addressing other financing issues to help transform the market in California. Residential OBF will be evaluated in coordination with the Financial Services Working Group (consistent with Strategic Plan, Section 2 Residential Sector Strategies 1-4 and 2-4, see Section 5.e, below). This also complies with the September 17, 2007 Interim Order for "…an evaluation of prospects for on-bill financing programs for residential customers…"²

SCE is also presently seeking qualified consultants and advisors to provide an up-todate evaluation of best practices in the financing of residential DSM projects, the current market for traditional third- party financing of residential DSM projects, and alternative, creative financing vehicles for residential DSM projects.

Financing can help promote accelerated investment in energy efficiency in several ways:

- 1. By moving the market: Financing can move the market by both accelerating investment and enabling investment in EE that is cost-effective but that otherwise would be delayed or not made at all;
- 2. By reducing barriers: Following from above, financing can have the effect of removing barriers that can keep EE from growing from small-scale to more mass-scale; and
- 3. Adding to a well rounded portfolio: Financing is a critical element that has the effect of increasing the power and reach of all other program elements.

The Financial Solutions program will be coordinated with the other IOUs, financial institutions, and both the CPUC and CEC. The program is local because the actual offerings will vary by service area, depending on local financial institutions and customer needs.

While SCE intends to gain valuable experience from further evaluation of financing options, there is already local and other experience upon which to call.. OBF programs are offered by several utilities throughout North America³. While utilities in Canada have consistently offered financing for energy efficiency investments, only a handful in the U.S. are currently offering such an option. In general, the primary operating principles for these utilities include:

- Offering a combination of loan and incentive;
- Structuring the package to result in a relatively short payback period; and
- Restricting participation to customers with very good credit histories.

² D.07-10-032, Ordering paragraph 20.

³ Small Business Energy Advantage, an ENERGY STAR® award winning program offered by United Illuminating (UI); National Grid PAYS® program; other programs offered by BC Hydro, First Electric Cooperative, Manitoba Hydro, NW Natural Gas, Maui Electric Co., Midwest Energy, New Hampshire Electric Cooperative, Efficiency Vermont and NYSERDA (non-exhaustive).

Program Elements

 <u>The Nonresidential OBF Program</u> will offer zero-interest financing for installation of qualifying energy-efficient lighting, refrigeration, and air conditioning measures by commercial and governmental institutions customers. This program is a non-resource program that provides OBF as a tool for other SCE programs offered to individual customers in the commercial and industrial market segments, and through the local government partnership program.

Participating customers will be pre-qualified for a loan based on the customers' utility bill and payment history. The length of the loan will vary, depending on the customer segment and measure life. In general, however, business loans are typically limited to a 5-year term and government loans are limited to a 7-year term.

Small business loans have a minimum financed amount of \$5,000 and a maximum financed amount of approximately \$50,000; government institutions loans will be capped at approximately \$250,000. The maximum amount for governmental institutions customers may vary by partnership, and will be evaluated on an individual basis to assess the merits of exceeding the guidance-amounts stated.

- 2. <u>The Nonresidential EE Loan Program</u> is a third-party non-resource program that will provide third-party asset-based leasing and/or project financing to customers who are implementing energy efficiency projects for which out-of-pocket costs are greater than \$25,000. The financing is in the form of a loan through the third-party, and is not on-bill financing. The program's ultimate objective is to simplify the financing of projects, thus making customer adoption of energy efficiency measures easier. The aim of the program is fundamentally to deal with barriers to investment. Thus, SCE will:
 - Dedicate resources to packaging EE projects (on behalf of customers) in a manner that middle-market lending institutions will be able to easily comprehend and review;
 - Build relationships with third-party financial institutions that not only have an understanding of EE projects, but also have special business interests and core competency in middle-market and asset-based and leasing; and
 - Dedicate resources to leveraging the experience of outstanding public sector and non-government organization financing programs into the Nonresidential EE Loan Program.

The Nonresidential EE Loan program will employ a loan origination and packaging business model. To bring this to full operation, several major short-term action steps will be taken:

- Analysis and characterization of historical EE projects in an effort to establish benchmarks, standard profiles, similarities, project installation terms, and dollar values;
- Outreach to third -party financial institutions to explain the program and to assess and establish level of interest;
- Establishment of formalized relationships with third- party financial institutions to underwrite qualifying EE projects;
- Development of training and collateral materials establishing general standards and requirements for the program; and
- Establishment of needs requirements and development of corresponding infrastructure and internal business processes to:
 - Filter all proposed or new EE projects to assess suitability for the program;
 - Package loan applications; and
 - Provide for ongoing interface with participating financial institutions, and close out the loan origination and application process.
- 3. <u>AB 811 Energy Efficiency for Cities and Counties</u> is California's 2008 legislation to empower municipalities to fund installation of energy efficiency upgrades to an existing residential, commercial, industrial, or other real property. The program will authorize all cities and counties in California to designate areas within which a willing property owner could enter into contractual assessments to finance the installation of distributed renewable generation, as well as energy efficiency improvements, that are permanently fixed to the property- owners' residential, commercial, and industrial or other real property. Financing arrangements will allow property owners to finance renewable generation and EE improvements through low-interest loans that would be repaid as item on the property owner's property tax bill.

This program cannot be used to finance the purchase or installation of appliances that are not permanently fixed to real property. However, through the process of qualifying a property owner, any eligible improvement, such as refrigerators, can be referred to the relevant SCE program for incentives. The process for attempting to capture these opportunities will be worked out through the partnership program

SCE'S role in making the most of this important legislation will evolve. First and foremost, SCE will work to inform municipalities about the opportunity to deliver, market, inform, and qualify customers. In addition, through the partnership program, SCE will work on specific action plans for each partnership, including establishing or coordinating through the right institutional structure to effectively execute a program. SCE expects to apply lessons learned in this respect from the successful Palm Desert Demonstration Partnership.

SCE is also pursuing loan guarantees through the U.S. Department of Energy's (DOE) Federal Loan Guarantees for projects that employ innovative

technologies in support of the Advanced Energy Initiative program, to backstop banks who may feel this new type of municipal bond is too great a risk in today's economic climate. If our application is successful, the DOE Federal Loan program guarantees the loan, should the city default on repayment of the bond.

4. Financial Services Working Group

The Strategic Plan identifies financing as a priority. In several sections, but especially in Section 2, Residential Sector Including Low Income, financing is discussed as an enabler of energy efficiency market transformation. Strategy 1-4 calls for the creation of a task force of financial experts to develop attractive financial products. SCE plans to help establish, and then actively participate in a Financial Services Working Group.

Similar to the proposed Integrated DSM Task Force, SCE expects a series of regular meetings of IOUs, including their financial staff, as well as representatives from the CPUC, especially the Energy Division. It is anticipated that one commissioner will join the Financial Services Group.

Since approximately 1981, SCE has gained perspective on financing in the residential market. Some of this experience is discussed in SCE's testimony in this proposal for 2009-2011 programs. The Financial Services Working Group will add to this experience and, potentially, identify new avenues for using financing to move the residential energy efficiency market.

- a) List measures: Not Applicable, as this is a non-resource program. See measure listings in the Commercial, Industrial, Local Government and Institutional Partnership PIPs.
- *b)* List non-incentive customer services: *Applies to entire Financial Solutions* program.

5. Program Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors, and can not be directly attributed to all program efforts. Specific market transformation metrics cannot be readily offered for this program at present.

 $\label{eq:table3-Quantitative baseline metrics cannot be readily offered for this program$

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors, and can not be directly attributed to all program efforts. Specific market transformation metrics cannot be readily offered for this program at present.

 $\label{eq:table4-Market transformation metrics cannot be readily offered for this program$

c) <u>Program Design to Overcome Barriers</u>

Efforts to promote AB811, as well as develop either on-bill or other residential financing options focus on the following identified barriers:

Barriers:

- Lack of capital funds;
- First-cost financing barriers significantly reduce the participation of residential customers in energy efficiency programs; and
- The high first-costs for long-life mechanical systems (HVAC, water heating, etc) and building shell measures (windows, insulation, etc) often limit residential sector participation in energy efficiency programs to low-cost, shot-life measures (for example, CFLs, or thermostats, etc).

Program Design Elements to eliminate barriers:

- Financing through the utility bill will be expected to remove these barriers by allowing customers to spread out the efficiency measure first-costs over a period of time.
- Financing packages tailored to incorporate efficiency measure bill savings and useful life term periods can render overall net reductions in consumer monthly bills.
- Financial solutions would be offered in conjunction with core IOU incentive programs in a manner to remove remaining economic barriers not mitigated through incentive payments.

SCE will coordinate through the Financial Services Working Group to assess various approaches for residential customer energy efficiency financing (see section 5.e, below).

The nonresidential sector financing program element addresses the following priority barriers with program design elements to overcome identified barriers:

Barriers:

- Lack of capital
- Small business cash flow issues
- Small business unwillingness to take out loans
- Paperwork / complicated & invasive loan applications
- Competing use of credit lines (core business operational needs vs. efficiency upgrades)
- Some sectors lack access commercial credit providers (i.e., governmental institutions)

Program Design Elements:

• Non-residential finance offerings described herein are provided to all nonresidential customer segments, including governmental institutional customers.

- Financing through the utility bill is expected to remove these barriers by allowing customers to spread out the efficiency measure first-costs over a period of time.
- Financing packages tailored to incorporate efficiency measure bill savings and useful life term periods can render overall net reductions in consumer monthly bills.
- The Financial Solutions program will be offered in conjunction with core IOU incentive programs in a manner to remove remaining economic barriers not mitigated through incentive payments.
- OBF or third-party asset-based lease financing can constitute off-balance sheet financing, preserving customer credit lines for core business operations

d) **<u>Quantitative Program Targets</u>**

 Table 5 – Targets to be provided when available.

e) Advancing Strategic Plan goals and objectives

The residential sector OBF program element supports the following Strategic Plan near- term strategies and actions steps:

Section 2 Residential Sector Including Low- Income:

- Strategy 1-4: Develop innovative financing programs for the construction of energy efficient homes; Near- Term 2009 2011 action steps:
 - Convene a task force of financial experts to develop attractive financial products for energy efficiency homes.
 - Implement options.
- Strategy 2-4: Develop financial products and programs such as OBF to encourage demand for energy efficiency building products, homes systems, and appliances; Near- Term 2009 2011 action steps:
 - Develop partnerships for innovative financing programs, such as performance contracts and City of Berkeley's solar and EE property loans.
 - Investigate the feasibility of OBF and other lending products.
 - Convene working group with attention to issues of multi-family housing and paying for actions with longer-term paybacks.
- Strategy 3-2: In coordination with Strategy 2-2, above, develop public awareness of and demand for highly efficient products; Near Term 2009 2011 action steps:
 - Complete initial market research including identification of customer decision triggers for choosing highly energy efficiency devices.

The Nonresidential program supports the following Strategic Plan near -term strategies and actions steps:

Section 3 Commercial Sector:

- Strategy 2-6: Develop effective financial tools for EE improvements to existing buildings; Near Term 2009 2011 action steps:
 - Continue OBF Program and Third Party Program
 - Explore expanding on-bill financing offerings to other DSM programs as part of Working Group agenda

Through the program, customers are able better able to take advantage of energyefficient lighting, refrigeration, and air conditioning measures.

6. Program Implementation

a) Statewide IOU Coordination

i. Program name: Financial Solutions

ii. Program delivery mechanisms

In terms of OBF, much of the necessary infrastructure has been created through the 2006 - 2008 pilot program. Thus, program ramp-up time will be brief. The process of billing and updating accounts will be close to being fully automated (in the billing system) by the start of the 2009 - 2011 program cycle.

The program will maintain a financial account to provide funds for the portion of a project to be financed. On a monthly basis, customer payments toward the financed amount will be credited back to this account and reissued to other customers needing loans. Historically, the default rates of OBF for business customers by other utilities have trended lower than the rates of normal loans. However, defaulted loans will be debited from ratepayer funds.

iii. Incentive levels: Not Applicable

iv. Marketing and outreach plans

The program will coordinate with other SCE core programs to market OBF to program participants. Marketing materials will be provided to other programs for distribution to customers. Interested customers will be pre-qualified, based on eligibility criteria and the customer's payment history.

v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable: Not directly applicable

vi. Similar IOU and POU programs

The other IOUs plan to offer financing solutions for the 2009-2011 program cycle. SCE will coordinate with other IOUs to make program offerings similar, especially for IOUs with overlap in coverage area (e.g. SCG and PG&E), to avoid confusion for customers. SCE intends to work closely with other IOUs through coordination calls and meetings to ensure as much consistency as possible among different programs.

b) **<u>Program delivery and coordination</u>**

- vii. Emerging Technologies program NA
- viii. Codes and Standards program NA
- ix. WE&T efforts NA
- x. Program-specific marketing and outreach efforts NA
- xi. Non-energy activities of program Non-resource
- xii. Non-IOU Programs NA
- xiii. CEC work on PIER NA except to promote "affordability," a PIER priority
- xiv. CEC work on codes and standards NA
- xv. Non-utility market initiatives NA

c) <u>Best Practices</u>

Best practices are discussed above in Program Elements. SCE has identified other IOU financing programs to study, and has conducted its own evaluations in best practices. See SCE Testimony for this Application (Local Financial Solutions Program)

d) <u>Innovation</u>

This program supports innovation by introducing new tools to move the market and by investigating additional tools via the Working Group.

e) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result, they have proposed the establishment of a Statewide Integration Task Force (Task Force). The Financial Solutions program plans to monitor the progress of AB811 and to work closely with the Task Force to identify comprehensive integration approaches that feed into the overall statewide strategy and to implement best practices as rapidly as practical.

f) Integration across resource types (energy, water, air quality, etc)

No directly applicable, but opportunities can be discussed to develop tools to capture multiple initiatives through a single loan

- g) **<u>Pilots</u>** Not Applicable
- h) EM&V To be developed

7. Diagram of Program



8. Program Logic Model



3

Integrated Demand Side Management Pilot for Food Processing

1. Program Name: Integrated Demand Side Management Pilot

for Food ProcessingProgram ID:SCE-L-003Program Type:Core

2. Projected Program Budget Table

Table 1

			Total Administrative Cost		Total Marketing &		Fotal Direct plementation	Integration Budget Allocated to other Programs (If	Total Budget By	
SCE-L-003	Main Program Name / Sub-Program		(Actual)		Outreach (Actual)		(Actual)	Applicable)	Program (Actu	ual)
NONRESIDENTIAL										
	Integrated Demand Side Management Pilot for Food Processing	S	44,475	S		\$	649,525		\$ 694,	,000
	TOTAL:	\$	44,475	\$	-	\$	649,525	\$ -	\$ 694,	,000

3. Projected Program Gross Impacts Table (by calendar year)

Not Applicable, non-resource program.

4. Program Description

a) **Program Description**

The Integrated Demand Side Management (IDSM) Pilot for Food Processing Program is a non-resource program. Industry, trade allies, and other partners promote integrated energy management solutions to end-use customers in the food processing and refrigerated warehouse segments. Targeted customers include:

- Agricultural post-harvest processors (*e.g.*, ginners, nut hullers, and associated refrigerated warehouses);
- Fruit and vegetable processors (*e.g.*, canners, dryers, and freezers);
- Prepared food manufacturers;
- Wineries; and
- Other beverage manufacturers.

The program's integrated approach combines audits for traditional measures such as energy efficiency retrofits and upgrades with strategies to assist customers in managing or reducing their energy demand during peak periods. By combining these approaches, the customer receives a comprehensive solution for managing energy costs. This helps SCE respond to peak energy demand.

While the program implementation focuses on energy efficiency, it also emphasizes integrated solutions in proper sequence (energy efficiency solutions, then demand response solutions) to support the most cost-effective and satisfactory energy and financial solutions for all customers. Each project receives a comprehensive Demand Side Management (DSM) audit that provides recommendations on how to implement DSM, and the channels, trade allies and specific SCE programs) through which the measures will be installed.

b) <u>Measures</u>

The program promotes these measures to its customers:

- Compressed air
- Motors, pumps, variable frequency drives
- Refrigeration
- Efficient boilers and chillers
- Lighting retrofits with demand reduction and response controls
- Efficient fruit and vegetable dryers and dehydrators
- Industrial water reduction to reduce energy in pumping and wastewater treatment
- Automation of precision temperature control
- Replacement of mechanical processes with bio-based processes, and
- Efficient process separation technologies.

c) <u>Non-Incentive Customer Services</u>

Non-incentive customer services include:

- Audit for a comprehensive set of measures in demand-side management
- Information services
- Technical assistance
- Water and wastewater treatment savings potential, and
- Analysis of greenhouse gas (GHG) reductions associated with the measures.

5. Program Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors, and can not be directly attributed to all program efforts. Specific market transformation metrics cannot be readily offered for this program at present.

Table 3 -Quantitative baseline metrics cannot be readily offered for this program

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors, and can not be directly attributed to all program efforts. Specific market transformation metrics cannot be readily offered for this program at present.

Table 4 – Market transformation metrics cannot be readily offered for this program

c) <u>Program Design to Overcome Barriers</u>

Core, statewide industrial and agricultural programs are designed to overcome specific financial barriers. This pilot program addresses market-specific barriers that have prevented greater penetration into the food processing industry.

Agricultural post-harvest processors and food processing industry customers have specific needs that cannot be addressed by incentive programs alone. For example, these customers have critical operations that may be seasonal in nature. They may own leased equipment agreements with split incentives issues, for example, the customer may not own the equipment, but pays the operational costs). On-bill financing (OBF)options can help to address the seasonal operations issue by spreading the cost of efficiency upgrades over several seasons. The leased equipment issue can be addressed through energy efficiency equipment leases. Both options will be explored further as the program design is finalized and solicited through the third-party process.

Food Processing Sector Barriers

- International competition drives short-term survival attitudes over the sustained focus required for continuous improvement in energy use. Corporate capital resources for process improvements are often cut first. OBF shifts capital expenses to operational expenses and removes the obstacle of competing for limited financial resources.
- Mandates to meet new environmental and regulatory requirements can take precedence over energy efficiency projects. International cost competitiveness, combined with new air and water regulatory pressure, provides new opportunities for comprehensive total resource efficiency improvements. This program will create a stronger bond between Green House Gas (GHG) reductions, water efficiency savings, and energy efficiency.
- Even the largest firms have trouble supporting facility-level energy manager positions. It is difficult to find qualified facilities managers for larger operations who can manage energy, and most candidates lack the education and information needed to operate certain systems such as compressed air optimally and efficiently. The comprehensive technical audits provided through the program, coupled with increased education and training in this sector, help to increase the knowledge base among existing production personnel and promotes a grassroots effort within the industry.
- There is a lack of technology transfer between other industries and food processors. Emerging Technology (ET) projects, such as mechanical vapor recompression, can be demonstrated and shared among peers. However, risk adversity is a barrier to adoption of new technologies. The program will take an active role in influencing targeted ET efforts in the agricultural sector, implementing appropriate new technologies into projects through increased incentives and sharing program best practices at industry events.

Refrigerated Warehouse (Post Harvest Processors) Sector Barriers

- There has been a lack of industry education and training for facility operators on optimizing operations, maintenance, and opportunities for system retrofits. The program will increase outreach and training to facility operators and develop best practices in systems operations for the industry.
- To obtain corporate funding for energy efficiency projects, large industrial refrigeration users require accurate project-specific savings estimates, performance targets, and project economics. System modeling can take too long for decision-making timelines. The program's comprehensive technical audits will deliver specific recommendations based on payback size. Focusing on IDSM

will support a more comprehensive solution to improve the project's economic feasibility.

- Since facility upgrades and retrofits require significant capital, OBF, non-utility financing and equipment leasing options will be leveraged. In addition, information on federal tax credits and/or other outside capital sources will also be provided.
- Large complex refrigeration systems require commissioning and retrocommissioning (RCx). The program will leverage the core Agricultural Energy Audits and Continuous Energy Improvement (CEI) sub-programs to deliver RCx services to provide sustainable solutions to the customer.

By targeting these markets through this comprehensive approach, the program anticipates that there will be an increased uptake in the IOU's core programs by the customers that will yield increased DSM activities.

d) **<u>Quantitative Program Targets</u>**

Table 5 – Targets to be provided when available

e) Advancing Strategic Plan Goals and Objectives

In conformance with the Strategic Plan, the IDSM Pilot Food Processing Program will deliver an integrated, solutions-driven approach, while leveraging the offerings of SCE's portfolio of incentive-based programs. Additionally, its long-term solutions will adopt the concepts of continuous improvement and best practices. This program is specifically designed in response to a requirement detailed in Section 4 of the Strategic Plan¹:

Goal 1: Integration with Other Resource Strategies

Strategy 1-1: Develop coordinated energy and resource management program for California's industrial sector, to enhance use of energy efficiency.

Short-term goal for 2009-11: Undertake pilot program with food processing sector.

6. Program Implementation

a) Statewide IOU Coordination

i. Program Name: IDSM Pilot for Food Processing

ii. Program Delivery Mechanisms

The IDSM Pilot for Food Processors Program is designed to maximize integrated energy management solutions for customers through existing core and third-party programs. The program will be marketed primarily through IOU account representatives, field engineers, third-party programs, industry associations, and trade professionals.

Targeted stakeholders for this program include customers, design teams, trade professionals, and trade associations. These professionals can directly and indirectly impact energy decisions in the agriculture post-harvest processors and

¹ California Long Term Energy Efficiency Strategic Plan, September 2008, page 48

food processing segments, including sales, repair, maintenance, and project development. Working with trade and other industry associations is critical for reaching customers and aligning program offerings with current industry drivers.

The primary associations include:

- California League of Food Processors
- State Farm Bureau (State and Regional Chapters)
- Refrigeration and Technical Engineering (RETA) and other refrigeration associations
- GHG associations (for example, California Climate Action Registry), and
- International Association of Refrigerated Warehouses.

The program introduces a Resource Energy Manager as project champion to address the lack of resources on the customer side, especially for smaller customers lacking in-house resources for energy management.

The Resource Energy Manager will act as the customer liaison with the utility and manage the project from start to finish. The Resource Energy Manager ensures that a high level of focus on IDSM is maintained throughout project implementation.

Program implementation will leverage the tools and audits currently utilized in both the energy efficiency and the demand response approaches. The program will produce a comprehensive audit outlining all potential opportunities for the customer. The proposal will include a benchmark of their processes, payback, measures, and installation timelines that compliment energy objectives. The audit indicates channels (*such as* design teams and trade allies) to implement the measures and strategic goal setting in conformance with regulatory goals (for example, AB 32).

Program participants will be directed to established incentive-based programs where savings from this activity will be claimed. The ultimate goal is to reduce the facility energy demand and consumption, while maintaining productivity.

iii. Incentive Levels

The program does not pay customer incentives. Incentives for installed measures will be paid by the core Calculated and Deemed incentive programs (*see* sub-program PIPs described under the core Industrial and Agricultural Programs for more information).

Incentives for implementation of recommendations will be provided through the Calculated and Deemed incentive sub-programs described in the Industrial and Agricultural Program PIP.

iv. Marketing and Outreach Plans (*e.g.*, research, target audience, collateral, and delivery mechanisms)

The program will use many delivery channels and marketing approaches to reach its customers:

- SCE Account Representatives and Field Representatives
- Targeted workshops and trainings
- SCE demonstration facilities at CTAC (Irwindale) and AgTac (Tulare)
- Increased outreach with vendors and trade allies
- Industry associations
- Advertisements and articles in trade publications
- Direct mail
- Industry conferences and trade show events, and
- SCE's website.
- v. IOU Program Interactions with California Energy Commission (CEC), Air Resource Board (ARB), Air Quality Management Districts, Local Government Programs, Other Government Programs as Applicable

The program's integrated approach conforms to rules and regulations established by all jurisdictions with authority (for example, the Air Resource Board as it relates to GHG emissions). The program will also utilize other programs for providing technical or capital resources to the agricultural sector.

For example, the program will work with the Rural Energy for America Program to achieve greater economies of scale in the implementation of energy efficiency projects.

vi. Similar IOU and POU Programs

The program will be coordinated with similar food processing programs offered by the other IOUs and POUs, as appropriate.

b) **<u>Program Delivery and Coordination</u>**

i. Emerging Technologies Program

The program will promote emerging technologies, including those demonstrated in a related industry but not currently in use by the food processing industry ,(for example mechanical vapor compression).

ii. Codes and Standards program

The program will recommend measures that exceed all applicable federal, state, and industry standards (for example, EPAct, California Title-20, California Title-24, ASHRAE 90.1 standards, air compressor efficiencies in the DOE's AirMaster+ compressed air tool, and NEMA motor standards).

iii. Workforce Education and Training Efforts

Not applicable to this program.

iv. Program-Specific Marketing and Outreach Efforts (provide budget) Planned program-specific marketing and outreach efforts include:

- Performing one-to-one marketing with customer through telephone and personal meetings;
- Conducting briefings and presentations with trade associations;
- Holding seminars for plant managers and corporate decision makers;
- "Word-of-mouth" marketing among plant managers;
- Attendance at conferences and trade associations;
- Preparing and circulating program marketing materials (brochures, flyers, case studies, and Internet web sites);
- Writing articles for publication in industry publications and for advertising;
- Marketing by SCE Account Managers and Field Representatives, and
- Marketing by other third-party programs.

v. Non-Energy Activities of Program

The program will offer customers information about non-energy benefits associated with all recommended measures such as improved safety, productivity, indoor air quality, comfort, and appearance.

vi. Non-IOU Programs

The program will provide information to program participants about non-IOU programs that may help them achieve additional energy benefits. The information may come from federal agencies, state agencies, industry associations and other sources and may take the form of an industry assessment report.

vii. CEC work on PIER

Not applicable to this program.

viii. CEC Work on Codes and Standards

Not applicable to this program.

ix. Non-Utility Market Initiatives

Not applicable to this program.

c) <u>Best Practices</u>

This program targets customers, trade professionals, and trade associations. Design teams and other trade professionals can influence energy decisions in the agriculture post-harvest processor and food processing segments. They can both directly and indirectly influence sales, repair, maintenance, and project development decisions. Working closely with trade and other industry associations is critical for reaching customers and aligning program offerings with current industry drivers and represents a program best practice.

This program introduces the "project champion" concept to address the lack of resources on the customer side, especially smaller participants with insufficient inhouse resources for energy management. This champion will act as the customer's liaison with SCE and will manage the project until completion to ensure its success.

d) <u>Innovation</u>

The program will leverage the audit tools currently utilized in both energy efficiency offering and demand response approaches. The program considers demand side management measures along with other measures, including distributed energy, renewables, and water and wastewater conservation.

e) Integrated/Coordinated Demand Side Management

The program performs a comprehensive energy audit to identify energy saving opportunities under energy efficiency, demand response, energy storage, distributed generation, demand-side management measures, emerging technologies, and renewable energy programs. Recommendations will be coordinated with appropriate core programs, as well as other programs including third-party, demand response and renewable energy.

f) Integration Across Resource Types

The program estimates GHG emission reductions associated with any recommended energy savings measures. The program is sensitive to other resource types by flagging recommended energy saving measures with meaningful impacts on other resources. In compliance with the California Global Warming Solutions Act of 2006 (AB 32), the program will provide facility staff with the publication *Guidance and Protocols for Businesses to Facilitate Greenhouse Gas Missions Reductions*.

g) <u>Pilots</u>

This program is a pilot operation designed to stimulate multiple projects in the food processing industry.

h) <u>EM&V</u>

The utilities plan to work together and with the Energy Division to develop a complete plan for 2009-2011 studies and budgets after the program plans are finalized and filed. This plan will be submitted to the CPUC in time for approval along with the PIPs.

Detailed plans for process evaluations and other evaluation efforts specific to this program will be developed after the final program design is approved by the CPUC and program implementation has begun, since final plans will be based on identified program design and implementation issues and questions. Preliminary plans is provided below:

- Conduct SCE and SCG evaluation to track all proposed key metrics; and
- Conduct SCE specific process evaluation to improve program design, implementation, and market effectiveness;
7. Diagram of Program



Southern California Edison

8. Program Logic Model



Southern California Edison



Southern California Edison

1. Program Name:Energy Leader Partnership ProgramProgram ID:SCE-L-004

2. Projected Program Budget Table

Table 1¹

		Total Administra- tive Cost	Total Government Facilties Cost	Total Strategic Plan Support	Total Core Program Coordination	Total Budget by Program
Program #	Main Program Name / Sub-Programs	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)
SCE-L-004	Local Government Partnerships					
	Energy Leader Partnership Program	\$998,715	\$2,961,846	\$216,900	\$1,431,539	\$5,609,000
	City of Beaumont Energy Leader Partnership	\$158,559	\$266,503	\$19,466	\$128,473	\$573,000
	Community Energy Leader Partnership	\$686,859	\$2,057,823	\$150,831	\$995,486	\$3,891,000
	Desert Cities Energy Leader Partnership	\$324,061	\$746,301	\$54,689	\$360,950	\$1,486,001
	Eastern Sierra Energy Leader Partnership	\$235,212	\$462,937	\$33,928	\$223,924	\$956,000
	Energy Leader Partnership Strategic Support	\$173,000	\$243,000	\$578,000		\$994,000
	Kern County Energy Leader Partnership	\$481,635	\$1,389,387	\$101,839	\$672,139	\$2,645,000
	City of Long Beach Energy Leader Partnership	\$378,597	\$945,809	\$69,289	\$457,305	\$1,851,000
	Orange County Cities Energy Leader Partnership	\$417,918	\$1,156,133	\$84,730	\$559,219	\$2,218,000
	Palm Desert Demonstration Partnership	\$2,418,003	\$12,356,548	\$794,796	\$5,245,653	\$20,815,000
	City of Redlands Energy Leader Partnership	\$197,973	\$385,378	\$28,243	\$186,406	\$798,000
	City of Ridgecrest Energy Leader Partnership	\$191,352	\$381,922	\$27,990	\$184,737	\$786,001
	San Gabriel Valley Energy Leader Partnership	\$395,928	\$1,025,635	\$75,584	\$498,853	\$1,996,000
	San Joaquin Valley Energy Leader Partnership	\$423,025	\$1,155,412	\$85,074	\$561,488	\$2,224,999
	City of Santa Ana Energy Leader Partnership	\$337,932	\$976,289	\$71,550	\$472,229	\$1,858,000
	South Santa Barbara County Energy Leader	\$557,894	\$1,541,014	\$113,038	\$746,054	\$2,958,000
	Partnership					
	City of Simi Valley Energy Leader Partnership	\$190,990	\$128,460	\$9,414	\$62,136	\$391,000
	South Bay Energy Leader Partnership	\$560,402	\$1,546,825	\$113,391	\$748,382	\$2,969,000
	City of South Gate Energy Leader Partnership	\$197,973	\$385,378	\$28,243	\$186,406	\$798,000
	Ventura County Energy Leader Partnership	\$765,944	\$2,568,486	\$188,233	\$1,242,337	\$4,765,000
	TOTAL	\$10,091,972	\$32,681,085	\$2,845,229	\$14,963,714	\$60,582,000

* Estimated budget allocation provided in this manner, per ED request. SCE does not budget or track program costs as indicated on this table.

<u>Total Administrative Cost</u> includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).

<u>Total Direct Implementation</u> – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.

¹ Definition of Table 1 Column Headings:

Total Marketing & Outreach includes all media buy costs and labor associated with marketing production. Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.

Total Budget is the sum of all other columns presented here

<u>Sub-Program</u>: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

3. Projected Program Gross Impacts Table

Table 2

		2009-11 EE	2009-11 EE	2009-11 EE
		Program Gross	Program Gross	Program Gross
SCE-L-004	Energy Leader Partnership Program	kWh Savings	kW Savings	Therm Savings
	Energy Leader Partnership Program	14,395,899	2,884	-
	City of Beaumont Energy Leader Partnership	1,250,000	251	-
	City of Long Beach Energy Leader Partnership	4,619,795	907	-
	City of Redlands Energy Leader Partnership	1,875,000	376	-
	City of Ridgecrest Energy Leader Partnership	1,856,250	376	-
	City of Santa Ana Energy Leader Partnership	4,750,000	943	-
	City of Simi Valley Energy Leader Partnership	625,000	126	-
	City of South Gate Energy Leader Partnership	1,875,000	372	-
	Community Energy Leader Partnership	10,000,000	1,986	-
	Desert Cities Energy Leader Partnership	3,750,000	728	-
	Eastern Sierra Energy Leader Partnership	2,250,000	487	-
	Energy Leader Partnership Strategic Support	-	-	-
	Kern County Energy Leader Partnership	6,743,750	1,354	-
	Orange County Cities Energy Leader Partnership	5,625,000	1,104	-
	Palm Desert Demonstration Partnership	62,130,677	18,214	-
	San Gabriel Valley Energy Leader Partnership	5,000,000	1,011	-
	San Joaquin Valley Energy Leader Partnership	5,625,000	1,129	-
	South Bay Energy Leader Partnership	7,500,000	1,490	-
	South Santa Barbara County Energy Leader Partnership	7,500,000	1,472	-
	Ventura County Energy Leader Partnership	12,500,000	2,454	-
	TOTAL	159,871,371	37,665	-

4. Program Element Description and Implementation Plan

Through its Energy Leadership Partnership Program (ELPP), and the partnership agreements SCE has with its individual partners, SCE has developed strong yet dynamic local government partnerships (LGPs). These relationships continually evolve, as economic conditions change, and achieve as challenges arise and are met.

The complex, inter-relationships occurring in SCE's LGPs dictate that the ELPP be designed around three elements: Government Facilities, Strategic Support and Core Program Coordination. Following the general description and Sections 2 and 3 of the Local Government template, each of these core program elements will be treated separately in their own sub-sections of this Master PIP. To see how the ELPP has been designed to negotiate this complexity, please refer to the "Logic Model of the Energy Leader Program" in Appendix A attached to the end of this PIP.

Local governments (LGs) have a significant role in achieving California's aggressive clean energy and greenhouse gas (GHG) reduction goals. In its California Long-Term Energy Efficiency Strategic Plan (Strategic Plan), the CPUC identified three primary strategies for local governments:

- *Strategy 1 Tap Local Government Authority* to assure Title 24 code compliance and to implement "reach" policies, plans, codes and standards;
- *Strategy 2 Lead by Example* by making municipal facilities and operations as energy-efficient as possible; and

• *Strategy 3 – Community Leadership* by encouraging stakeholders and constituents to help achieve their local government's vision for a long-term cleaner energy and sustainable future.

While these strategies point the way to success, local governments face many challenges in achieving success. The most significant barrier faced by local governments is a lack of resources both funds and well-trained available staff. A detailed description of the ways in which SCE and the local governments address and overcome this and other barriers is discussed further in Section 5.b (Barriers) below.

a) List of Program Elements

SCE's ELPP has been designed to help local governments overcome their lack of funds and time-availability by providing integrated technical and financial assistance. In this way local governments can effectively lead their communities to: increase energy efficiency and the use of renewable energy; reduce GHG emissions; protect air quality; create green jobs; and, ensure that their communities are more livable and sustainable.

As stated above, SCE's ELPP comprises three core program elements:

- *Element A Government Facilities*: helps local governments lead by example by identifying and implementing "clean energy" projects using energy efficiency (EE), demand response (DR), and renewable energy (RE) in municipal-owned facilities and operations. The Government Facilities element is accomplished through the ELPP by:
 - Identifying potential projects;
 - Conducting technical audits and assessments;
 - Implementing retrofits and retro-commissioning for existing facilities;
 - Integrating cleaner energy design and technologies into new facilities;
 - Identifying equipment and service providers; and
 - Providing enhanced incentives, on-bill financing, and information about financing strategies being deployed by other local governments.

Element A is designed to help local governments "Lead by Example" (Strategic Plan Strategy 2) by assisting them to understand energy use in their communities, so that they can deliver information about cleaner energy options and programs to their constituents. In this way, Element A also supports the third strategy of the Strategic Plan ("Lead Communities)."

- *Element B Strategic Support:* focuses on helping local governments "Tap Local Government Authority" over local development, planning and permitting to assure that communities adopt cleaner energy design, technologies and practices. Local governments will be provided access to extensive peer networks and databases of best practices, tools and techniques, as well as best "reach" policies, goals, codes, standards, plans, and practices "reach" meaning those that exceed statutory requirements approved by the California Energy Commission (CEC). Element B will also:
 - Support local governments in their efforts to comply with Titles 20 and 24 and other codes and standards;

- Help compute carbon footprints;
- Help establish cleaner energy and GHG reduction goals;
- Integrate GHG perspectives into local governments' energy portfolios and other energy initiatives;
- Help evaluate the impact of potential GHG reduction strategies;
- Identify mitigation and adaptation strategies for reducing both municipal and community GHG;
- Recognize local governments that achieve their energy and climate goals; and
- Encourage adoption of reach codes.

Element B also supports the third Strategic Plan strategy (Community Leadership) by using local authority both directly and indirectly to influence the energy-related actions of local governments' residents, businesses, and other stakeholders.

• *Element C – Core Program Coordination* supports the third strategy of the Strategic Plan (Lead Communities), by integrating technical and financial assistance from multiple energy programs to help communities learn about and implement clean energy and GHG reduction options. Similar to Element A (Government Facilities), the Core Program Coordination element provides comprehensive support, including leveraging outreach and education, technical audits and assessments, residential and small business direct install programs, and improved access to Savings by Design and other SCE programs.

Participants in Local Government Partnerships are the primary audience for this program, but local governments in general will benefit from the peer networks and comprehensive databases, tools, outreach, education, and training that will be available to all local governments.

This ELPP Master PIP describes each of the program elements listed below in Figure 1. While each of the three Core Program Elements is described separately, they are delivered through a single, integrated program (see Figure 2 – The Energy Leader Partnership Program).

Core Program Elements		Sub-Programs	Type of Program	
	A1	Government Facilities Retrofits	Resource	
	A2	Government Facilities Retro- commissioning	Resource	
A - Government Facilities	A3	Integrated Demand Response	Demand Response	
i defitites	A4	Technical Assistance	Non-Resource (technical assistance for project management, training, audits, etc.)	
	A5	On-Bill Financing	Non-Resource	

Figure	1: Structure	of the ELP	P's Core	Elements an	nd Program	Types
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Energy Leader Partnership Program

Core Program Elements		Sub-Programs	Type of Program
	B1	Code Compliance Support	Non-Resource
D. Stratagia	B2	Reach Code Support	Non-Resource
B – Strategic Support	B3	Guiding Document(s) Support	Non-Resource
	B4	Financing for the Community	Non-Resource
	B5	Peer-to-Peer Support	Non-Resource
	C1	Community Outreach & Education	Non-Resource
	C2	Residential & Small Business Direct Install	Resource
C – Core Program Coordination	C3	Third Party Program Coordination	Non-Resource
	C4	Retrofits for just-above LIEE- qualified customers	Resource
	C5	Technical assistance for program management, training, audits, etc.	Non-Resource

SCE's ELPP is a comprehensive program designed to leverage the power and influence of California's local governments by first helping them quickly increase and accelerate the adoption of as much energy efficiency (EE), demand response (DR) and renewable energy (RE) within their own facilities as feasible. Local governments are then helped to encourage their constituents — residents, businesses, and other key stakeholders such as local developers — to do the same. ELPP was designed to support the Strategic Plan goals through enhanced levels of financial incentives, technical assistance, and education and outreach support. The ELPP model encourages higher levels of local government commitment and performance.



Figure 2: The Energy Leader Partnership Program Design

The ELPP process begins by establishing a local Government Partnership (LGP) through an executed agreement, setting its goals, then its planning and implementation. This includes establishing multiple forums for peer-to-peer sharing which create a support network in which local governments can challenge themselves and each other to increase clean energy adoption and reduce GHG emissions. The ELPP will encourage participants to publicize Reach goals and accomplishments widely and to recognize partners as they progress.

There are three types of distinct partnerships under SCE's ELPP, as summarized in Figure 3:

Type of Partnership	Partnership Characteristics	Structure of Commitments
Single City	A single city or county	A single city or county establishes a commitment
or County	can directly participate	to reduce municipal energy & demand, adopt Reach goals, and assist SCE in delivering
	as a partiter	information about clean energy and GHG
		reduction options and programs to targeted

Figure 3: Partnership Types and Characteristics

Type of Partnership	Partnership Characteristics	Structure of Commitments
		customer groups, encouraging them to enroll in SCE, AB 32 and other programs.
Multiple Cities, Counties &/or other jurisdictiona l entities	Groups of cities counties, &/or other jurisdictional entities can participate as a single Partner	Same as "Single City or County," except that a single Education and Outreach plan is developed and adopted for all cities, counties &/or other jurisdictional entities participating in the group.
Bundled Groups of Cities, Counties, &/or other jurisdictiona l entities	Groups of cities &/or counties whose participation is managed through an implementing organization, which partners with SCE.	The commitments and participation of individual local governments are coordinated through a designated Lead Implementer who partners with SCE and works directly with the participants to help them achieve clean energy and GHG reduction commitments. The Lead Implementer also helps its members develop Reach goals and supports the Education and Outreach Plan and the ELPP Model.

Figure 4 describes the general responsibilities and commitments of SCE and its local government partners and participants.

SCE Provides	Partner Provides
 <u>Technical assistance</u>: Project identification & qualification through technical audits and reviews Primary output is a prioritized list of municipal cleaner energy projects. 	 <u>Municipal Projects Inventory</u>: List of municipal facilities (both existing and planned) that provide opportunities for cleaner energy.
Incentives:	Energy Savings & Demand Response Commitment:
 Ascending EE incentives are paid at progressively higher levels of achieved energy savings (5%, 10% and 20%). DR incentives are provided at regular tariff rates for participating entities. 	 Each local government commits to: Reducing its energy consumption by a targeted percentage and Participating in SCE's DR programs during the 2009-2011 program cycle
<u>Note</u> : The level of achieved energy savings by individual participating cities or counties determines the incentive amount.	The energy savings of each local government rolls-up into the energy savings commitment by the partnership (LGP).

Figure 4:	SCE and	Partner	Responsibilities a	and C	Commitments
I Igui C H	DCL and	I al ului	responsionnes e		Jonninuncing

SCE Provides	Partner Provides
 <u>Financial Assistance</u>: Information on financing options for EE and DR projects, including: Zero-to-low interest loans through the California Energy Commission (CEC) SCE's Financial Solutions' On-Bill Financing (OBF) program, and Local government revolving funds. 	 <u>Financial Planning</u>. Local governments work with SCE and others to identify and obtain approval to access viable financing options.
Strategic Planning Assistance:	Willingness to Consider Establishing
Assistance formulating & adopting upstream energy & GHG reduction policies, goals,	<u>Upstream Policies, Goals, Plans, etc.</u> : Local governments agree to establish
objectives, codes, standards, ordinances, and	"reach" goals and work to establish, adopt
plans [see Core Program Element B: Strategic	and implement aggressive energy and
Support].	climate goals and plans.
Community Outreach & Education	
Assistance:	Targeted Marketing, Education &
• Information about energy use by customer	Outreach:
groups in local governments' communities	Access to local government
 Assistance developing educational materials & venues 	communications channels to reach high potential customer groups
• Information about EE, DR, RE, & GHG reduction options for local governments' constituents and stakeholders; and	• Develop community partnerships, communications strategies, and diverse marketing media and
• Information about available technical and financial assistance programs for local governments' constituents [see Core Program Element C: Core Program Coordination	 collateral; and Deliver integrated energy and GHG reduction information to constituents and stakeholders.

The following diagram illustrates key steps in the ELPP process.



Figure 5: ELPP Process

Notes to Figure 5:

- [1] A Local Government Partnership (LGP) involves SCE and one or more participating local governments. Some LGPs also have a separate Lead Implementer. In addition, some LGPs include other partners, such as other utilities.
- [2] Plan development starts with baseline information about the LGP's energy and demand profile, both for the participating local governments and for energy users in their communities, in order to:
 - (a) Create awareness for the partner of their current energy use and savings potential;
 - (b) Motivate higher levels of energy efficiency by increasing incentives as partners achieve savings thresholds; and
 - (c) Help target Education & Outreach. SCE will teach local governments about how and where energy is used in their jurisdictions so as to identify better communications channels and strategies for targeting energy users.

The Plan will identify municipal and community EE, DR, RE (renewable energy) and GHG reduction opportunities, and describe:

- The work that needs to be completed to achieve the goals;
- The timing and types of budgetary and other approvals needed;
- Resource and technical needs;

- Types of support that can be found outside of the ELPP; and
- The ELPP budget for each LGP, schedule, and critical milestones.

[3] Implementation begins by formalizing the commitments of the parties. Each participating local government will be required to adopt a resolution, ordinance, or other formal document confirming their participation in the ELPP and acknowledging the objectives they have committed to. SCE's commitment will be documented by agreements with each LGP.

During implementation, SCE will provide technical and strategic advisory services, either directly or by a pool of pre-qualified technical experts SCE selects through competitive solicitations and then manages. The expert pool will:

- Facilitate effective and timely feedback;
- Enable consistent deployment of strategies;
- Control the quality of technical assistance;
- Accelerate planning & implementation, enabling local governments to quickly access qualified technical assistance when needed; and
- Increase program effectiveness and cost-effectiveness by matching technical skills with specific needs.

As recommended by the Peer Review Group (PRG), SCE will conform to its supplier diversity policy in selecting technical experts.

- [4] As noted previously, the ELPP supports and encourages local governments to establish and enforce "Reach" policies, goals, codes, standards, plans, and practices, through:
 - Multiple forums for information sharing and training; and
 - A tiered structure of significantly enhanced incentives that encourage local government to work toward increasingly higher levels of EE, DR and RE achievement.

SCE will supplement these incentives with an awards and recognition program to be conducted by the Institute for Local Government (see ELP Strategic Support subprogram PIP) that publicizes the efforts of participating local governments and disseminates information about successful strategies and accomplishments. The ELPP will collaborate with other organizations throughout the U.S. that have similar peer networks and awards/recognition programs to minimize duplication of effort while still assuring that ELPP participants feel that their efforts are appreciated.

[5] To assure maximum program success and cost-effectiveness, the ELPP is designed for flexibility, and provides multiple opportunities for feedback and course corrections. This allows local governments to determine the level of EE and DR they can reasonably achieve, but provides significant incentives to exceed committed goals in order to access higher levels of incentives and benefits. Importantly, these enhanced levels of incentives will also increase the number of measures that pass the cost-effectiveness screen. The ELPP determines the level of benefits and services initially available to local governments as follows:

- Determine 2003 energy consumption for (a) municipal facilities and (b) the community as a whole to establish a baseline;
- Determine the local government's participation in EE programs during 2003-2007;
- Calculate the percentage of participation by taking the aggregate of 2003-2007 participation over the 2003 energy consumption baseline; and
- Identify the level at which the local government is eligible to enter the ELPP.

Importantly, these enhanced levels of incentives will also increase the number of measures that pass the cost-effectiveness screen.

Note: The level of entry and participation commitments made by the respective LGPs and their local government members are provided in the Partner-level PIPs. See Figure 17.

The following diagram illustrates the levels of commitment and performance, and the requirements for each level.

2003 Jy use)	Achieving 5% savings in city			ental support	
js from Ide energ	20% facilities and community- wide triggers	coive	Platinum Leve		
n saving al city-wi	10% incremental support	Customer recen	Gold Level		
ve kWh e of tota	5%	Silver Level			
umulati ercentag				_	
C (Pe	valued Partner	Reward Level 1	Reward Level 2	Reward Level 3	
	Valued Partner, Energy Leader	Silver Energy Leader Level EE	Gold Energy Leader Level	Diatinum Energy Leader	
	Level EE Criteria:	Criteria:	EE Criteria:	Level EE Criteria::	
	 Energy savings achieved across all levels through core EE program efforts Limited participation in EE program by City IOU to provide a specific amount of co-branded outreach materials/efforts prior to the City actually achieving 5% reduction targets 	 If City achieves Silver level savings target, additional financial resources made available to city for joint outreach to the community 	 If City achieves Gold level savings target, additional financial resources made available to city for joint outreach to the community 	 If City achieves Platinum level savings target, additional financial resources made available to city and community for joint outreach to the community through the City/SCE Partnership plus customized EE offerings 	
	 City will co-sponsor marketing & outreach to the community on EE programs 	 City develops Energy Action Plan Target at least 25% of City facilities to complete specified EE upgrades Target 5% kWh reduction for City facilities City participates in DR Level 1 City will co-sponsor marketing & outreach to the community on EE programs 	 City develops Energy Action Plan Target at least 50% of City facilities to complete specified EE upgrades Target 10% kWh reduction for City facilities City participates in DR Level 2 City will co-sponsor marketing & outreach to the community on EE programs 	 City integrates Energy Action Plan (policies, ordinances and procedures) Target at least 100% of City facilities to complete specified EE upgrades Target 20% kWh reduction for City facilities City participates in DR Level 3 City will co-sponsor marketing & outreach to the community on EE programs 	
	Valued Partner Energy Leader Level DR Criteria:	Silver Energy Leader Level DR Criteria:	Gold Energy Leader Level DR Criteria:	Platinum Energy Leader Level DR Criteria::	
	Enroll in Flex Alert and prepare internal educational campaign	All major city facilities will have fulfilled the following criteria:	Will have performed all activities under the Silver level and	Will have performed all actions under both Silver and Gold levels and	
		 TA Audit Produce Peak Load Reduction Plan Distribute Energy Solutions Brochure internally At least 1 City Facility actively participates in DR Co-sponsor DR educational campaign to residential customers 	 50% of the City's applicable facilities participate in <at 1="" least=""> DR</at> Sponsor and hold an annual DR training event for local businesses 	 All eligible major city facilities will actively participate in DR programs Install DR technology <through auto="" dr<br="" or="" the="" ti="">program> in at least 1 major facility</through> Participate in an Emerging Markets DR Technology Demonstration through City facility or a customer located in the city limits Co-sponsor annual DR Participation Award(s) 	



Note: The individual core program elements: A - Government Facilities, B – Strategic Planning Support, and C – Community Energy are described separately below.

Element A – Government Facilities

<u>Note</u>: See following sections for Element B – Strategic Planning Support and Element C – Core Program Coordination

4.A Program Element Description and Implementation Plan

a) List of Program Elements:

A. Government Facilities				
A1	Government Facilities Retrofits			
A2	Government Facilities Retro-			
	commissioning			
A3	Integrated Demand Response			
A4	Technical Assistance			
A5	On-Bill Financing			

b) <u>Overview</u>

The Government Facilities element will be implemented by each participating LGP during the 2009 – 2011 program cycle. This section provides an overview of the program element, expected outcomes and barriers that will be common for all of the LGPs. LGP-specific characteristics and strategies will be provided in the respective individual local government PIPs.

The single largest challenge to increasing clean energy and reducing GHG in municipal facilities is a lack of resources — both of knowledgeable staff with sufficient time for these activities, and lack of funds to implement projects. The ELPP will help overcome these barriers by providing hands-on assistance to LGPs during all project stages, including help to identify financing and optimizing EE, DR & RE solutions on an integrated, whole-system basis. This will:

- Directly link energy savings and fossil fuel reduction to GHG reduction and AB 32 compliance;
- Achieve short- and long-term savings;
- Demonstrate the local government's commitment to energy efficiency to its constituents and stakeholders; and
- Enable local governments to become champions for EE, DR, and RE and promote further reductions in energy usage and associated GHG impacts throughout their communities.

Element A includes five sub-elements, described below: Government Facilities Retrofits, Government Facilities Retro-commissioning, Integrated Demand Response, Technical Assistance, and SCE Financial Solutions' On-Bill Financing (OBF).

Incentive Services

Sub-Element A1 - Government Facilities Retrofits

The ELPP will provide technical, financial, managerial, and administrative support to the local government representative, usually a facilities manager,

responsible for energy projects. The degree of support will be tailored to each local government's need, taking into account energy savings and GHG reduction potential, cost-effectiveness, level of commitment, available funds, and in-house technical expertise. This program sub-element will be leveraged by and integrated with other programs such as retro-commissioning (RCx), DR, and self-generation to achieve maximum impact while minimizing lost opportunities.

Energy savings will be based on measures installed or replaced. Anticipated measures include, but are not limited to:

- Comprehensive lighting (approximately 60%);
- HVAC (approximately 20%); and
- Other measures (motors, water heating, pumps and miscellaneous, approximately 20%).

Unless otherwise stated in the local government sub-program PIPs , the Government Facilities' measure mix will be 60% lighting, 20% HVAC and 20% other.

The specific EE measures for each local government will depend on technical audits and assessments that will identify all retrofit opportunities. However, since lighting is often a local government's first entry into EE, lighting retrofits will comprise a significant portion of projects for local governments that do not yet have a strong portfolio of EE projects. For local governments that have already implemented many EE projects, the mix will tend to include a higher ratio of HVAC and other types of measures.

The ELPP will help local governments document the energy and GHG savings benefits from retrofitting municipal facilities, which will help encourage residents, businesses, and other local governments to match their efforts.

Sub-Element A2 - Government Facilities Retro-commissioning (RCx) &/or Monitoring-Based Commissioning (MBx)

RCx and MBx are systematic processes for optimizing performance of an existing building's equipment, lighting, and control systems. Where retrofitting involves replacing outdated equipment, RCx and MBx focus on improving efficiencies of what is already in place. The ELPP will help local governments identify RCx and MBx opportunities, and bundle them with EE retrofits and other comprehensive energy options will to optimize local government investments and project cost-effectiveness.

The specific EE measures for each local government will depend on technical audits and assessments. Anticipated measures include but are not limited to:

- Comprehensive lighting (30%);
- HVAC controls and tune-ups (30%);
- Variable-frequency drives (VFDs, 20%); and
- Other types of energy savings measures (water heating, etc., 20%).

For Government Facilities retro-commissioning and unless otherwise stated in the individual local government sub-program PIPs, the measure-mix will consist of 30% lighting, 30% HVAC, 20% VFDs, and 20% other measure mix.

RCx and MBCx projects will demonstrate cost-effective approaches to optimizing facility operations, including saving electricity and gas, reducing operating costs while improving occupancy comfort, improving environmental quality, and reducing GHG emissions. Successful outcome of the projects will encourage other departments within each local government, other local governments, and private sector entities to retro-commission their facilities.

Sub-Element A3 - Integrated Demand Response

Participation in Demand Response (DR) is a requirement for becoming a participant in SCE's ELPP. Opportunities for municipal facilities to participate in SCE's DR programs will be identified by technical audits and assessments. SCE will work with the LGPs to make comprehensive packages of DR options available to the local governments within each partnership. Municipal participation in DR programs will prompt local governments to publicize their economic and societal benefits, encouraging their constituents to participate in DR. SCE will also provide standard tariff options, the California Solar Initiative (CSI), the Self-Generation Incentive Program (SCIP) and other programs. Integrated Demand Response audits will be provided, if applicable.

Sub-Element A4 - Technical Assistance

The ELPP will provide technical audits and assessments to help participating local governments identify, prioritize and schedule municipal EE, DR and RE projects including EE retrofits, renovations, energy-efficient new construction, MBCx, and/or RCx. Specialized assistance will also be available through DR programs, including Technical Assistance & Technical Incentive (TA&TI) audits, and through the Savings By Design (SBD) Program.

Technical assistance will be coordinated with Core Program Sub-Element B-5 (Peer-to-Peer Support) to collect information about projects, technologies, tools, cost-benefit experiences, implementation challenges, successful strategies for overcoming barriers, and how to effectively package and promote energy projects to financial managers, elected officials, and other key decision-makers. Linking GHG benefits to energy project proposals, financing strategies, etc. leverages the support the program provides to each local government into documented case studies that can be shared with other local governments.

Sub-Element A5 - On-Bill Financing (OBF)

The ELPP provides access to On-Bill Financing (OBF), which will offer zeropercent interest financing for qualifying installations of lighting, refrigeration and HVAC measures. This is a key strategy for overcoming the "first cost" barrier local governments face when making EE and other capital investment decisions. Many LGPs have communicated to SCE that they intend to apply for OBF loans to support their EE projects, which are eligible for when an EE project has reached the stage where its technical merits and cost-effectiveness can be determined. An application for OBF will be submitted along with the application for financial incentives.

SCE's Financial Solutions' OBF option applies only to EE retrofit measures, which means that to qualify for OBF, measures must also qualify for financial incentives through SCE's EE prescriptive measure programs. New construction and other DSM measures such as solar or DR will not qualify. Qualifying measures can be bundled to shorten the payback period, but each service account will be subject to a loan limit at any one time.

<u>Note</u>: For further details on the OBF program, please refer to SCE's Financial Solutions PIP.

In addition to OBF, LGPs may suggest that local governments consider other financing options such as CEC loans, municipal bonds, and other state and federal grant programs. The 2009 American Reinvestment and Recovery Act (ARRA) that is currently being considered by Congress is expected to provide significant funds to local governments in the form of Energy Efficiency Block Grants that may help fund municipal projects. The ELPP will assist local government s in developing plans for integrating these funds, if they become available, into their project portfolios.

The Government Facilities program element is the heart of the ELPP, in which participating LGPs commit to achieve specified levels of EE and DR in the facilities they own and control.

<u>Note</u>: The ELPP will also encourage local governments to consider distributed Renewable Energy (such as rooftop solar photovoltaics) in their projects to help achieve the Strategic Plan goal of "net zero energy," but purchase and installation of solar energy is not required.

The types of EE measures will vary widely depending on the specific municipal facilities that are selected by each participating local government to meet its energy and demand reduction targets. Following are some examples of types of EE projects that have been identified by LGPs.

Types of Municipal Facilities	Types of EE Measure Projects
Municipal Office Buildings	Primarily lighting, HVAC, and office equipment
Information Technology Centers	Primarily HVAC, lighting, and computer networks with uninterruptible back-up power supplies

Figure 7: Sample List of LGP EE Measure Types – Government Facilities

Types of Municipal Facilities	Types of EE Measure Projects
Water & Wastewater Facilities	Primarily pumps and motors
Groundwater Wells	Pumps and motors
Corporation Yards	Depending on the function, may be any combination of measures, but typically will include lighting, HVAC, and office equipment May also include secure communications systems (e.g., for emergency response)
Laboratories	Lighting, HVAC, refrigeration, electronic equipment
Parks & Recreation	Combination of lighting & HVAC in community centers, and irrigation pumping & outdoor lighting for parks
Police & Fire	Primarily lighting, HVAC, office equipment, and secure emergency communications systems (typically served by two or three independent power sources)

All participating local governments will be encouraged (but not required) to consider clean distributed Renewable Energy (such as rooftop solar photovoltaics (PV)) in their projects to help achieve the Strategic Plan goal of "net zero energy." Other types of distributed energy — such as solar thermal and fuel cells — may also be recommended for certain types of facilities.

c) <u>Non-incentive services</u>

See individual local government sub-program PIPs, as applicable, for specific nonincentive services provided through the ELPP.

d)	Target audience		
	Figure 8: Target Aud	ence - Government I	Facilities Sub-Element

Sub-Element	Target Audience	
• 1 Retrofits	• Primarily NAICS 3 Municipal Administration Buildings:	
• A2 RCx &/or MBx,	City Libraries	
and	• Fire Stations	
A3 Integrated	County Medical Hospitals	
Demand Response	County Correctional Facilities	
	Police Stations	
	• Teen Centers	
	Recreation Centers-	
	City or County Museums	
	Animal Shelters	
	Public Works Department Facilities	
	Bridges and Highways	
	• Water and Wastewater Agencies	
	Transit Agencies	
	• Streetlights	
	• Schools (if under the jurisdiction of a city or county)	
A4 Technical	• Primarily City or County Staff or Department Managers,	
Assistance	especially Energy Managers & Facility Managers, but also:	
	• Other City officials (City Manager, Council, Controller, etc.)	
	that are involved in approving energy projects	
	• Other local governments through Sub-Element B-5 Peer-to-	
	Peer Support, particularly to share information about	
	successful strategies to overcome barriers	
A5 On-Bill Financing	• Once the OBF program is approved, any qualifying local	
	government can apply	

e) <u>Implementation</u>

- Figure 9 below illustrates the Government Facilities program element process from inception of comprehensive municipal clean energy portfolios through implementation. This process helps assure LGP success by: tracking, monitoring, and making course corrections needed to clear obstacles;
- Constantly focusing LGs on the rewards of successful participation: increased incentives and program services; recognition as local government leaders; and energy and cost savings; and
- Constantly focusing participants on the rewards of successful participation increased incentives and program services; recognition as local government leaders; and energy and cost savings.

Develop	Schedule	Implement	Track &	Enhance
Portfolio	Projects	Portfolio	Report	Portfolio
 Develop list of municipal facilities targeted for EE/DR/RE (new & existing) Develop criteria for ranking opportunities Develop prelim estimates of costs & benefits Rank potential projects Identify types & timing of project & funding approvals Develop project budget, schedule, critical milestones 	 Conduct audits & cost-benefit analyses for selected projects Obtain approvals from respective departments Complete engineering design & project documents Identify & secure source(s) of financing Obtain all project & funding approvals Schedule projects 	 Implement approved projects Concurrently, continue to identify, develop & obtain funding for next projects Manage portfolio to assure Partnership goals will be met Provide assistance to potentially exceed initial Partnership commitment, targeting next level of incentives 	 Meet regularly to discuss barriers encountered & the types of assistance needed to overcome them Document & publicize benefits realized from completed projects, including computations of societal benefits (e.g., GHG reductions) in the reported value stream 	Continually review performance & assess the number of additional projects & budget needed to achieve the next ELPP level

Figure 9. Government Facilities Process

During spring/summer 2008, SCE conducted marketing and outreach, encouraging local governments in its service area to participate in the ELPP. Through a competitive solicitation process, 18 Local Government Partnerships were proposed and selected. SCE then commenced discussions with the 18 partnerships, providing them with a template for a Detailed Program Plan to be maintained by each Partner.

Each Detailed Program Plan contains the following key elements:

- *Partnership Overview*: Identifies the partners (and Lead Implementer where applicable) and their respective roles and responsibilities; identifies approvals that have been or need to be obtained to formalize the commitments by each participating local government and the LGP overall.
- **Partner Profile:** Describes the unique characteristics of the LGP and its members, providing insights on specific partner needs and the program delivery and messaging strategies needed to engage the LGP's targeted constituents most effectively. Includes a profile of the participating local jurisdiction: leadership, priorities, municipal services, energy, climate and sustainability policies, goals, and plans, and decision-making, communications, and budgetary processes.
- *Energy Profile:* Includes historical demand and energy data from SCE to help each local government understand how and where energy is used in its jurisdiction, help identify and target high-potential energy customers, and help the local government conduct informed dialogues with its constituents and stakeholders for more successful education and outreach.

- *Municipal Facilities Plan:* Lists municipal facilities targeted for participation in EE and DR programs. Prior audits, if any, will be documented here, along with project schedules, levels of investment needed for each project, financing options, and key milestones, especially the critical time for project reviews and budgetary approvals.
- **Program Evaluation and Reporting:** Documents the program's tiered incentive structure and the level of energy and demand savings needed to access each level of incentives and benefits. This section also provides a basis for tracking and monitoring each participant's progress towards meeting its commitments and achieving the next incentive level.
- *Marketing, Education & Outreach (ME&O) Plan:* Contains detailed documentation of planned events, activities, and strategies that will be deployed to engage high-potential targeted customer groups. The ME&O Plan anticipates leveraging common priority issues and associated stakeholder and communications channels with other partners, both nearby and in other areas. Local priorities will establish unique marketing, education and outreach plan elements.

In addition to providing an effective vehicle for communicating information among the partners, the Plan will also provide important information to key stakeholders and the CPUC, as well as provide a launch point for long-term strategic Energy Action Plans (EAPs) by local government participants. Ideally, the EAPs will build upon the LGPs to develop a roadmap for achieving the highest partnership level - Platinum.

The following paragraphs explain the ELPP implementation approach at the subelement level.

Sub-Element A1 – Government Facilities Retrofits

Each local government participating in the ELPP as a partner with SCE will undertake to develop and implement municipal clean energy projects within its respective jurisdiction. When multiple local governments participate in an LGP in which a partner or third party is designated as a "Lead Implementer" ("Bundled" partnerships), the Lead Implementer is responsible for coordinating the local government participants' efforts and assuring that their collective efforts result in achieving the overall partnership's EE & DR goals.

The Lead Implementer will also provide a single point of contact with SCE for identifying and bringing in the technical assistance needed by each local government participant. As noted previously, Sub-Element A1 will be coordinated with Sub-Element B5 (Peer-to-Peer Support) to share technical, operations, financing, and other types of energy strategies, tools and techniques with other local governments in California (and, potentially, nationally).

Implementation: Sub-Element A2 – Retro-commissioning (RCx) &/or Monitoring-Based Commissioning (MBx)

Candidate facilities for RCx and/or MBx will be identified through the development process that will be conducted with ELPP technical assistance (see Sub-Element A4 – Technical Assistance). This process consists of performing field-based functional tests at the building system and/or subsystem level, including on-site equipment testing, monitoring and/or verifying proper operation, and calibration of a sample of the systems, and assessing potential projects for technical feasibility and cost-effectiveness. Sub-Element A1, Sub-Element A2 will be coordinated with Sub-Element B5 – Peer-to-Peer Support.

Implementation: Sub-Element A3 – Integrated Demand Response

The Integrated DR development process will also identify eligible non-emergency municipal facilities and functions — such as office buildings where lighting and/or HVAC could be interrupted or reduced without risk to public health and safety — that could participate in SCE DR programs. LGPs will also be encouraged to identify self-generation opportunities, especially for cleaner technologies such as solar PV, advanced micro-turbines, and fuel cells.

See Core Program Element C (Core Program Coordination) for more information about how the ELPP will coordinate with the utilities' Self Generation Incentive Program (SGIP), and Core Program Element B (Strategic Planning Support) for information about coordination with other types of RE and SG programs.

Implementation: Sub-Element A4 – Technical Assistance

Technical assistance starts with obtaining a list of all of the municipal facilities of each participating local government with their account name (e.g., city/county department), address, type of municipal function being performed at that location, age of the building (known or estimated), size in square feet, and any other readily compiled, relevant information. The list is then matched with energy use to identify the energy use of the facility and prioritize high-potential opportunities.

SCE Business Customer Division (BCD) Representatives have met with all LGPs to help compile lists of potential retrofits and request information about each facility's situation. Some preliminary energy assessments have been conducted to identify highest-priority projects for implementation upon CPUC approval of the ELPP.

Element A-4 will be coordinated with Sub-Element B-5 Peer-to-Peer Support to share information with other local governments.

Implementation: Sub-Element A5 – On-Bill Financing

See discussion above in Section 4.b.(Overview, Incentives, Sub-Element A5) for a description of how the ELPP will approach On-Bill Financing.

5.A Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

Market Transformation (MT) metrics proposed in Tables 3 and 4 are preliminary. The proposed metrics are meant to initiate a collaborative effort to elaborate meaningful metrics that will provide overall indicators of how markets as a whole are evolving. MT metrics should neither be used for short-term analyses nor for specific program analyses; rather, should focus on broad market segments.

Market transformation is embraced as an ideal end state resulting from the collective efforts of the energy efficiency field, but differing understandings of both the MT process and the successful end state have not yet converged. The CPUC defines the end state of MT as "Long-lasting sustainable changes in the structure or functioning of a market achieved by reducing barriers to the adoption of energy efficiency measures to the point where further publicly-funded intervention is no longer appropriate in that specific market."² The Strategic Plan recognizes that process of transformation is harder to define than its end state, and that new programs are needed to support the continuous transformation of markets around successive generations of new technologies³.

Market transformation programs differ from resource acquisition programs on 1) objectives, 2) geographical and 3) temporal dimensions, 4) baselines, 5) performance metrics, 6) program delivery mechanisms, 7) target populations, 8) attribution of causal relationships, and 9) market structures⁴. Markets are social institutions⁵, and transformation requires the coordinated effort of many stakeholders at the national level, directed to not immediate energy savings but rather to intermediary steps such as changing behavior, attitudes, and market supply chains⁶ as well as changes to codes and standards. Resource acquisition programs rely upon the use of financial incentives, but concerns have been raised that these incentives distort true market price signals and may directly counter market transformation progress⁷. According to York⁸, "Market transformation is not likely to be achieved without significant,

² California Public Utilities Commission Decision, D.98-04-063, Appendix A.

³ California Public Utilities Commission (2008) *California Long Term Energy Efficiency Strategic Plan*, p. 5. Available at http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf

⁴ Peloza, J., and York, D. (1999). "Market Transformation: A Guide for Program Developers." Energy Center of Wisconsin. Available at: http://www.ecw.org/ecwresults/189-1.pdf

⁵ Blumstein, C., Goldstone, S., & Lutzenhiser, L. (2001) "From technology transfer to market transformation". Proceedings of the European Council for an Energy Efficient Economy Summer Study. Available at http://www.eceee.org/conference_proceedings/eceee/2001/Panel_2/p2_7/Paper/

⁶ Sebold, F. D., Fields, A., Skumatz, L., Feldman, S., Goldberg, M., Keating, K., Peters, J. (2001) *A Framework for Planning and Assessing Publicly Funded Energy Efficiency*. p. 6-4. Available at www.calmac.org.

⁷ Gibbs, M., and Townsend, J. (2000). The Role of Rebates in Market Transformation: Friend or Foe. In *Proceedings from 2000 Summer Study on Energy Efficiency in Buildings*.

⁸ York, D., (1999). "A Discussion and Critique of Market Transformation", Energy Center of Wisconsin. Available at http://www.ecw.org/ecwresults/186-1.pdf.

permanent increases in energy prices. From an economic perspective, there are 3 ways to achieve market transformation: (1) fundamental changes in behavior, (2) provide proper price signals, and (3) permanent subsidy."

The question of what constitutes successful transformation is controversial because of a Catch-22: Market transformation is deemed successful when the changed market is self-sustaining, but that determination cannot be made until after program interventions are ended. Often, however, the need for immediate energy and demand savings or immediate carbon-emissions reductions will mean that program interventions may need to continue, which would interfere with the evaluation of whether MT is self-sustaining. Market transformation success has also been defined in terms of higher sales of efficient measures than would have otherwise occurred against a baseline absent of program interventions. The real world, however, provides no such control condition. Evaluators must estimate these baselines from quantitative factors such as past market sales that may be sparse and/or inaccurate - particularly for new products. Evaluations must also defer to expert judgments on what these baselines may have been as well as on the degree of successful market transformation⁹. Due to the subjective nature of these judgments, it is imperative that baselines as well as milestone MT targets be determined and agreed upon through collaborative discussion by all stakeholders, and these targets may need periodic revision as deemed necessary by changing context.

Market transformation draws heavily upon diffusion of innovation theory¹⁰, with the state of a market usually characterized by adoption rate plotted against time on the well-known S-shaped diffusion curve. In practice, however, the diffusion curve of products may span decades¹¹. Market share tracking studies conducted 3, 5 or even 10 years after the start of an MT program may reveal only small market transformation effects¹². The ability to make causal connections between these market transformation effects and any particular program's activities fades with time, as markets continually change and other influences come into play.

These challenges mentioned above are in reference to programs that were specifically designed to achieve market transformation; and these challenges are only compounded for programs that were primarily designed to achieve energy and demand savings. However, since the inception of market transformation programs almost two decades ago, many lessons have been learned about what the characteristics of successful MT programs are. First and foremost, they need to be designed specifically to address market transformation. "The main reason that (most) programs do not accomplish lasting market effects is because they are not designed specifically to address this goal (often because of regulatory policy directions given to

⁹ Nadel, S., Thorne, J., Sachs, H., Prindle, B., and Elliot, R.N. (2003). "Market Transformation: Substantial Progress from a Decade of Work." American Council for an Energy-Efficient Economy, Report Number A036. Available at: http://www.aceee.org/pubs/a036full.pdf

¹⁰ Rogers (1995) Diffusion of Innovations, 5th Ed.

¹¹ Example in bottom chart of this graphic from NYTimes:

http://www.nytimes.com/imagepages/2008/02/10/opinion/10op.graphic.ready.html

¹² Sebold et al (2001) p. 6-5,

program designers.)¹³" The Strategic Plan recognizes that regulatory policies are not yet in place to support the success of market transformation efforts¹⁴, but also reflects the CPUC's directive to design energy efficiency programs that can lay the groundwork for either market transformation success or for codes and standards changes.

Above all else, the hallmark of a successful market transformation program is in the coordination of efforts across many stakeholders. The most successful MT programs have involved multiple organizations, providing overlapping market interventions¹⁵. The Strategic Plan calls for coordination and collaboration throughout, and in that spirit the utilities look forward to working with the CPUC and all stakeholders to help achieve market transformation while meeting all the immediate energy, demand, and environmental needs. Drawing upon lessons learned from past MT efforts, the Energy Center of Wisconsin's guide for MT program developers¹⁶ suggests that the first step is not to set end-point definitions, progress metrics or goals. Rather, the first steps include forming a collaborative of key participants. As the Strategic Plan suggests, these may include municipal utilities, local governments, industry and business leaders, and consumers. Then, with the collective expertise of the collaborative, we can define markets, characterize markets, measure baselines with better access to historical data, and define objectives, design strategies and tactics, implement and then evaluate programs. The collaborative will also provide insights that will set our collective expectations for the size of market effects we can expect, relative to the amount of resources we can devote to MT. No one organization in the collaborative will have all the requisite information and expertise for this huge effort. This truly needs to be a collaborative approach from the start.

The metrics and baselines described below in Tables 3 and 4 are presented for the purposes of starting the much-needed discussion between all key participants. These are suggestions, intended to allow key participants to pilot-test processes for establishing baseline metrics, tracking market transformation progress, and for refining evaluation tools. Early trial of these evaluation metrics will reveal any gaps in data tracking so that we may refine our processes before full-scale market transformation evaluations take place.

The set of metrics we selected is intentionally a small set, for several reasons. First, as mentioned, the full set of metrics and baselines need to be selected by key participants. Second, we anticipate that market share data for many mid- and low-impact measures will be too sparse to show MT effects and not cost-effective to analyze. Third, we selected core measures and metrics that would both be indicative of overall portfolio efforts. These measures are also likely to be offered on a broad level by other utilities, providing a greater base of sales and customer data that could be analyzed for far-reaching MT effects.

¹³ Peters, J.S., Mast, B., Ignelzi, P., Megdal, L.M. (1998). *Market Effects Summary Study Final Report: Volume 1.*" Available at http://calmac.org/publications/19981215CAD0001ME.PDF.

¹⁴ CPUC (2008) Strategic Plan, p. 5.

¹⁵ Nadel, Thorne, Saches, Prindle & Elliot (2003).

¹⁶ Peloza & York, (1999).

Therefore, for the Energy Leader Partnership Program the following approach to quantitative baseline and market transformation information is presented as follows. The utilities recommend development of a baseline, and tracking the number of cities, counties and government institutions that have plans for written energy efficiency provisions. Such a metric relates directly to the Strategic Plan (Goal 12.3.4) in terms of measuring progress towards 50% plans for sustainability.

In addition, we propose tracking community adoptions of new construction model reach codes, both residential and nonresidential. This metric aligns with the Strategic Plan (Goal 12.3.1). In addition to being a direct indicator of support by local government partnerships, community adoptions of model reach codes are of strategic interest to the CPUC. A proliferation of dissimilar reach codes would confuse the market relative to building codes and incentive programs. Model reach codes to be developed by Codes and Standards would allow energy efficiency efforts across partners to be aligned with a clear target for each climate zone. As discussed in the Local Government PIPs, the IOUs intend to work closely with partners in establishing baseline code compliance levels and pushing for model reach codes.

With this discussion in mind, IOUs propose the following metrics for this sector:

	Baseline Metric		
	Metric A	Metric B	Metric C
Energy Efficiency Action Plans	Baseline inventory of cities, counties and government institutions within the IOU territory with that have adopted such energy planning documents as Energy Action Plans, Climate Action Plans and Sustainability Plans, and General Plans with energy or climate elements.		
Model Reach Codes		In coordination with Codes and Standards, develop a baseline inventory of cities and counties within the IOU territory with adopted model reach codes	
Baseline Compliance			In coordination

Table	3. A
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Levels		with Codes and
		Standards, develop
		baseline
		compliance levels
		for a collection of
		indicator
		measures. An
		example list of
		measures may
		include: residential
		hardwired lighting,
		residential duct
		improvement,
		ducts in existing
		commercial
		buildings, pool
		pumps, general
		service
		incandescent
		lamps, external
		power supplies,
		and other
		measures as
		appropriate

b) Market Transformation Information

As stated above, market transformation draws heavily upon diffusion of innovation theory, with the state of a market characterized by adoption rate plotted against time on the well-known S-shaped diffusion curve. In practice, however, the diffusion curve of products may span decades. Market share tracking studies conducted 3, 5 or even 10 years after the start of an MT program may reveal only small market transformation effects. Therefore it is problematic, if not impractical, to offer internal annual milestones towards market transformation sectors and specific program activities.

As a consequence, it is not appropriate to offer more than broad and general projections. Any targets provided in the following table are nothing more than best guesstimates, and are subject to the effects of many factors and market forces outside the control of program implementers.

Table 4	.A
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	Internal Market Transformation Planning Estimates		
	2009	2010	2011
Baseline inventory of cities, counties and government	Improvement over baseline, over time	Improvement over baseline, over time	Improvement over baseline, over time

institutions within the IOU territory with that have adopted Energy Efficiency Action Plans			
In coordination with Codes and Standards, develop a baseline inventory of cities and counties within the IOU territory with adopted model reach codes	Improvement over baseline, over time	Improvement over baseline, over time	Improvement over baseline, over time
In coordination with Codes and Standards, develop baseline compliance levels for a collection of indicator measures. An example list of measures may include: residential hardwired lighting, residential duct improvement, ducts in existing commercial buildings, pool pumps, general service incandescent lamps, external power supplies, and other measures as appropriate	Improvement over baseline, over time	Improvement over baseline, over time	Improvement over baseline, over time

c) Program Design to Overcome Barriers

The primary barriers to local government EE programs and the strategies the ELPP will employ to overcome these barriers include:

Primary Barrier: Many local governments do not have adequate staff resources to develop and manage a municipal energy program, especially in the current economic climate. In addition, existing staff may not be knowledgeable about energy issues and options.

Strategies: The ELPP will provide a comprehensive municipal clean energy program that includes technical assistance for program and project development and management, training in EE and DR opportunities, as well as information on

broader energy programs and offerings. ELPP will help identify, qualify and schedule EE, DR and RE projects.

The ELPP will overcome these barriers by providing hands-on assistance to local governments for all project stages, including obtaining financing, and optimizing EE, DR & RE solutions on an integrated, whole-system basis. This will:

- Directly link energy savings and fossil fuel reduction to GHG reduction and AB 32 compliance;
- Achieve short- and long-term energy savings;
- Demonstrate the local government's commitment to efficiency to its constituents and stakeholders; and
- Enable local governments to become champions for EE, DR, and RE, so as to further reduce energy usage and associated GHG impacts within their communities.

Primary Barrier: Access to financing is a significant barrier, particularly when operating in the present credit crisis. Even under "ordinary" circumstances, funding for these types of energy projects (deemed "discretionary" when they are not absolutely needed to protect public health & safety) is difficult to obtain, since they must compete for limited funds with mission-critical activities.

Strategies: The ELPP will provide financing planning assistance including, but not limited to, cost/project estimating and budgeting, identification of financing options, help with scheduling and preparing for reviews and approvals of proposed energy projects and budgets, and on-bill financing.

Primary Barrier: With significant staffing and financial challenges, the local government sector experience lost opportunities which can occur when viable efficiency opportunities are not identified or are value-engineered out of a project due to lack of funds, lack of information, and/or lack of management support.

Strategies: The ELPP's comprehensive approach minimizes lost opportunities in municipal facilities by directly tackling major barriers. The barriers the Government Facilities Element of the ELPP helps overcome are summarized in Figure 10 below:

Primary Barriers	SCE ELPP Strategies
Budgetary Constraints	Provide comprehensive energy (EE/DR/RE) assistance, from project inception through project implementation, including
Lack of staff	financing. Services include:
resources or technical	
expertise to develop	Overcome initial first cost barrier by providing direct
or manage projects	technical engineering audits and assessments to identify cost-effective projects:
	Assist in project planning & development, including

Figure 10: Summary of Barriers and Strategies - Government Facilities Element

Long and costly	cleaner energy options and project identification		
procurement	(EE/DR/RE, whole building/facility basis), EE		
processes	audits, equipment testing & analysis, equipment		
	specifications, preliminary engineering design & cost		
Municipal funding	estimating.		
cycles	• Assist in computing life cycle costs and benefits		
	(installed cost of equipment & systems, financing		
Difficult and time	costs, energy savings, expected changes to operations		
consuming approval	& maintenance (O&M) and repair & replacement		
processes	(R&R) costs over the life of the equipment or system,		
-	etc.) for input to capital budgets.		
	Provide financing assistance: access to SCE's Financial		
	Solutions' OBF option, information about CEC & other low interest loans, and information about successful municipal		
	EE revolving fund approaches.		
	Assist local governments in computing and providing		
	information about GHG reductions in their project proposals		
	(see Element B – Strategic Planning Support).		
	Provide access to technical experts selected by SCE through		
	competitive solicitation processes.		
	Provide on-going project management assistance including		
	project scheduling and field inspections		
	Provide training and access to benchmarking tools such as		
	USEPA S EINEKU Y STAK PORTIOIIO Manager (see Element		
	B – Strategic Planning Support).		

d) **<u>Quantitative Program Targets</u>**

 Table 5.A – See individual Partnerships

6.A Other Program Element Attributes

a) **Best Practices**

The ELPP employs the following best practices in energy programs design, as summarized in Figure 11 below:

Figure 11: Best Practices - Government Facilities Element

Type of Best Practice	Best Practice	ELPP Application(s)
Goals & Objectives	Develop and use clearly articulated objectives that are internally consistent, actionable and measurable.	The ELPP's steps to higher incentives & program benefits are well structured & understandable.
	Develop tools to track the portfolio's performance on a continuous basis and report progress.	The LGP-specific Detailed Program Plan is a living document that will facilitate continuous tracking and reporting.
Planning	Design programs within the portfolio based on sound program plans; where appropriate, use clearly but concisely articulated program theories.	The ELPP plan & program structure are based on sound program plans & theories. Baseline research was conducted for each partnership and on individual participating local governments.
	Conduct baseline research. Build feedback loops into program design and logic.	The Detailed Program Plan provides a mechanism for closely monitoring progress and making adjustments as needed to meet partnership goals and objectives.
	Maintain the flexibility to rebalance portfolio initiatives as needed to achieve the portfolio's goals & objectives.	
Staffing	Select highly qualified in-house staff &/or outside contractors to manage, design, implement and evaluate programs.	Qualified SCE Project Managers have been assigned to each LGP to promote open communications and implementation success. The roles and responsibilities of the LGP's partners are defined in the
	Clearly define portfolio implementation responsibilities and clarify roles to minimize confusion.	governing partnership agreements. More detailed roles and responsibilities of all participants are further defined the individual LGPs' Detailed Program Plans. SCE's resources will be supplemented with pre-qualified technical support contractors selected by SCE though competitive solicitations to cost- effectively provide the portfolio of technical assistance needed to support its LGP.
Integration	Leverage relationships from	The ELPP is structured to leverage all

Type of Best Practice	Best Practice	ELPP Application(s)
	complementary organizations such as utilities, trade allies, and industry specialists.	resources, assets and relationships of SCE, its partners, and their participants, constituents, stakeholders, and other related individuals & organizations.
Reporting & Tracking	Clearly articulate the data requirements for measuring portfolio and program success. Design tracking systems to support the requirements of all major users: program administrators, managers, contractors and evaluators.	The LGPs' Detailed Program Plans, coupled with frequent meetings between/among SCE, its partners and their members/ constituents is designed to track and report partnership progress and successes.

In addition, the ELPP incorporates the lessons learned from past program cycles. SCE has determined that as local governments become champions for EE in their communities, they are more intent on reducing energy use in municipal facilities to "Lead by Example" [Strategic Plan Goal 2].

The ELPP will help overcome the barriers inherent to governmental entities, which will help pave the path for achieving the Strategic Plan goals of a 20% reduction below 2003 levels by 2015, and 20% below 1990 levels by 2020. The LGPs will supplement best practices learned from SCE's 2006-2008 local government partnerships with input from other organizations conducting comparable programs, including but not limited to:

- National organizations such as the American Council for an Energy-Efficient Environment (ACEEE) and the International Council for Local Environmental Initiatives (ICLEI) USA;
- California organizations dedicated to local governments such as the Institute for Local Governments (ILG) and the Local Government Commission (LGC);
- Past, present and future government partnerships involving the other utilities
- The third-party program "California Sustainability Alliance" and its partner, the Department of Conservation's "Emerald Cities Pilot Program"; and
- A wide variety of other complementary programs and initiatives.

See Core Program Element B (Strategic Planning Support) for more information about best practices, and Section 6.g, EM&V, below, for additional information about documenting best practices.

b) <u>Innovation</u>

The Government Facilities program element incorporates innovative aspects of program design, as discussed above, including benchmarking, finance, and framing energy savings by municipal facilities within a climate action framework.

The ELPP itself is innovative in the comprehensiveness of the services it will provide to local governments. The ELPP will help local governments adopt and implement higher Reach Goals through a diverse portfolio of upstream policies and programs. Further, the ELPP will help local governments take a proactive role in reducing their energy use and carbon footprint by:

- Helping them understand where and how energy is used in their jurisdictions; and
- Engaging local government assistance in developing and implementing diverse portfolios of marketing, education, and outreach programs targeting high energy users in their jurisdictions.

Services provided help overcome primary barriers local governments face in adopting and implementing cleaner energy, including:

- Initial costs of technical audits and assessments for project identification and qualification;
- Prioritizing and ranking projects in accordance with their cost-effectiveness; and
- Helping local governments obtain financing from a variety of sources.

Additionally, each LGP will collaborate with other ELPP participants and broader networks of local governments to address potential barriers by sharing solutions and best practices (see Element B – Strategic Plan Support). This is the first such fully comprehensive program for California local governments structured specifically to implement the three aforementioned strategies set forth in the Strategic Plan.

The ELPP will enable California's local governments to assume their role as leaders in their communities on energy, climate action, and environmental issues through the unique combination of:

- A comprehensive portfolio of technical and financial assistance designed to overcome the most significant barriers to local government energy programs;
- A flexible and agile program design that provides continuous feedback and opportunities for course corrections as needed to achieve the LGP's goals and objectives;
- Significant benefits for local governments that are willing and able to deliver the highest level of energy savings and demand reductions, both by themselves and by their constituents; and
- A true partnership with local governments, in which the local governments themselves take a proactive leadership role in encouraging energy users in their respective jurisdictions to demonstrate energy, climate, and environmental responsibility by enrolling in utility EE and DR programs, as well as other complementary sustainability initiatives.

c) <u>Interagency coordination</u>

The ELPP will foster coordination among LGPs by encouraging them to make use of other resources, including:

- Participating in the CEC loan program for governments;
- Participating in CEC's Public Interest Energy Research (PIER) program;
- Participating in the "EPA ENERGYSTAR Low Carbon IT Campaign Ally" with their power management savings program; and
- Working with the California Air Resources Board (CARB) as well as other agencies to co-market materials, co-brand programs, etc.

<u>Note</u>: Additional interagency coordination with CARB, CEC/PIER, Codes & Standards, and other related opportunities for leverage are addressed below under Core Program Element B (Strategic Plan Support) and Core Program Element C (Core Program Coordination).

d) Integrated/coordinated Demand Side Management

SCE's ELPP model offers a greater concentration of DR offerings and resources to LGPs. Different levels of DR offerings have been defined and LG partners will be encouraged to establish goals for DR that will help them progress to higher levels of participation. In addition, the LGPs will use an integrated approach, encouraging participation in DR, CSI, and SGIP programs in order to achieve coordinated delivery of DSM options. Although the funding for integration will come from the dedicated funding source for each integrated measure, SCE will make this transparent to the local government and its constituents.

Some LGPs will achieve integration of all elements, while others may only integrate a few. The integrated elements include:

- Integrated energy audits will be offered to government facilities that show savings potential and a willingness to commit the additional time and financial investments, while standard EE audits will be offered to all other program participants;
- Emerging Technologies and CEC-PIER collaboration is expected to include pilot projects and market acceleration assistance for market-ready products in the general categories of day lighting, lighting, HVAC, controls, and building envelope improvements;
- Commissioning and retro-commissioning services will continue being offered to segment customers; and
- DR opportunities will be targeted in larger facilities, particularly as part of monitoring-based retro-commissioning efforts where controls to facilitate DR efforts would be installed.

e) Integration across resource types (energy, water, air quality, etc.)

The ELPP encourages LGPs to coordinate with other resource agencies including air quality management districts, schools, local and regional water and wastewater agencies, transportation authorities, and other interested stakeholders to comprehensively address EE, DR and RE opportunities in conjunction with GHG
reduction, and to co-deliver the partnership's message of saving energy, money and the environment.

f) <u>Pilots</u>

No pilot projects are planned for the ELPP at this time; however, local government partners will be encouraged to identify technologies and/or processes that they would like to pilot. Codes and Standards and PIER coordination may provide piloting opportunities. Most LG partners have indicated a willingness to provide sites for piloting new technologies and initiatives and to participate in the Codes and Standards pilot program.

Opportunities may arise to test technologies that could, if successful, be extended across California. Codes and Standards gives partnership programs high priority in selecting test sites, and also provides links to CEC's Public Interest Energy Research (PIER) program. The Codes and Standards and Workforce Education and Training programs support local government Title 24 compliance activities with energy code training for plan checkers, inspectors, and the trades.

g) <u>EM&V</u>

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2009-2011 after the program implementation plans are filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy Division studies. More detailed plans for process evaluation and other program-specific evaluation efforts cannot be developed until after the final program design is approved by the CPUC and in many cases after program implementation has begun, since plans need to be based on identified program design and implementation issues.

Element B – Strategic Plan Support

4.B Program Element Description and Implementation Plan

a) <u>List of Program Elements</u>

B. Strategic Plan Support	
B1	Code Compliance Support
B2	Reach Code Support
B3	Guiding Document Support
B4	Financing for the Community
B5	Peer to Peer Support

b) <u>Overview</u>

Element B - Strategic Plan Support and the "ELP Strategic Support" sub-program PIP are designed to collectively facilitate the vision set forth in the Strategic Plan. California's local governments are leading their communities to a cleaner energy and low carbon future. This section describes the standard overview, rationale, outcomes, and barriers associated with this program element. The specific services to be

accessed by the individual LGPs are described in the individual LGP sub-program PIPs.

The support offered through Element B to any LGP and/or its participating local governments depends on a variety of factors, including availability of staff and financial resources, competition with other local priorities, and how the local government's leadership views its role with respect to energy and climate issues. Some local governments have very limited staff and budgets and may be engaging in energy and climate issues for the first time, while other local governments have been working on these issues for several years and are recognized both in California and nationally as sustainability leaders. Therefore, Strategic Plan Support will need to be tailored to the individual needs and capabilities of each participating local government.

Through the ELPP, SCE is offering assistance to help local governments reduce their carbon footprint through increased energy efficiency. This offering will be delivered with expertise and strong relations with local government. This collaborative effort is structured to leverage the unique resources, assets, relationships, communications channels, programs, training, models and tools brought by each stakeholder in support of the Strategic Plan. This is a statewide local government strategic element support effort among the four investor-owned utilities.

ELP Strategic Support will help local government participants understand the linkages between energy efficiency and greenhouse gas (GHG) reduction, i.e., AB 32 compliance. ELP Strategic Support will deliver in-person and on-line trainings to facilitate local government understanding of requirements under AB 32, learn about principles and methodologies for conducting GHG inventories and setting GHG reduction targets and developing and implementing climate action plans (CAPs). ELP Strategic Support will also provide access to templates and tools that detail the components of GHG inventories and CAPs and provide training on mitigation strategies for reducing GHG emissions in both local government and communityscale activities and facilities.

ELP Strategic Support will conduct conferences, workshops and webinars, building upon ELP Strategic Support's offerings and linking energy actions with GHG reduction to provide information about energy efficiency, demand response and renewable energy (EE/DR/RE), AB 32 implementation, Strategic Plan, and other timely and important energy and climate policies, rules, regulations and legislation. These venues will increase opportunities for local governments to network and share information and experiences about best practices and lessons learned.

To encourage local governments to implement the best practices, ELP Strategic Support will conduct a statewide local government recognition program for local governments that achieve their energy and climate goals. Within SCE's service area, Silver, Gold and Platinum awards levels will be linked to the incentive and achievement levels established in SCE's ELPP program. ELP Strategic Support will collaborate and coordinate their efforts in order to leverage each other's efforts, resources and funding. Within SCE's service area, Silver, Gold and Platinum awards levels will be linked to the incentive and achievement levels established in SCE's ELPP program (see individual LGP PIPs).

The ELP Strategic Support program element thus provides an integrated portfolio of services that will complement SCE's ELPP and help local governments achieve the Strategic Plan's strategies and goals while accelerating their jurisdiction's path to a cleaner energy and low carbon future.

Below is a description of types of support that will be provided through the 5 subelements.

Sub-Element B1 - Code Compliance Support

The Code Compliance sub-element will be implemented primarily through the Codes and Standards program, as described in the Codes and Standards PIP. Some individual LGPs will take action related to code compliance by engaging in a range of activities that will be coordinated with the Codes and Standards program.

LGPs that participate in the Codes and Standards program may take advantage of the Title 24 and measure-specific training. They may also be able to participate in pilots designed to evaluate and improve the process used by local governments to conduct code compliance. LGPs may also obtain support in developing local codes or ordinances. However, development of local codes should be done at a county or regional level to avoid the development of a patchwork of inconsistent codes that complicate realization of energy savings.

The Code Compliance sub-element will be implemented primarily through the Codes and Standards program (see Codes and Standards PIP). In addition to providing training for local government staff that has responsibility for code compliance, LGP's may also want to develop and implement certification programs for local inspectors and contractors. Some LGPs may assist SCE with outreach in coordination with SCE and statewide marketing activities (see Core Program Element C – Core Program Coordination). Local governments may assist in announcing training opportunities designed to raise awareness about current codes and encouraging compliance. Local governments often have access to constituents through existing relationships and can use those routes to enhance or complement other EE marketing activities.

SCE will:

- Provide training on Title 24 compliance for local government permit-granting & building inspection staff; and
- Help local governments conduct education & outreach to builders, developers, architects, engineers, and other key stakeholders that have a significant role in Title 24 implementation & compliance.

See the Codes and Standards PIP for further information.

Sub-Element B2 - Reach Code Support

The Reach Code Support sub-element will be implemented primarily through the Codes and Standards program, with additional support from the Energy Leader Program Strategic Support sub-program (see Codes and Standards PIP and Energy Leader Strategic Support sub-program PIP). Some LGPs may include Reach Code activities to promote local codes that exceed Title 24 requirements. These activities might include training local government staff about adoption and implementation of model reach codes, establishing expedited permitting and title approval processes, and establishing fee structures and other incentives for green buildings and other above-code developments (such as green building standards for new construction and retrofits/retro-commissioning or carbon offset reduction programs that exceed Title 24).

One of the goals of the Codes and Standards program is to develop a model ordinance that exceeds the 2008 Title 24 Building Energy Standard and receive pre-approval from the CEC. This would avoid the current problem of each city developing its own unique ordinance for approval by the CEC. The Codes and Standards program will also investigate a model ordinance that would include a package of standards that would be applicable at time-of-sale or major remodels. The program will encourage all local governments to first optimize compliance with existing codes. In addition to the biggest savings opportunity, sub-optimal compliance with the existing code will erode potential savings from a new code. Reach code support is designed to facilitate mutual support from the utilities and local governments to realize the full savings potential from codes, both statewide, and at a local level. SCE will request that prior to adopting any new codes, building department staff attend role-based training as well as relevant measurespecific training (HVAC replacements, controls under skylights, etc.), and to identify, implement and document two actions designed to increase compliance.

Governmental, quasi-governmental and supporting organizations dedicated to clean energy, GHG reduction, and environmental sustainability (may include but not limited to ICLEI, Institute for Local Government (ILG), the Local Government Commission (LGC), SCE will request that prior to adopting any new codes, building department staff attend role-based training as well as relevant measure-specific training (HVAC replacements, controls under skylights, etc.), and to identify, implement and document two actions designed to increase compliance.

The stakeholders will help build a library of best policies, practices, tools, and techniques. These and other organizations will also help disseminate this information to LGPs and other California local governments through conferences, workshops, webinars, and other types of training.

The ELPP will encourage adoption of reach policies, codes and standards through the following strategies:

- Encourage participating local governments to adopt aggressive goals for cleaner energy and GHG reduction that are structured to achieve the Strategic Plan's zero net energy vision;
- Encourage participating local governments to adopt policies, plans, codes, and standards for other sustainability initiatives (such as water efficiency, waste management, transportation management, and smart planning & growth) that exceed statutory requirements and will affect cleaner energy availability and GHG reduction;
- Provide information and assistance directly, through peer networks, and through a broad growing network of statewide and national environmental sustainability initiatives, about strategies such as cleaner energy, climate action & green/sustainability plans; green buildings; solar cities, and zero carbon communities; and
- In collaboration with SCE's Codes and Standards program, coordinate twoway sharing of information with CEC PIER about challenges to implementation of Reach Codes.

Please refer to the Codes and Standards PIP and the Energy Leader Partnership Strategic Support sub-program for further information.

Sub-Element B3 - Guiding Document(s) Support

The Guiding Document Support sub-element will be implemented with additional support from industry experts identified by SCE. Most individual LGPs will include this activity in their scope of work. Guiding documents may include Energy and/or Climate Action / GHG emissions reduction plans and other documents (such as General Plans, Building Permits, and Green Building Ordinances) that assist local governments in integrating clean energy and GHG reduction goals and principles into their local and regional plans and permit and approval processes.

With the assistance of external stakeholders engaged in sustainability activities, this Guiding Document sub-element and the ELPP Strategic Plan Support element will:

- Compile a collection of existing guiding documents references, guidebooks, checklists, models, and tools about cleaner energy and GHG reduction options for local governments;
- Help develop new documents that guide local governments and their constituents to reduce community energy consumption and GHG emissions effectively. These might include, for example, estimating the energy and GHG impacts of various policy goals and objectives and embedding these into the General Plan; and
- Provide technical assistance to help local governments conduct GHG emissions inventories, compute their carbon footprint, and prepare Climate Action Plans, in accordance with protocols jointly developed and adopted by

the California Air Resources Board (CARB), the California Climate Action Registry (CCAR), and ICLEI (the "Local Government Operations Protocol" for computing municipal emissions and the "Community Operations Protocol" for computing emissions by residents and businesses that is scheduled for implementation in Summer 2009).

The ELPP will disseminate cleaner energy and climate action information to local governments and their communities through:

- Conducting workshops and webcasts about important new developments in energy and climate action policies, rules, legislation and regulations;
- Providing checklists of existing and emerging best practices;
- Providing information and training about new protocols for computing carbon footprints;
- Providing links to websites with information about best policies and practices, energy and GHG data, models, tools, and techniques; and
- Providing information about organizations that conduct training on cleaner energy and GHG reduction policies, legislation, & regulations.

Sub-Element B4 - Financing for the Community

The Financing for the Community sub-element will be implemented with the assistance of the ELP Strategic Support sub-program and technical resources to be identified by SCE through competitive solicitations and partnerships with complementary initiatives. In support of Strategic Plan strategies, the ELPP will help local governments identify, evaluate, and implement opportunities for financing community energy projects, such as:

- Low-interest loans through the California Energy Commission (CEC);
- The CEC's Energy Efficiency Financing Program (EEFP), which provides financing for schools, hospitals, and local governments through low-interest loans for feasibility studies and the installation of energy-saving measures; and
- The 2009 American Reinvestment and Recovery Act (ARRA) currently being considered by Congress, which is expected to provide significant funds to local governments in the form of Energy Efficiency Block Grants that could be used to help fund community projects. The ELPP will assist local governments in developing plans for integrating these funds, if they become available, into their community energy plans so as to optimize energy and GHG reduction benefits.

The ELPP will help local governments evaluate the cost-effectiveness of various options and effectively communicate those results to policymakers and community leaders. This assistance may include:

- Performing life cycle cost analyses and illustrating how financing strategies leverage a local government or community's limited capital, allowing them to do more projects with less upfront cash; and
- Showing how initiating a cleaner energy project portfolio with low-interest financing can help build a perpetual fund for financing future projects (e.g., by

reinvesting reduced operating costs from energy savings after the loans have been repaid).

The ELPP will provide technical financing assistance through:

- Conducting workshops and webcasts about innovative financing strategies tested and deployed by local governments, such as special assessment districts and applications of AB 811, to accelerate adoption of cleaner energy by mitigating the initial cost of EE retrofits;
- Helping local governments identify potential financial partners for cleaner energy projects;
- Providing links to websites with information about zero-to-low interest loans, grants, and subsidies for cleaner energy projects;
- Conducting webinars about how to evaluate financing options; and
- Providing guidance about low-cost ways to create high value for stakeholders and constituents that also meet aggressive local green goals (e.g., builders' entitlements for developers).

Finally, the ELPP will assist local governments in linking the energy savings for community energy projects to climate action strategies, AB 32 compliance, and long-term clean energy security and environmental sustainability, and help local governments communicate these options to community and business leaders whose support will be needed to implement them.

Please refer to the ELP Strategic Support sub-program PIP for further information.

Sub-Element B5 - Peer to Peer Support

The Guiding Document Support sub-element will be implemented primarily through the ELP Strategic Support sub-program. Information sharing can occur within a single LGP among local government participants, among local government staff, LGPs, and/or LGPs, their participating local governments, and other local governments throughout California and the U.S.

The program will provide LGPs and their local government members multiple venues for participating in activities, including conferences, workshops, webinars, and smaller special-purpose working groups (for example, when local governments implementing retro-commissioning projects want to share information).

Peer-to-peer exchange is an important way to build local government EE knowledge and capabilities, and has the added benefit of providing insights into the challenges inherent in local government organizational structures and decision-making processes. This will provide important data about increasing the effectiveness of cleaner energy and GHG reduction programs.

LGPs have told SCE that they want to meet other LGPs and share information about everything associated with implementing their Detailed Program Plans.

This underscores the importance of peer support: when entering uncharted territory, it is comforting to share that journey with others. Facilitating sharing of information helps participants avoid costly mistakes and "re-inventing the wheel," improves the effectiveness of projects and programs, and increases the likelihood of success.

The expected outcomes are the exchange of information within, across, and from partnerships to broader local government staff. The range of expected impacts is consistent with the Strategic Plan and includes:

- Increased knowledge and awareness of EE;
- Changes in local government behaviors related to EE;
- Increased ability to implement EE within local governments;
- Streamlined access to information needed to develop goals and implement strategies around cleaner energy and GHG reduction; and
- Benefits to local governments within California and in other states.

The ELPP will access the combined member networks and communications channels of governmental, quasi-governmental and implementing organizations to facilitate peer networking. In addition, the ELPP is working to develop and implement a local government recognition program that will enable all California local governments to benchmark their energy, carbon, and other sustainability performance against their peers, and recognize local governments that achieve or exceed their goals. Plans include.

- Conducting quarterly and annual meetings among LGPs and local governments to share lessons learned and successful strategies for overcoming implementation challenges;
- Creating working groups of ELPP participants that meet regularly to collaborate on development of certain Reach goals (for example, a Green Building Initiative Working Group) and that support each other throughout implementation;
- Encouraging ELPP participants to share their plans and achievements with peers both within and outside of the ELPP (for example, at ACEEE's annual conference);
- Inviting sustainability organizations and thought leaders to participate in discussions with partners about various types of Reach goals;
- Presenting certificates of achievement and awards to partners that meet or exceed their goals; and
- Leveraging the Governor's Environmental and Economic Leadership Awards, the California Sustainability Alliance Sustainability Showcase Awards, and other awards and recognition programs to honor significant Partner achievements.

Please refer to the ELP Strategic Support PIP for further information.

Strategic Plan Support focuses on meeting Strategic Plan goals by leveraging the considerable power and influence of local governments on their stakeholders and

constituents through upstream strategies, including but not limited to policies, goals, codes, ordinances, plans, and initiatives. Local governments are also encouraged to continually "set the bar higher" by committing to and achieving progressively more EE and DR, and by establishing a portfolio of Reach codes, standards, policies, goals, and ordinances. The ELPP provides technical and financial assistance to LGs to help them implement the Strategic Plan goals, including access to reference libraries and to peer-to-peer networks for sharing information. To provide further encouragement, the ELPP will conduct an awards and recognition program that recognizes LGPs that achieve their goals, encourages them to advance to the next level of enhanced incentives and program services, and compliments LGs for adopting aggressive Reach goals and policies and/or demonstrating innovative approaches to clean energy and GHG reduction.

c) <u>Non-incentive services</u>

All of the services provided under Core Program Element B – Strategic Plan Support are non-incentive services.

d) Target audience

The target audience for this core program element is the partnership itself and its local government participants. All levels of staff and management in the local government who are involved in the development and implementation of policies, goals, codes, standards, plans, initiatives, etc. — elected officials, city managers, and operating and planning staff — will have access to the extensive libraries and networks created for information-sharing . The ELPP will assist local governments, quasi-governmental entities, nonprofits focused on the public sector, and others in achieving Strategic Plan objectives. Each Partner's actions in this arena will benefit their respective constituents, including but not limited to residents, inspectors, contractors, small businesses, and other local governments.

e) Implementation

The diagram below summarizes the key components in the Strategic Plan component of program implementation.

[1]	[2]	[3]	[4]	[5]
Compile	Establish	Provide	Recognize	Raise
Resources	Partner Goals	Forums	Achievements	the Bar
Leverage efforts by LGs, industry associations, non- profits & others to: • Identify "best-of- the-best" energy, climate & sustainability policies & programs • Assemble checklists of options & tools • Establish network of complementary programs that can bring technical & financial assistance and support	 Develop "baseline" for each participating LG (existing energy, climate & other sustainability policies, programs, codes, standards, goals & objectives) Facilitate LG identifi- cation & ranking of opportunities for "reach" programs, policies, codes, standards Develop technical assistance portfolio (training on existing policies & codes, development of reach codes, innovative financing options for residents 	 Directly conduct training & dissemination of information through workshops & webcasts Support ELPP Working Groups for various types of reach goals Establish robust network of complementary sustainability organizations & initiatives & provide venues for bringing their ideas & recommenda- tions to ELPP participants 	 Provide venues for ELPP participants to present their achievements to others Present certificates of achievement to Partners that meet their goals and awards to Partners that exceed them Leverage existing awards & recognition programs to honor significant Partner achievements 	 Continually provide timely information about new & emerging best policies, programs, codes, ordinances, plans, practices, etc. and encourage ELPP participants to consider raising the bar



5.B Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3.B – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information:

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4.B – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>:

Following is a list of the primary barriers to implementation of Core Program Element B - Strategic Plan Support and the strategies that will be deployed by the ELPP to overcome these barriers.

Figure 13: Barriers and Strategies – Strategic Planning Element

Primary Barriers	Strategies to Overcome Barriers
Most local governments do not have	In addition to providing direct technical
adequate staff resources to stay	assistance, the ELPP builds upon existing
abreast of current energy and climate	programs and resources funded by SCE, other
issues and options.	IOUs, state agencies, and a wide variety of other
	organizations to compile and facilitate access to
	the extensive body of best practices, tools and
	techniques needed by local governments to:
	• Assure compliance with existing policies,
	codes and standards
	• Be informed about new and emerging
	policies, codes, standards, programs, practices,
	tools, and techniques, and
	• Develop and implement Reach goals.
Most local governments are both risk-	The ELPP will assist participants in
averse and resource-constrained	documenting and communicating the resource
resulting in a predisposition towards	and societal benefits achieved by successfully
caution about launching aggressive	implemented initiatives. This understanding is
initiatives that may incur significant	essential to mitigating political and perception
incremental costs and risks, and may	risks.
thus potentially appearing	
irresponsible to local governments'	The ELPP will bring lessons learned and
stakeholders and constituents.	recommendations from leading organizations
	and individuals directly involved in testing and
	deploying sustainability initiatives and
	strategies.

d) **<u>Quantitative Program Targets</u>**

Table 5.B

Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1 Education and training- Number of workshops *	18	25	29
Target #2 Strategic Planning Activities- Number of Ordinances, policies, etc. *	3	5	7

* Figures provided are estimated targets.

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6.B Other Program Element Attributes

a) **Best Practices**

SCE's Strategic Plan Support program design incorporates the following best practices.

Type of Best Practice	Best Practice	ELPP Application(s)
Goals & Objectives	Develop tools to track the portfolio's performance on a continuous basis and report progress.	Monthly partner meetings provide timely opportunities to identify & remedy barriers.
Planning	Conduct baseline research Build feedback loops into program design and logic	Baseline research about participants' existing energy, climate & other sustainability policies, programs, codes, standards, goals, and objectives has been conducted for each LGP and its individual participating cities & counties.
	Maintain the flexibility to rebalance portfolio initiatives, as needed, to achieve the portfolio's goals and objectives.	Quarterly and annual ELPP-wide meetings will be held to facilitate sharing of lessons learned and successful strategies. External peers will also be recruited to provide insights and observations about ELPP efforts. These activities will provide opportunities to modify plans as needed to accomplish goals.
Staffing	Select highly qualified in- house staff and/or outside contractors to manage, design, implement and evaluate programs.	SCE resources will be supplemented with technical support contractors (selected by SCE though competitive solicitations) to cost- effectively provide the technical assistance needed to support partners. In addition, technical expertise will be brought in by external organizations and individuals who are implementing complementary sustainability initiatives.
Integration	Leverage relationships with complementary organizations such as utilities, trade allies, and industry specialists.	The ELPP will leverage SCE and other IOUs' Sustainable Communities Programs, and an extensive network of California and U.S. governmental and industry associations, community action groups, non-profit organizations, and related sustainability initiatives.

Figure 14: Best Practices - Strategic Planning Element

b) <u>Innovation</u>

The Strategic Plan Support element is unique in its network comprehensiveness of complementary sustainability initiatives. These will be leveraged to encourage ELPP participants to assume a leadership role in adopting and implementing aggressive reach policies, goals, codes, standards, ordinances, plans, and initiatives. No other program has yet accomplished this level of collaboration at this scale.

See Section 6.c, Interagency Coordination, below for more information.

c) Interagency coordination

The Strategic Plan Support element will provide many opportunities for coordination with the CEC, CARB and PIER, especially as communities look towards AB 32 implementation, Title 24 compliance, and development of Climate Action Plans. LGPs that commit to achieving Strategic Plan goals will need to align their strategies with local goals, priorities, and resources. The process of establishing and adopting Reach goals may be long and arduous, requiring extensive education and outreach campaigns, both within the local government itself (among staff, department managers, elected officials, etc.) and among community and business leaders. The ELPP's peer network and technical assistance will help local governments develop and implement their plans and strategies.

d) Integrated/coordinated Demand Side Management

The IOUs have identified Integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

The Strategic Plan Support program element will achieve integrated DSM by providing comprehensive information about cleaner energy and GHG reduction programs and strategies to local governments.

For example, a Green Building Policy may specify minimum EE, DR and RE standards for new and/or existing buildings. To assure compliance, the minimum green building criteria should be integrated into local permit and approval processes for new construction and retrofits. In addition, these criteria should be included in the General Plan so that it is clear that all new development will need to meet these criteria, whether the facilities are constructed by the local government itself, its residents or businesses, or other stakeholders such as private developers. The local government should memorialize its commitment through a Green Building Ordinance and/or Policy Resolution.

Optimally, the local government will also conduct public workshops and meetings, engaging its community leaders and key stakeholders in discussions about its Green Building requirements, and providing information to builders, engineers, architects, planning staff, building inspectors and others about technical and financial resources (including but not limited to utility programs, solar rebates, CEC loans, state and federal subsidies and assistance, etc.) that are available to assist them in implementing their projects. The ELPP's local government recognition program will reward local governments that adopt these types of reach policies by publicizing their achievements to their peers.

e) Integration across resource types (energy, water, air quality, etc.)

Consistent with the Strategic Plan, this program will include cleaner energy in combination with GHG reduction. Although not a direct goal of the ELPP, the process of computing carbon footprints and developing CAPs will also benefit other sustainability initiatives such as water efficiency, waste management, transportation management, smart planning, and growth.

In addition, Sub-Elements B2 – Reach Code Support, B3 – Guiding Documents Support, B4 – Financing for the Community, and B5 – Peer-to-Peer Support rely upon resources, assets and relationships brought by a wide range of complementary initiatives, including broader sustainability initiatives. While non-energy and non-air initiatives are not the primary focus of the ELPP, many of these also have energy and GHG impacts. The ELPP will bring these resources and information to LGPs and their participating local governments so that they can decide the best mix of actions to achieve their goals.

f) <u>Pilots</u>

Unless included in the individual sub-Program PIPs, no pilots are planned at this point, although it is possible that explorations of reach policies and goals could be developed into pilot programs. Individual LGPs may choose to implement pilots related to this element.

g) <u>EM&V</u>

Evaluations will focus on examining the success of the ELPP's efforts at enhancing and disseminating knowledge to target audiences. For example:

- Short surveys will be done at all training sessions;
- Process and impact evaluations from 2006-08, as well as other trade data, will be used to focus initial efforts;
- New program elements will be evaluated within three months of initiation; and
- Process evaluations will survey both existing and potential participants and implementers.

Evaluation efforts will review program elements and participation tracking data, and survey key decision makers, to verify enhanced practices in LGPs at least on a yearly basis. The statewide process evaluations will be driven by researchable issues based on activities and expected outcomes described in the ELPP theory and logic model. The process evaluation will also provide early feedback as to how well the 2009-2011 ELPP is progressing toward meeting the goals and objectives stated earlier in this PIP.

The specific researchable issues chosen for the process evaluation will be determined with consultation from the ELPP's stakeholders, and will include assessing how effectively the ELPP receives adoption information from the EE program's deployment efforts, as requested by the CPUC. Process evaluation tasks will include an update (if needed) of the program theory and logic model. The process evaluation will use commonly-used methods such as stakeholder interviews, but may also use less-common techniques, such as communication/social network analysis.

Element C - Core Program Coordination

4.C Program Element Description and Implementation Plan

a) List of Program Elements

C. Core Program Coordination	
C1	Community Outreach & Education
C2	Residential and Small Business Direct Install
C3	Third Party Program Coordination
C4	Retrofits for Just Above LIEE
C5	Technical Assistance

b) <u>Overview</u>

The Core Program Coordination element will be implemented by all of the Local Government Partners (LGPs) in SCE's ELPP. This section describes the standard overview, rationale, outcomes, and barriers associated with the Core Program Coordination element. Unique aspects of each LGP's Detailed Program Plan will be described in the individual LGP PIPs.

c) Non-incentive services

All ELPP services provided under Core Program Element C –Coordination are nonincentive services. The comprehensive and diverse portfolio of IOU and non IOU technical, financial and marketing assistance that will be assembled and administered through the ELPP encompasses energy audits, cost-benefit analyses, energy project structuring & financing, and incentives. In addition, statewide non-resource technical information and Marketing, Education and Outreach (ME&O) programs, such as FlexYourPower, will be used to support the partners' education and outreach activities. Further, support and assistance will be requested from other local, regional and statewide energy, water, GHG reduction and other relevant complementary programs.

d) Target audience

Community level data will be analyzed to determine the areas with the largest potential based on market potential studies and consideration of previously served customers. A strategic market planning approach will be used to identify customers best suited for comprehensive yet cost-effective retrofits.

The target audience is slightly different for each sub-element.

Element C – Core Program Coordination	Target Audience
C1 – Community Outreach & Education	LGPs and participating local governments, community based organizations, contractors, SCE customers (residential, business, institutional), building engineers
C2 – Residential & Small Business Direct Install	All residential & small business customers, but with a special emphasis on hard-to-reach sectors including low income, very small businesses, non-English speaking customers, etc.
C3 – Third Party Program Coordination	Third party program service providers, especially those that provide support for residential & small business direct installs, low income & multi-lingual services, etc.
C4 – Retrofits for just- above LIEE-qualified customers	Low income customers whose income falls just above LIEE income guidelines.
C5 – Technical Assistance	Local governments, SCE customers, contractors

Figure 15: Target Audience – Core Program Coordination

e) Implementation

Through the Core Program Coordination element, LGPs coordinate with each other, with their participating local governments, with SCE, and with other implementers to support EE programs across the SCE portfolio with respect to outreach, education, direct installations for residential and small business customers, third party programs, and technical assistance. Local governments have multiple superior points of access and communications channels with their stakeholders and constituents. All of SCE's LGPs have committed to help SCE identify and enroll local participants in residential and small business direct install programs. Through the ELPP, LGPs will also have the opportunity to help bring EE to moderate-income customers slightly above the LIEE guidelines or to customers who are unable to produce the necessary LIEE documentation.

In addition, the ELPP will help LGPs coordinate with and leverage other sources of funding to increase the impact of SCE offerings by including access to programs provided by other agencies such as the CEC, CARB, and other state and federal agencies. In particular, the 2009 American Reinvestment and Recovery Act (ARRA) that is currently being considered by Congress is expected to provide significant

funds to local governments in the form of Energy Efficiency Block Grants that could be used to help fund community projects. Through Sub-Element B4 – Financing for the Community, the ELPP will assist local governments in developing plans for integrating these funds, if they occur, into their community energy plans in a manner that optimizes cost-effective energy and GHG reduction benefits.

Sub-Element C1 – Community Outreach & Education

Under the ELPP, local governments play a lead role in developing and implementing a diverse portfolio of customized education and outreach collateral, media and events designed to engage energy users within their respective communities. In addition to providing important and timely information about energy and climate policies, goals and opportunities, the education and outreach activities target increased enrollment by residential and business customers in SCE re and third-party EE and DR core programs. LGPs collaborate to develop strategic energy and climate messages to key groups of high potential and hard-toreach energy users. LGs then take leadership in developing and securing strategic venues for delivering the messages.

Importantly, local governments participating in SCE's ELPP publicly commit to help increase community energy efficiency within their jurisdictions and formalize that commitment through an adopted resolution.

Under the ELPP, there are three primary types of education and outreach channels:

- **Internal (within the local government):** Key municipal points of interface with the public (for example, planning, permits and approvals, water and sewer bills and connections, building inspections, etc.) that provide opportunities to effectively deliver EE and DR messages to targeted customer groups;
- External (within local government's jurisdiction): Communication channels provided by community and other constituents (for example, community leaders including faith-based organizations, local chambers of commerce, business and industry associations, developers, etc.) that have unique and superior access and influence on targeted groups of energy users; and
- External (within the state or region): Channels provided by the local government's participation in a broader community (such as regional planning organizations that provide opportunities to share communications program costs and infrastructure to deliver common messages). Notably, a local government's sphere of influence often exceeds its jurisdictional boundaries.

The LGPs' education and outreach portfolios include the following types of activities:

• General awareness, i.e., "big splash" partnership launches by local elected officials and community leaders, and reinforcement of broad messages at

community events such as chamber and Rotary meetings, Earth Day and other festivals, etc.;

- Training workshops to provide information to LG businesses about current and future policies, rules, legislation, and regulations that may impact their operations, and to identify opportunities for reducing their energy use and carbon footprint;
- Business energy audits and analyses, including benchmarking;
- Information on business EE programs and residential energy savings programs; and
- Neighborhood sweeps to install residential lighting, HVAC, low-flow showerheads, CFLs, and torchieres, to provide refrigerator rebates and recycle refrigerators, freezers and other appliances.

Sub-Element C2 - Residential and Small Business Direct Install

The ELPP empowers and enables local governments to encourage their residents and businesses to participate in SCE and other IOU core programs. Through local business and industry associations and community leaders, LGs will invite residents and businesses to participate in training workshops and to sign up for EE audits and assessments. Through the ELPP, SCE will coordinate direct install activities with core and third-party programs on behalf of LGPs.

Residential and small business measures offered contractors will be coordinated in a manner so that geographic overlap of contractor services is limited and incentive levels and customer co-payments are more consistent. The measures will include but are not limited to lighting, refrigeration, HVAC, attic insulation, water heating, and other types of EE measures.

Sub-Element C3 - Third-Party Program Coordination

Through the ELPP, SCE will identify opportunities for residents and businesses to access technical and/or financial assistance from third-party programs, and will coordinate with the third-party program managers to enroll qualified LG constituents in appropriate programs. SCE will also identify opportunities to leverage non-resource programs to supplement the ELPP's budget for marketing, education, outreach and training, wherever appropriate.

Sub-Element C3 is also related to Core Program Element A – Government Facilities, in that LGs may participate in third-party programs that bring technical and financial resources to their municipal clean-energy project portfolios. Coordination between third-party programs and Government Facilities Retrofits and retro-commissioning (RCx) will occur through this sub-element. An example of a likely third-party program for local government facilities could be HVAC tune-ups and replacements.

Sub-Element C4 - Retrofits for Just-Above LIEE-Qualified Customers

Local governments have unique access to low-income residents through a variety of public assistance programs. The ELPP will provide information about SCE's

Low Income Energy Efficiency (LIEE) program and other low-income programs to the LGs and request their assistance in identifying qualified participants for low-income building retrofit programs. SCE will provide support in reaching low-income customers through coordination with LIEE. The ELPP will coordinate with the multi-family and affordable housing programs to encourage customers just above income-qualified levels to participate.

LIEE program providers will complete a home audit for qualifying customers brought in through the ELPP.

The following list of free measures can be installed in the customer's home including comprehensive lighting, duct sealing, attic insulation, AC tune-up, low flow showerheads and faucet aerators.

Sub-Element C5 - Technical assistance for program management, training, audits, etc.

The ELPP provides technical assistance to LGPs to help increase participation in SCE and other utility and third party programs. Services may include but are not limited to energy audits, engineering calculations, reports and inspections. SCE will work with its LGPs and their LG participants to match existing core utility programs to LG constituencies and to develop marketing strategies designed to effectively engage targeted groups of high potential and hard-to-reach energy customers. The scope of assistance provided under any program will be determined by its structure. Typical assistance includes energy audits, costbenefit analyses, energy project structuring, financing and incentives. One of the roles of the ELPP is to overcome barriers to adoption of EE and DR by both local governments and their constituents. Consequently, as barriers to viable projects are encountered, the ELPP may directly provide technical assistance programs.

The Core Program Coordination element brings resource and technical support from core IOU and third-party Programs to help local governments achieve their LGP goals for accelerating adoption of EE and RE by local government stakeholders and constituents. With information provided by SCE about how and where energy is used within their jurisdictions, local governments are able to participate in developing and/or delivering targeted messages about EE, DR and RE opportunities to their energy users.

Through Core Program Coordination element, the ELPP encourages and provides support to local governments through pre-approved Education & Outreach plans, in which local governments play a significant role in encouraging their residents and businesses to enroll in SCE and other clean-energy programs. The level of funding and other types of support provided to each LGP depend on the level of commitment and demonstrated ability to successfully implement their municipal facility and education and outreach plans.

It became clear during the partnership formation phase that local governments are very excited about this aspect of the ELPP. For the first time, local governments will have enough information about their constituents' energy use to engage targeted groups of residents and businesses in meaningful dialogues about their roles in reducing the local governments' energy use and carbon footprint, and the types of IOU and other programs available to assist them in achieving these reductions.

In fact, it is Core Program Coordination that creates a true partnership among SCE and LGs and connects LGs and their constituents to rebates, incentives, education, and other services not directly funded by partnership PGC funds. It is through this element that DR is integrated into the program and the California Solar Initiative (CSI), Self Generation Incentive Program (SGIP), Codes and Standards support and Sustainable Communities offerings are coordinated. The ELPP empowers local governments to play a visible role in influencing the behavior of their constituents through a comprehensive and diverse portfolio of education and outreach collateral, media, and events that will help local governments to deliver important information about energy, climate, and environmental responsibility directly to their constituents. This is an important role for government leaders. For SCE, having the local governments themselves co-brand and deliver information about energy offerings and incentive programs significantly increases the effectiveness and cost-effectiveness of the entire portfolio. In short, through Core Program Coordination element, the local governments themselves will help to identify and engage targeted energy customers residing in their jurisdictions, increasing participation in IOU Core and third-party Programs.

The ELPP will fund LGP education and outreach plans and strategies, including the costs of approved collateral, media and events. All other costs relating to EE, DR, and RE technical support (for example, audits and reviews, financial incentives, on-bill financing, etc.) provided to residents, businesses, and other stakeholders such as developers who enroll in core and third-party Programs through the ELPP, will be funded by the respective programs. Energy savings resulting from Core Program Coordination element will be recorded and reported by the appropriate programs.

This discussion is below followed by a diagram that illustrates the Core Program Coordination Process (Figure 16).

Sub-Element C1 - Outreach and Education

Local governments know their constituents and understand the needs of their communities. They are thus perfectly positioned and well-qualified to conduct effective outreach and education about cleaner energy and GHG reduction for their residents and businesses. The ELPP will help LGPs and their participating local governments develop a portfolio of educational activities and schedule energy audits and training for their communities. Existing curricula and SCE's

training centers will be used, but may be supplemented or tailored as needed to meet the unique needs of a particular local government's residents and/or businesses.

Sub-Element C2 - Residential and Small Business Direct Install

The ELPP's role is to leverage participating local governments' unique relationships and access to their residents and businesses to provide targeted information about SCE's residential and small business direct install programs, and to increase enrollment, especially among hard-to-reach sectors. The local governments will accomplish this through the approved education and outreach plans that include a variety of media and events through which targeted energy customers will be engaged. The local governments will also obtain the assistance of community organizations and leaders, including local chambers of commerce, Rotary and other clubs, and community-based organizations in engaging targeted customers.

Sub-Element C3 - Third Party Program Coordination

The ELPP will serve as a point of coordination among LGPs, local governments, and third-party programs that will be supporting community energy projects. As noted previously, Sub-Element C3 will also coordinate between local governments and third-party programs as needed to support Government Facilities energy programs.

Third-party program contractors providing resident and small business direct installations will be coordinated through the ELPP in a manner that assures efficient, cost-effective geographic coverage.

Sub-Element C4 - Retrofits for Just-Above LIEE-Qualified Customers

Once identified by the participating local governments, qualified customers will be served through a collaborative effort that uses existing LIEE program implementers for customer site evaluation and retrofit services. LIEE contractors will visit the homes of customers who failed to qualify for LIEE services, either because their income level was above the LIEE income guidelines. Under this sub-element, LIEE contractors will be able to serve these customers.

Sub-Element C5 – Technical Assistance

The ELPP will provide technical assistance to LGPs to conduct audits, create engineering calculations and reports, and perform inspections for community energy projects. The technical services are described more fully in previous sections of this PIP. The following diagram, Figure 16, illustrates the key components in program implementation.

[1]	[2]	[3]	[4]	[5]
Establish	Develop Plan	Implement	Engage	Refresh
Baseline	& Strategies	ME&O Plan	Constituents	Plan
 Document energy use by participating LGs & their constituents (2003 to current) so that LGs understand where & how energy is being used within their jurisdictions. Identify high potential & hard- to-reach constituent groups in each participating LG's jurisdiction. Develop inventory of technical, financial & marketing assistance that can be brought by Core & Third Party IOU programs (resource & non- resource) to LGs' residents & businesses. Identify potential support from non-IOU programs (water, GHG reduction, other). 	 Partners & LGs develop strategic ME&O Plan: Identify high potential & hard-to- reach constituents. Identify best venues, communications channels, media & events for successfully engaging targeted constituents. Develop portfolio of priority ME&O activities. Schedule training, workshops, events. Develop budget, schedule, milestones & resource plan. 	 Engage support & participation of partners (SCE, other water & energy utilities, community & business leaders, press, state & regional agencies); obtain commitments for ME&O support. Develop EE, DR & RE and related climate action & sustainability messages. Produce collateral materials & media strategies. Obtain assistance of business & community leaders in getting targeted participants to events. Schedule & conduct training, workshops, marketing events, community sweeps, etc. Widely publicize events (newsletters, tv, radio, internet, newspapers, community based organizations, local business & industry associations, etc.) 	 Identify customer segments for IOU Core & Third Party programs. Conduct audits, cost-benefit & feasibility assessments. Assist in structuring projects, including identification & scheduling of technical & financial assistance. Provide project management assistance, technical reviews & oversight. Conduct EM&V. Document costs & benefits of completed projects, both to document energy savings for programs that provided the support and to document the effectiveness of ELPP strategies for engaging & enrolling residents & businesses. 	 Through monthly Partnership meetings & in Workbook, review & document barriers encountered, workarounds employed, ME&O costs by event/ activity, success engaging participants - both Partners & energy customers (residents & businesses). Periodically revisit ME&O strategies, redesign portfolio &/or reallocate program budget & resources as may be needed to achieve Partnership goals.

Figure 16. Core Program Coordination Process

5.C Program Element Rationale and Expected Outcome

a) **<u>Quantitative Baseline and Market Transformation Information</u>**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3.C – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4.C – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

Following is a list of the primary barriers to implementation of Core Program Element C – Core Program Coordination and the strategies that the ELPP will use to overcome these barriers.

Primary Barriers	Strategies to Overcome Barriers
Most local governments do not have	SCE's ELPP provides current and historical
sufficient information about how and	energy information for the local
where energy is used in their communities,	governments themselves and for their
and have been unable to play a meaningful	communities, empowering local
role in developing and implementing	governments for the first time to play a
strategies to increase their constituents'	significant direct role in identifying high
adoption of EE, DR, & and RE.	energy users within their jurisdictions and
Consequently, local governments have not	encouraging these constituents to help
been fully vested in energy programs	reduce the local governments' energy
targeting their communities.	consumption & carbon footprints.
In addition, while their constituents may	Through the ELPP, local governments also
have fully supported the local	assume a major role in communicating the
governments' energy, climate action and	economic, environmental, and societal
sustainability goals, they may not have	benefits of their constituents' participation
understood the importance of their own	to their constituents, and providing
role in helping achieve these local	information about IOU and other sources of
governments' goals.	technical and financial assistance.
Most small- to mid-sized energy customers	The ELPP will bring comprehensive
do not have the expertise and resources	technical and financial assistance to local
needed to implement energy projects.	governments' residents and businesses
	through a "one-stop shopping" approach
	that significantly simplifies the decision to
	enroll in an energy program and streamlines
	the implementation process.

Figure 17: Barriers and Strategies – Core Program Coordination

Primary Barriers	Strategies to Overcome Barriers
Furthermore, the current economic climate	The ELPP's comprehensive package of
has increased concerns by both local	technical assistance, incentives, and on-bill
governments and their constituents about	financing is expected to be effective in
economic costs and risks.	overcoming many implementation barriers
	in the residential and business sectors.

d) **Quantitative Program Targets**

Table 5.C

Program/Element	Program	Program	Program
	Target by	Target by	Target by
	2009	2010	2011
Target #1 Community Outreach- : Estimated number of events (including sweeps) *	72	144	216

6.C Other Program Element Attributes

a) **Best Practices**

This program element incorporates lessons learned from multiple sources. For example, KEMA's 2007 Process Evaluation recommendations of Government partnerships concluded that several models are effective in delivering energy savings. Regional approaches can be successful in addressing larger markets. Community-based direct install campaigns can be effective in delivering services to small business communities while leveraging local government resources such as local Chambers of Commerce. Close coordination with Core and third-party programs is integral for success.

b) <u>Innovation</u>

This program is unique in that this is the element that creates a true partnership among SCE, its partners and local government participants.

Element C puts the local governments squarely into the energy and climate action leadership role for their respective jurisdictions in a very highly visible way. The local governments appreciate being supported in this role, and with modest assistance, ascend naturally into the lead role. Having the local governments themselves assume the leadership role, delivering information about Core and thirdparty energy programs to their constituents, significantly increases the strength and credibility of the ELPP's energy messages, thereby increasing both the effectiveness and cost-effectiveness of the entire SCE portfolio.

With input from SCE about how and where energy in their jurisdictions, LGPs and their participating local governments develop their own strategic communications plans. The ELPP helps them identify high- potential opportunities for cost-effective

energy savings, address barriers, share best practices, and allocate resources efficiently. LGPs will use their unique education and outreach channels to inform their customers about energy savings opportunities and share best practices among their participating local governments. The ELPP will support the LGPs through technical assistance, including energy audits, project management, and strategic resource management approaches at the community level.

Through the ELPP, local governments are empowered to assumed leadership in energy and GHG reduction, not just for their own facilities, but for energy users throughout their entire jurisdiction.

c) Interagency coordination

This sub-element requires strong coordination among LGPs, local governments, utility programs, third parties and their subcontractors, and other involved service providers. In addition, the local governments' education and outreach plans rely heavily on effectively engaging the assistance and participation of multiple key constituent groups, such as residents, small business, chambers of commerce, Rotary clubs, non-profits, and other community-based organizations. Since local governments intend to leverage local community events as strategic venues for delivering their cleaner energy and GHG reduction messages, other types of initiatives (for example, Earth Day) will also be engaged.

d) Integrated/coordinated Demand Side Management

Through Element C, fully integrated and comprehensive cleaner energy services will be brought to local government constituents. While EE and DR are the primary objectives of the ELPP, consistent with the Strategic Plan goal of a zero-net-energy and low-carbon future, the ELPP will also provide information to local governments and their constituents about RE. The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

e) Integration across resource types (energy, water, air quality, etc.)

By preparing Climate Action Plans (see Element B – Strategic Support and Sub-Element B2 – Reach Code Support), local governments will be encouraged to adopt aggressive cleaner energy and climate action goals for themselves and for their communities. While the primary focus of the ELPP is on cleaner energy and its substantial role in AB 32 compliance, other complementary sustainability initiatives (water efficiency, waste reduction, "smart" transportation, planning and land use, etc.) may be included in the participating local governments' Detailed Program Plans. ELPP will provide technical assistance to help local governments secure funding and technical assistance for elements not eligible for partnership funding.

f) <u>Pilots</u>

The ELPP does not currently plan to conduct any pilot projects, although the process of coordinating with core programs may present opportunities for local governments to participate in pilots, such as demonstrations of the benefits of advanced lighting, controls and other promising emerging technologies.

g) <u>EM&V</u>

Short surveys of LGP, third-party, and core program implementers and participants will be conducted to identify any coordination issues among the various portfolio program offerings and to decrease overlap. The incorporation of any recommendations stemming from these limited process evaluations will be examined in future process evaluations to ensure verify whether they are implemented and/or no longer valid. As part of the quality assurance activities, the ELPP managers will provide support for future impact evaluations by increasing documentation activities and creating an evaluation database. This database will be accessible to the CPUC and the IOUs, but not the public.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	Core Program Element 2, Strategic Plan Support
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Core Program Element 2, Strategic Plan Support
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	Core Program Element 2, Strategic Plan Support
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Core Program Element 2, Strategic Plan Support
1-5: Develop broad education program and peer-to-peer support to local govt's to adopt and implement model Reac codes	Core Program Element 2, Strategic Plan Support
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program	Core Program Element 2, Strategic Plan Support

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	Core Program Element 2, Strategic Plan Support
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Core Program Element 2, Strategic Plan Support
3-1: Adopt specific goals for efficiency of local government buildings, including:	Core Program Element 1, Government Facilities
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	Core Program Element 2, Strategic Plan Support
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Core Program Element 1, Government Facilities
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	Core Program Element 2, Strategic Plan Support
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Core Program Element 2, Strategic Plan Support
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	Core Program Element 1, Government Facilities
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority*	Core Program Element 2, Strategic Plan Support

* Strategy is 1-7 in the September 2008 (final) version of the Strategic Plan.

Also see Individual Local Government PIPs.

		Energy
	City/County	Leader
Partnership	Name	Level
Market Sector Programs		
Local Government	City/County	
Partnerships		
City of Beaumont Energy		
Leader Partnership		
	Beaumont	Value
Community Energy Leader Partnership		
	Brea	Value
	Cathedral City	Value
	Corona	Value
	Hermosa Beach	Value
	Irvine	Value
	Moreno Valley	Gold
	San Bernardino	Value
	Santa Clarita	Silver
	Santa Monica	Value
Desert Cities Energy Leader Partnership		
•	Desert Hot	
	Springs	Value
	Indian Wells	Value
	Palm Springs	Silver
	Rancho Mirage	Value
Eastern Sierra Energy Leader Partnership		
	Bishop	Value
	Inyo County	Value
	Mammoth	
	Lakes	Value
	Mono County	Value
Kern County Energy Leader Partnership		
	California City	Value
	Delano	Value
	McFarland	Value
	Tehachapi	Value
	Kern County	Value
City of Long Beach Energy Leader Partnership		

Figure 17: List of SCE's Local Government Partnerships Energy Leader Levels

	City/County	Energy
Partnorshin	Nomo	Leader
Market Sector Programs	Ivallie	Level
Local Covernment	City/County	
Partnershins		
	Long Beach	Value
Orange County Cities Energy	Long Deach	varue
Leader Partnership		
	Costa Mesa	Value
	Huntington	
	Beach	Value
	Fountain	
	Valley	Value
	Westminster	Value
City of Redlands Energy		
Leader Partnership		
	Redlands	Value
City of Ridgecrest Energy		
Leader Partnership		
	Ridgecrest	Value
San Gabriel Valley Energy		
Leader Partnership	A 11 1	
	Alhambra	Value
	Azusa	Value
	Arcadia	Value
	Baldwin Park	Value
	Bradbury	Value
	Claremont	Value
	Covina	Value
	Diamond Bar	Value
	Duarte	Value
	El Monte	Value
	Glendora	Value
	Industry	Value
	Irwindale	Value
	La Canada-	
	Flintridge	Value
	La Puente	Value
	La Verne	Value
	Monrovia	Value
	Montebello	Value
	Monterey Park	Value
	Pomona	Value

		Energy
	City/County	Leader
Partnership	Name	Level
Market Sector Programs	•	
Local Government	City/County	
Partnerships		
	Rosemead	Value
	San Dimas	Value
	San Gabriel	Platinum
	San Marino	Value
	Sierra Madre	Value
	South El Monte	Value
	South Pasadena	Value
	Temple City	Value
	Walnut	Value
	West Covina	Gold
San Joaquin Valley Energy Leader Partnership		
	Exeter	Value
	Farmersville	Value
	Hanford	Value
	Lindsay	Value
	Porterville	Value
	Tulare	Value
	Tulare County	Value
	Visalia	Value
	Woodlake	Value
City of Santa Ana Energy Leader Partnership		
•	Santa Ana	Silver
South Santa Barbara County Energy Leader Partnership		
	Carpenteria	Value
	Goleta	Silver
	Santa Barbara	Value
	Santa Barbara	
	County	Value
City of Simi Valley Energy Leader Partnership		
*	Simi Valley	Value
South Bay Energy Leader Partnership		
•	Carson	Value
	El Segundo	Value
	Gardena	Value

Partnershin	City/County Name	Energy Leader Level
Market Sector Programs	Lever	
Local Covernment	City/County	
Partnershins	City/County	
	Hawthorne	Gold
	Hermosa Beach	Value
	Inglewood	Value
	L awndale	Valued
	Lawildale	Silver
	Manhattan	Silver
	Reach	Valued
	Palos Verdes	Valueu
	Fstates	Valued
	Rancho Palos	Varaea
	Verdes	Valued
	Redondo Beach	Valued
	Rolling Hills	Valued
	Rolling Hills	vulueu
	Estates	Valued
	Torrance	Valued
City of South Gate Energy	Torrande	(urucu
Leader Partnership		
F	South Gate	Valued
Ventura County Energy Leader		
Partnership		
	Camarillo	Valued
	Fillmore	Valued
	Moorpark	Valued
	Ojai	Valued
	Oxnard	Valued
	Port Hueneme	Valued
	Santa Paula	Valued
	Thousand Oaks	Valued
	Ventura	Valued
	Ventura County	Valued

Appendix A: Logic Model

The ELPP program is aligned with the Strategic Plan through activities that align with three Core Elements: Element A – Government Facilities, Element B – Strategic Plan Support, and Element C – Core Program Coordination. See the Master Logic Diagram.

Activities and Outputs

Government Facilities

Activities under this Core Element include establishing partnerships with local governments and providing project management support and incentives. Establishing partnerships will result in formalized commitments, identification of energy use baselines, and establishment of corresponding incentive levels, and the development of a Detailed Program Plan to document activities associated with the partnership. Project support will result in the development and ranking of project inventories, the identification of available resources and gaps in required resources, and the timing of potential projects. Incentives will provide an opportunity for the ELPP to support projects financially.

• Strategic Plan Support

Activities under this Core Element include efforts designed to help local governments meet the Strategic Plan goals and strategies by providing workshops, webcasts, other training opportunities focused on improving code compliance, and opportunities for peer-to-peer collaboration, and encouraging dissemination of information. These opportunities are expected to inform partners of best practices, new developments, protocols, and training opportunities likely to improve local government energy and sustainability efforts, particularly in development and implementation of new policies, goals, codes, ordinances, plans and initiatives. These activities will result in peer-to-peer networking meetings, focused training opportunities, and improved collaboration.

• Core Program Coordination

Activities under this Core Element include integrating resources and technical support from other Core Programs and assisting local governments in marketing, education, and outreach efforts. Program coordination activities will result in partners and their constituents becoming more aware of other (non ELPP-funded) program opportunities, including: CSI, SGIP, Workforce Education and Training, Codes and Standards, and Sustainable Communities. Jurisdiction-specific energy use information will inform relevant and targeted marketing, education, and outreach, causing plans to be tailored to reach specific segments of Partner constituencies, and will result in community events, co-branded collateral, and targeted marketing and outreach plans.

• Short-Term Outcomes (1-2 Years)

The activities and outputs associated with establishment of partnerships and provision of technical and financial resources are expected to result in a variety of EE and DR projects that are scheduled, funded, and completed within the first 12-18 months of the program. As initial projects are completed, Partners are expected to identify subsequent projects and begin efforts to schedule and install these projects as possible.

The training, information and support activities and outputs designed to help local governments meet the goals and strategies identified in the Strategic Plan will

result in local governments equipped to adopt and implement specific policies, such as expedited permitting, transaction ratings, financing options, emissions reductions, "reach" codes, and improved code compliance.

The outputs associated with program coordination and marketing, education, and outreach assistance activities will influence constituents to participate in Core Programs in greater numbers and make EE investments or improvements at increasingly higher rates. Partner staff will become better informed and better able to advocate for EE within their jurisdictions.

• Medium Term Outcomes (2-4 Years)

ELPP-sponsored projects are expected to result in documented energy savings and DR capability in Partner facilities. Improved awareness of EE programs and opportunities on the part of constituents, combined with motivation resulting from effective marketing, education, and outreach activities, will increase Core Program participation and result in energy savings throughout the community. Greenhouse gas reductions and other environmental benefits should also accrue to partners as the effects of more aggressive policies, "reach" codes, and sustainability-related ordinances take effect.

• Long Term Outcomes (3-5 Years)

ELPP-sponsored projects and outreach activities will result in levels of energy savings, DR capability, and community participation in Core Programs sufficient to qualify partners for additional incentive dollars, which are expected to facilitate more comprehensive or complicated projects in Partner facilities and to encourage even higher levels of community participation.

Ultimately, partners will become "Energy Leaders" and operate with an improved capacity to actualize EE and DR projects in their facilities and promote EE and sustainability within their communities. Partners will adopt long-lived upstream measures and become better able to meet energy savings and environmental commitments.



4a

1. Program Name: City of Beaumont Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

 Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

a) List of Program Elements:

The three core program elements are similar to those identified in the Energy Leader Partnership Program (ELPP) Master Program Implementation Plan (PIP): Element A - Government Facilities, Element B - Strategic Plan Activities and Element C - Core Program Coordination.

b) <u>Overview</u>

The City of Beaumont has identified major facilities in need of energy efficiency retrofits. The City currently owns two large operational facilities (City Hall and the Police Department) in addition to several sewer lift stations, a waste water treatment facility, a transit office and bus yard, the City pool, and several large municipal parks. The sites that could qualify for SCE's Technical Assistance & Technical Incentives through the partnership have already been identified and preliminarily audited by an SCE contractor. In addition, all City-owned facilities have been audited for energy efficiency retrofits. The City's Energy Champion and SCE Partnership Project Manager will oversee the implementation of these retrofit projects including demand response where applicable. The City Manager, with the direction of City Council, will determine which projects will move forward first.

Any projects totaling over \$5,000 will need approval from City Council to move forward. In addition, the work done on these retrofits must follow the public bid process if it does not qualify under the maintenance contract that the City currently holds. The City Manager will have the discretion regarding retrofit projects less than \$5,000 and will have the authority to determine the priority list for those specific projects. Funding for all municipal retrofits will be in house- it has already been determined by the City Manager that the City will not seek funding from outside sources. Beaumont has its own financing authority.

All future facilities procured or constructed by the City will follow energy efficiency measures at Title 24 standards or better.
All funding for municipal retrofit projects will be performed in house as a budgeted item to be renewed on a yearly basis and adjusted as need is determined.

The City currently holds a maintenance contract with a local electrical contractor; however, any projects that must go to public bid may be bid by other electrical contractors that should be approved by SCE.

Core Program Element A - Government Facilities

The core program element for government facilities consists of retrofit of county and municipal facilities, retro-commissioning of buildings, and integrating Demand Response into the audits, described below.

A.1) Retrofit of county and municipal facilities

The City of Beaumont plans to complete a comprehensive retrofit of all existing municipal facilities over the next three years. All municipal facilities have already been audited for energy efficiency and cost estimates for retrofits have been provided to the City Council and City Manager. Potential opportunities identified for energy savings include but are not limited to: comprehensive lighting retrofits (indoor and outdoor), installation of Variable Frequency Drives (VFD's) on various pumps, and HVAC retrofits. See Master PIP for measure mix.

A.2) Retro-commissioning (of buildings or clusters of buildings)

The Beaumont ELP will focus on retro-commissioning municipal buildings through energy management systems for City Hall and the Police Department. In addition, this partnership will examine other creative ways to improve building efficiency and reduce its overall carbon footprint through examining hours of operation, evaluating possible lighting and HVAC procedural changes, and creating an atmosphere that encourages conservation and wise-stewardship of all natural resources.

A.3) Integrating Demand Response into the audits

The City of Beaumont plans to enroll qualified municipal facilities into "Demand Response" programs at various levels. Currently, all City facilities are enrolled in the "Flex Alert" program. As the City continues to grow and expand, any new facilities that may become eligible for enrollment in "Demand Response" will be identified.

A.4) Technical assistance for project management, training, audits, etc.

The Beaumont ELP has already dedicated one part-time employee to oversee the administration of this program. In addition, two City employees have attended a workshop provided by CTAC and continue to be in contact with SCE staff and project management on a regular basis. A specific budget for each of these elements will be included in the City's comprehensive "Office of Sustainability" which has preliminarily been approved by City Council.

A.5) On-bill financing

Although the City of Beaumont plans to finance any retrofit projects in house, it is a possibility that on-bill financing may be utilized for certain HVAC retrofits that may

include the use of alternative forms of energy such as hybrid AC units (solar) and "load shifting" technologies.

Core Program Element B - Strategic Plan Support

The program offers strategic plan support in the areas of code compliance, reach code, guiding documents, and financing for the community, described below.

B.1) Code Compliance Support

Beaumont will examine current compliance with Title 24 standards and explore the potential of creating an energy efficiency code compliance improvement program. The partnership will support this activity.

The City plans to implement a Green Building Program which will encourage developers as well as homeowners who plan on undertaking any improvements, to follow more sustainable guidelines and will provide technical assistance to do so. The City's Green Building Program was preliminarily approved by City Council as part of the City's Office of Sustainability.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Documents Support

The City of Beaumont plans to use the resources provided through the Energy Leaders Partnership model to create a comprehensive Climate Action Plan as well as a short-term implementation plan to head towards achieving the goals of AB 32. The City of Beaumont has already identified its baseline energy usage as a point to progress forward from and plans to monitor its energy usage in relation to that baseline to track reductions.

B.4) Financing for the community

The City of Beaumont plans to augment its own resources with the technical knowledge and resources provided through the partnership to reach the community through various levels of involvement, including workshops and other public information tools as well as identifying other local entities, both public and private, to aid in the administering of the partnership resources to the public.

B.5) Peer to Peer Support

The City of Beaumont Partnership has been extremely proactive in working with other partnerships as well as SCE to share ideas and strategies that have proved successful as well as to point out areas of improvement. Beaumont volunteered to assist SCE project coordinators in the creation of a template for community outreach to be utilized by all ELP's. The Beaumont Energy Leader Partnership will continue to actively participate in the various Peer-to-Peer strategies outlined in the Master Program Implementation Plan while also forging their place as a leader and innovator among the ELPs.

Core Program Element C - Core Program Coordination C.1) Outreach & Education

The City of Beaumont Energy Leader Partnership has established a three year ME&O plan that incorporates public events, educational workshops, and other venues for publicizing the partnership goals and providing various types of assistance to local business owners, private citizens, and other public entities within the City's jurisdiction. In addition, the City of Beaumont plans to actively participate in regional initiatives focused on sustainable development including the "Green Valley Initiative," which the City Council has already passed a resolution in support of. The Beaumont ELP will work with the City's public information officer to create press releases outlining the progress of the partnership and publicizing upcoming ME&O events.

C.2) Residential and Small Business Direct Install

The partnership will incorporate training programs with the goal of supporting SCE's core programs for businesses, particularly small offices and convenience stores. In addition, through the partnership, the City will work in conjunction with the Chamber of Commerce and SCE to provide workshops dedicated to specific businesses (restaurants, offices, etc.) to publicize the core programs provided by SCE.

C.3) Third-party program coordination

The City of Beaumont Energy Leader Partnership will work to include third-party programs through the strategies as expressed in the ELPP Master PIP as well as encourage local businesses and residents to explore the options provided by these types of programs.

C.4) Retrofits for just-above Low-Income Energy Efficiency- (LIEE) qualified customers

The partnership will support retrofits for those who qualify for this program through active outreach and marketing.

C.5) Technical assistance for program management, training, audits, etc.

The partnership plans to utilize a portion of its resources to this particular activity. The Core Programs provided by SCE will be utilized to reach their appropriate audience and the City will work continuously to identify other programs that may serve the City of Beaumont more effectively. These programs may include, but are not limited to: Savings by Design, Direct Install, VFD Pool Pump Rebate Program (residential and commercial), Multi-family Energy Efficiency Rebate Program, etc.

c) <u>Non-incentive services</u>

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) Target audience

See the ELPP Master PIP. The Beaumont ELP will also target county and municipal facilities. Its outreach and education efforts are aimed at local business owners, private citizens, and public entities within the City's jurisdiction.

e) <u>Implementation</u>

Beaumont has outlined a three-year program coordination plan for Marketing, Education and Training, and Outreach. SCE has included a sample detailed program plan extract from the Beaumont Partnership; a similar plan is generally developed in each ELP.

Marketing
General Awareness
City Employee Awareness Campaign-Kick Off Event
Article in local and regional paper describing Partnership components
Partnership page activated on "Green City" website
Kiosk for Civic Center
Press Releases for each event
Education & Training
Training
Beaumont Rotary Club-Business
Pass Business Connection-Small business
Energy Efficiency 101 Workshops-small businesses (specified for business type)
Energy Efficiency 101 Workshops-Community Services/Building and Safety Dept.
CTAC Event for GHG education
Energy Audits & Analyses
(incl. Green Building Compliance & LEED Certification)
Energy Action Plan-Strategic Plan for the City
Residential In Home/Mail surveys
Outreach
Tag onto Existing Community Events
Cherry Festival
Chamber Mixers
State of the City
Rotary Senior Dinner
Summer Concert Series
Business Energy Efficiency
Chamber of Commerce Business Expo

Residential Energy SavingsHOA'sWal-Mart Lamp Exchange

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

Described in the ELPP Master PIP.

d) Quantitative Program Targets

Table 5

	Program	Program	Program
	Target by	Target by	Target by
Program Element	2009	2010	2011
Target 1: Government Buildings kWh	TBD	TBD	TBD
Target 2: Number of Workshops	0	4	6
Target 3: Number of Ordinances, Codes, etc.	0	TBD	TBD
Target 4: No. of ME&O Events	0	10	18

6. Other Program Element Attributes

a) **Best Practices**

Described in the ELPP Master PIP

b) <u>Innovation</u>

Develop municipal sustainability dashboard to simplify sustainability reporting including energy efficiency and renewable energy. Partner with Cherry Valley Water

district to integrate recycled water for irrigation. Partner with the Green Valley Initiative.

c) <u>Interagency coordination</u>

Described in the ELPP Master PIP.

d) Integrated/coordinated Demand Side Management

Described in the ELPP Master PIP

f) <u>Pilots</u>

None proposed for this program.

g) <u>EM&V</u>

Not applicable to this program

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	As a result of the partnership, the city continued research on the implementation possibilities of other building energy codes for commercial, residential, and industrial developments in Beaumont.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Through the partnership, the Green Building Program adopted by the City's Building and Safety Department to encourage sustainable building practices.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	The partnership will continue exploration on the implementation possibilities for AB 811 legislation.
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	Through the partnership, the city of Beaumont will partner with other community agencies, public and private, to increase knowledge and energy efficiency education.
1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program	
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will support enhanced code compliance in general through education.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Specifications for contract services, public works projects, or other municipal facilities improvements that require a public bidding process will have these components included in the bid documents and specifications.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
3-1: Adopt specific goals for efficiency of local government buildings, including:	The city goal is to retrofit all existing facilities and implement better than Title 24 standards for all new City construction.
3-2: Require commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings.	Through the partnership all municipal facilities have been audited for energy efficiency and costs for retrofits have been identified.
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	It has been proposed that the City create a separate budget for the partnership to track spending as well as benefits of different programs.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	The City of Beaumont has identified several goals relating to sustainability. The City plans to create and implement a Climate Action Plan as a guideline for the City to follow.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	The City Council approved a Sustainable City Plan as part of the 2009-2010 Capital Improvements Plan.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	The City of Beaumont and the Cherry Valley Water District collaborated to integrate recycled water program for irrigation. Infrastructure currently in place.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	The partnership will identify new ways to use zoning authority to promote efficiency

4b

Southern California Edison

1. Program Name: City of Long Beach Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

 Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

a) List of Program Elements

The three core program elements are similar to those identified in the Energy Leader Partnership Program (ELPP) Master Program Implementation Plan (PIP): Element A - Government Facilities, Element B - Strategic Plan Activities and Element C - Core Program.

b) <u>Overview</u>

For more than a decade, the City of Long Beach (City) has placed a priority on efforts to achieve energy savings in its 132 facilities comprising approximately 1.9 million square feet. The City will continue to achieve increased energy efficiency in municipal facilities through a series of well defined efforts, including through the 2009-2011 City of Long Beach Energy Leader Partnership between the City and Southern California Edison (SCE).

Core Program Element A - Government Facilities

A.1) Retrofit of municipal facilities

The City has identified specific municipal facilities for retrofit under this partnership and will execute them during the 2009-2011 program cycle. The partnership will continue to audit municipal facilities and explore opportunities for retrofitting. In addition to energy efficiency retrofits, the city is considering greater participation in SCE's Solar Photovoltaic Program, radiant barriers and other passive cooling devices. The partnership will facilitate access to additional energy services and funding not provided for in the partnership budget (for example, by SCE core programs).

A.2) Retro-commissioning (of buildings or clusters of buildings)

The City will partner with SCE to conduct retro-commissioning audits of eligible municipal facilities.

A.3) Integrating Demand Response into the audits

The Long Beach City Hall and the Convention Center are currently participants in Demand Response programs offered by SCE, including the Summer Discount Plan and Time-of-Use Base Interruptible Program. The City will pursue participation in

these programs at additional City facilities, as Demand Response participation is required by the Energy Leader Model. The partnership will provide integrated audits that will yield recommendations for energy efficiency, as well as demand response actions in eligible buildings.

A.4) Technical assistance for project management, training, audits, etc.

See the ELPP Master Program Implementation Plan (PIP) for an explanation of how SCE provides technical assistance to overcome technical and information barriers faced by the city in implementing energy efficiency programs. Appropriate support will be provided to accomplish energy efficiency savings goals.

A.5) On-bill financing

See the ELPP Master PIP. The City will participate in SCE's on-bill financing offering.

Core Program Element B - Strategic Plan Support

B.1) Code Compliance Support

The partnership will conduct energy code training and other energy training targeted to meet the needs of the region. Workshops will target plan checkers, inspectors and building trade professions in the City of Long Beach.

B.2) Reach Code Support

The partnership will explore meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

In addition, the following applies to this partnership:

- <u>Environmentally Preferable Procurement Policy & Program</u>: In 2003, the City adopted an Environmentally Preferable Procurement Policy, which encouraged purchasing of energy efficient products in order to conserve natural resources, materials and energy. The City will partner with SCE to continue to strengthen and expand this program to capture additional energy efficiencies.
- <u>Green Building Policy for Municipal Buildings:</u> In 2003, the City adopted a Green <u>Building</u> Policy for Municipal Buildings, which states that all new construction of municipally owned and operated buildings, will meet the Leadership in Energy and Environmental Design (LEED) standard. The partnership will support the City's plans as follows:
 - (1) Facilitate support from the Sustainable Communities, Codes and Standards and New Construction Programs, as appropriate.
 - (2) Provide guiding templates and other support need for the City to implement a Green Building selection criteria for Requests for Proposal (RFPs).

- <u>Savings-by-Design in Public Buildings</u>: The City's Green Building Policy for Municipal Buildings calls for all future planned facilities to be constructed to LEED <u>standards</u>. The partnership will support implementation of this policy with technical assistance incentives and a requirement that all new buildings participate in the 'Savings By Design program.
- <u>Savings-by-Design in Private Development</u>: The partnership will support the City in the implementation of a similar policy for private development.

B.3) Guiding Document(s)

The City of Long Beach is engaging greenhouse gas emissions inventory and reduction strategies. The City has joined the Climate Registry and the California Climate Action Registry in order to be better equipped to respond and adapt to climate change. Long Beach's participation in the Climate Registry as a Founding Report will provide an established framework and a clear and consistent reporting mechanism to track greenhouse gas emissions. The partnership will support the City's creation of an Energy Action Plan in accordance with the Sustainable City Plan that will demonstrate the City's commitment to sustainability and greenhouse gas emissions. Through the ELPP model, Partnership activities will reach into communities to provide information and opportunities for energy actions, reducing the City's environmental footprint and furthering the goals of AB 32 and the Strategic Plan.

B.4) Financing for the community

The partnership also recognizes the financial barrier that communities face in the attempt to implement energy actions, and will investigate AB 811 as a way to overcome this barrier. The partnership will provide information on AB 32, as well as best practices and templates from the City of Palm Desert Pilot Demonstration Partnership. See the ELPP Master PIP.

B.5) Peer-to-Peer Support

This partnership will participate in SCE's service territory-wide conferences and conference calls designed to help each partnership learn best practices from one another. In addition, the partnership will share best practices and successes as a result of its own activities with other local governments.

Core Program Element – Core Program Coordination

C.1) Outreach & Education

In addition to the Outreach and Education strategies featured in the ELPP model and to support the City's intent to lead the community by example, this partnership will pursue the following additional activities. Also see the ELPP Master PIP for additional information.

• <u>Employee Energy Efficiency Campaign:</u> The City of Long Beach previously launched an Employee Energy Efficiency Campaign to City employees in order to optimize energy usage in City buildings, as well as to create messages and incentives that will bring about a culture of change and conservation citywide. The partnership will support information and outreach materials that address employee use of lighting, heating/air conditioning, computers, equipment, and paper products in the office and at home.

Educational materials such as brochures, posters and new-employee training video will be distributed to City employees. Employees will be encouraged to disseminate program information to family, relatives and friends to promote participation in the program. It is expected that City leadership, department heads and City employees will proactively contribute to the implementation of energy efficiency, demonstrating the City's commitment and desire to lead by example as described in the Strategic Plan.

- Energy Efficiency Website: The partnership will create a custom energy efficiency website that showcases the SCE programs and offerings to the community and provides links to SCE's website and other websites (Flex Your Power, CEC, LEED, ENERGYSTAR, etc.).
- <u>Green Workforce Development</u>: The partnership will work with the City's Economic Development Division and Pacific Gateway Workforce Investment network division to explore opportunities for green workforce development, such as offering training in energy audits and retrofits. In addition, the partnership will coordinate with SCE's Workforce Education and Training Program.

C.2) Residential and Small Business Direct Install

The partnership will focus on SCE's existing direct install programs within the City of Long Beach. SCE's non-residential direct install program installs lighting and other measures to small business customers. If the area has not yet been served or if large pockets of un-served customers exist, the partnership will co-brand marketing and outreach and assist in the deployment of the program to those customers.

C.3) Third-party program coordination

The partnership will coordinate with SCE core and third-party programs as needed, based on the City's energy use profile outlined in the ELPP Master PIP. The partnership will promote Operation Lamp Exchange, an energy efficiency program that allows residential customers of SCE to exchange inefficient halogen and incandescent light fixtures for new, ENERGY STAR labeled lamps.

C.4) Retrofits for just-above LIEE-qualified customers

See the ELPP Master PIP.

C-5) Technical assistance for program management, training, audits, etc.

• <u>Citizen Education Activities</u>: The partnership will work with appropriate City staff to plan and implement community outreach events. The City will invite SCE to place booths at all appropriate City and community events and will promote available incentives, provide government, businesses and residents with information on energy efficiency programs and services, demand response, self-generation, low income, CEC, DOE and other energy assistance programs, such as gas and water efficiency resources.

• <u>Green Building, Solar Installation & Energy Efficiency Training</u>: Training will be <u>provided</u> to city staff on energy efficient building procedures, materials and design strategies, solar installation techniques and energy efficiency installation techniques.

c) <u>Non-incentive services</u>

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) <u>Target audience</u>

See the ELPP Master PIP. Target audiences include Long Beach's municipal facilities, especially older buildings such as libraries and public safety stations. The City currently has a \$570M infrastructure upgrade need. Business and residential communities will be targeted with information, outreach, including community sweeps, and education.

e) <u>Implementation</u>

See the ELPP Master PIP for implementation for each core program element.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics.

c) Program Design to Overcome Barriers

See the ELPP Master PIP. This partnership faces the traditional barriers of available expertise to identify projects, technical assistance to support implementation, and funding. The Energy Leader Partnership Program addresses these barriers and supports the city's role as identified in Strategic Plan.

d) **Quantitative Program Targets**

The City of Long Beach hopes to achieve Energy Leader Silver Level status during the 2009-2011 program cycle, achieving 5% savings in Partner facilities and community-wide, which will trigger premium incentives. The City already has at least one facility that has participated in a DR program.

Table 5

Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
kWh	TBD	TBD	TBD
Number of Workshops	2	6	10
Number of Ordinances, Codes, etc.	0	0	0
# of ME&O Events conducted that target Residential customers	2	4	6

6. Other Program Element Attributes

a) **Best Practices**

See the ELPP Master PIP.

b) <u>Innovation</u>

- Sustainable City Action Plan: The City has created an 11-member Sustainable City Commission, responsible for developing and overseeing the implementation of a Sustainable City Action Plan. (This plan is still in its draft form and is targeted to go before the Long Beach City Council in July/August 2009). The Sustainable City Action Plan has seven sections: Energy, Buildings & Neighborhoods, Waste Reduction, Transportation, Urban Nature, Water and Eco Products & Services. Each section includes goals and actions related to this partnership and more broadly to energy efficiency, alternative energy and other elements of sustainability. Some examples of proposed goals include: Reduce greenhouse gas emissions from City facilities and operations by 15% by 2020; reduce electricity use in City operations by 25% by 2020; and reduce community electricity use by 15% by 2020. The partnership will support the City's goals in furtherance of the Strategic Plan, AB 32, the Governor's Green Building initiative and other mandates. The partnership will also support the establishing of baselines and tracking efforts.
- <u>Green Business Designation</u>: A Green Business Designation/Program will be a multi-faceted program to reward "green" businesses based on a variety of criteria including energy efficiency, solar energy, retrofits and energy efficiency products.

Providing incentives rather than regulations for businesses to voluntarily participate in green practices material is intended to stimulate Long Beach's "green" economy and advance the Strategic Plan. The partnership will be instrumental in facilitating the support of this and other applicable SCE programs and offerings for activities not eligible for partnership funding.

c) Interagency coordination

- <u>Green Workforce Development</u>: The partnership will work with the City's Economic Development Division and Pacific Gateway Workforce Investment network division to explore opportunities for green workforce development, such as offering training in energy audits and retrofits or actively recruiting green companies to participate in its existing training and employment programs.
- <u>Green Business Designation</u>: As described previously in Item 6b (Innovation), a Green Business Designation/Program will be supported by the partnership. Partners in the Green Business Program will include the Long Beach Convention & Visitor's Bureau, the local Chamber of Commerce and others.

d) Integrated/coordinated Demand Side Management

See the ELPP Master Program PIP.

e) Integration across resource types (energy, water, air quality, etc.)

This partnership has not identified many resource integration opportunities. However, energy efficiency in water operations will be pursued, as stated in the ELPP Master PIP.

f) <u>Pilots</u>

The Solar Demonstration Program is a pilot program The partnership will support the city's exploration of vacant city-owned lots to implement interim green uses such as developing solar, wind or landscaping pilot projects or planting trees to reduce the urban heat island effect. Partnership will facilitate coordination with the California Solar Initiative and other applicable programs to provide funding and technical support not provided for in the partnership budget.

g) <u>EM&V</u>

This partnership will use tracking tools and processes provided by the Energy Leader Partnership to ensure program effectiveness. See the ELPP PIP for more information.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both	All future planned municipal facilities will be constructed to LEED standards and participate in Savings By Design.
adopt one or two additional tiers of increasing stringency.	The City is in the process of completing Green Building Requirements for Private Development and will implement a permanent green building policy for private development.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	
1-3: Develop, adopt and implement model point-of-sale and other point- of transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program	
2-1: Statewide assessment of local government code enforcement and recommendations for change	

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	Energy Code Training: The partnership will conduct energy code training and other energy training targeted to meet the needs of the region. Workshops will target city personnel, and the trades
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	
3-1: Adopt specific goals for efficiency of local government buildings, including:See Paragraph 1a.	
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	The partnership will conduct retro- commissioning audits of applicable municipal facilities.
3-3: Improve access to favorable financing terms that create positive cash flow from energy efficiency/DSM savings	
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	Sustainable City Plan and Commission; Energy Action Plan. Energy Leader Partnership
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-3: Statewide liaison to assist local governments in energy efficiency, sustainability and climate change	
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	The City will provide lower-cost expedited plan check for buildings that are LEED-compliant and zoning incentives, such as a FAR bonus or reduced parking requirements, for projects that incorporate sustainable design and energy efficiencies.
	Mayor's Award for Green Building Design Excellence to encourage the private and public sector to build efficiently and sustainability.

4c

Southern California Edison

1. Program Name: City of Redlands Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plana) List of Program Elements

The three core program elements are similar to those identified in the Energy Leader Partnership Program (ELPP) Master Program Implementation Plan (ELPP Master PIP): Element A - Government Facilities, Element B - Strategic Plan Activities, and Element C - Core Program coordination.

b) <u>Overview</u>

The Redlands ELP is a new Local Government Partnership designed to:

- seek innovative approaches to energy efficiency and greenhouse gas (GHG) reduction
- encourage adoption of energy efficiency measures and best practices within its municipality and community by continuing an energy efficiency culture of focused educational and outreach events; and
- increase the effective delivery of technical and financial energy services to residents and businesses.

Marketing, education, and outreach (ME&O) activities will consist of:

- staff training
- SCE's Mobile Energy Unit attendance at the downtown farmers market nights;
- technical training at the local University of Redlands;
- marketing and co-branding with SCE core programs; and
- exploring and potentially implementing an AB 811 financing mechanism for residents of Redlands.

The partnership activities will be coordinated with recommendations adopted through the city's current climate action task force.

Core Program Element A - Government Facilities

Government facilities will deliver energy savings during the next three-year program cycle. Every partnership local government will achieve specified energy savings and greenhouse gas (GHG) reductions from the facilities and infrastructure that it manages. These savings will come from technology retrofits, operational

improvements, and policy changes. Participating local governments will take advantage of partnership incentives for municipal facilities and of eligible rebate, incentive, and technical assistance programs offered by their serving utilities.

A.1) Retrofit of county and municipal facilities

Through partnership support, the City of Redlands will conduct audits of their facilities. Potential opportunities identified from current assessments include but are not limited to: lighting, air conditioning, controls, thermal energy storage, and solar generation.

A.2) Retro-Commissioning (of buildings or clusters of buildings) (RCx)

The Redlands Civic Center and its corporate yard are the city's largest municipal campus buildings. The partnership will focus on identifying appropriate HVAC retrofit opportunities through the RCx of these and other facilities. This will provide a systematic whole-system approach to energy efficiency and many chronic building problems and energy waste can be resolved by making low-cost or no-cost adjustments identified by the RCx process.

A.3) Integrating Demand Response into the audits

The Redlands Partnership will target its facilities, as well as external agricultural pumping customers and commercial building owners for participation in Demand Response and Summer Discount Plans as appropriate.

A.4) Technical assistance for project management, training, audits, etc.

Each partnership has a specific budget for each of these elements. Standard programs available include energy efficiency training, energy audits, and technical assistance in alignment with the ELPP Master PIP.

A.5) On-bill financing

The City of Redlands has indicated an interest in using On-Bill Financing.

Core Program Element B - Strategic Plan Support

B.1) Code Compliance Support

The partnership will explore the creation of an improvement program for use with other energy strategies to improve code compliance with building energy standards and appliance regulations. The partnership will conduct focused energy code training through workshops at the local University of the Redlands campus. This training will target local businesses, residents, homeowner associations, social groups, seniors, and building professionals. The training will also target the large number of businesses located in the County of San Bernardino "doughnut hole" which falls within the city boundaries of Redlands.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in

the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

In addition to establishing documentation conforming to the strategies expressed in the ELPP Master PIP, the Redlands Partnership will develop an Energy Action Plan and a Climate Action Plan. These plans will document baseline energy use and emissions for use in setting and achieving emission reductions and energy savings. This effort will be coordinated with the activities of the City of Redland's Climate Action Task Force, which is currently formulating energy efficiency and GHG reduction recommendations to present to the city's governing body.

B.4) Financing for the community

The City of Redlands Energy Leader Partnership will develop an education and outreach program for the Redlands' community in alignment with the strategies expressed in the ELPP Master PIP.

B.5) Peer-to-Peer Support

The Redlands Partnership will actively participate and support in the peer to peer program strategies described in the ELPP Master PIP.

Core Program Element C - Core Program Coordination

C.1) Outreach & Education

The partnership will establish a comprehensive Marketing Education & Outreach (ME&O) Plan incorporating:

- Educational workshops to assist Redlands and its target sectors in moving forward with energy savings projects, policies, codes, and ordinances;
- Events and exhibits to publicize the partnership and its goals (including regional county fairs and home shows);
- Mailers, press releases, and quarterly e-newsletters to market energy efficiency programs; and
- A minimum of 12 special workshops at the University of Redlands.

C.2) Residential and Small Business Direct Install

The partnership will launch support of the core program by driving participation through leveraging its chamber of commerce, bill mailing inserts, and public television access.

C.3) Third-Party Program Coordination

The partnership will use its direct implementation budget to augment technical and financial resources to help achieve its goals with support from third party programs.

C.4) Retrofits for Just-Above LIEE-Qualified Customers

The Redlands Partnership will support this program in alignment with the strategies described in the ELPP Master PIP.

C.5) Technical Assistance for Program Management, Training, Audits, Etc. The Redlands Partnership will support this element in alignment with the strategies described in the ELPP Master PIP.

c) <u>Non-Incentive services</u>

The City of Redlands ELP will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) Target audience

The program targets:

- city staff, management, policymakers, and elected officials;
- residential and business customers;
- students of the University of Redlands; and
- business customers in the unincorporated territory.

e) <u>Implementation</u>

In addition to the strategies and coordination described in the ELPP Master PIP, the program will implement:

- customized incentives for the retrofitting of Redland's municipal facilities based on SCE's tiered incentive structure; and
- ME&O consultation, and cooperation with SCE.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at

the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) **<u>Program Design to Overcome Barriers</u>**

The City of Redlands Partnership will have barriers consistent with, and will overcome them using, strategies expressed in the ELPP Master PIP.

c) **<u>Quantitative Program Targets</u>**

Table 5

Target	Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
1	Municipal Facilities (kWh)	TBD	TBD	TBD
2	Number of Workshops	0	2	4
3	Number of Ordinances, Codes, Etc.	0	TBD	TBD
4	Number of ME&O Events	4	8	12

6. Other Program Element Attributes

a) **Best Practices**

The Redlands Partnership will embody the best practices strategies described in the ELPP Master PIP.

b) <u>Innovation</u>

Throughout the program, the partnership will:

- collaborate with SCE core programs to develop energy and water conservation programs for the community;
- co-sponsor technical courses with the University of Redlands on energy efficiency, green building, and renewable energy generation;
- participate in local climate action task force, planning commission, and city council meetings to advocate energy efficiency in local projects that are being considered for approval;
- contribute articles to publications; and
- work with City of Redlands' departments to promote sustainability through numerous programs (*for example*, recycling, employment education, building retrofits, and other related sustainability initiatives).

c. Interagency coordination

The partnership is in discussions with Southern California Gas Company about becoming an active partner.

d) Integrated/coordinated Demand Side Management

The Redlands Partnership will support and drive an integrated/coordinated DSM program in alignment with the ELPP Master PIP.

e. Integration across resource types (energy, water, air quality, etc)

The partnership promotes comprehensive sustainability including energy efficiency, demand response, renewable energy, water efficiency, and GHG reduction.

f) <u>Pilots</u>

No pilots are planned through this partnership.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

Table 6

California Long Term Energy Efficiency	Program Approach to Achieving
Strategic Plan (Strategic Plan) Strategy	Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The partnership will evaluate adopting them on a voluntary but rewarded basis, including excess Title 24 performance in the fee-waiver program or adopting the new California "Green Building Code" on a voluntary basis through 2010, making it mandatory in 2011.
1-2: Establish expedited permitting and	The partnership will evaluate and adopt
entitlement approval processes, fee	expedited permitting and entitlement
structures and other incentives for green	approval processes, fee structures and other
buildings and other above-code	incentives for green buildings and other
developments.	above-code developments as appropriate.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The partnership will evaluate and adopt as appropriate, a point of sale energy disclosure; dependant upon availability of standardized energy star benchmarked data (per recent legislation) on each meter at the point of sale.
1-4: Create assessment districts or other	The partnership will contemplate pursuing
mechanisms so property owners can fund	the adoption of an AB 811 financing
EE through city bonds and pay off on	mechanism for its jurisdiction in alignment
property taxes; develop other EE financing	with the strategies described in the ELPP
tools.	Master PIP.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes.	The partnership, with other partnerships, participate in six comprehensive peer to peer educational and outreach forums on a bi-annual basis that emphasize specific actions to take to help achieve the local agencies' Reach code goals.
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	The partnership will evaluate how DSM programs might achieve AB 32 / SB 375 compliance requirements and will be integrated as appropriate.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will support developing and implementing Training and Education programs to achieve additional T-24 compliance.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	The partnership will evaluate and adopt as appropriate, policies regarding energy components of the professional licensing of local inspectors and contractors hired.
3-1: Adopt specific goals for efficiency of local government buildings, including:	The partnership goal is to achieve the ELP model silver target level in its municipal facilities resulting in at least a 5% savings over the 2003 energy use baseline during the 2009-2011 partnership.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	The partnership will evaluate and adopt as appropriate, commissioning, performance measurement, and verification as a core part of their energy action plan.
3-4: Explore creation of line item in local governments' budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	The partnership will evaluate and adopt as appropriate, creation of a line item in their budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	N/A

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-1: Local governments commit to clean energy/climate change leadership.	The partnership will evaluate and adopt as appropriate, a Strategic Energy Plan that includes long and short-term energy and sustainability objectives in line with the adopted California Long Term Energy Efficiency Strategic Plan.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability, and climate change.	The partnership will evaluate and adopt as appropriate, development of aggressive sustainability goals into their General Plan Updates that include emphasizing sustainability through green building design and technologies, reduction of GHG emissions, increased use of renewable energy, and conservation of existing sources of energy.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority.	As required, the partnership will evaluate, develop, and adopt zoning and development authority changes to comply with AB 32 and SB 375. Through the potential addition of SCG, the partnership will add natural gas usage reduction and water efficiency programs, with low flow aerators and shower head measures.

4d

Southern California Edison

1. Program Name: City of Ridgecrest Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

a) <u>List of Program Elements</u>

The three core program elements are similar to those identified in the Energy Leader Partnership Master Program Implementation Plan (ELPP Master PIP): Element A -Government Facilities, Element B - Strategic Plan Activities, and Element C - Core Program coordination.

b) <u>Overview</u>

The Ridgecrest Program is the extension of an existing Local Government Partnership. The Ridgecrest partnership was first formed in the 2006-2008 as a nonresource partnership.

The 2009-2011 City of Ridgecrest Energy Leader Partnership builds upon the already successful Ridgecrest Community Partnership. The Ridgecrest Partnership will add to its portfolio of M,E,&O activities to promote energy efficiency activities while focusing on water conservation and greenhouse gas reduction, which is in alignment with the strategies as expressed in the ELPP Master PIP.

Core Program Element A: Government Facilities

This area will deliver energy savings during the next three-year program cycle. Every local government that participates in the partnership will achieve specified energy savings and greenhouse gas reductions from the facilities and infrastructure that it manages through technology retrofits, operational improvements and policy changes. Participating local governments will take advantage of partnership incentives for municipal facilities and, wherever possible, of eligible rebate, incentive and technical assistance programs offered by their serving utilities.

A.1) Retrofit of county and municipal facilities

Through a proposed energy service contract project, the City of Ridgecrest has conducted a recent audit of their civic center and is contemplating an integrated energy efficiency and renewable project. Potential opportunities identified from this audit include, but are not limited to: lighting, air conditioning, controls, thermal energy storage, and solar generation.

A.2) Retro-Commissioning (RCx) (of buildings or clusters of buildings)

The Ridgecrest civic center includes the city's largest municipal campus. Technical audits and assessments of all of the other municipal energy using facilities; ball parks, street lighting, etc. is contemplated as well as project development and implementation as part of the 2009-2011 program.

A.3) Integrating Demand Response into the audits

The Ridgecrest Partnership will target their facilities, as well as external agricultural pumping customers and commercial building owners for participation in Demand Response and Summer Discount Plans, as appropriate.

A.4) Technical assistance for project management, training, audits, etc.

Each partnership has a specific budget for each of these elements. The standard available programs include energy efficiency training, energy audits, and technical assistance in alignment with the ELPP Master PIP.

A.5) On-bill financing

City of Ridgecrest personnel have indicated an interest in offering On-bill financing.

Core Program Element B: Strategic Plan Support

The program offers Strategic Plan support in the areas of code compliance, Reach code, guiding documents and financing for the community, described below.

B.1) Code Compliance Support

The Ridgecrest Partnership will explore the creation of an energy code compliance improvement program and various strategies to improve compliance with building energy standards and appliance regulations. The partnership will conduct focused energy code training through workshops at the local Cerro Coso Community College targeted to their local businesses, residents, homeowner associations, social groups, seniors, building professionals, and the public works directorate of the China Lake NAWS military reservation, as well as those target groups in adjacent unincorporated communities.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

In addition to establishing documentation in alignment with the strategies as expressed in the ELPP Master PIP, the Ridgecrest Partnership objectives will include development of Energy Action Plans and Climate Action Plans to document baseline energy use and emissions. These baselines will be used to set and achieve emission reductions and energy savings, germane to their desert/rural environment.

B.4) Financing for the community

The Ridgecrest Partnership will develop an education and outreach program for the partnership communities in alignment with the strategies as expressed in the ELPP Master PIP.

B.5) Peer to Peer Support

The City of Ridgecrest Energy Leader Partnership will actively participate in and support the peer-to-peer program strategies as expressed in the ELPP Master PIP.

Core Program Element C: Core Program Coordination

C.1) Outreach & Education

The partnership has an established comprehensive Marketing Education & Outreach (ME&O) Plan that will be expanded to incorporate: educational workshops to assist Ridgecrest and its target sectors in advancing energy savings projects, policies, codes, and ordinances; general awareness events and exhibits to publicize the partnership and its goals (including regional county fairs and home shows); marketing energy efficiency programs through a variety of media channels including mailers, press releases, and quarterly e-newsletters; and a provision to host a minimum of 12 special workshops at the local Cerro Coso Community College.

C.2) Residential and Small Business Direct Install

The partnership will continue its support of the core program by driving participation through leveraging its chamber of commerce, bill mailing inserts, and public television access. The partnership will also fund and execute focused multi-family and single family residential direct install activities.

C.3) Third-party program coordination

The partnership will use its direct implementation budget to augment technical and financial resources to help achieve its goals with support from third party programs.

C.4) Retrofits for just-above Low-Income Energy Efficiency (LIEE)-qualified customers:

The partnership will support this program in alignment with the strategies as expressed in the ELPP Master PIP.

C.5) Technical assistance for program management, training, audits, etc.

The partnership will support this element in alignment with the strategies as expressed in the ELPP Master PIP.

b) <u>Overview</u>

The Ridgecrest Program is the extension of an existing Local Government Partnership. The Ridgecrest partnership was first formed in the 2006-2008 as a nonresource partnership.

The 2009-2011 Ridgecrest Partnership builds upon the already successful Ridgecrest Community Partnership. The Ridgecrest Partnership will add to its portfolio of

M,E,&O activities to promote energy efficiency activities while focusing on water conservation and greenhouse gas reduction, which is in alignment with the strategies as expressed in the ELPP Master PIP.

c) <u>Non-incentive services</u>

The Ridgecrest Partnership will leverage its portfolio of ME&O activities to deliver non-incentive services such as those listed below. These non-incentive services are designed to increase community enrollment in energy core programs and participation in SCE services and resources:

- Mobile energy unit;
- Account manager support;
- Training at SCE's Customer Technology Application Center (CTAC);
- Speakers bureau;
- Limited giveaways such as opportunity drawings and free CFLs;
- Marketing;
- Design and printing of brochures and other collateral materials; and
- Media/Press/Publicity support.

The facilities and programs at Cerro Coso College will also be leveraged.

d) <u>Target audience</u>

The target audience includes:

- City and county staff, management and policymakers (elected officials);
- Residential and business customers;
- Students of Cerro Coso Community College; and
- Residents and business customers of adjacent unincorporated Inyokern.

e) <u>Implementation</u>

In addition to the strategies and coordination outlined in the ELPP Master PIP:

- The program will be implemented with customized incentives for the retrofitting of Ridgecrest's municipal facilities based on SCE's tiered incentive structure; and
- The ME&O portions will be implemented in consultation and cooperation with SCE.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics**b)** Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at

the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

The City of Ridgecrest Partnership will have barriers consistent with and will employ those strategies as expressed in the ELPP Master PIP to overcome them.

d) **<u>Quantitative Program Targets</u>:**

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Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1 Municipal			
Retrofits (kWh)	TBD	TBD	TBD
Target #2			
Community Direct			
Install, (kWh)	TBD	TBD	TBD
Target #3 Number of		2	4
workshops	0		
Target #4 Number of			
Ordinances, Codes,		TBD	TBD
etc. *	0		
Target #5 Number of	4	8	12
events			

6. Other Program Element Attributes

a) **Best Practices**

The City of Ridgecrest Partnership will embody the best practices strategies as expressed in the ELPP Master PIP.

b) <u>Innovation</u>

The partnership will: collaborate with the LivingWise® energy and water conservation program for local 6th grade earth science classes; co-sponsor technical courses with the Cerro Coso Community College on energy efficiency, green building, and renewable energy generation; participate in local planning commission, city council and county board meetings to advocate energy efficiency in local projects that are being considered for approval; contribute articles to publications; and work with the City of Ridgecrest departments to promote sustainability through numerous programs including recycling, employment education, building retrofits, and other related sustainability initiatives.

d) <u>Interagency coordination</u>

The partnership is in discussions with PG&E about becoming an active partner.

d) Integrated/coordinated Demand Side Management

The Ridgecrest Partnership will support and drive an integrated/coordinated DSM program in alignment with the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

The Partnership will promote comprehensive sustainability, including energy efficiency, demand response, renewable energy, water efficiency, and greenhouse gas GHG reduction.

f) <u>Pilots</u>

No pilots are planned through this partnership.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

Table 6

California Long Term Energy Efficiency	Program Approach to Achieving
Strategic Plan (Strategic Plan) Strategy	Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The partnership will evaluate adopting them on a voluntary but rewarded basis, including excess Title 24 performance in the fee-waiver program or adopting the new California "Green Building Code" on a voluntary basis through 2010, making it mandatory in 2011, provided a sustained funding level is provided by the CPUC to support the activities.
1-2: Establish expedited permitting and	The partnership will evaluate and adopt
entitlement approval processes, fee	expedited permitting and entitlement
structures and other incentives for green	approval processes, fee structures and other
buildings and other above-code	incentives for green buildings and other
developments.	above-code developments as appropriate.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The partnership will evaluate and adopt, as appropriate, a point of sale energy disclosure; dependant upon the availability of standardized ENERGY STAR® benchmarked data (per recent legislation) on each meter at the point of sale.
1-4: Create assessment districts or other	The partnership will contemplate pursuing
mechanisms so property owners can fund	the adoption of an AB 811 financing
EE through city bonds and pay off on	mechanism for its jurisdiction in alignment
property taxes; develop other EE financing	with the strategies as expressed in the ELPP
tools.	Master PIP.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes.	The Ridgecrest partnership, with other partnerships, participate in 6 comprehensive peer-to-peer educational & outreach forums on a bi-annual basis that emphasize specific actions to take to help achieve the local agencies' Reach code goals.
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	The partnership will evaluate and adopt the energy DSM programs and integrate the larger AB 32 / SB 375 compliance requirements as appropriate, provided a sustained funding level is provided by the CPUC to support the activities.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will support developing and implementing Training & Education programs to achieve additional T-24 compliance, provided a sustained funding level is provided by the CPUC to support the activities.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	The partnership will evaluate and adopt as appropriate, policies regarding energy components of the professional licensing of local inspectors and contractors hired by local governments
3-1: Adopt specific goals for efficiency of local government buildings.	The partnership goal is to achieve the ELP model silver target level in its municipal facilities resulting in at least a 5% savings over the 2003 energy use baseline during the 2009-2011 partnership.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	The partnership will evaluate and adopt as appropriate, commissioning, performance measurement, and verification as a core part of their energy action plan.
3-4: Explore creation of line item in Local governments' budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	The partnership will evaluate and adopt as appropriate, creation of a line item in their budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional EE projects.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	n/a
California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
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4-1: Local governments commit to clean energy/climate change leadership.	The partnership will evaluate and adopt as appropriate, a Strategic Energy Plan that includes long and short term energy & sustainability objectives in line with the adopted California Long Term Energy Efficiency Strategic Plan.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	The partnership will evaluate and adopt as appropriate, development of aggressive sustainability goals into their general plan updates that include emphasizing sustainability through green building design & technologies, reduction of GHG emissions, increased use of renewable energy, and conservation of existing sources of energy.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	Through the potential addition of PG&E, the partnership will add natural gas usage reduction and water efficiency programs that will add low flow aerators and shower head measures.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	The partnership will evaluate, develop, and adopt as required, zoning and development authority changes to comply with AB 32 / SB 375.

4e

Southern California Edison

1. Program Name: City of Santa Ana Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP

4. Program Element Description and Implementation Plan

The City of Santa Ana Energy Leader Partnership began in 2008 as a pilot to model SCE's new Energy Leader model. This PIP represents a three year continuation of an effort whose first year's activity proved very successful.

Santa Ana is the most populous city in Orange County, California, and serves as its county seat. In addition to being part of the second largest metropolitan area in the United States – with neighboring cities Los Angeles and Long Beach - , the City of Santa Ana has shown great initiative in conservation of natural resources and energy. The City of Santa Ana encourages its residents to live sustainably and has already partnered with multiple local and national organizations to bring about change in the way residents consume resources. With influence over almost thirteen million people in the Los Angeles–Long Beach–Santa Ana area, the City of Santa Ana stands out as a leader in sustainable living.

The City of Santa Ana Energy Leader Partnership is one of 18 partnerships in SCE's Energy Leader Partnership Program (ELPP). The ELPP provides a fully integrated portfolio of comprehensive technical and financial assistance to local governments that is specifically structured to overcome the primary barriers to energy efficiency adoption by local governments so that they can help implement the goals and strategies identified in the Strategic Plan. The ELPP is described in detail in the Master PIP. The purpose of this sub-program PIP is to describe elements that this individual Local Government partnership has committed to as well as any unique features of this partnership; thus, several of the items below may be marked "n/a" or "See the ELPP Master PIP."

a) List of Program Elements

The three core program elements are similar to those identified in the ELPP Master PIP: Element A - Government Facilities, Element B - Strategic Plan Activities and Element C - Core Program Coordination.

b) <u>Overview</u>

The Santa Ana Energy Leader Partnership (SAELP) Program is an existing local government partnership and will be transitioning into SCE's Energy Leader

partnership portfolio. Santa Ana piloted this model at the Silver level throughout 2008.

The partnership will further SCE's goals for local governments in keeping with the goals and objectives of the Strategic Plan and will demonstrate leadership in its community by retrofitting municipal buildings and adopting supporting policies consistent with the commission's sustainability goals. The partnership will assist and facilitate residents, businesses and city officials in understanding, managing, and reducing energy use and costs. It will position the partners as energy leaders, connecting the community with best practices and opportunities to take action to save energy, money and the environment.

Core Program Element A – Government Facilities

A.1) Retrofit of municipal facilities

The City of Santa Ana Energy Leader Partnership will help coordinate retrofits of municipal facilities, including HVAC, both indoor and outdoor lighting, and a planned solar element project in support of the California Solar Initiative (CSI).

A.2) Retro-commissioning (of buildings or clusters of buildings)

Eligible municipal buildings will be considered for retro-commissioning and monitoring-based commissioning as they are identified.

A.3) Integrating Demand Response into the audits

The City of Santa Ana is currently implementing a Demand Response component in the current retrofit projects. A DR/EE audit will be conducted for eligible facilities and recommendations implemented as feasible. See the ELPP Master PIP for more on this section.

A.4) Technical assistance for project management, training, audits

The partnership will provide technical assistance to overcome barriers to the implementation of energy efficiency retrofits as identified in the ELPP Master PIP.

A.5) On-bill financing

On-bill financing will not be available at the beginning of the program cycle. However, it may be added in the future, as each city and county in the partnership has indicated an interest in using on-bill financing. In alignment with the Strategic Plan's emphasis on leveraging financial tools to encourage action on efficiency, as well as guidance from the CPUC on financing, SCE will continue on-bill financing pilots and will assess expanding these services to both residential and non-residential markets in the future.

Core Program Element B - Strategic Plan Support

The Santa Ana Energy Leader Partnership will support a citywide strategic plan addressing energy efficiency, DSM, alternative energy and climate preservation and identify additional program opportunities in furtherance of the AB 32 and the goals and objectives of the Strategic Plan.

B.1) Code Compliance Support

The City of Santa Ana will consider shoring up Title 24 compliance and/or other code efficiency/compliance to the extent the City can remain business-friendly and competitive. The partnership will provide training for plan checkers, inspectors and personnel employed in the trades.

B.2) Reach Code Support

Although no Reach codes are planned at this time, the partnership will explore meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

The partnership will provide support for development of a Sustainability Plan in line with the goals and objectives found in the Strategic Plan.

B.4) Financing for the community

The City of Santa Ana will explore implementing an AB 811 Funding Mechanism to encourage 200 residents and 50 businesses to invest in solar retrofits. The program, if implemented, will enable residents and businesses to repay loans via property tax bills. The partnership will provide technical assistance and facilitate peer-to-peer support.

B.5) Peer-to-Peer Support

The partnership is interested in providing and sharing best practices with other partnerships. SCE will arrange to have a representative from the City of Palm Desert provide guidance on how to set up an AB 811 funding program. The partnership and the city will determine how and to what extent such a program is applicable to its citizenry.

Core Program Element C – Core Program Coordination

The partnership will provide residents and business owners with comprehensive marketing and outreach, education and training opportunities take action to save energy, money and the environment. In addition, the program will act as a portal for all energy offerings, delivering information on demand response, self-generation, the California Solar Initiative (CSI), and low income programs, including California Alternative Rate for Energy (CARE). Please see description in the ELPP Master PIP.

C.1) Outreach & Education

The partnership will work with core programs to make a variety of public education materials for use in community outreach efforts, to be delivered at community events, through local schools municipal services bills, direct mail, and the partnership's webpage. The partnership plans to co-brand and promote core and third party programs as needed, based on analysis of the city's energy use profile. Higher energy-using or underserved segments will be provided with program information and opportunities to take action; for example, a Community sweep for the Appliance

Recycling program, Operation Lamp exchange and others. See other educational marketing and outreach strategies in the Master ELPP PIP.

C.2) Residential and Small Business Direct Install

The partnership will continue to include these programs in the 2009-2011 cycle as it did in the 2006-08 cycle.

C.3) Third-party program coordination

The City of Santa Ana Energy Leader Partnership has used third parties in the past and expects to continue to rely on them to support, and to every extent possible, achieve the community's greenhouse gas (GHG) reduction strategies and the goals and objectives of the Strategic Plan.

C.4) Retrofits for just-above LIEE-qualified customers.

There is no plan to consider this in the 2009 - 2011 program cycle.

C.5) Technical assistance for program management, training, audits

The partnership will provide training and information to the city and its community and will coordinate technical assistance, from other program as described in the ELPP Master PIP.

c) <u>Non-incentive services</u>

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) Target audience

The partnership's principal target audiences are the City's municipal facilities. Facilities to be improved include city hall, its police facility, the Corporate Yard, the South West Senior Center, the Bowers Museum, the Transportation Center, Fire Stations 1 - 10, and a variety of city parks. The city has a history of investing in municipal facility energy efficiency upgrades that presently position the city at the Silver incentive level.

e) <u>Implementation</u>

See the ELPP Master PIP for details on how the three core elements will be implemented.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) **<u>Program Design to Overcome Barriers</u>**

Santa Ana has large Hispanic and Asian populations many of whom do not speak English. In addition, many of the city's residents are economically disadvantaged with 18% of the population living below the poverty line. These demographic characteristics are a significant barrier to energy efficiency. To address this barrier, the City is developing a strategy for the Partnership Program that utilizes an expansive multi-lingual approach to implement a variety of public education programs in both English and Spanish languages (and Vietnamese in targeted events).

This strategy will increase energy savings from customers who traditionally may not participate in energy efficiency programs to help combat the effects of climate change. Public education will be delivered at community events, through local schools and municipal services bills, via direct mail, and through the partnership's webpage. Training will be provided through business organizations such as the Greater Santa Ana Business Alliance, the Orange County Hispanic Chamber and/or the South Santa Ana Merchants Association.

e) **Quantitative Program Targets**

Table 5

	Program	Program Target	Program
Program Element	Target by 2009	by 2010	Target by 2011
kWh	TBD	TBD	TBD
Number of Workshops	2	6	10
Number of Ordinances, Codes, etc.	0	0	0
# of ME&O Events conducted that	2	Λ	6
target customers	2	+	0

6. Other Program Element Attributes

a) <u>Best Practices</u> See the ELPP Master PIP.

b) <u>Innovation</u> See the ELPP Master PIP.

c) Interagency coordination

See the ELPP Master PIP.

d) Integrated/coordinated Demand Side Management

See the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

Santa Ana's integration activities include the rehabilitation of all of the City's groundwater wells and pump stations that were built before 1970 to bring their overall plant efficiencies to the industry standard of 65% or better. The partnership continues to look for further energy and water efficiencies in the delivery infrastructure of the city.

Opportunities for enhanced integration and including climate protection across resource types will be identified in the development of the city's Strategic Energy and Resource Protection Plan. The partnership will provide technical assistance and other support, especially as it relates to utility energy elements.

f) <u>Pilots</u>

<u>Street Lighting & Full Implementation on Citywide Inventory</u>: The partnership will implement a pilot program to evaluate the replacement of city-owned LS2 and LS3 street lights with LED street lights, if funding is available. The pilot will be targeted in distinct circuits in order to accurately evaluate energy efficiency and cost savings. Based on the energy savings achieved in this pilot, the partnership intends to expand the program to replace 1,000 city-owned LS2 and 270 LS3 street lights.

<u>AB 811 Funding Mechanism and Energy Efficiency Enhancement</u>: The purpose of this program is to encourage 200 residents and 50 businesses to invest in solar retrofits. The program will enable residents and businesses to repay loans via property tax bills. The partnership will provide technical assistance and facilitate peer-to-peer support.

g) <u>EM&V</u>

See the ELPP Master PIP

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	This will be considered in the City's Strategic Energy and Resource Protection Plan. It will consider adopting codes at a level that will allow the city to remain business friendly and competitive.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	This will be considered in the city's Strategic Energy and Resource Protection Plan.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Explore the applicability of an AB 811 Funding Mechanism and Energy Efficiency Enhancement pilot program,
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	This will be considered in the city's Strategic Energy and Resource Protection Plan.
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program	This will be considered in the city's Strategic Energy and Resource Protection Plan.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	This item will be considered in the city's Strategic Energy and Resource Protection Plan.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	This will be considered in the city's Strategic Energy and Resource Protection Plan.
3-1: Adopt specific goals for efficiency of local government buildings, including:	This will be considered in the city's Strategic Energy and Resource Protection Plan.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	This will be considered in the city's Strategic Energy and Resource Protection Plan. The city currently has no requirements but will provide assistance through the partnership.
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	This will be considered in the city's Strategic Energy and Resource Protection Plan. The item will be considered but, due to the limitations of revenue and the budget crisis that the City is facing, this is a low priority.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	See ELPP Master Program Implementation Plan (PIP)
4-1: Local governments commit to clean energy/climate change leadership.	Development and implementation of a citywide Strategic Energy and Resource Protection Plan will reinforce the city's long standing position as an energy leader.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	This will be considered in the city's Strategic Energy and Resource Protection Plan.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	This will be considered in the city's Strategic Energy and Resource Protection Plan.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	The city currently offers a program for Solar that waives a plan check, permit and inspection fees for systems that either produce energy or save natural resources.
	The Strategic Energy and Resource Protection Plan will identify additional opportunities or "carrots" using local zoning and development authority.
	"Carrots" outside of local zoning and development authority:
	Enhanced rebates to multi-family property owners to install efficient products such as lighting, refrigeration, and water heaters in common areas and dwelling units.
	Energy efficiency enhancement in conjunction with AB 811 solar project financing that will allow residents and businesses to repay loans through property tax liens.

4f

Southern California Edison

1. Program Name: City of Simi Valley Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

The City of Valley Simi Valley Energy Leader Partnership is a partnership between Southern California Edison and the City of Simi Valley. Simi Valley is the third largest city in Ventura County, occupying 42 square miles. Its 2005 population was 118,687.

As a new city by California's standards (Simi Valley was incorporated in 1969), its infrastructure is not as mature as many other cities in SCE's service area. Simi Valley's primary employers are service industries and retail companies: banks, insurance companies, and grocery stores. Large institutional employers include the school district, a hospital and health care center, and the City of Simi Valley itself.

Simi Valley has demonstrated its commitment to energy conservation by designating the City Manager as the partnership program's Energy Champion. The city has also established a Sustainability Committee dedicated to developing energy efficiency strategies and conserving all natural and economic resources.

The partnership will support the City's intention to lead by example in furtherance of AB 32 and the Strategic Plan.

a) List of Program Elements

The three core program elements are similar to those identified in the Energy Leader Partnership Program Master Program Implementation Plan (ELPP Master PIP): Element A - Government Facilities, Element B - Strategic Plan Activities, and Element C - Core Program Coordination.

b) **Overview**

The Simi Valley Partnership is one of 18 participants in SCE's Energy Leader Partnership Program. The ELPP provides a fully- integrated portfolio of comprehensive technical and financial assistance to local governments specifically structured to overcome the primary barriers to energy efficiency adoption by local governments. This helps them implement the goals and strategies identified in the Strategic Plan. For further information on the ELPP, see the ELPP Master PIP. The purpose of this sub-PIP is to describe elements of the individual Local Government Partnership program (LGP) that are unique to this LGP. Therefore, many of the items may be marked "n/a" or "See Master ELPP Master PIP."

Core Program Element A - Government Facilities

A.1) Retrofit of County and Municipal Facilities

The city recently embarked on a mission to achieve sustainability for the community, with a commitment from the City Council to move forward to meet the needs of current residents without compromising future residents. The City Council acknowledges that the city must lead by example, by demonstrating its commitment to sustainability in its own operations. The city will also provide information and incentives to all members of the community to promote sustainable growth, change, and development.

The city owns and operates eight buildings (approximately 190,000 square feet in total). The partnership will provide comprehensive EE/DR audits for eligible municipal buildings in Simi Valley. After each audit, the program will implement energy efficiency measures identified by the audit and/or demand response implementation. To date, the program has identified 11 candidate projects, and scheduling them for retrofit. Several others candidate buildings have been identified.

Expected energy savings over the 2009 – 2011 cycle are: 60% lighting, 20% HVAC and 20% other measures. These facilities will also be re-evaluated to determine the applicability for Retro-Commissioning. Further audits and review are required to forecast the actual impact. For information on incentives, see the ELPP Master PIP.

A.2) Retro-Commissioning (of buildings or clusters of buildings)

The partnership will assess the larger buildings it owns and operates to identify candidates for Retro-Commissioning (RCx). The city has not identified specific candidate RCx projects, but does own and operate several buildings that meet the general criteria for RCx. The program will investigate several candidate buildings, and expects to start two facility projects each year in 2009 - 2011.

A.3) Integrating Demand Response into the Audits

The partnership will link comprehensive energy audits to demand response (DR) measures. It will perform applicable EE/DR audits and consider candidate projects for program participation. As an Energy Leader Partner, the City will participate in demand response at least at the Valued Partner level.

A.4) Technical Assistance for Project Management, Training, Audits, Etc.

The partnership will assist building officials in understanding, managing, and reducing their energy use and costs. It will position the City as a regional leader in energy management practices. The partnership will offer assistance to city inspectors, plan checkers, and other building officials.

Further, the partnership will provide educational materials and tools to the City for encouraging staff in all departments to observe and suggest energy efficiency and conservation actions. The Partnership will offer additional workshops about plan review, the audit process, and building awareness.

A.5) On-Bill Financing

Simi Valley will participate in both the SCE and Southern California Gas (SCG) onbill financing for municipal facilities that install energy-efficient equipment or implement energy-efficient strategies. In addition, Simi Valley will explore participating in the California Energy Commission (CEC) low interest municipal energy loan program.

Core Program Element B - Strategic Plan Support

B.1) Code Compliance Support

The City of Simi Valley is nearing build-out and is focusing its attention on existing building stock to maximize the community potential for its residents. The city has recently embarked on a mission to achieve sustainability for the community. The City Council has committed to move forward to meet the needs of current residents without compromising the needs of future residents of the city. The partnership will provide training best practices, templates, and peer-to-peer support as well as other technical assistance to support the city's intent to increase code compliance for in-fills and retrofits.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

In addition, the partnership will provide support for Simi Valley to establish and enforce Reach codes that require meeting Leadership in Energy and Environmental Design (LEED) guidelines for City facilities. As an example, one of the city's transit buildings will undergo a major retrofit and will meet LEED minimum thresholds. The city will also investigate promoting a Green Purchasing Policy promoting sales and installation of ENERGY STAR®- rated equipment. The partnership will provide training, best practices and peer-to-peer support as detailed in the ELPP Master PIP.

B.3) Guiding Document(s) Support

The partnership will support integration of comprehensive energy efficiency into their policies, plans, and goals. Sample supporting documents are: State and local building codes and standards documentation, sample building ordinances, energy efficiency resolutions, training and technical manuals, energy use calculation methodology, and other sustainability materials.

Simi Valley City leaders consider sustainability as a key objective as they update their general plan. The partnership will provide support for goals and policies that address energy and resource conservation, the mitigation of traffic concerns, affordable housing, and development issues. The partnership will identify additional support for activities that do not qualify for partnership funding.

B.4) Financing for the Community

The partnership will consider AB 811 financing for the community, and provide peerto-peer and other support. *See* the ELPP Master PIP for more information on financing for the community.

B.5) Peer-to-Peer Support

As an Energy Leader Partner, Simi Valley will participate with other local partners to share best practices and experiences that further the goals of energy reduction and the Strategic Plan. City representatives will seek to attend meetings, forums, and seminars sponsored by other communities, organizations, and SCE in an effort to learn from other local governments and to share best practices.

Core Program Element C - Core Program Coordination

C.1) Outreach and Education

The city can leverage existing contacts (*for example*, the need for builders and contractors to come to the Planning Division, the Business Tax Certificate list and the list of multi-family units and mobile home parks property owners). The partnership will directly market to these segments to educate and encourage residents and owners to take advantage of the energy programs that are available through SCE. Sample marketing strategies are: press releases, newsletters, marketing collateral, and television and radio ads targeting policymakers, business managers, and community leaders.

Training will be provided to city personnel, the trades, and various market segments to increase awareness of energy efficiency practices and programs in support of AB 32, and the Strategic Plan. The program targets Simi Valley community members (*for example*, low-income residents, multi-family residential units, small businesses, non-English speaking residents, and builders) with a menu of activities and training opportunities. This will raise awareness and increase participation in energy efficiency programs. Potential events to target these groups include:

- focusing on city housing and multi-family dwellings to include Compact Fluorescent Lamps (CFL) change-outs and torchiere turn-ins
- providing builder outreach through the city's Building and Safety Division
- identifying areas of need and focusing on neighborhoods and small businesses to install lighting, HVAC and other measures through the IOU's direct installation offering; and
- finding opportunities to promote the residential energy surveys (*for example*, coordinating with local realtors and others to distribute welcome packages to new home owners and conduct in-home energy surveys).

C.2) Residential and Small Business Direct Install

No Direct Install initiatives are planned at this time.

C.3) Third-Party Program Coordination

The partnership will coordinate with third party programs to provide services and incentives needed by the city or its community but not provided for in the partnership budget. *See* Master PIP for more information.

C.4) Retrofits for Just-Above LIEE-Qualified Customers

The partnership will provide support for marginally-qualified LIEE customers by coordinating with the Multi-Family Energy Efficiency Program (MFEEP) in accordance with the ELPP Master PIP.

C.5) Technical Assistance for Program Management, Training, Audits, Etc.

The city will assist residents and city businesses in understanding, managing, and reducing their energy use and costs. It will provide comprehensive technical, planning, and implementation assistance. The city will offer training to building inspectors, plan checkers, and builders in Title 24 code compliance. It will make available self-audit tools and assistance for residential customers.

Simi Valley will leverage its local infrastructure to promote energy efficiency and extend the reach of statewide and local energy codes. Sample applications include: outreach and education to develop mass marketing, special events, training, and education. This will disseminate a single integrated energy efficiency message targeted to all residents and businesses.

c) <u>Non-incentive services</u>

The partnership will assist building officials in understanding, managing, and reducing their energy use and costs. It will position the city as a regional leader in energy management practices. The partnership will offer assistance to city inspectors, plan checkers, and other building officials.

Further, the partnership will provide educational materials and tools to the city for encouraging staff in all departments to observe and suggest energy efficiency and conservation actions. The partnership will offer additional workshops about plan review, the audit process, and building awareness.

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) Target audience

The businesses and residents of the City of Simi Valley.

e) Implementation

See Section 4.b. above.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

The principal barrier to adopting energy efficiency is the state of the economy generally in California and specifically in Simi Valley. With commercial and residential building at an all time low and with major cutbacks in municipal spending, it is difficult to convince decision makers that investing in energy efficiency is prudent. See the ELPP Master PIP for additional barriers.

The city intends to lead by example and to inform businesses and residents of the increased need for energy efficiency and utilize incentives from ongoing savings and retrofits. Training and education will identify the benefits of sustainability and will support the Strategic Plan goals. The program will distribute information on on-bill financing, CEC funding, and other sources of funding to help overcome financial barriers.

d) **<u>Quantitative Program Objectives</u>:**

Table 5

	Program	Program Target	Program
Program Element	Target by 2009	by 2010	Target by 2011
kWh	TBD	TBD	TBD
Number of Workshops	2	4	6
Number of Ordinances, Codes, etc.	0	0	1
# of ME&O Events conducted that	3	6	0
target customers	5	0	7

6. Other Program Element Attributes

a) **Best Practices**

See the ELPP Master PIP.

b) **Innovation**

None identified

c) Interagency coordination

See the ELPP Master PIP for coordination activities with supporting organizations and agencies. This partnership will benefit from those coordination activities.

d) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices. See Section 4.c.iv. above, and the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

The partnership will work with the Simi Valley Water Board to coordinate an energyefficient retrofit of its facility. It is also promoting programs coordination with the California Air Resources Board (CARB), schools, and other stakeholder organizations.

f) <u>Pilots</u>

The city is now conducting pilot projects using LED lighting technology for City Hall light bollards, and illuminated street signs at intersections near City Hall. The city is currently remodeling one of its Transit buildings, and this project is expected to qualify for LEED-certification, following the suggestions of staff and recommendations of the project consultants. The program does not anticipate any new pilots at this time. The partnership will work with SCE's Codes and Standards and other programs to participate in available pilots.

g) <u>EM&V</u>

No special EM&V process evaluation is planned for Simi Valley at this stage.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	Simi Valley will address strategies for affecting codes and with support from the partnership and the Codes and Standards Program.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	This will be evaluated to determine potential impacts and benefits as well as the cost associated with modifying fees.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Simi Valley participants have expressed interest in participating in SCE's on-bill financing program and in applying for low interest CEC loans for energy efficiency projects.
1-5: Develop broad education program and peer-to-peer support to local govt's to adopt and implement model reach codes.	
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	
3-1: Adopt specific goals for efficiency of local government buildings, including:	Simi Valley will promote LEED certification for municipal facilities.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	
3-4: Explore creation of line item in Local governments' budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	Simi Valley will "Lead by example".
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	Simi Valley is working with its Water Resource Board to integrate energy efficiency in its planned retrofit projects.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority.	

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Southern California Edison

1. Program Name: City of South Gate Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table – By Calendar Year

 Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan¹

The South Gate Partnership consists of one city in the central Los Angeles County area.

a) List of Program Elements

The three core program elements are those identified in the Energy Leader Partnership (Master) Program Implementation Plan (PIP): Element A – Government Facilities, Element B – Strategic Plan Activities, and Element C – Core Program Coordination.

b) **Overview**

The South Gate Energy Leader Partnership (SGELP) Program is a new local government partnership in SCE's Energy Leader Partnership portfolio. This program will further SCE's goals for local governments in keeping with the city's plan to demonstrate leadership in its community by retrofitting municipal buildings and supporting policies that will support the CPUC's sustainability goals. The partnership will assist and facilitate residents, businesses, and city government officials in understanding, managing, and reducing their energy use and costs. We will also position the city as leaders in the region in energy management practices.

Core Program Element A - Government Facilities

A.1) Retrofit of county and municipal facilities

In 2009, the City of South Gate will complete comprehensive energy efficiency retrofit in all municipal facilities. Potential opportunities for energy savings include but are not limited to: lighting, air conditioning, vending machines, and computer networks.

A.2) Retro-commissioning (of buildings and clusters of buildings)

The partnership intends to conduct retro-commissioning of municipal buildings, focusing on the identification of HVAC retrofit opportunities. Retro-commissioning

¹ Complete for each direct savings and non-resource program element. General text stating big picture principals is discouraged as is text that repeats from PIP to PIP. If the same approach is used in multiple partnerships, refer to the original text in a master PIP. Include in each subsequent PIP only information on how that element might vary due to climate zone, local dynamics, etc.

provides a whole-system approach to energy efficiency, resolving many chronic building problems and their associated energy wastes through low-cost or no-cost adjustments in existing systems.

A.3) Integrating Demand Response into the audits

The Energy Leader model for all SCE partnerships includes a requirement for participation in demand response programs. South Gate will be doing so, and to progress from the "Valued Partner" to the "Silver" level in the Energy Leader model, they will include a plan to increase its participation in demand response accordingly.

A.4) Technical Assistance for project management, training, audits

South Gate has a specific budget item for each of these elements.

A.5) On-bill financing (OBF)

On-bill financing will not be available at the beginning of the program cycle. However, it may be added in the future, as each city and county in the partnership has indicated an interest in using on-bill financing. In alignment with the Strategic Plan's emphasis on leveraging financial tools to encourage action on efficiency, as well as guidance from the Commission on financing, SCE will continue on-bill financing pilots and will assess expanding these services to both residential and non-residential markets in the future.

Core Program Element B - Strategic Plan Support

B.1) Code Compliance Support

The partnership is examining ways to increase compliance with existing codes. South Gate is aware that this is an area where increased enforcement can result in substantial energy savings.

B.2) Reach Code

The partnership will explore establishing meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

The City of South Gate will, through the partnership, develop a Strategic Energy Plan that includes long- and short-term energy and sustainability objectives in line with the adopted Strategic Plan. For sharing with other cities, South Gate will make available to SCE any documents it develops that support the execution of its partnership activities. Likewise, SCE intends to make documents and best practices available to help South Gate and other cities develop and improve their energy efficiency practices.

B.4) Financing for the community

The city will not be in a position to offer such financing. However, it is aware of the opportunities for financing provided by AB 811 and will explore the possibilities it represents to the partnership.

B.5) Peer to Peer Support

South Gate will participate in SCE sponsored Peer-to-Peer events.

Core Program Element C - Core Program Coordination

C.1) Outreach and Education

The partnership has specifically allocated a portion of its budget to outreach and education. The city already has a monthly newsletter which goes out to every resident, so the city will integrate energy efficiency messaging into this well-received communications piece to influence residents to become more energy-wise and to participate in energy efficiency programs. The city also has a website, and will integrate energy efficiency messaging into this outreach tool as well. Each year the city sponsors or participates in a number of community events. Plans are in development to include energy efficiency messaging into each one.

C.2) Residential and Small Business Direct Install

Not a part of this partnership activity.

C.3) Third-party program coordination

The partnership will make every effort to schedule SCE's existing third party programs, such as Direct Install and Lamp Exchange, into the community through the website and general communications. Such programs are recognized as adding a great deal of value to the community, and they serve as rallying points for energy efficiency.

C.4) Retrofits for just-above LIEE qualified customers

Not a part of this partnership activity.

C.5) Technical Assistance for program management, training, audit

A portion of the partnership budget is allocated specifically for this activity, and South Gate is examining how best to apply these funds.

c) <u>Non-incentive services</u>

The City of South Gate intends to conduct public, business and residential energy efficiency training workshops within its community. Other non-incentive services will include:

- Focusing SCE's portfolio of partnership activities to increase community enrollment in energy programs and other SCE services
- Providing training at SCE's Customer Technology Application Center (CTAC)
- Establishing a speakers bureau, and
- Conducting limited giveaways such as opportunity drawings and free informational brochures.

d) Target audience

- City facilities, city and county staff and management, and policymakers (elected officials);
- Other regional governmental agencies that are not direct participants in the partnership; and
- Residential and business customers.

e) <u>Implementation</u>

The partnership has developed a comprehensive portfolio of activities and is proceeding to schedule such activities and events. These include advertising in regional and local newspapers, newspaper interviews about energy efficiency opportunities, and energy-efficient community exhibits, expected to have an attendance of from 200 to 1,000 people.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

See the ELPP Master PIP.

d) **<u>Quantitative Program Targets</u>**

Table 5

Target	Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
1	kWh	TBD	TBD	TBD
2	Number of Workshops	2	6	10
3	Number of Ordinances, Codes, etc.	0	0	0

Target	Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
4	# of ME&O Events conducted that target customers	2	4	6

6. Other Program Element Attributes

a) **Best Practices**

See the ELPP Master PIP.

b) <u>Innovation</u>

The partnership will collaborate with its municipal participants, including school districts and special districts, to develop renewable energy strategies for reducing energy costs and improving energy efficiency. The partnership plan calls for a heavy emphasis on community events in order to:

- Exhibit energy efficiency programs and practices;
- Conduct energy code training;
- Promote whole-building performance to get better space conditioning;
- Coordinate emerging "green" or sustainability standards; and
- Encourage the community to take full advantage of SCE's core programs.

c) Interagency coordination

An objective for 2009-2011 is to leverage the strength of SCE's relationships with the other partnership cities. South Gate will also coordinate extensively with its Central Basin Municipal Water District and Waste Management to provide integrated education programs.

d) Integrated/coordinated Demand Side Management

See the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

The Partnership promotes comprehensive sustainability, including water conservation and solid waste management.

f) <u>Pilots</u>

No pilots are planned.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

Table 6²

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	Not applicable.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Through the partnership, the City of South Gate will evaluate establishing expedited permitting and entitlement approval processes, fee structure, and other incentives for green buildings and other above-code developments.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	Not applicable.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	The City of South Gate will contemplate pursuing the adoption of an AB811 financing mechanism for its jurisdiction.
1-5: Develop broad education program and peer-to-peer support to local govt's to adopt and implement model reach codes	With the assistance of the partnership, the City of South Gate would offer a comprehensive educational and outreach program that emphasizes specific actions their constituents can take to help achieve the City's Reach goals.
1-6: Link emission reductions from "reach" codes and programs to ARB's AB 32 program	The energy DSM programs and the larger AB 32 / SB 375 compliance requirements will be integrated.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	Training and Education of plan checkers.

² This table includes a subset of Strategic Plan local government chapter strategies that pertain especially to local government decision makers. Statewide coordination-related strategies should be discussed in the Strategic Plan portion of the Testimony. This table should be addressed in the master PIP by IOU territory but need not be repeated in local partner PIPs.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	The City of South Gate has already pre- qualified two energy service companies.
3-1: Adopt specific goals for efficiency of local government buildings, including:	The City of South Gate, with the assistance of the partnership, will adopt and implement a list of mandatory energy efficiency and conservation measures for all City facilities.
3-2: Require commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings.	The City of South Gate, with the assistance of the partnership, would evaluate the adoption of commissioning, performance measurement, and verification as a core part of an energy action plan.
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	South Gate will evaluate the creation of a line item in its budget (or other options) that allows energy efficiency cost savings to be returned to the department and/or projects that provided the savings
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in LG pilot projects.	Not applicable.
4-1: Local governments commit to clean energy/climate change leadership.	Not applicable.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	The City of South Gate would take these steps through the partnership, developing and adopting aggressive sustainability goals into its General Plan Update that include:
	Emphasizing sustainability through green building design and technologies
	Reduction of GHG emissions
	Increased use of renewable energy, and
	Conservation of existing sources of energy.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	By including the Central Basin Water District and the Los Angeles County Sanitation District in the partnership, water efficiency projects, including low flow aerators, shower heads, and toilets, will be added.

California Long Term Energy Efficiency	Program Approach to Achieving
Strategic Plan (Strategic Plan) Strategy	Strategic Plan Goal
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	Not applicable.

4h

Southern California Edison

1. Program Name: Community Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

a) List of Program Elements

The three core program elements are consistent with the Master Program Implementation Plan: Government Facilities, Strategic Plan Activities, and Core Program Coordination.

b) **Overview**

The Community Energy Leader Partnership's 2009-2011 program implements SCE's new Energy Leader Model by enhancing the leadership role of cities in energy management. The partnership has evolved from the Irvine Energy Efficiency Initiative to a ten-cities program that defines a true partnership between local governments and utilities focused on achieving energy savings and behavioral change in residential, non-residential and the municipal sectors. Through this framework, the partnership program supports local governments that are willing to commit and sustain the appropriate level of participation and resources to effectively initiate programs that address the main issue areas for local government action that are identified in the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan).

The partnership consists of nine cities lead by The Energy Coalition based in Irvine, including: Brea, Corona, Hermosa Beach, Irvine, Moreno Valley, San Bernardino, Santa Clara and Santa Monica.

Core Program Element A - Government Facilities

This area likely has the greatest potential to deliver energy savings during the next three-year program cycle. Every local government that participates in the partnership program will achieve specified energy savings and greenhouse gas (GHG) reductions from the facilities and infrastructure that it manages through technology retrofits, operational improvements, and policy changes. Participating local governments will take advantage of partnership incentives for municipal facilities and, wherever possible, of eligible rebate, incentive and technical assistance programs offered by their serving utilities.

A.1) Retrofit of County and Municipal Facilities

The partnership will provide opportunities for our Partner Cities to "lead by doing" by identifying opportunities for local governments to participate in comprehensive retrofits of municipal facilities.

These governments can leverage incentives offered through Southern California Edison (SCE) and Southern California Gas Company's (SCG) core programs. The partnership will support city planning efforts throughout this process by:

- Identifying energy efficiency in municipal facility retrofit projects. A preliminary list of municipal retrofits has already been identified. The partnership estimates it will complete up to 30 buildings (approximately 600,000 square feet);
- Retrofits to municipal facilities will consist primarily of lighting (60%), HVAC (20%) change outs, and the 20% balance spread among various measures identified through SCE and SCG audits;
- Targeting special districts (*for example*, water districts, school districts, county facilities, libraries, community centers and senior centers) for additional energy efficiency facility retrofit projects;
- Providing workforce education and training to city personnel to provide for long-term energy efficiency maintenance and upgrades;
- Enrolling municipal facilities into existing utility programs;
- Coordinating advanced engineering audits to identify further opportunities for savings; and
- Enrolling qualifying municipal facilities in our Partner Cities in ENERGY STAR's Benchmarking Portfolio Manager Program.

A.2) Retro-Commissioning (of Buildings or Clusters of Buildings)

The partnership will identify the potential for energy-savings opportunities through the Retro-Commissioning (RCx) of municipal facilities within the partnership's Partner Cities. While further study is needed, the partnership anticipates completing RCx in up to 15 buildings. The partnership will encourage any facility receiving enhanced technical assistance to also pursue RCx and apply for utility incentives in order to optimize building performance and reduce energy costs.

The partnership will also assist in providing training and education to city employees on the benefits of RCx during any major retrofits of existing governmental buildings.

A.3) Integrating Demand Response into the Audits

The partnership will provide integrated audits that are a combination of energy efficiency and demand response (DR) where applicable. SCE's tiered incentive program requires cities to implement DR in order to move up to a higher incentive level. The partnership will encourage Partner Cities who are receiving energy efficiency audits for municipal facilities and implementing energy efficiency recommendations to participate in at least the basic level of demand response. This integration of DR and EE will encourage Partner Cities to exploit synergies and maximize potential energy savings.

A.4) Technical Assistance for Project Management, Training, Audits, Etc.

The partnership will assist city government officials and staff in understanding, managing, and reducing their energy use and costs, and position Partner Cities as regional leaders in energy management practice. Assistance will be offered to designers, building inspectors, building engineers, employees and building occupants, and will include design assistance, plan review, Title 24 training, the audit process, technology review and building awareness. This assistance will be delivered by government or industry representatives, IOU Technical Staff, consultants, or another qualified source.

The partnership understands the need to build local energy efficiency expertise. A key role of the partnership in the 2009 – 2011 cycle will be the development of local government energy efficiency expertise. Faced with resource constraints, local governments lack adequate resources to proactively act or respond to energy efficiency opportunities in their buildings or in community buildings. To that end, the partnership program will work with local governments to identify any resource constraints, and work with utilities to find viable and cost effective solutions to ensure that the required level of expertise is achieved in the following ways:

- Develop in-house capabilities (energy manager position) devoted to achieving all cost-effective energy efficiency for local government facilities and stimulating similar actions in the community
- Continue to build the capacity/expertise of a designated Team Leader to be able to address and respond to energy efficiency opportunities within the city
- Educate employees through city staff workshops/information sessions.

A.5) On-Bill Financing

Through the SCE's on-bill financing, the partnership will encourage Partner Cities to take advantage of this opportunity for municipal facilities that install energy-efficient equipment or strategies. Financing and installation of equipment will be considered for partial or fully-extended repayment in the amount up to that offered through the applicable core program and will be included as a component line item of the monthly utility bill for repayment to the IOU.

Core Program Element B - Strategic Plan Support

The partnership will employ the following strategies in support of the Strategic Plan:

B.1) Code Compliance Support

The Strategic Plan concludes that significant attention must be focused on enforcing and strengthening local on-the-ground compliance with energy codes and standards. The partnership will support local government code compliance efforts as a key element to obtaining full savings from California's building and appliance energy code standards. Consistent and effective compliance, enforcement, and verification by local governments are essential parts of the overall effort. An emphasis will be placed on multi-jurisdictional efforts which can be promoted through the partnership partner cities in order to take advantage of economies of scale that can be realized, particularly for outreach and training efforts. The partnership will work with SCE, SCG, and other organizations to assist city building officials to gain a better understanding of new and existing energy codes.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

The relevant codes and standards that will be addressed by the partnership program are primarily those related to residential and commercial buildings, both new and existing. The Strategic Plan calls for the coordination of local government building codes and development policies, requirements to be mandated by local governments when a significant renovation occurs or when a property is sold, and the development of model local government programs that exceed minimum State code requirements.

Through the partnership local governments will commit to begin engaging in a good faith effort to develop "reach" codes and standards. They will also commit to coordinating with neighboring jurisdictions, professional and industry associations and others in the development and implementation of the Reach codes.

B.3) Guiding Document(s) Support

The Strategic Plan calls for local governments to lead their communities with innovative programs for energy efficiency, sustainability, and climate change. The partnership will serve as a catalyst to help facilitate local government energy leadership and adoption of an Action Plan that will move their community forward. Participating local governments will leverage their existing programs, interactions, and relationships in support of community-focused energy efficiency, demand response, and GHG reduction programs with particular focus on socio-economically diverse populations. These activities will entail close collaboration with the serving utilities in educating and informing citizens about opportunities for participation in utility sponsored programs.

B.4) Financing for the Community

A key barrier for local governments as well as private property owners in undertaking energy efficiency and GHG reduction projects is the difficulty in obtaining up-front financing to cover the project costs. The Strategic Plan recognizes the need for new and innovative financing solutions to accelerate investments in energy efficiency and cleaner energy technologies for both residential and commercial properties. The partnership will work closely with its participants to foster a larger local government role in the development and implementation of innovative financing tools by embracing approaches such as:

- AB 811;
- Assessment district loans; and
- Third party financing (PPAs).

The partnership will also coordinate with Southern California Edison (SCE) and Southern California Gas (SCG) to initiate and offer on-bill financing for both municipal and community facilities choosing to install high efficiency equipment or strategies. Financing and installation of equipment will be considered for partial or full-extended repayment in the amount up to that offered through the applicable core program and included as a component line item of the monthly utility bill.

In addition, the partnership will support partner cities in the exploration of tax-exempt equipment lease financing, clean renewable energy bonds ("CREBs"), and other innovative financing approaches. The partnership will also serve as a clearinghouse to disseminate information to our Partner Cities on federal energy efficiency community block development grants which will likely be allocated to municipalities on a per capita basis. Many of these financing options require lead time for the local government decision making and public input processes to occur. Best efforts will be made to measure and track resulting energy savings and greenhouse gas reductions over the next three years but it is likely that the bulk of the positive impact will occur over a longer period of time.

B.5) Peer-to-Peer Support

Through its peer-to-peer strategy, the partnership supports the goals of the Strategic Plan by providing a support network through which Team Leaders from Partner Cities can have access to information, exchange information, and attend training workshops, all in an effort to increase in-house EE knowledge base levels to enable them to better serve their residents and businesses. Peer-to-peer support has been the cornerstone of the partnership program's ability to effectively stimulate the sharing of ideas and best practices among partner cities. Through the partnership the following will be facilitated:

• Partner-to-Partner Dialogue

The partnership Team Leaders have the unique advantage of providing one another with peer-to-peer leadership that would not normally exist without the partnership. Through the partnership, partner cities are able to leverage the experience and expertise of fellow peer cities to increase awareness and participation levels and positively influence their own local government. Through regular Team Leaders Meetings, Team Leaders are able to engage in peer-to-peer dialogue, support each other with local policy and code advancement, and share best practices and technical knowledge.

• Partnership-to-Partnership Dialogue

The partnership will also connect to new partnerships, and local governments participating in other cutting-edge IOU partnership programs across the state. The partnership will leverage opportunities for sharing and advancing city leadership through mentorship and sharing of best practices and models with Hermosa Beach who has joined the regional South Bay Partnership, Palm Desert of the new Palm Desert Partnership, and Cathedral City of the new Desert Cities Partnership.
Core Program Element C - Core Program Coordination

The partnership has been developed in response to the need to integrate statewide energy and greenhouse goals into effective local action. The partnership's objective in this area is to develop effective partnerships between local governments and utilities that support the development of long-term, sustainable energy and GHG reduction programs in support of the California Energy Action Plan and California Global Warming Solutions Act (AB 32). The Partnership supports the key areas of the Strategic Plan that helps local governments define individualized energy reduction goals and Action Plans through very practical, flexible, and straightforward steps.

C.1) Outreach and Education

The partnership will utilize existing resources offered by the city or utility for an efficient and effective campaign. Energy efficiency will be framed within the context of climate change and the city's goals to reduce greenhouse gas emissions as outlined in AB 32.

The partnership will provide marketing and outreach, education and training and community sweeps to connect the community with opportunities to take action to save energy, money and the environment and increase the viability of small businesses. In addition, the program will act as a clearinghouse for all energy offerings, delivering information on demand response, self-generation, and low income programs, California Alternative Rate for Energy (CARE) and the California Solar Initiative (CSI).

C.2) Residential and Small Business Direct Install

No activity planned in 2009 – 2011 program cycle besides the promotion of existing utility core programs.

C.3) Third-Party Program Coordination

The partnership will coordinate with third party programs and associations in order to realize the benefits of being part of a broad professional network, such as resource sharing and establishment of best practices. The partnership intends to involve interested special districts (*for example*, water, fire, and school districts) and to coordinate with local building and trade professionals and organizations and other green business and sustainability organizations to develop an integrated, comprehensive message. *See* the ELPP Master PIP regarding activities that provide access to energy offerings.

C.4) Retrofits for Just-Above LIEE-Qualified Customers

The partnership will promote retrofits as an integrated approach to energy consumption and reduction, increasing awareness of energy efficiency and demand response for qualified Low-Income Energy Efficiency (LIEE) customers. Coordinating with the Multi-family Energy Efficiency Program will provide energy efficiency retrofits for just-above low income customers. This implementation of demand side management (DSM) strategies will also be coordinated with the LIEE Program and will support progress towards local and statewide sustainability goals.

C.5) Technical assistance/Workforce Education & Training for program management, training, audits, etc.

The partnership will assist our partner city staff, residents, and businesses in understanding, managing, and reducing their energy use and costs, and position partner cities as regional leaders in energy management practice by providing comprehensive technical, planning, marketing and implementation assistance.

The partnership will use utility resources to support partner cities' capacity for smart energy management. This includes encouraging and enlisting city staff to leverage utility resources.

c) <u>Non-incentive services</u>:

The partnership will provide numerous non-incentive services, including:

- Municipal Energy Action support;
- Peer-to-Peer Leadership;
- Energy Efficiency Trainings;
- Marketing, Education and Outreach;
- Information, Education and Funneling or core and third-party programs; and
- Energy Champion Recognition.

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) <u>Target audience</u>

See the ELPP Master PIP. The Partnership will also target special districts in partnering cities, for example water districts, and school districts.

e) <u>Implementation</u>

Program cost efficiency will be captured throughout our partner cities by maximizing replicable program elements, leveraging resources and staff support from each partner as defined in our participation model, and implementing initiatives that create demonstrated permanent and persistent energy savings.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest

program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) Program Design to Overcome Barriers

Economy. The principal barrier faced is the condition of the economy at the State and local levels. Commercial and residential development is at an all time low, and major companies and builders are facing massive layoffs. It will be increasingly difficult to convince decision makers that investing in energy efficiency is the prudent thing for them to do.

The partnership will utilize strategies to include cost/benefit analysis for all suggested or identified projects to demonstrate long-term benefits and pay-backs. The partnership will encourage partner cities to find viable and cost effective solutions such as taking advantage of on-bill financing, and identifying other sources of funding such as CEC funding and federal funding.

Lack of Access to Financing/Resources. The partnership will work with local governments to access on-bill financing, explain the benefits of AB 811, and encourage other community financing options to ease the adoption of energy efficiency in communities.

End User Attitudes Toward Energy Efficiency. Over the course of the past funding cycle, the partnership observed a gradual acceptance of new energy efficient technology and utility programs. However, complete market transformation has not yet been achieved in our partner cities. As a trusted entity, the partnership will continue to build upon our history of effective marketing and outreach strategies and established relationships with local governments and key community stakeholders.

Cost of Obtaining and Processing Information. Local governments are often overwhelmed on a day-to-day basis with obtaining and processing disparate information from different channels on an individual basis. The partnership has identified and continues to address this barrier through our existing peer-to-peer support network of Team Leaders from each partner city. Through this vehicle, the CEP is able to provide a forum for partnership Team Leaders to facilitate the sharing of best practices and information processing strategies.

Community Energy Leader Partnership

d) <u>Quantitative Program Objectives</u>

Table 5

Target	Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
1	Kw, kWh	TBD	TBD	TBD
2	Number of Workshops	4	9	17
3	Number of Ordinances, Codes, etc.	0	1	2
4	# of ME&O Events conducted that target Residential customers	8	16	26

6. Other Program Element Attributes

a) **Best Practices**

Primary Barriers/Program Challenges	Program Best Practices
Insufficient technical and financial resources	<i>One- stop Shopping</i> - Provides comprehensive bundle of technical, economic, marketing and implementation assistance
First cost of EE investments	<i>Financing</i> - On-bill financing, other low interest energy loans, possible establishment of self-replenishing energy efficiency/savings funds, AB 811
Incomplete implementation (due to adoption of aggressive policies & goals without a sound implementation & financing plan)	<i>Course Corrections</i> - Mechanism for constant tracking, monitoring and review of program results vs. challenges, allowing sufficient time for course corrections
Insufficient motivation	<i>Comprehensive Benefits</i> – Combines measure incentives with funding support for ME&O activities that are very important to local governments. Also, ascending to the leadership role is a natural and appropriate role for governmental entities.
Lost opportunities	<i>Comprehensive Strategies</i> – Comprehensive whole portfolio, building and facility approaches minimize lost EE and DR opportunities by municipal facilities, while the companion ME&O strategy leverages the participating local governments' efforts to encourage residents and business to also become energy efficient.

b) <u>Innovation</u>

The partnership's unique combination of partner cities strengthens the ability to test strategies and share best practices across every corner of SCE and SCG's service territory. They were selected for their leadership potential, and geographic distinction. This range of diversity allows for program versatility and the opportunity to explore implementation across multiple factors.

c) Interagency coordination

The partnership plans on collaborating and coordinating with both local agencies such as the Santa Clarita Water District and Metropolitan Water District, as well as statewide agencies, such as CARB and CEC. The partnership also plans to continue enhancing our marketing efforts by leveraging the materials produced by Flex Your Power, Department of Energy, and ENERGY STAR.

d) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

The integration of demand side resources is critical to realizing the State's long-term energy goals and objectives. The partnership strives to minimize lost opportunities that accrue from the disparate delivery of energy services. As a core implementation strategy, the partnership adopts an integrated approach that leverages the synergies and economies of scale that exist from the complementary implementation of both energy efficiency and demand response resources, along with promoting awareness and increasing knowledge of LIEE, renewables, and self-generation.

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

e) Integration across resource types (energy, water, air quality, etc.)

A key focus of the partnership will be assisting our local government partners in identifying and exploiting cost-effective opportunities for integration with other resource areas including water, solid waste, and air quality around climate action and AB 32. The partnership will develop joint marketing and promotion initiatives with water and sewer districts, solid waste management agencies, regional air quality districts, and other relevant resource management entities.

f) <u>Pilots</u>

Two pilot program opportunities will be pursued in conjunction with the Partnership implementation plan.

Green Schools Initiative

The first pilot project will be a Green Schools Initiative in collaboration with the Irvine Unified School District. The Green Schools Initiative will consist of three components:

- Reduction in the carbon footprint of the District through a combination of energy efficiency retrofits, comprehensive greenhouse gas reduction policies and installation of solar electric and solar thermal rooftop systems.
- Development of an enhanced environmental curriculum to strengthen classroom instruction in the areas of environmental sustainability with a particular emphasis on energy efficiency and greenhouse gas reductions.
- Expansion of the role of the School District and its students as catalysts for change in the community through outreach and creation of robust partnerships with the City of Irvine, community organizations and other stakeholders.

Irvine GHG Emissions Tracking Tool

The second pilot project will be a comprehensive greenhouse gas emissions tracking and measurement tool being developed by the City of Irvine.

This tool will allow cities within the Partnership as well as cities throughout the State to assess current and future energy consumption patterns, as well as assist with future utility system planning for energy service demands from new developments and opportunities for energy use reduction programs and policies.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	The Partnership's Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The partnership will investigate development of a Municipal Forum (Forum) consisting of partner representatives for the purpose of establishing common goals for the region. The Forum will address strategies for affecting codes, standards and incentives; review best practices for exceeding current Title 24 standards; and provide expert consultation to assist cities with their own planning and implementation. The partnership will leverage the beyond Title 24 Reach codes that have already been developed and adopted in Santa Monica by actively promoting and achieving adoption of similar Reach codes by at least half of the other Partnership cities.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Some of the partnership partner cities have already implemented expedited permitting and other incentives for green building projects. The partnership will expand these approaches for joint adoption by other partnership partners. See discussion under 1-1 above.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The partnership will provide technical support and coordinate the joint development and adoption of model multi- jurisdiction point of sale and point of permit requirements related to increased energy efficiency in the partnership partner cities.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Using the lessons learned from participation in the implementation of Palm Desert's AB 811 program, the partnership will assist in the adoption of AB 811 programs in at least half of the Partnership partner cities along with adoption of other appropriate innovative EE financing approaches.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	The Partnership's Approach to Achieving Strategic Plan Goal
1-5: Develop broad education program and peer-to-peer support to local govt's to adopt and implement model reach codes.	The Partnership will enlist the leadership cities within the partnership as mentors for development and adoption of Reach codes in the other Partnership cities. See discussion under 1-1 above.
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	The Partnership will conduct training of City managers, policymakers, business owners, community leaders and others to explain their respective roles in implementing AB 32 and the important role of energy efficiency in achieving these aggressive greenhouse gas reduction targets. Each partnership partner city that has not already done so will develop and adopt an Energy and Climate Action Plan that will link policy and program actions being taken within their community to specific AB 32 goals and targets.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	Through leveraging of expertise and resources within the Partnership (outreach, training, technical assistance, etc.) multi- jurisdictional efforts will be implemented to increase the rate of Title 24 compliance. See discussion under 1-1 above.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	See discussion under 1-1 above.
3-1: Adopt specific goals for efficiency of local government buildings, including:	The partnership partner cities will commit up to a 10% reduction in energy use within qualifying municipal buildings as well as work to adopt a LEED requirement for new government buildings.
3-2: Require commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings.	The partnership will assist in a joint analysis and development of joint recommendations by the partner cities into the feasibility of commissioning requirements for new buildings and retro- commissioning requirements for existing buildings, as applicable.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	The Partnership's Approach to Achieving Strategic Plan Goal
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	The Partnership will assist in a joint analysis and development of joint recommendations by the partner cities into the feasibility of modified budgeting approaches to allow EE cost savings to be returned to the department and/or projects that generate the savings.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	The Partnership has emphasized creativity by our Partners to develop innovative local governments pilots, such as the Palm Desert Demonstration Project, Green Schools Initiative, benchmarking, etc.
4-1: Local governments commit to clean energy/climate change leadership.	Each partnership partner that has not already done so will develop and adopt and Energy and Climate Change Action Plan. Each Partnership partner city will commit to supporting a community-focused effort related to energy efficiency, demand response and greenhouse gas reduction programs with particular emphasis on socio-economically diverse populations.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability, and climate change.	The partnership envisions facilitating a peer-to-peer effort that allows each governmental entity to leverage the knowledge and experience of the others and take a more integrated approach to overall energy savings and greenhouse gas reduction through its Municipal Forum (see discussion under 1-1 above). The partnership will draw upon the experiences from the partner cities to identify generic modifications to General Plan elements that promote community sustainability. Recent General Plan re- drafting experiences in Santa Monica and Irvine will be very useful in this effort.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	The Partnership will assist in the identification and preliminary concept development of integrated resource projects within the partner cities.

California Long Term Energy Efficiency	The Partnership's Approach to
Strategic Plan (Strategic Plan) Strategy	Achieving Strategic Plan Goal
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority.	The partnership will help compile and disseminate examples of energy efficiency related requirements and incentives within local zoning and land-use planning codes/policies for joint consideration by the partner cities. An example is a local solar access ordinance developed by the City of Santa Monica. Another example is a model sustainable land-use policies being developed in other partner cities. The model creates sustainable development incentives with potential broader applicability.

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1. Program Name: Desert Cities Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

 Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

a) List of Program Elements

The three core program elements are similar to those identified in the Energy Leader Partnership Program (ELPP) Master Program Implementation Plan (PIP): Element A - Government Facilities, Element B - Strategic Plan Activities and Element C - Core Program Coordination.

Core Program Element A - Government Facilities

A.1) Retrofit of county and municipal facilities

The Desert Cities Energy Leader Partnership (DCELP or Partnership) will focus on encouraging participating jurisdictions to lead by example and become models of energy efficiency through action in their municipal facilities. The Coachella Valley Association of Governments (CVAG) and Southern California Edison (SCE) as partners in DCELP, will meet with each participating Jurisdiction to identify their municipal facilities and to establish when upgrades may have been made to those facilities. This will include an initial evaluation or audit of all municipal facilities. The CVAG member jurisdictions within SCE territory that have expressed retrofit interest include Desert Hot Springs, Cathedral City, Indian Wells, Palm Springs, Rancho Mirage and the Agua Caliente Band of Cahuilla Indians.

A.2) Retro-Commissioning (of buildings or clusters of buildings)

Each jurisdiction will have the opportunity to evaluate potential retro-commissioning and financing options.

A.3) Integrating Demand Response into the audits

The Energy Leader model for all SCE partnerships includes a requirement for participation in demand response programs.

A.4) Technical assistance for project management, training, audits, etc.

Through the partnership, each participating jurisdiction will receive technical assistance in identifying and prioritizing the portfolio of municipal energy efficiency projects that will meet its energy efficiency goals and commitments to sustainability practices.

A.5) On-bill financing

Each jurisdiction in the partnership has indicated an interest in using On-bill financing. The extent of participation in OBF will be limited only by the funding level provided to the partnerships.

Core Program Element B - Strategic Plan Support

B.1) Code Compliance Support

The partnership is examining ways to increase compliance with existing codes. Each jurisdiction is aware that this is an area where increased compliance can result in substantial energy savings.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

The CVAG Energy and Water Conservation Subcommittee will be developing information about best practices for energy efficiency, sustainability and related topics during 2009. This information will be available to participating jurisdictions, hopefully through a website related to the partnership. SCE intends to make available documents and best practices to help cities develop their energy efficiency practices.

B.4) Financing for the community

The partnership will provide information about financing options, including on-bill financing, revolving energy efficiency funds, low interest loans, energy service company (ESCO) contracts, and other potential programs and financing instruments that can assist with the upfront costs of energy efficiency retrofits. CVAG is also working through its Energy and Water Conservation Subcommittee on potential opportunities for an AB 811 funding program that would provide a source of funds for energy efficiency upgrades for municipal, business, and residential customers.

B.5) Peer to Peer Support

The partnership intends to develop an effective means by which each jurisdiction participating in partnerships, past and present, can readily share information with others. Conference calls including all Partnerships as well as conferences will be conducted on a routine basis.

Core Program Element C - Core Program Coordination

C.1) Outreach & Education

The partnership has a portion of its budget specifically allocated to outreach and education. See the ELPP Master PIP.

C.2) Residential and Small Business Direct Install

Not a part of this partnership activity.

C.3) Third-party program coordination

The partnership will develop community events appropriate for a third party contractor to execute, such as light exchange events.

C.4) Retrofits for just-above LIEE-qualified customers

See the ELPP Master PIP.

C.5) Technical assistance for program management, training, audits, etc. See the ELPP Master PIP and Table 6.

b) <u>Overview</u>

DCELP is a local government partnership in SCE's energy leader partnership portfolio. The partnership is between CVAG and SCE with cooperation from the Imperial Irrigation District, a local public utility. CVAG is a local government agency, representing 10 cities, Riverside County and three tribal governments (each a Jurisdiction, and collectively referred to as Jurisdictions)CVAG will coordinate education and outreach efforts, a valley-wide marketing program, as well as related administrative and reporting activities. Through its existing communication network, CVAG will provide outreach to the member Jurisdictions and the larger Coachella Valley community about energy efficiency. SCE will provide energy information, technical assistance, and assist the Jurisdictions with implementation of municipal facilities retrofits and energy efficiency upgrades. SCE will provide resources and support, as available, for training, events, and marketing programs.

The partnership will provide comprehensive evaluation and retrofit of municipal facilities, marketing and outreach, education and training, and community activities to connect the community with opportunities to take action to save energy, money and the environment. CVAG will coordinate partnership activities with its member jurisdictions through the Energy and Environmental Resources Committee, and its Energy and Water Conservation Subcommittee. The Subcommittee meets monthly and will provide a forum for coordination of partnership activities. The Subcommittee can assist with potential projects, outreach opportunities, and possible events and training. The Subcommittee is coordinating a CVAG Energy Symposium and Energy Fair in April 2009.

A unique element of the DCELP is the opportunity to bring together other community partners in a successful regional partnership that will maximize opportunities to meet common goals. One of our utility partners, the Imperial Irrigation District (IID) serves three of our member cities -- Coachella, Indio and La Quinta -- as well as parts of Riverside County. The IID has indicated their interest in cooperating with CVAG, SCE and The Gas Company to promote this regional partnership. The IID has already offered to provide an IID energy professional as a resource to the three cities to work on joint program promotion, evaluation of municipal facilities for energy efficiency, and coordination of project implementation. The IID has indicated the potential for cooperative efforts to accomplish economies of scale and efficient utilization of resources. The IID has expressed a willingness to participate with SCE and SCG to

maximize the resources necessary to meet our energy use reduction goal. The Imperial Irrigation District is an active partner in the CVAG Energy and Water Conservation Subcommittee.

CVAG's Energy and Water Conservation Subcommittee also includes representatives from local water districts, including Desert Water Agency, the Coachella Valley Water District, and Mission Springs Water District. Recognizing the critical link between water conservation and energy efficiency, CVAG is working with the water districts to integrate these efforts. Given that the management and delivery of water resources to our communities accounts for 20% of electrical demand, our energy efficiency efforts will necessarily involve coordination with water conservation programs already underway and to be developed by the water districts. Including the local water districts in this effort will further enhance the partnership.

A number of Coachella Valley cities have also adopted the U.S, Mayor's Climate Protection Agreement, including Palm Springs, Rancho Mirage, Palm Desert, and La Quinta. Portions of this agreement call for making energy conservation a priority through the retrofitting of a Jurisdiction's facilities with energy efficient lighting, the purchase of ENERGY STAR® equipment and appliances for that Jurisdiction use, and increase pump efficiency in water and wastewater systems.

c) <u>Non-incentive services</u>

CVAG will coordinate education and outreach efforts, a valley-wide marketing program, as well as related administrative and reporting activities. Through its existing communication network, CVAG will provide outreach to the member jurisdictions and the larger Coachella Valley community about energy efficiency. SCE will provide energy information, technical assistance, and assist the jurisdictions with implementation of municipal facilities retrofits and energy efficiency upgrades. SCE will provide resources and support, as available, for training, events, and marketing programs.

d) Target audience

A number of Coachella Valley cities have also adopted the U.S, Mayor's Climate Protection Agreement, including Palm Springs, Rancho Mirage, Palm Desert, and La Quinta. Portions of this agreement call for making energy conservation a priority through the retrofitting of City facilities with energy efficient lighting, the purchase of ENERGY STAR® equipment and appliances for City use, and increase pump efficiency in water and wastewater systems.

e) Implementation

The partnership will provide comprehensive evaluation and retrofit of municipal facilities, marketing and outreach, education and training, and community activities to connect the community with opportunities to take action to save energy, money and the environment. CVAG will coordinate partnership activities with its member jurisdictions through the Energy and Environmental Resources Committee, and its Energy and Water Conservation Subcommittee. The Subcommittee meets monthly and will provide a forum for coordination of partnership activities. The Subcommittee

can assist with potential projects, outreach opportunities, and possible events and training. The Subcommittee is coordinating a CVAG Energy Symposium and Energy Fair in April 2009.

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A number of Coachella Valley cities have also adopted the U.S, Mayor's Climate Protection Agreement, including Palm Springs, Rancho Mirage, Palm Desert, and La Quinta. Portions of this agreement call for making energy conservation a priority through the retrofitting of City facilities with energy efficient lighting, the purchase of ENERGY STAR® equipment and appliances for City use, and increase pump efficiency in water and wastewater systems.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) **<u>Program Design to Overcome Barriers</u>**

See the ELPP Master PIP for discussion of barriers.

d) **Quantitative Program Targets**

Table 5

Target	Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
1	Government Buildings kWh	TBD	TBD	TBD
2	Number of Workshops	0	4	8
3	Number of Ordinances, Codes, etc.	0	TBD	TBD
4	# of ME&O Events	3	7	11

6. Other Program Element Attributes

a) <u>Best Practices</u>

Offer best practices information via website and other outreach, including 2009 Energy Summit.

b) <u>Innovation</u>

Develop municipal sustainability dashboard to simplify sustainability reporting including energy efficiency and renewable energy.

c) Interagency coordination

Through our Energy and Water Conservation Subcommittee, the partnership will coordinate partnership programs with other stakeholders, including water districts, building industry, other utilities, environmental community, and members of the public.

d) Integrated/coordinated Demand Side Management

The IOUs have identified Integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

e) Integration across resource types (energy, water, air quality, etc.)

Air quality and water are key elements of our environmental sustainability programs. Please see discussion under "4b.Overview" section above.

f) <u>Pilots</u>

Establish localized pool pump program pilot for climate zone 15.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving CLT Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	A number of the Jurisdictions have adopted the California Green Builder program on a voluntary basis. The partnership plans to provide training and information to cities about Title 24 and ways to encourage more stringent energy codes on a voluntary basis, including incentives.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	The partnership will offer training and educational workshops for Jurisdictions planning and building department staff regarding opportunities for expedited permitting and other incentives, green building codes and energy efficient design.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The partnership will evaluate the potential for this program.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	The partnership is exploring potential funding sources for jurisdictions to implement AB 811 programs for energy efficiency.
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	The partnership will work to enhance education and peer-to-peer support for local governments.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving CLT Strategic Plan Goal
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	The partnership is coordinating energy efficiency programs with GHG reduction and climate action initiatives. The Partnership plans to present an AB 32 workshop for local governments in the Coachella Valley. CVAG is working with the local air quality management district to evaluate AB 32 implementation options.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will support the development of training & education programs and evaluate potential for stipends for incremental staff time to assist with achieving additional T-24 compliance.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	
3-1: Adopt specific goals for efficiency of local government buildings.	Various opportunities for improved efficiency, including environmentally preferred purchasing policies, and incentives will be shared with the cities.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	Energy efficiency upgrades and retro- commissioning of municipal facilities is a major goal of the 2009-2011 partnership.
3-4: Explore creation of line item in local governments' budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Explore this opportunity with cities to determine whether it could be effective.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	The Coachella Valley has significant potential for renewable energy development as well as energy efficiency incubators including local colleges that have sustainability goals.
4-1: Local governments commit to clean energy/climate change leadership.	A goal of the partnership will be to integrate energy efficiency efforts with climate action leadership. Other CVAG partners in the Coachella Valley are exploring economic development opportunities for cleaner energy.

California Long Term Energy Efficiency	Program Approach to Achieving CLT
Strategic Plan (Strategic Plan) Strategy	Strategic Plan Goal
4-2: Use local governments' general plan and other elements to promote energy efficiency, sustainability and climate change.	Local Jurisdictions are interested in education and training opportunities to explore ways to promote energy efficiency, sustainability and greenhouse gas reduction through general plans and community planning.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	CVAG's Energy and Water Conservation Subcommittee is coordinating efforts to reduce water use, enhance water-related energy efficiency, and other water and energy saving programs. Local water districts are participants in the Subcommittee and will be included in partnership outreach.
4-5: Develop EE-related "carrots" and	The partnership will focus on incentives,
"sticks" using local zoning and	education, model programs, and
development authority.	leadership by example.

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1. Program Name: Eastern Sierra Energy Leader Partnership

2. Projected Program Budget Table

 Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

a) List of Program Elements

The three core program elements are similar to those identified in the Energy Leader Partnership Program (ELPP) Master Program Implementation Plan (PIP): Element A - Government Facilities, Element B - Strategic Plan Activities, and Element C - Core Program coordination.

b) **Overview**

The Eastern Sierra Energy Leader Partnership (Partnership) continues the partnership between the Town of Mammoth Lakes and Southern California Edison (SCE). The Partnership will be expanded to include the City of Bishop, Inyo County, Mono County, Eastern Sierra Council of Governments, and the implementing partner, the High Sierra Energy Foundation (HSEF).

The Eastern Sierra Partnership builds upon the successful existing Mammoth Lakes Partnership to bring additional governmental entities into SCE's 2009-2011 local government partnership program. The partnership's comprehensive portfolio of activities is designed to seek innovative approaches to energy efficiency in the alpine environment; to increase adoption of energy efficiency measures and best practices within their municipalities and communities by establishing a "culture" of energy efficiency through focused educational and outreach events; and to increase the effective delivery of technical and financial energy services to residents and businesses.

Core Program Element - Government Facilities

A.1) Retrofit of county and municipal facilities

The town of Mammoth Lakes has conducted a recent audit of their facilities. The County of Inyo, the City of Bishop and the County of Mono plan to complete audits of targeted facilities in 2009. Potential opportunities include but are not limited to: lighting, air conditioning, refrigeration, food service equipment, agricultural equipment, pumps, premium efficiency motors.

A.2) Retro-commissioning (of buildings or clusters of buildings)

The partnership focuses on identifying HVAC retrofit opportunities through the retrocommissioning of county and city facilities. This provides a systematic whole-system approach to energy efficiency, and many chronic building problems and energy waste can be resolved by making low-cost or no-cost adjustments identified by the retrocommissioning process.

A.3) Integrating Demand Response into the audits

The partnership's plans include identifying and performing successful comprehensive energy efficiency projects with the member cities and counties and to enroll service accounts from each in demand response programs in alignment with the ELPP Master Program Implementation Plan and the Energy Leader Partnership model.

A.4) Technical assistance for project management, training, audits, etc.

Standard programs available include energy efficiency training, energy audits, and technical assistance in alignment with the ELPP Master PIP.

A.5) On-bill financing

On-bill financing will not be available at the beginning of the program cycle. However, it may be added in the future, as each city and county in the partnership has indicated an interest in using on-bill financing.

Core Program Element - Strategic Plan Support

B.1) Code Compliance Support

The Eastern Sierra Leader Partnership will explore the creation of an energy code compliance improvement program and various strategies across the partnering cities and counties to improve compliance with building energy standards and appliance regulations. The partnership will conduct focused energy code training targeted to the Eastern Sierra region, including workshops for local agency planning and building staff, building professionals, and contractors.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

The partnership objectives will include development of Energy Action Plans and Climate Action Plans to document baseline energy use and emissions. These baselines will be used to set and achieve emission reductions and energy savings. Individual city and county plans will be used to develop a regional energy savings plan. Additionally the partnership will establish documentation in alignment with the strategies stated in the ELPP Master PIP.

B.4) Financing for the community

The Partnership will develop an education and outreach program for the Partnership communities in alignment with the strategies stated in the ELPP Master PIP.

B.5) Peer-to-Peer Support

The Eastern Sierra Partnership will actively participate in and support the peer-topeer program in forums for the partnering cities and counties through the strategies stated in the ELPP Master PIP.

Core Program Element - Core Program Coordination

C.1 Outreach & Education

The partnership will build upon the established comprehensive Marketing Education & Outreach (ME&O) Plan to incorporate: educational workshops to assist the partner cities and counties in moving forward with energy savings projects, policies, codes, and ordinances; general awareness events and exhibits to publicize the Partnership and its goals throughout the communities (including environmental fairs and expos); marketing energy efficiency programs through a variety of media channels including mailers, press releases, and quarterly e-newsletters; and a minimum of 12 special workshops.

C.2) Residential and Small Business Direct Install

The partnership will continue its support of core program coordination by driving participation through leveraging its various chambers of commerce, bill mailing inserts and public television access. The Partnership will also fund and execute focused small business and residential direct install activities.

C.3) Third-party program coordination

The partnership will actively support third party programs through the strategies stated in the ELPP Master PIP.

C.4) Retrofits for just-above LIEE-qualified customers

The Eastern Sierra Partnership will support this program in alignment with the strategies stated in the ELPP Master PIP.

C.5) Technical assistance for program management, training, audits, etc.

The Eastern Sierra Partnership will support this element in alignment with the strategies stated in the ELPP Master PIP.

c) <u>Non-incentive services</u>

The Eastern Sierra Partnership will build upon a portfolio of partnership ME&O activities to increase community enrollment in energy core programs, and other SCE services, resources and available including the mobile energy unit, account manager support, training at the Customer Technology Application Center (CTAC), marketing, design & printing of brochures, media/press/publicity support and others.

d) Target audience

- City and county staff, management and policymakers (elected officials)
- Residential and business customers
- Residents and business customers of unincorporated communities

e) Implementation

In addition to the strategies and coordination stated in the ELPP Master PIP:

- The program will be implemented with tiered incentives for the retrofitting of county and city facilities based on SCE's tiered incentive structure;
- The ME&O portions will be implemented in consultation and cooperation with SCE.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) Program Design to Overcome Barriers

The barriers and strategies are described in the ELPP Master PIP.

d) **<u>Quantitative Program Targets</u>**

Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1 Municipal			
Retrofits (kWh)	TBD	TBD	TBD
Target #2 Number of			
workshops			
	2	6	10
Target # 3 Number			
of Ordinances,			
Codes, etc.			
	0	TBD	TBD
Target #6 ME&O			
Events Conducted-			

Table 5

Number of events			
(including sweeps)			
	4	8	12

6. Other Program Element Attributes

a) **Best Practices**

In addition to the strategies described in the ELPP Master PIP, the Eastern Sierra Partnership will carry out the following best practices:

- Leverage the strong member relationships developed when the Eastern Sierra participated in a non-resource partnership to develop and capture energy efficiency opportunities within the municipal facilities;
- Expand the existing partnership education programs to identify, develop and capture energy efficiency opportunities within the region communities;

b) <u>Innovation</u>

The partnership and its municipal participants will expand its:

- Collaboration in developing energy efficiency and renewable energy strategies for reducing energy costs in its alpine and valley climates; and
- Comprehensive approaches to deliver energy education to local residents and businesses.

The partnership will also hold 12 training workshops and 12 exhibits at community events over the course of the 2009-2011 cycle. The workshops will:

- Demonstrate energy efficiency activities and practices;
- Provide energy code training to target the needs of the Eastern Sierra region;
- Promote whole-building performance to achieve better space conditioning;
- Coordinate emerging "green" or sustainability standards; and
- Promote programs that promote sustainability, including the California New Homes Program, Home Energy Efficiency Rebate Program, Appliance Recycling Program, Benchmarking and Performance Tracking, On-Line Buyer's Guide and Business and Consumer Electronics Program.

c) <u>Interagency coordination</u>

The Partnership is in discussions with the Los Angeles Department of Water and Power (LADWP) about becoming an active partner.

d) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

The Eastern Sierra Energy Leader Partnership plans include identifying and enrolling municipal service accounts from each city and county in demand response programs in alignment with the Energy Leader Partnership model and the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

The partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

f) <u>Pilots</u>

No pilots are planned through this Partnership.

g) <u>EM&V</u>

Described in the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The partnership will evaluate adopting codes on a voluntary but rewarded basis, including excess Title 24 performance in the fee-waiver program or adopting the new California "Green Building Code" on a voluntary basis through 2010, making it mandatory in 2011.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Each local agency, through the Partnership, will evaluate and adopt expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments as appropriate.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The partnership will evaluate and adopt as appropriate, a point of sale energy disclosure; dependant upon availability of standardized energy star benchmarked data (per recent legislation) on each meter at the point of sale.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	The local agencies of the partnership will contemplate pursuing the adoption of an AB 811 financing mechanism for its jurisdiction in alignment with the strategies stated in the ELPP Master Program Implementation Plan.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	Within the partnership and through other partnerships, the local agencies of the partnership and the SBESC will participate in six comprehensive bi-annual peer-to- peer educational & outreach forums that emphasize specific actions to take to help achieve the local agencies' reach code goals.
1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program	The partnership will evaluate and integrate DSM programs and AB 32 / SB 375 compliance requirements, as appropriate.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will support each agency in developing and implementing Training & Education programs to achieve additional T-24 compliance.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Each local agency of the partnership will evaluate and adopt, as appropriate, policies regarding energy components of the professional licensing of local inspectors and contractors hired.
3-1: Adopt specific goals for efficiency of local government buildings	The partnership goal is to achieve the ELPP model silver target level in the aggregated local government municipal facilities, resulting in at least a 5% savings over the 2003 energy use baseline during the 2009-2011 Partnership.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	Each local government of the partnership will evaluate and adopt as appropriate, commissioning, performance measurement, and verification as a core part of their energy action plan.
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Each local government of the partnership will evaluate and adopt, as appropriate, creation of a line item in their budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	Not applicable

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-1: Local governments commit to clean energy/climate change leadership.	Each local government of the partnership will evaluate and adopt, as appropriate, a Strategic Energy Plan that includes long and short term energy & sustainability objectives in line with the adopted California Long Term Energy Efficiency Strategic Plan.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Each local government of the partnership will evaluate and adopt, as appropriate, development of aggressive sustainability goals into their general plan updates that include emphasizing sustainability through green building design & technologies, reduction of GHG emissions, increased use of renewable energy, and conservation of existing sources of energy.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	The partnership will influence wastewater, storm water and potable water capital projects, with SCE, to ensure that they are as energy efficient as possible.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	Each local government of the partnership will evaluate, develop, and adopt, as required, zoning and development authority changes to comply with AB 32 / SB 375.

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Southern California Edison

1. Program Name: Energy Leadership Partnership Strategic Support

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – N/A (this is a non-resource program).

4. Program Element Description and Implementation Plan

a) List of Program Elements

The three core program elements are those identified in the Energy Leader Partnership Program (ELPP) Master Program Implementation Plan (PIP): Element A – Government Facilities, Element B – Strategic Plan Support, and Element C – Core Program Coordination. Because this Energy Leader Partnership Program Strategic Support PIP is a supporting resource and not a Local Government Partnership.

Core Program Elements	Sub-Programs		Type of Program
	A1	Government Facilities Retrofits	Resource
	A2	Government Facilities Retro- commissioning	Resource
A - Government Excilities	A3	Integrated Demand Response	Demand Response
Tacinities	A4	Technical Assistance	Non-Resource (technical
			assistance for project
			management, training, audits,
			etc.)
	A5	On-Bill Financing	Non-Resource
B – Strategic Plan Support	B1	Code Compliance	Non-Resource
	B2	Reach Code Support	Non-Resource
	B3	Guiding Document(s) Support	Non-Resource
	B4	Financing for the Community	Non-Resource
	B5	Peer-to-Peer Support	Non-Resource
C – Core Program	C1	Community Outreach &	Non-Resource
Coordination		Education	
	C^{2}	Residential & Small	Resource
	02	Business Direct Install	
	C3	Third Party Program	Non-Resource
		Coordination	

Core Program Elements	Sub-Programs		Type of Program
	C4	Retrofits for just-above LIEE-qualified customers	Resource
	C5	Technical assistance for program management, training, audits, etc.	Non-Resource

Core Program Element A - Government Facilities

The Energy Leader Partnership sub-program (ELP) Strategic Support element (ELP Strategic Support) supports Element A – Government Facilities, in the following ways:

- ELP Strategic Support supplements the ELPP, providing another channel for disseminating information about the key characteristics of successful Government Facilities energy programs, including information about high potential EE/DR/RE technologies, measures and approaches. In addition, ELP Strategic Support will provide information about on-bill financing, CEC's California Energy Efficiency Financing Program (CEEFP) low interest loans, strategies for establishing self-replenishing revolving funds for energy projects, and other types of relevant information about financing municipal facilities retrofits.
- ELP Strategic Support also helps local governments quantify the GHG reductions that will be achieved through their Government Facilities energy retrofit plans so that this information can be effectively communicated to department heads, elected officials, lenders and community leaders whose support is needed to approve these plans.

Core Program Element B - Strategic Plan Support

SCE's Energy Leader Partnership Program (ELPP – see separate ELPP Master PIP) is the primary program through which the Strategic Plan will be implemented. The ELP Strategic Support program element is designed to support the ELPP by helping local governments overcome the primary barriers to local government leadership in energy and climate action, that being; a lack of resources of sufficient funds and knowledgeable staff with sufficient time to devote to these activities.

Through the ELP Strategic Support element, SCE is offering assistance to help local governments reduce their carbon footprint through increased energy efficiency. This offering will primarily be delivered through a variety of implementing organizations.

Through ELP Strategic Support, local government participants in SCE's ELP will understand the linkages between energy efficiency and greenhouse gas (GHG) reduction/AB 32 compliance. The program will deliver in-person and on-line trainings to facilitate local government understanding of requirements under AB 32, learn about principles and methodologies for conducting GHG inventories and setting GHG reduction targets and developing and implementing climate action plans (CAPs). The program will also provide access to templates and tools that detail the components of GHG inventories and CAPs and provide training on mitigation strategies for reducing GHG emissions in both local government and community-scale activities and facilities.

The program will offer conferences, workshops and Webinars, building upon past experience with offerings, and linking energy actions with GHG reduction to provide information about energy efficiency, demand response and renewable energy (EE/DR/RE), AB 32 implementation, Strategic Plan and other timely and important energy and climate policies, rules, regulations and legislation. These venues will increase opportunities for local governments to network and share information and experiences about best practices and lessons learned.

To encourage local governments to implement best practices established, the program will conduct a statewide local government recognition program for local governments that achieve their energy and greenhouse gas emission reduction goals. Within SCE's service area, Silver, Gold and Platinum awards levels will be linked to the incentive and achievement levels established in SCE's ELPP (see separate ELPP PIP). Program implementers will collaborate and coordinate their efforts in order to leverage each other's efforts, resources and funding.

The ELP Strategic Support element thus provides an integrated portfolio of services that will complement SCE's ELPP and help local governments achieve the Strategic Plan's strategies and goals while accelerating their jurisdiction's path to a cleaner energy and low carbon future.

Core Program Element C - Core Program Coordination

ELP Strategic Support also supports ELPP Element C – Core Program Coordination, providing another channel for disseminating information about community energy programs and opportunities, and for coordinating those outreach and education activities.

Through the Core Program Coordination element, Local Government Partnerships (LGPs) coordinate with SCE to support EE programs across the SCE portfolio with respect to outreach, education, direct installs for residential and small business customers, third party programs, and technical assistance. Through the ELPP, LGPs will also have the opportunity to help bring EE to moderate income customers slightly above the LIEE guideline or to customers who are unable to produce the necessary LIEE documentation.

The ELP Strategic Support program element will support Element C by helping Local Governments integrate climate action/GHG reduction messages into the Local Government partners' community education and outreach efforts. The ELPP leverages the unique access, communications channels and relationships that Local Governments have with their constituents – residents, businesses and other stakeholders (e.g., developers) – to increase enrollment in SCE Core Programs.

b) <u>Overview</u>

In the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan), the CPUC identified the following primary strategies for local governments:

- **Tap Local Government Authority** to assure Title 24 code compliance and to implement "reach" policies, plans, codes and standards;
- Lead by Example by making municipal facilities and operations as energy efficient as possible; and
- Lead Communities by encouraging stakeholders and constituents to help achieve their local government's vision for a long-term clean energy and low carbon future.

Through the Energy Leader Partnership (ELP) Strategic Support program element, SCE is offering assistance to help local governments reduce their carbon footprint through increased energy efficiency. This offering will primarily be delivered through various implementing organizations.

This collaborative effort is structured to leverage the unique resources, assets, relationships, communications channels, programs, training, models and tools brought by each organization to support the Strategic Plan.

This is a statewide local government strategic element support effort among the four investor-owned utilities. Program support elements will be coordinated between the IOUs and the three implementing organizations taking a statewide planning and coordination approach. The IOUs will meet individually and collectively with the organizations to plan and implement Local Government support efforts.

c) <u>Non-incentive services</u>

All services provided through this partnership are non-resource/non-incentive services. The focus is to provide education, outreach and general strategic planning assistance to ELPP participants ultimately driving local governments to greater utilization of utility energy efficiency programs as an integral component toward meeting their GHG implementation goals. Services include but are not limited to:

- Providing information through Webinars, training, and peer support network groups about GHG inventories, the recently adopted Local Government Operations Protocol (LGOP), GHG reduction targets, climate action plans and potential GHG mitigation and adaptation strategies;
- Providing local governments access to tools and templates to compute their GHG emissions and that of their communities, and evaluate the GHG reduction impacts of various proposed policies, plans, codes and ordinances;
- Conducting conferences, workshops, Webinars, peer support network groups, and other types of venues for knowledge sharing, peer support, training and education about best policies, practices; and
- Develop and manage an awards and recognition program that recognizes local governments that achieve targeted levels of energy efficiency and greenhouse gas emissions reductions.

d) Target audience

The target audience consists of the following:

- California cities and counties especially ELPP participants and participants in statewide IOUs' local government partnership programs, but also all California local governmental entities in general;
- Local government staff and elected officials including mayors, council members, county supervisors, city managers, county administrative offices, facilities managers, budget and finance staff, department heads, community leaders whose support and involvement is needed to approve local government facilities retrofits and the local government Controller, Treasurer, financial advisors and others who assist the City in developing its financial plans; and
- State agencies and policymakers that are depending on local governments to help achieve California's aggressive energy and climate action goals.

A wide variety of stakeholders are needed to support local government efforts to "lead by example" in energy efficiency, demand response, renewable energy, climate action, etc. (e.g., federal energy and environmental agencies, urban planners, developers, energy service providers, etc.).

e) Implementation

The stakeholder organizations will coordinate their respective membership bases and infrastructure to bring broad peer networks together for sharing information, models and tools. They will also coordinate their respective resource libraries and databases and compile comprehensive resources related to best practices, tools and techniques that will be accessible by all SCE ELPP participants and all local governments statewide.

The program will focus on providing local governments the tools and resources needed to develop their GHG inventories and climate action plans. The Program will provide training for ELPP LGPs to explain the methodology for computing the GHG impacts of their Government Facilities energy projects. The program implementer will also provide information about its GHG Inventory and Climate Action Planning Tools, and how these could be used to more effectively communicate the energy and GHG benefits of their Government Facilities energy portfolio to decision-makers that need to approve the capital expenditures. In addition, the program will train ELPP participants on how to develop Climate Action Plans (CAPs) that include GHG reduction strategies that reflect best environmental responsibility policies, plans, programs and practices.

The program will supplement the GHG-specific information with additional information about California's energy and climate policies and programs, and will conduct conferences, webinars and other types of education and outreach venues for peer-networking, and sharing of best practices among local governments that are implementing similar types of Government Facilities projects. Information about financing strategies and options will be included. This program involves a certain amount of travel for various reasons including peerto-peer conferences. These support services are being implemented through comprehensive means resulting in many touch-points to local government representatives some of which also will require no travel (for example webinars) and others that may require regional or intra-state travel. Local government representatives will seek reimbursement through their normal government organization channels. Table 5 indicates the targeted number of outreach, informational and training efforts targeted during the program cycle as well as a list of strategies and topics.

The program will, through a recognition program, recognize the achievements of local government participants as they progress along the ELPP incentive and achievement scale. The program will leverage an extensive network with California city and county officials to reach all city and county officials with California's Climate Action Network (CCAN) program. Through CCAN, an awards and recognition program will be developed for cities and counties that achieve specified levels of energy efficiency and GHG reductions. The recognition program integrates SCE's ELPP program performance criteria as the energy best practice in the SCE service territory. Local government participants in SCE's ELPP program that achieve their targeted EE, DR and RE commitments will be recognized through this program.

SCE will help identify complementary resources and support from other organizations, including but not limited to SCE programs, Third Party programs, other private, public and stakeholders in energy efficiency, demand response, renewable energy, climate action, water efficiency, etc. to facilitate compilation of a comprehensive repository of information that can be built upon by the stakeholder organizations to support strategic energy, climate action and sustainability planning by California's local governments. These supplemental services will be provided by SCE's ELPP, Core Program Element 2 – Strategic Planning Support (see separate PIP for more information).

Program support of GHG reduction is targeted to SCE ELPP participants though training will be made available to statewide local governments. The broader network of local governments that will be included in a peer network are statewide. In addition, an awards and recognition program will be open to all cities and counties statewide.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics
b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) Program Design to Overcome Barriers

Lack of resources - both funds and knowledgeable staff with sufficient time - remain the two most significant barriers to achieving government energy efficiency and GHG reduction. This program brings in qualified resources that have information, tools and peer networks that can help local governments collaborate on how to overcome these barriers.

Local governments are committed to help California achieve its aggressive energy and climate goals. Presently, however, many California's local governments are not clear about the immediate direction they can take in addressing the multitude of policy priorities options – what they are, how they fit together, which needs to be done first, what is voluntary vs. mandatory, etc.

To overcome the staffing and knowledge gap that prevents many local governments from supporting the goals of the Strategic Plan, the ELP Strategic Support program element will provide targeted information that helps clarify regulatory and legislative issues relative to the local government's role toward meeting Strategic Plan objectives.

	Primary Barriers	Strategies to Overcome Barriers
•	Many local governments do not have sufficient staff resources to stay abreast of all the current issues (e.g., new policies, rules and regulations; AB 32 and Title 24 compliance; most current and "best" policies, practices, programs, etc. for EE/DR/RE, climate action/GHG reductions, water efficiency, etc.).	• Establish Baseline Understanding. Stakeholder organizations will collaborate in compiling a comprehensive repository of information for local governments about best-in-class energy, climate and other sustainability policies, programs, codes, ordinances, standards, practices, etc. These resources will help shortcut the amount
•	Many local governments also do not have staff that are knowledgeable in energy, climate and other sustainability issues and options.	of time needed by local governments to get their arms quickly around these types of issues and events, and also to understand what is deemed the body of "best practices", so that they can
•	Many local governments are confused about the different types of carbon policies, programs, goals (especially mandatory vs. voluntary), and	 Provide Regular Updates. California leads the nation in energy, climate and other environmental sustainability goals

protocols.	and initiatives. It can be difficult for any one person or organization to stay abreast of all of these issues. The need to understand this information is burdensome to local governments. The ELP Strategic Support will deliver a comprehensive portfolio of education and training through conferences, workshops, Webinars, etc. that help local governments stay current on evolving regulation and legislation issues so that they can free up staff time to address other essential priorities.
	• Provide Access to Continuous Peer Support. As California's local governments struggle to keep up with all of these activities, they find it very helpful to network, learn, grow and share data, information and experiences with other local governments that are facing the same challenges. The ELP Strategic Support will facilitate access to a wide variety of peer-to-peer networks so that local governments can participate in the topics that are of greatest interest, need and priority to them and identify other local governments that can share in the development and implementation of policies, programs, strategies, etc The ELP Strategic Support will create venues for peer-to-peer support at multiple levels

d) **<u>Quantitative Program Targets</u>**

Table 5

Program	Program	Program	Program
	Target by	Target by	Target by
	2009	2010	2011
Workshop/ConferencesStatewide Conference	N/A	1	2
 Regional Local Government	N/A	3	6
Networking Meeting Energy/GHG Topics Regional	N/A	3	6

Energy Leadership Partnership Strategic Support

Workshops			
Recognition Program			
• Launch	N/A	2/	
Recognition Events		2/yr	4/yr
Tools			
CAP Guidebook	N/A	Х	Ongoing
Energy Programs database	N/A	Х	Ongoing
Best Practices database	N/A	Х	Ongoing
GHG Reduction Decision support tool	N/A	N/A	Х
Direct Local Government Training			
• Small group topical meetings/Webinars	N/A	6	12
(e.g., GHG emissions inventories,	19/23	0	12
LGOP, target setting, CAP development			
and implementation, Staffing,			
Financing, Recognition program, EE,			
Strategic Plan)			
Coordination with regional entities	Ongoing	Ongoing	Ongoing
(COGs, local government orgs, related	000	00	00
agencies)			
Outreach			
• Email communications, Newsletters,	Ongoing	Ongoing	Ongoing
Web sites, presentations, leveraging			
opportunities, etc			

6. Other Program Element Attributes

a) **Best Practices**

Type of Best Practice	Best Practice	ELPP Application(s)
Planning	Build feedback loops into program design and logic. Maintain the flexibility to rebalance portfolio initiatives, as needed, to achieve the portfolio's goals and objectives.	The portfolio of activities to be developed and managed by several nonprofit organizations will be reviewed a minimum of quarterly throughout the program period and compared with ELPP program needs for support to make adjustments as needed.
Staffing	Clearly define portfolio implementation responsibilities and clarify roles to minimize confusion.	The roles of the 3 nonprofit organizations in support the ELPP have been clearly defined.
Integration	Leverage relationships from complementary organizations such as utilities, trade allies, and industry specialists.	The ELP Strategic Support is structured to leverage all resources, assets and relationships of the stakeholders, as well as SCE, local governments participating in the ELPP, and other organizations that also

Type of Best Practice	Best Practice	ELPP Application(s)
		have information about local government best policies, practices, tools, techniques, etc. for reducing energy and GHGs.
Reporting & Tracking	Clearly articulate the data requirements for measuring portfolio and program success. Design tracking systems to support the requirements of all major users: program administrators, managers, contractors and evaluators.	Monthly coordination meetings coupled with quarterly portfolio reviews and adjustments will assure that the portfolio of activities meets the needs of the ELPP.

b) <u>Innovation</u>

These three nonprofit organizations all work now with local governments. Through ELP Strategic Support, they will coordinate and leverage their joint resources, assets, relationships, communications channels, etc. to increase the robustness of the information, tools and services that they can bring to California's local governments. It makes sense that they should bring their respective members into a common forum for sharing information, tools and techniques with ELPP participants as well as all California local governments. While these three organizations collaborate regularly, this is the first time they are bring forth a strategically integrated portfolio of technical, education and outreach services for local governments. This close collaboration is expected to improve both effectiveness and cost-effectiveness of their education and outreach activities.

c) Interagency coordination

In conjunction with SCE's Codes and Standards program (see separate PIP), ELP Strategic Support helps California's local governments assure compliance with Titles 20, 24 and other existing codes, while concurrently developing and implementing aggressive Reach goals. It will also help cities and counties achieve the voluntary 15% GHG reduction goals included in the AB 32 Scoping Plan adopted by the California Air Resources Board. The full scope of this program is the broader umbrella of "sustainability" initiatives, and thus includes a wide variety of environmental sustainability strategies and initiatives by other state and local agencies. Coordination will be required with all of these agencies to assure that California local governments understand their roles in implementing these goals. The types of agencies with which coordination will be needed include: the California Air Resources Board (CARB); California Climate Action Registry (CCAR); California Department of Conservation's "Emerald Cities" and "Innovative Recycling" Programs; California Integrated Waste Management Board (CIWMB); California Strategic Growth Council; California Department of Housing & Community Development (HCD); California Energy Commission (CEC); California Department

of Water Resources (DWR); Governor's Office of Planning & Research (OPR); State Water Resources Control Board (SWRCB); U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy (EERE); U.S. Environmental Protection Agency's ENERGY STAR & WaterSense Programs.

d) Integrated/coordinated Demand Side Management

The IOUs have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

e) Integration across resource types (energy, water, air quality, etc.)

Consistent with the Strategic Plan, this program will include energy (EE, DR and RE) in combination with GHG reduction. Although not a direct goal of the ELP Strategic Support, the process of computing GHG inventories as well as developing and implementing CAPs will also benefit other sustainability initiatives such as water efficiency, waste management, green building, transportation management, smart planning and growth.

f) <u>Pilots</u>

No pilots are planned through this program, although it is possible that explorations of reach policies, goals, codes, ordinances, etc. could be developed into pilot programs.

g) <u>EM&V</u>

N/A (this is a non-resource program)

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building	Provide venues for delivering
energy codes (and/or other green codes) more	training by SCE
stringent than Title 24's requirements, on both a	
mandatory and voluntary basis; adopt one or two	
additional tiers of increasing stringency.	
1-2: Establish expedited permitting and entitlement	Compile information from
approval processes, fee structures and other incentives	multiple organizations and
for green buildings and other above-code	disseminate through workshops,
developments.	Webinars and on-line resources

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
 1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings. 1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools. 1-5: Develop broad education program and peer-topeer support to local governments to adopt and implement model Reach codes 1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program 	Encourage including in Energy and Climate Action Plans Provide training, tools and templates for estimating and reducing emissions from various policies, codes, standards and ordinances
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	Provide venues for delivering training by SCE
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Recommend that local governments adopt and implement
3-1: Adopt specific goals for efficiency of local government buildings:	 Help establish goals for municipal EE and compute the GHG benefits of EE projects and plans Help elected officials draft resolutions and adopt EE goals Link energy efficiency progress to Recognition program consistent with SCE's ELPP Partner levels
	Encourage local governments to include these goals in their Climate Action Plans
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	Encourage local governments to adopt

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Provide information about successful "revolving fund" strategies deployed by other local governments and how they overcame implementation barriers
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	Provide information about participation opportunities
4-1: local governments commit to clean energy/climate change leadership.	Compile information from multiple organizations and disseminate through workshops,
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and elimate change	Webinars and on-line resources
sustainability and chinate change.	Action Plans
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	Provide coordination with water and wastewater agencies, CEC, others
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	Develop curriculum and educational materials Conduct training

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Southern California Edison

1. Program Name: Kern County Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan a) <u>List of Program Elements</u>

The three core program elements are similar to those identified in the ELPP Master PIP: Element A - Government Facilities, Element B - Strategic Plan Activities, and Element C - Core Program coordination.

Core Program Element - Government Facilities

Kern County Energy Leader Partnership (Partnership) will deliver energy savings during the 2009-2011 ELPP program cycle. Every local government that participates in the Partnership will achieve specified energy savings and greenhouse gas reductions from the facilities and infrastructure that it manages through technology retrofits, operational improvements and policy changes. Participating local governments will take advantage of Partnership incentives for municipal facilities and, wherever possible, of eligible rebate, incentive and technical assistance programs offered by their serving utilities.

A.1) Retrofit of county and municipal facilities

The County of Kern has the opportunity to expand on the existing Kern County Energy Watch Municipal Program by trying to maximize the feasibility and energy efficiency upgrade of the county's municipal facilities. The plan is to retrofit county facilities through the Partnership program's technical assistance, capital improvement projects, and where appropriate direct delivery installation components. Potential opportunities include but are not limited to: lighting, air conditioning, and gas measures. Direct delivery includes but is not limited to: CFLs, hardwire fixtures, lighting controls, T8s, occupancy sensors, LED exit signs, vending machine controllers, and aerators.

A.2) Retro-Commissioning (of buildings or clusters of buildings)

The partnership will focus on identifying HVAC retrofit opportunities through the retro-commissioning of municipal buildings. This will provide a systematic whole-system approach to energy efficiency. Many chronic building problems and energy waste can be resolved by making low-cost or no-cost adjustments identified by the Retro-commissioning process.

A.3) Integrating Demand Response into the audits

The partnership's plans include identifying and performing successful comprehensive energy efficiency projects with member cities and enrolling service accounts from each city in demand response programs in alignment with the ELPP Master PIP and the ELPP model.

A.4) Technical assistance for project management, training, audits, etc.

Each partnership has a specific budget for each of these elements. Standard programs available include energy efficiency training, energy audits, and technical assistance in alignment with the ELPP Master PIP.

A.5) On-bill financing

The County and each city in the partnership have indicated an interest in using on-bill financing.

Core Program Element - Strategic Plan Support

B.1) Code Compliance Support

The partnership will explore the creation of an energy code compliance improvement program and various strategies across the partnering cities to improve compliance with building energy standards and appliance regulations. The Partnership will conduct focused energy code training targeted to the Kern County region including workshops for municipal planning and building staff, building professionals, and contractors.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

In addition to establishing documentation in alignment with the strategies described in the ELPP Master PIP, the Kern County Partnership objectives will include development of Energy Action Plans and Climate Action Plans to document baseline energy use and emissions. These baselines will be used to set and achieve emission reductions and energy savings. Individual county and city plans will be used to develop a regional energy savings plan.

B.4) Financing for the community

The Kern County Partnership will develop an education and outreach program for the participating communities in alignment with the strategies described in the ELPP Master PIP.

B.5) Peer to Peer Support

The Kern County Partnership will actively participate and support in the peer to peer program in forums for the partnering county and cities and through the strategies described in the ELPP Master PIP.

Core Program Element - Core Program Coordination

C.1) Outreach & Education

The existing partnership has an established comprehensive Marketing Education & Outreach (ME&O) Plan that will be expanded to incorporate: educational workshops to assist cities in moving forward with energy savings projects, policies, codes, and ordinances; general awareness events and exhibits to publicize the ELPP Partnership and its goals throughout the partnering communities (including environmental fairs and expos); marketing energy efficiency program through a variety of media channels including mailers, press releases, and quarterly e-newsletters; and providing a minimum of 16 special workshops throughout Kern county and five participating cities.

C.2) Residential and Small Business Direct Install

The partnership will continue its support of the core program by driving participation through its county economic development agency, chambers of commerce, bill mailing inserts, and public television access. The partnership will also fund and execute focused small business, multi-family, and single family residential direct install activities.

C.3) Third-party program coordination

The partnership will actively support third part programs through the strategies described in the ELPP Master PIP.

C.4) Retrofits for just-above LIEE-qualified customers:

The Kern County Partnership will support this retrofit program in alignment with the strategies described in the ELPP Master PIP.

<u>Technical assistance for program management, training, audits, etc.</u>: The partnership will allocate a portion of its direct implementation budget for this activity. In addition, the Partnership anticipates bringing technical and financial assistance from the following programs to its communities: SCE & PG&E Energy Center offerings, Energy Star® Qualified Refrigerator Rebates, Appliance Recycling, Electric Water Heater Rebates, and Energy Star® Qualified Lighting; Express Efficiency; Multi-family Energy Efficiency Rebate Program; Non-Residential Audits; Retro-Commissioning; Savings by Design; Standard Performance Contractsm.

b) <u>Overview</u>

The Kern County Energy Leader Partnership is a continuation of the existing partnership between the City of Bakersfield, Kern County, Southern California Edison (SCE), Southern California Gas, and Pacific Gas & Electric (PG&E) which will be expanded to include the cities of Delano, McFarland, Tehachapi, and

California City, and the implementing partner: The Kern County Council of Governments (KCOG).

The partnership will build upon the success of the Kern County Energy Watch Partnership. The 2009-2011 Energy Leader Partnership Program improves SCE's existing local government partnering strategy by establishing a disciplined, concentrated approach to create consistency in program offerings and improve clarity and ease of participation in community partnerships. The Kern County Partnership will add new partners, extending the partnership's reach into the unincorporated communities of Kern County. The partnership's comprehensive portfolio of activities is designed to seek innovative approaches to energy efficiency by implementing best practices for municipalities and by establishing a wave of energy efficiency activities through focused educational and outreach events. This will also increase effective delivery of technical and financial energy services to residents and businesses.

c) <u>Non-incentive services</u>

In addition to the strategies described in the ELPP Master PIP and the ELPP model, the partnership will include a portfolio of ME&O activities to increase community enrollment in energy programs, and other SCE services, resources and assets available to support the ME&O plan (e.g., mobile energy unit; account manager support; training at the Agricultural Technology Application Center (AgTAC); Speakers Bureau; marketing, design & printing of brochures and other collateral materials; media/press/publicity support, etc.).

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile E Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) <u>Target audience</u>

The target audience includes:

- City and county staff, management and policymakers (elected officials);
- Residential and business customers;
- Students of Kern County Community Colleges; and
- Leaders, residents and business customers of the unincorporated communities.

e) <u>Implementation</u>

In addition to the strategies and coordination described in the Master Partnership Implementation Plan:

- The partnership has developed a portfolio of ME&O activities and is proceeding to schedule near-term activities and events. These include advertising in regional and local newspapers, cable TV and newspaper interviews about energy efficiency opportunities, and workshops as well as community exhibits (with an historical attendance averaging 1,500-3,000 people); and
- Partnership strategies include an integrated approach to energy consumption and reduction, increasing awareness of energy efficiency, demand response, Low-Income Energy Efficiency, California Alternative Rates for Energy Program, Self-Generation Incentive Program, and California Solar Initiative Program.

5. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) Program Design to Overcome Barriers

The partnership and communities that participate in the Kern County Energy Leader Partnership will have barriers consistent with, and will employ strategies to overcome such barriers as described in the ELPP Master PIP.

d) **Quantitative Program Targets**

Table 5

Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1 Municipal	TBD	TBD	TBD
Retrofits (kWh)			
Target #2 Community	TBD	TBD	TBD
Direct Install			
(kWh reduction)			
Target #3	1	4	8
Number of workshops			

Target #4 Number of Ordinances, Codes, etc. *	0	TBD	TBD
Target #5 Community Outreach- Number of ME&O events	8	12	16

6. Other Program Element Attributes

a) Best Practices

As well as those strategies described in the ELPP Master PIP, the Kern County Partnership will embody the following best practices:

- Leverage the strong member municipal relationships developed by the 2006-2008 cycle partnership to further develop and capture energy efficiency opportunities in its municipal facilities; and
- Expand the existing partnership education programs to identify, develop and capture energy efficiency opportunities within the region's communities, including communities of new participants.

b) <u>Innovation</u>

The partnership will collaborate with its county and city participants, including school districts and special districts, to develop strategies to implement integrated and comprehensive projects that will encompass energy efficiency, demand response, and renewable elements.

The partnership will also hold training work shops and exhibits over the course of the 2009-2011 cycle at community events to demonstrate: energy efficiency activities and practices, energy code training to target the needs of Kern County, promote wholebuilding performance to get better space conditioning, coordinate emerging "green" or sustainability standards, and promote programs that promote sustainability including the California New Homes Program, Home Energy Efficiency Program, Appliance Recycling Program, Benchmarking and Performance Tracking, On-Line Buyer's Guide and Business and Consumer Electronics Program.

c) Interagency coordination

The Kern County Partnership, through its local government and consulting network, will encourage coordination with agencies and initiatives as noted within the Master Partnership Implementation Plan as well as with the participating IOUs: SCE, SCG, and PG&E.

d) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task

Force to identify comprehensive integration approaches and to implement best practices.

The Partnership plans to identify and enroll service accounts from each local government partner in demand response programs in alignment with the ELPP model and the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

The partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

f) <u>Pilots</u>

No pilots are planned through this Partnership.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The partnership will evaluate adopting them on a voluntary but rewarded basis, including excess Title 24 performance in the fee-waiver program or adopting the new California "Green Building Code" on a voluntary basis through 2010, making it mandatory in 2011.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Each local government, through the Partnership will evaluate and adopt expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments as appropriate.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The partnership will evaluate a point of sale energy disclosure.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Within the partnership and through other partnerships, the local governments of the Partnership, and the KCOG, will participate in peer to peer educational & outreach forums on a quarterly basis that emphasize specific actions to take to help achieve the local governments reach code goals.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model Reach codes.	Each local government in the partnership will evaluate AB 32 / SB 375 compliance plans.
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	The partnership will support developing and implementing Training & Education programs to achieve additional T-24 compliance.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	Each local government of the partnership will evaluate and adopt as appropriate, policies regarding energy components of the professional licensing of local inspectors and contractors hired.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Each local agency of the partnership will evaluate and adopt as appropriate, policies regarding energy components of the professional licensing of local inspectors and contractors hired.
3-1: Adopt specific goals for efficiency of local government buildings.	The partnership goal is to achieve the ELP model Silver Level target in the aggregated local government municipal facilities resulting in at least a 5% savings over the 2003 energy use baseline during the 2009-2011 program cycle.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	Each local government of the partnership will evaluate and adopt as appropriate, commissioning, performance measurement, and verification as a core part of their energy action plan.
3-4: Explore creation of line item in local governments' budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Each local government of the partnership will evaluate and adopt as appropriate, creation of a line item in their budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	n/a

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-1: Local governments commit to clean energy/climate change leadership.	Each local government of the partnership will evaluate and adopt as appropriate, a Strategic Energy Plan that includes long and short term energy & sustainability objectives in line with the adopted Strategic Plan.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Each local government of the partnership will evaluate and adopt as appropriate, development of aggressive sustainability goals into their General Plan updates that include emphasizing sustainability through green building design & technologies, reduction of GHG emissions, increased use of renewable energy, and conservation of existing sources of energy.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	The partnership will influence wastewater, storm water and potable water capital projects, with SCE, SCG, and PG&E to ensure that they are as energy efficient as possible.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	Each local government of the partnership will evaluate, develop, and adopt as required, zoning and development authority changes to comply with AB 32 / SB 375.

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Southern California Edison

1. Program Name: Orange County Cities Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

a) List of program elements:

The three core program elements are those identified in the Energy Leader Partnership Program Master PIP: Element A – Government Facilities, Element B – Strategic Plan Activities, and Element C – Core Program Coordination.

Core Program Element A - Government Facilities A.1) Retrofit of county and municipal facilities

The four cities participating in the Orange County Cities Energy Leader Partnership (Partnership) with Southern California Edison (SCE) are developing detailed lists of facilities that will be retrofitted during the 2009-2011 program cycle of the partnership. Many of these facilities and their respective energy savings have been identified and quantified. Other buildings have been audited by the California Energy Commission (CEC) and the partnership is awaiting the CEC's reports.

Municipal facilities' energy efficiency is a key component of Huntington Beach's local government participation plans. It will consist of numerous projects in two phases: Phase 1 consists of monitoring-based commissioning of the two largest municipal facilities in Huntington Beach and IT energy saving retrofits such as server virtualization, network energy management software and HVAC retrofits of server rooms; Phase 2 will consist of lighting system redesign & retrofits, HVAC retrofits, pumping retrofits and building envelope improvements.

A.2) Retro-commissioning (of buildings and clusters of buildings)

The partnering cities are including this means of achieving significant energy savings in their plans. See A.1 above.

A.3) Integrating Demand Response into the audits

The ELPP model for all SCE partnerships includes a requirement for participation in demand response programs. Each partner city plans to increase its participation in demand response accordingly. Integrated EE/DR audits will be conducted in eligible facilities.

A.4) Technical Assistance for project management, training, audits, etc. -

Each partner city has a specific budget for each of these activities.

A.5) On-Bill Financing

On-bill financing will not be available at the beginning of the 2009-2011 program cycle; however, it may be added in the future, as each partner city has indicated an interest in using on-bill financing.

Core Program Element B - Strategic Plan Support

B.1) Code Compliance Support

The Partnership will support the individual partner cities as they examine ways of increasing compliance with existing codes. Increased enforcement can result in substantial energy savings and greenhouse gas (GHG) emissions. The Partnership will provide training, technical assistance, and additional support from SCE's Codes and Standards Program to build local government capacity to address code compliance issues.

B.2) Reach Code

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

At least one of the partner cities offers information at its building permit office on best practices and energy efficiency opportunities through SCE's programs. SCE plans significant enhancements to this practice for the 2009 - 2011 program cycle. The partnership intends to make training, documents, and templates available to help cities develop their own climate and energy action plans, especially relating to utility energy elements.

B.4) Financing for the community

The partners are aware of the opportunities for financing provided by AB 811 and will be examining its possibilities. The partnership will arrange for an AB 811 presentation for the cities, and technical assistance through the Peer-to-Peer support network.

B.5) Peer-to-Peer Support

The partnership plans to develop an effective approach for sharing information among SCE and partner cities. The program will conduct conference calls among all partners on a routine basis.

Core Program Element C - Core Program Coordination

C.1) Outreach and Education

The partnership has budgeted outreach and education efforts to demonstrate local government leadership and to provide the community with opportunities to provide energy actions and reduce the community's environmental footprint.

Marketing, education, and outreach (ME&O) activities will consist of:

- Staff training;
- Huntington Beach Green Corp Citizen and Environmental Board training;
- SCE's Mobile Energy Unit at the Annual Green Expo;
- Stipends for HB Green Corp home and business energy, green audits, and onsite retrofits;
- Support for Huntington Beach's annual environmental awards;
- Publishing of Huntington Beach's case studies, strategic sustainability, and energy plans; and
- Exploring an AB 811 financing mechanism for the Partnership cities' citizens.

See the ELPP Master PIP for a further description of these activities.

C.2) Residential and Small Business Direct Install

Currently, there are no plans for promoting direct installations in homes and business; however, market outreach will create awareness of energy services and programs.

C.3) Third-party program coordination

The Partnership will conduct community events appropriate for execution by a thirdparty contractor (*for example*, light exchange events).

C.4) Retrofits for just-above LIEE qualified customers

The Partnership will conduct coordination activities as identified in the ELPP Master PIP.

C.5) Technical Assistance for program management, training, audits, etc.

The Partnership has budgeted for technical assistance. See Table 6 for more details.

b) <u>Overview</u>

The Orange County Cities Energy Leader Partnership consists of four central Orange County cities: Huntington Beach, Costa Mesa, Fountain Valley, and Westminster. They began working together in early 2008 to form this partnership.

c) <u>Non-incentive services</u>

- Train the Huntington Beach Green Corps of citizen volunteers to provide energy efficiency audits for residential, small commercial, and low-income citizens. The program will pay stipends to offset background checks and expenses;
- Study and consider voluntary "reach" green codes, similar to the pilot project HB Goes Green Residential Scorecard;

Orange County Cities Energy Leader Partnership

- SCE's Mobile Energy Unit attendance at the annual HB Green Expo conference;
- Support for the annual Environmental Award;
- Publishing case studies, sustainability, and energy/climate plans with support from available programs and funding sources; and
- Strategic plan support to the city of Costa Mesa for extending its existing green building permit waiver program.

d) Target audience

- All Municipal Facilities: City Halls, Civic Center, Police Departments, Libraries, Social Services, Community Centers, Sports Fields, Parks, and water infrastructure; and
- Citizens, businesses, and city staff are the target audience for partner cities. See ELPP Master PIP for more information.

e) Implementation

The partnership's cost-effective implementation will include customized incentives to retrofit and retro-commission municipal facilities. The partnership bases its incentives on SCE's tiered incentive structure. See the ELPP Master PIP for each core element of the program for further information on the program implementation process.

5. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

Program barriers, and the strategies to overcome them, are the traditional resource barriers of expertise and funding, as outlined in the ELPP Master PIP.

c) **<u>Quantitative Program Targets</u>:**

Targ et	Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
1	kWh	TBD	TBD	TBD
2	Number of Workshops	2	6	10
3	Number of Ordinances, Codes, Etc.	0	0	0
	# of MEO Events conducted that			
4	target Residential customers	2	4	6

Table 5

6. Other Program Element Attributes

a) **Best Practices**

See the ELPP Master PIP for the Energy Leader Model.

b) <u>Innovation</u>

The partnership demonstrates environmental stewardship and community leadership supporting the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan). It will develop a municipal sustainability template to simplify sustainability reporting for energy efficiency and renewable energy. This template, alternately called a dashboard, will be displayed.

c) Interagency coordination

Huntington Beach, a PIER program partner, plans to install Bi-level area lights and Enforma diagnostic software. The city has a materials recovery facility in its jurisdiction, and plans to write a Renewable-based Energy Secure Community (RESCO) grant proposal for the CEC. The proposal envisions utilizing indigenous renewable energy resources in Huntington Beach. The partnership will provide technical assistance and other support though the Codes and Standards Program, its relationship with PIER, and support from other programs and organizations through its network of consultants.

d) Integrated/coordinated Demand Side Management

The IOUs have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

The Orange County partner cities will pursue necessary and cost-effective DSM as identified in the ELPP Master PIP. The Partnership has identified accounts eligible for participation in Demand Response programs. It will facilitate technical support for planned renewable energy-related activities by the City of Huntington Beach and other partner cities wishing to pursue similar opportunities.

Huntington Beach will apply for a RESCO grant from the CEC and federal government to utilize indigenous renewable energies.

e) Integration across resource types (energy, water, air quality, etc)

Phase Two energy projects identified above include smart irrigation controllers for use by irrigation accounts that use significant amounts of water.

f) <u>Pilots</u>

- PIER program Bi-level LED area lighting and Enforma diagnostic software in the City of Huntington Beach, as described above.
- New city buildings in Costa Mesa will be Leadership in Energy and Environmental Design (LEED) certified, including the Chamber of Commerce and police buildings.

g) <u>EM&V</u>

Not applicable.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The partnership will evaluate adopting more stringent model codes on a voluntary but rewarded basis, including excess Title 24 performance in the fee-waiver program, or adopting the new California "Green Building Code" on a voluntary basis through 2010, making it mandatory in 2011, if a sustained funding level is provided by the CPUC to support these activities. Costa Mesa is in the process of adopting new codes.
-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Through the partnership, Costa Mesa will consider expedited permitting based upon reduced valuation in 2009.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Through the partnership, Huntington Beach will investigate the adoption of an AB 811 financing mechanism for its jurisdiction.
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes.	
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Through the partnership, Huntington Beach already has two energy service companies pre-qualified and they are energy literate and conscious firms. Costa Mesa has a service agreement with a certified energy company that is also energy literate.
3-1: Adopt specific goals for efficiency of local government buildings, including:	Due to the efforts of the partnership, Huntington Beach will be publishing an environmentally preferred purchasing policy and publishing energy/climate plans as part of the 2009-2011 Partnership with SCE. Costa Mesa is also interested in publishing an energy action plan in partnership.
3-2: Require commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings.	The partnership's Phase One energy projects include retro-commissioning the two largest municipal facilities with significant near term energy savings. The City of Costa Mesa has a high interest in retro-commissioning its municipal facilities to maximize both energy savings and performance.
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Due to the partnership, Huntington Beach has devoted a portion of its annual capital improvement plan to energy efficiency and the savings accrue to the general fund. However, part of the energy/climate action plan will track the fiscal impacts (savings) created by the plan.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	Both the City of Costa Mesa and Huntington Beach have located appropriate sites for large-scale solar installations and both cities are exploring current funding mechanisms. Huntington Beach is also applying for grants to study ocean and urban wind power to meet 2020 AB 32 goals before 2015. HB has signed the US Mayors Climate Protection Agreement. For further information, see http://www.usmayors.org/climateprotectio n/

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Huntington Beach has deferred investment in general plan updates to include energy/climate concerns.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	The partnership's Phase-Two energy projects will include water efficiency projects, including aerators and ET irrigation controllers. Wastewater, storm water runoff, and potable water capital projects are also being pursued. SCE will ensure that they are as energy efficient as possible.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority.	Huntington Beach is studying zoning and development authority changes to comply with AB 32 and SB 375. Specifically, the Beach/Edinger Corridor plans and the Downtown Specific plan will be updated to create accessible and walkable neighborhoods that enhance Huntington Beach.

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Southern California Edison

1. Program Name: Palm Desert Demonstration Partnership

2. Projected Program Budget Table

 Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan

The three core program elements are those identified in the Energy Leader Partnership Program (ELPP) Master Program Implementation Plan (PIP): Element A – Government Facilities, Element B – Strategic Plan Activities, and Element C – Core Program Coordination.

Core Program Element A – Government Facilities

A.1) Retrofit of county and municipal facilities

Almost all Palm Desert facilities have been retrofitted to code and above. The Partnership is in the process of reviewing and updating previous audits for additional opportunities, such as computer network savings and additional facility upgrades. The city also has a large stock of low income housing. Audits and upgrades are currently underway.

A.2) Retro-Commissioning (of buildings or clusters of buildings) See the ELPP Master PIP.

A.3) Integrating Demand Response into the audits

See the ELPP Master PIP.

A.4) Technical assistance for project management, training, audits, etc. See the ELPP Master PIP.

On-bill financing

See the ELPP Master PIP.

Core Program Element B – Strategic Plan Support B.1) Code Compliance Support

The city currently has building codes exceeding Title 24 for new construction. See the ELPP Master PIP for additional code support.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

The partnership has created a comprehensive strategic plan for energy efficiency and greenhouse gas reduction plan. The partnership intends to create an Energy Action Plan.

B.4) Financing for the community

On-bill financing will be provided for city facilities and technical assistance will be provided to nonresidential and multi-family customers in the form of investment grade audit site-specific technical analysis. In addition, the partnership will implement the AB 811 financing program. The first phase of the loan program was highly successful and distributed over \$5 million in loans for energy efficiency and PV solar systems. The Partnership will seek private financing for continuous replenishment of the loan funding. Palm Desert intends to continue its robust AB 811 financing plan and lead other communities in this effort.

B.5) Peer to Peer Support

Core Program Element C – Core Program Coordination

In addition to the items found in the ELPP Master PIP, the partnership will coordinate to a greater degree with the California Solar Initiative. The partnership has encouraged a large number of solar arrays in the city.

C.1) Outreach & Education

As described below, the partnership provides unique, in-person customer education through the in-home and business surveys.

C.2) Residential and Small Business Direct Install

As part of its survey program, the partnership will host a more comprehensive direct install program. For this program, the customers will receive an air conditioning tune-up, in addition to other measures, and an education consultation.

C.3) Third-party program coordination

See the ELPP Master PIP.

C.4) Retrofits for just-above LIEE-qualified customers

See the ELPP Master PIP.

C.5) Technical assistance for program management, training, audits, etc. See the ELPP Master PIP.

a) List of Program Elements

The city's residents and businesses will continue to enjoy complete access to all of the programs currently offered under SCE's portfolios. However, under the project, the city and the utilities will continue to deliver these additional unique offerings:

<u>Commercial/Residential HVAC Incentives</u> – Due to the success that the partnership had with the residential HVAC program in 2007, in which several hundred energy efficient central air-conditioning systems were installed, the project will offer a commercial equivalent of this program through the 2009 – 11 program cycle. The Partnership will be considering ways to incent business owners, whose electric bills are paid by property owners, to purchase equipment with greater efficiency.

Through early replacement of air conditioners delivered through the SCE's Comprehensive HVAC Program, energy savings can be realized by replacing older equipment, properly installing new equipment, and properly servicing and maintaining existing systems. Information and financial incentives available through SCE's Residential/Light Commercial HVAC Program, as well as information regarding financing options provided by the city, will ensure quick, widespread customer action. This project offering will:

- address all customer segments, and be delivered in conjunction with the other programs, services, and promotions that form the partnership plan;
- communicate to residential and commercial customers the financial benefits of replacing older, inefficient systems with state of the art high efficiency systems, and create a call to act immediately; and.
- offer a financial incentive to customers to retire their existing systems early.
- <u>Effective Behavioral Messaging</u> Behavioral scientists have indicated that savings from 6% to 20% are possible through the application of effective messaging. The partnership intends to implement tailored messaging tied to the specific customer's usage history. This project will not only influence attitudes and behaviors toward energy efficiency, it will measure the results of this influence, and lay the groundwork for the establishment of disciplines for making behavioral savings claims and verifying them.
- <u>Attractive Financing</u> The city of Palm Desert sponsored AB 811. The availability of this financing mechanism is expected to significantly increase participation in energy efficiency projects throughout the city. It will also be replicable statewide, a mechanism any community can elect to implement for its residents and businesses.
- <u>The City's New Energy Code</u> The new code went into effect in January 2007, and is responsible for achieving 364,000 kWh in energy savings through December 2007. This code will remain in effect through the 2009 2011 program cycle.
- <u>A "One-Stop Shop" Pilot for Variable Speed Pool Pumps</u> The partnership intends to continue an approach where the customer calls a toll-free number for installation and a contractor is assigned to replace the customer's existing working model with a new variable speed unit. Once demonstrated, the partnership will seek other technologies that can be implemented in this manner. Special incentives will be offered to install new variable-speed pool

technology that minimizes energy use and achieves savings of up to 90%. These pumps can be programmed to operate during off-peak hours only.

- <u>Window Treatment</u>: Incentives to treat windows with window tinting that reduces heat gain are included in the project plan as an option.
- <u>Comprehensive Mobile Home</u>: Direct install for mobile home occupants and property managers, including HVAC refrigerant charge and air flow tune-up, duct test and seal, occupancy sensors, interior and exterior CFLs, night lights, interior and exterior hardwire fixtures.
- <u>Multi-family Energy Efficiency Rebates</u>: Cash rebates for property owners or managers of multifamily complexes with two or more units that purchase and install HVAC equipment or services, ENERGY STAR labeled room air conditioners, pool pumps and motors, exit signs, occupancy sensors, and photocells.
- <u>New Construction</u>: The Palm Desert Demonstration Partnership offers a unique new construction component which provides incentives by measure.
- <u>Comprehensive HVAC Replacement and Maintenance</u>: Energy savings can be realized by replacing older equipment, properly installing new equipment, and properly servicing and maintaining existing systems. Information and financial incentives available through SCE's Residential/Light Commercial HVAC Program, as well as information regarding financing options provided by the city, will ensure quick, widespread customer action. This project offering will:
 - Address all customer segments, and be delivered in conjunction with the other programs, services, and promotions that form the partnership plan.
 - Communicate to residential and commercial customers the financial benefits of replacing older, inefficient systems with state of the art high efficiency systems, and create a call to act immediately.
 - Offer a financial incentive to customers to retire their existing systems early.
- <u>Comprehensive commercial retrofits</u>: This offering will provide free comprehensive replacement of inefficient lighting systems and maintenance and repair of refrigeration systems to small businesses in the City of Palm Desert. TA condition assessment will determine what additional programs and services could be applicable, and the necessary referrals will be made to ensure follow-up services are provided.

b) <u>Overview</u>

The Palm Desert Demonstration Partnership presents a model for community energy partnerships. It joins the city of Palm Desert and its energy utilities, SCE and SCG, in a partnership in which each of the partners brings its experience, expertise and resources to bear on saving energy.

The 2009-2011 Palm Desert Demonstration Partnership is designed to (1) encourage residential and business customers to purchase energy efficient equipment and (2) focus on activities based on a segmented market in conjunction with SCE's EE portfolio of programs. The program will expand the opportunity to obtain energy

savings through a variety of sources and maximize existing savings potential for both residential and commercial customers. The program embraces initiatives established by the CPUC, known as the "Big Bold Energy Efficiency Strategies."

As new energy efficient measures are available, measure costs change or marketing opportunities/failures are identified, the Program will make adjustments to the measures list or rebate amounts. To stay abreast of new, yet proven technologies, and to better meet the needs of all nonresidential customers, the program will continue to solicit information from industry experts, vendors and customers to provide input as to new innovative measures that might be added, or how the program could be improved.

c) <u>Non-incentive services</u>

The partnership will develop an "Energy Champion Recognition" program which will publically recognize individuals, residents, and businesses for their contribution to the program. Additionally, the partnership will continue to participate in community events, energy rallies for Homeowners Associations, and in a school curriculum promoting efficiency and demand reduction.

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) Target audience

The overarching principle of the partnership is to provide comprehensive approaches to all customer groups through targeted strategies with a focus on early replacement of inefficient equipment. Due to the number of Home Owners Associations in Palm Desert, restaurants, and customers with pools, the partnership will continue to place emphasis on targeting programs to them through various delivery channels.

The partnership intends to enhance the resources of SCE Account Representatives with concentrated outreach to commercial customers in Palm Desert. This target audience has been identified as "hard to reach" and the partnership endeavors to create replicable methodologies to successfully reach this market.

e) Implementation

The partnership expects to launch other innovative approaches to achieving significant increases in participation in energy efficiency which can both be replicated by other communities and carried over to the 2009-2011 program cycle.

This program cycle (2009-2011) is envisioned as the final three years of a five-year, sustained campaign. Over the course of the five years, SCE and its project partners will have set an objective to reduce overall energy usage and peak load in the city by 30% of year 2005 usage. Results can be classified as energy savings, demand reduction, and the piloting of practices that can be replicated in other communities.

For replicable approaches, the partnership will have available through 2011 its experiences and recommendations regarding each of the following and their impact on results:

- Enhancing city energy efficiency codes;
- Targeting incentives to the community's usage profile;
- Integrating IOU coordination of energy efficiency with the resources available at the community level;
- Teaming relationships in energy efficiency partnerships;
- Implementing a one-stop shop of energy efficiency offerings; and
- Increasing the effectiveness of a new approach to achieving results through a behavioral messaging campaign.

Critical to this project, and a key driver to encouraging customers to take actions to reduce energy use and peak demand, is an outreach and information campaign that continually promotes the efficiency ethic and contains a follow-up mechanism with residents who have expressed interest in efficiency. The survey service will continue to be promoted through a joint SCE/SCG/Palm Desert communication strategy that may include announcements in local media, newsletter articles, direct mail campaigns, etc.

First, energy use specialists will be available to complete comprehensive in-home energy surveys. These specialists will identify appropriate measures for the home, and discuss incentive and financing options. They may also install compact fluorescent light bulbs (CFLs) and water/gas-savings measures. Online and mail-in surveys will also be available. The collected in-home energy survey information will be entered into a database that can be mined for additional communication opportunities, including special sale offerings, retailer promotions, and reminders to take advantage of energy efficiency opportunities.

Installation contractors will serve as another primary marketing tool. Using program materials provided by the project (including a package that outlines the energy savings of various devices, environmental impacts, bill reductions, testimonials, available financing, and utility incentives), these contractors will have the ability to apply incentives in many cases at time of sale, making the transaction as streamlined

as possible for consumers. They will also participate in energy events and will make presentations to condominium association meetings, at clubhouse events, etc.

Also included in outreach activities is assistance to city staff, residences, builders and developers in promoting standards that ensure that all new construction and retrofit projects incorporate the most energy efficient designs and measures possible.

Program Strategy: Promotion and Outreach

- A multi-faceted approach impacting all residents and businesses
- Energy surveys for all customers (Commercial and Residential), covering both gas and electric measures, with an emphasis on in-home surveys;
- Continuous, targeted communication and education;
- Neighborhood sweeps to sell, finance and install measures;
- Demonstration projects showcasing efficiency opportunities within the program; and
- School curriculum promoting efficiency and demand reduction

Program Strategy: Comprehensive HVAC

- Robust program to encourage early replacement in all markets;
- Incentives and financing to replace energy "hogs";
- Trained, certified contractor/dealer network;.
- Includes proper cooling system installation and air duct repair; and
- Early replacement A/C incentives delivered through a Comprehensive HVAC Program. Higher incentive levels that institute a comprehensive suite of measures considered for homeowners and property owners.

Program Strategy: Residential Consumers

- In-home surveys and sweeps provide detailed customer information and encouragement for implementation of energy efficiency measures;
- Home Energy Reports educating customers on their energy consumption compared to neighbors, while providing energy savings recommendations. Sales events, community events, and point-of-sale incentives increase participation and make things easy ;
- Low-cost/no-cost equipment installations. Addresses all areas: behavior change, appliances, water heating, space heating & cooling, lighting, and pool heating;
- Rebates considered for property owners or managers that institute a comprehensive suite of measures;
- Promotion of "Emerging Technologies"; and
- Addresses all segments: single family, multifamily, condominiums, and mobile home

Program Strategy: Nonresidential Consumers

- Incented equipment replacements for small/medium businesses;
- Low-cost/no-cost equipment replacements for businesses;
- Detailed energy audits, technical assistance and incentives;

- Segment-focused (for example., golf courses, restaurants, motels/hotels) and technology-focused (for example, efficient pool pumping, high efficiency domestic hot water heaters);
- An Enhanced Direct Install element where leads for participation in other energy efficiency programs are generated real time; and
- Where applicable, customers will be informed of on-bill financing opportunities

Program Strategy: Residential and Nonresidential New Construction

- New ordinance mandating high efficiency construction;
- Technical and design assistance for developers to meet higher requirements; and
- A residential New Construction program unique to Palm Desert where builders are eligible for incentives on a prescriptive basis.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) Program Design to Overcome Barriers

The City of Palm Desert has an unprecedented conservation goal and would not be able to achieve it without the partnership. The partnership is designed to empower the community to save money and energy by reducing energy consumption and peak demand by 30% by 2011. The previous two years of this highly successful partnership have demonstrated that creative financing options for large equipment purchases is necessary for overcoming customer participation barriers. Additionally, creating a simpler enrollment and participation process is imperative to achieve the aggressive conservation goals. The creation and emphasis in 2009-2011 of the "One-Stop-Shopping" concept will be a crucial program in aiding to achievement of the goals. The partnership has recognized the importance of behavior change and the need to quantify the outcome of conservation. It is the intent of the partnership through the launch of this ground-breaking behavior change campaign to be able to successfully quantify the savings. The partnership provides the vehicle to achieve savings that would otherwise be limited or lost.
d)	Quantitative	Program	Objectives

Table 5

Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1 kWh	TBD	TBD	TBD
Reduction			
Target #2 Number	0	2	3
of Workshops			
Target #3 Number	0	TBD	TBD
of Ordinances,			
Codes, etc			
Target #4 ME&O	2	14	24
Events			

6. Other Program Element Attributes

a) **Best Practices**

The partnership continually approves upon lessons its learned and shares them with other cities who may value or act on the information. The Palm Desert Demonstration Partnership reaches out to cities within the Coachella Valley and across the state to explain its unique programs, standards, and financing options to other cities and counties. city leadership, partnership management, and the participating utilities are all engaged in continual interaction with other cities and counties to educate them on the successes of the PDD Partnership.

b) <u>Innovation</u>

The partnership continually evaluates and implements energy savings opportunities, new technology and delivery channels, ensuring they are replicable to other cities and communities. An example of innovation includes the passing of AB 811 and the implementation of AB 811.

c) Interagency coordination

The partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility

d) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

The partnership continually focuses on integration of the utilities' demand side management programs where applicable. In 2008 the Partnership created its first combined commercial food service rebate application and will be expanding this concept to the residential programs in 2009. Energy surveys and the Direct Install programs have also been integrated; therefore, the customer is presented with a coordinated energy solution and education rather than an isolated case from each utility. The 2009 – 2011 programs will expand integration of other programs, including expansion of the "One-Stop-Shop."

e) Integration across resource types (energy, water, air quality, etc.)

The partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

f) <u>Pilots</u>

Although the partnership itself is a demonstration (pilot) program, it continually evaluates piloting new technologies, and delivery channels. The launch of a behavioral campaign and the "One-Stop-Shopping" strategies are examples of two piloted efforts of this partnership.

g) <u>EM&V</u>

See the ELPP Master PIP.

- **7. Partnership Program Advancement of Strategic Plan Goals and Objectives** This partnership supports the Strategic Plan in the following manner:
 - By actively using utility financing options in promoting energy efficiency activities, the Partnership is improving the ability to meet commercial sector goals;
 - The partnership actively promotes quality installation of HVAC measures and proper maintenance in efforts to reduce peak demands (Heating, Ventilation and Air Conditioning, Strategy 2);
 - The partnership will offer training on energy efficiency to homeowners, building managers, contractors and others (Workforce Education and Training, Strategy 4); and
 - Through the use of effective behavioral messaging, the Partnership will launch a pilot program designed to influence customer attitudes and behaviors toward energy efficiency (Marketing, Education and Outreach, Strategy 3).

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	Palm Desert has been a leader implementing more stringent energy efficiency codes. Additionally, the partnership is evaluating new and more stringent codes for possible implementation. These include a possible "time of sale" requirement that exceeds Title 24. Palm Desert is investigating adoption of the model Green Building Code as published by the California Building Standards Commission.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Palm Desert building permit fees have been waived for HVAC, PV solar and fuel cell permits.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	Palm Desert is investigating a time of sale ordinance requiring energy efficiency retrofits.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	As a result of the City of Palm Desert's leadership in promoting AB 811 in 2008, and the subsequent implementation of its loan program for customers, the partnership is a national leader in helping customers finance large energy efficiency and renewable investments. The partnership is now taking a leadership role in Congress with an effort to update the Internal Revenue Code to allow for tax-free bonds to be used by cities and counties to fund loan programs.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	The Palm Desert Demonstration Partnership is reaching out to cities within the Coachella Valley and across the State to explain its unique programs, standards, and financing options to other cities and counties. City leadership, Partnership management, and the participating utilities are all engaged in continual interaction with other cities and counties to educate them on the successes of the PD Partnership.
	Palm Desert is active in the Coachella Valley chapter of International Code Conference, including all educational aspects available for inspection and plan check staff.
1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program	The Palm Desert Partnership is converting its energy savings into carbon reductions continually. Palm Desert has adopted and is currently implementing a program to seek AB 32 goals and objectives
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	Palm Desert maintains a high level of compliance within its boundaries with codes and permitting and inspection requirements. Its experience with overseeing its more stringent energy requirements has made it a leader within the State on enforcement.
	All Palm Desert Building Inspectors, Plan Examiners and consultants are ICC trained and certified.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	The Palm Desert Demonstration Partnership is actively engaged in meeting with its key contractors on an ongoing basis to ensure knowledge of its new and innovative programs. The key contractors include building, pool, HVAC and solar contractors
3-1: Adopt specific goals for efficiency of local government buildings, including:	All new Palm Desert government buildings shall be Leadership in Energy and Environment Design- (LEED) certified.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	The Palm Desert Office of Energy Management (OEM) is currently developing a specific proposal with its utility partners to create a new funding source for the OEM, using "renewable energy credits" that are being created through the programs of the Partnership.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	The Palm Desert Demonstration Partnership has committed to leadership promoting energy efficiency, renewable energy through its aggressive marketing of Set to Save and Energy Independence. The City has also taken an aggressive position in developing a full sustainability strategy which is now being compiled
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Palm Desert is developing a sustainability plan/energy action plan and has worked smart energy management into their general plan. A Strategic Plan for this project focused on energy efficiency was also developed.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	The Palm Desert Demonstration Partnership actively explores and attempts to leverage the existing synergies between EE, DR, and renewable energy generation to achieve its aggressive goals. Whether through integrated commercial audits or the City's Energy Loan Program, the PDP provides makes participation in energy management assessable to its constituents through a variety of offerings
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	

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1. Program Name: San Gabriel Valley Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plan a) List of Program Elements

The three core program elements are similar to those identified in the Energy Leader Partnership Program Master Program Implementation Plan ELPP Master PIP): Element A - Government Facilities, Element B - Strategic Plan Activities and Element C - Core Program Coordination.

b) <u>Overview</u>

The San Gabriel Valley Energy Leader Partnership is made up of the San Gabriel Valley Council of Governments (SGVCOG) and Southern California Edison (SCE). The SGVCOG will primarily be responsible for facilitating access to energy efficiency services for its member agencies, as well as providing planning and implementation support. In addition, the SGVCOG will serve as the lead in marketing, education, and outreach efforts and be responsible for related administrative and reporting activities. SCE will provide technical assistance for identifying and implementing municipal facilities retrofit projects. SCE will also contribute resources, as available, for training sessions and marketing programs.

These agencies will work closely together through monthly partnership meetings and on-going communications. In addition, the SGVCOG will ensure consistent and timely communication to its member agencies through the formation of an Energy Working Group. This group will comprise Energy Champions and other interested stakeholders who will meet on a regular basis to discuss potential projects, identify outreach opportunities, and address any challenges that may arise.

The partnership has identified Energy Champions in all 29 of the participating SGVCOG member agencies. Founded in 1994, the SGVCOG is a Joint Powers Authority (JPA) of 31 incorporated cities in the San Gabriel Valley, the three Supervisorial Districts representing the unincorporated areas in the San Gabriel Valley, and San Gabriel Valley's three water agencies. Collectively, these agencies represent San Gabriel Valley's 2 million residents living in 31 incorporated cities and numerous unincorporated communities.

The SGVCOG will provide information about participation in the partnership through its Energy, Environment, and Natural Resources Committee. This committee addresses a number of issues related to the environment including open space, water, solid waste, energy, and air quality. In the past, it has been involved in a number of important environmental initiatives in the San Gabriel Valley, including promoting low-emission vehicles in fleets, the creation of a compendium of model environmental ordinances, and the formation of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, which promotes watershed and open space protection and enhancement.

Core Program Element A - Government Facilities

Twenty-nine (29) member cities (Alhambra, Azusa, Arcadia, Baldwin Park, Bradbury, Claremont, Covina, Diamond Bar, Duarte, El Monte, Glendora, Industry, La Canada-Flintridge, La Puente, La Verne, Monrovia, Montebello, Monterey Park, Pomona, Rosemead, San Dimas, San Gabriel, San Marino, Sierra Madre, South El Monte, South Pasadena, Temple City, Walnut, and West Covina), are targeted for participation in this partnership¹⁹. The SGVCOG will ask these cities to adopt resolutions committing to support the partnership goals. Each city that commits to the partnership will need to provide a detailed Municipal Facilities Plan that identifies its primary municipal facilities. Each participating city will then receive technical assistance in identifying and prioritizing the portfolio of municipal energy efficiency projects that will meet its commitments to "Lead by Example."

In return for this assistance, each participating city will also be required to provide a financing plan that schedules the necessary budget requests and approvals required to implement the projects over the course of the 2009-2011 energy efficiency program cycle.

A.1) Retrofit of County and Municipal Facilities

In order to build on the momentum and efforts established under the 2006-2008 partnership, the SGVCOG has identified 15 member cities which are already very active in energy efficiency, or have expressed interest in participation. These are: Alhambra, Baldwin Park, Claremont, El Monte, Glendora, Irwindale, Monrovia, Montebello, Monterey Park, Pomona, Rosemead, San Dimas, San Gabriel, South Pasadena and West Covina.

These cities will be the focus of municipal retrofit and installation programs at the onset of the 2009-2011 program. A project pipeline has been developed for these cities. The SGVCOG will simultaneously work with the fifteen (15) cities to develop their interest and capacity to participate in the program.

A.2) Retro-Commissioning

While retro-commissioning has previously been addressed by the partnership, it will focus effort in the 2009-2011 will be to identify suitable facilities for these projects.

¹⁹ The cities of Azusa and Pasadena operate their own municipal utilities and do not receive ELPP benefits.

A.3) Integrating Demand Response into Audits

See the ELPP Master PIP.

A.4) Technical Assistance for Project Management, Training, Audits, etc.

The SGVCOG will serve as a liaison between the partnership and its member agencies to clarify and streamline financing and decision-making policies and procedures which are fundamental to the completion of projects. The SGVCOG will help each participating city identify and assess financing options, including on-bill financing, revolving energy efficiency funds, Energy Service Company (ESCO) contracts, and other potential programs and financing instruments that mitigate first costs of energy efficiency retrofits. This is a particularly important issue that will need to be addressed very early in the process given the current outlook of our economy and the repercussions on local government revenues. The SGVCOG provides a very important function as Lead Implementer on behalf of its members, and will bring that type of information to its participating cities to streamline and expedite their local decision-making processes. The SGVCOG will also help participating cities secure contractors to do the energy efficiency work, and may enter into one or more technical assistance contracts on behalf of its participating members.

A.5) On-bill Financing

See ELPP Master PIP.

Core Program Element B – Strategic Plan Support

B.1) Code Compliance Support

The partnership is examining ways to increase compliance with existing codes. Each city is aware that this is an area where increased enforcement can result in substantial energy savings. However, increased enforcement has real costs associated with it and the partners will consider how to implement improvements without increasing costs. There is no provision in the partnership to fund this, and it is an area where costs could rapidly grow out of control. Significant consideration will be required before a meaningful, cost responsible approach can be fully developed and implemented. See Table 6 below for more details.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

Two of the cities have completed their Energy Action Plans. These plans are used as examples and templates for other cities. The partnership explores best practices and energy efficiency opportunities found through the utility's programs to incorporate into guiding documents. SCE intends to make available documents and best practices to help cities develop their energy efficiency practices and plans.

B.4) Financing for the Community

On-bill financing will not be available at the beginning of the program cycle. However, it may be added in the future, as each city and county in the partnership has indicated an interest in using on-bill financing. In alignment with the Strategic Plan's emphasis on leveraging financial tools to encourage action on efficiency, as well as guidance from the CPUC on financing, SCE will continue on-bill financing pilots and will assess expanding these services to both residential and non-residential markets in the future.

B.5) Peer to Peer Support

SCE intends to develop an effective means by which each city participating in partnerships, past and present, can readily share information with others. Conference calls including all partnerships will be conducted on a routine basis.

Core Program Element C – Core Program Coordination

The SGVCOG intends to leverage the collective assets, resources and relationships of its members to deliver targeted energy efficiency and sustainability messages throughout the region. The following section contains brief descriptions of the types of activities and messaging strategies that are planned.

C.1) Outreach and Education

Outreach and Education efforts focus on providing information about the partnership's goals, activities and achievements. A broad portfolio of marketing activities is planned, including:

- Kick-off: An initial high profile event will be conducted early in 2009 at attended by the region's policy leaders. They will discuss the importance of energy efficiency, sustainability and climate action, and request their various constituents to support the partnership. It will be followed by two annual events (one in 2010 and one in 2011) that publicize achievements of the past year and request constituents for their continued support;
- Website Re-Launch: The partnership plans to re-design and re-launch the San Gabriel Valley Partnership website. The re-launch will include information about all of SCE's relevant programs for cities, business, and residents. Additionally, it will provide access to all workshop and event materials. Finally, it would feature information about the latest energy efficiency news, including technology, initiatives, legislation and interest stories;
- Ribbon-cutting Ceremonies: In order to encourage participation from local elected officials and increase community awareness, the partnership is planning on holding ribbon-cutting ceremonies to recognize completed municipal projects. There will be at least one of these events annually;
- Newsletter: The partnership will develop bi-monthly electronic newsletters which will be distributed to elected officials and staff within member agencies. These newsletters will highlight the partnership's accomplishments, feature articles on related news topics of interest, and inform them about upcoming events and programs; and

• Brochures: Brochures about the partnership and energy efficiency programs will be distributed by our members at locations where they provide services to their constituents (e.g., permits, licenses, water bills, and other city services). Brochures will also be distributed at city-sponsored events, at community centers, and at other public events.

The SGVCOG will co-sponsor training events with SCE that explain how to identify opportunities for high potential energy savings and the types of SCE programs that are available to achieve them. The training will be specifically targeted and tailored to the needs of high energy efficiency potential customer groups, such as small retail businesses, grocery stores, hospitality services, etc. The partnership plans on conducting one training workshop per quarter, each targeted to a different high potential customer group, identified in conjunction with SCE. In addition to these targeted trainings, the partnership plans to hold two larger workshops annually. These workshops will focus on energy-efficiency in a broader context.

The final category of coordination activities involves broad "sweeps" of various types of energy customers. The purpose of these outreach events is to increase awareness about energy efficiency and how it can save money while helping to save the environment. For these types of events, the focus will be on creating an environment of excitement and fun. The partnership plans on conducting at least four of these events each year, with the goal of rotating the opportunity of event-hosting among the SGVCOG members that have committed to supporting and advancing the goals of the partnership.

The specific types of outreach will depend on the event in which the partnership will participate. The first priority will be to bring information about energy efficiency to events that have complementary purposes and messages, such as water conservation, environmental protection, climate action and greenhouse gas reduction. The partnership may also choose a few that do not specifically focus on environmental issues, but at which it is believed there will be many participants who would be interested in learning about energy efficiency.

For these broader-based events, the partnership plans to spice things up with the participation of influential community leaders, raffles and drawings for energy efficient appliances, and some low cost giveaways, such as CFLs. Media publicizing these events will include press releases, newsletters, radio and TV announcements, and newspaper articles.

In addition to community events, the partnership will target outreach to the business sector by leveraging its existing relationships with local chambers of commerce, public affairs groups, and the San Gabriel Valley Economic Partnership.

Southern California Edison

C.2) Residential and Small Business Direct Install

The partnership will coordinate with SCE's core Small Business Direct Installation Program and provide outreach to these sectors to increase participation in these activities. The partnership will not implement its own direct installation program.

C.3) Third-party Program Coordination

See ELPP Master PIP.

C.4) Retrofits for Just-Above LIFE-qualified Customers

See ELPP Master PIP.

C.5) Technical Assistance for Program Management, Training, Audits, Etc. The partnership will allocate a portion of the direct implementation budget for this activity. All cities will be able to take advantage of the technical services of a third party technical assistance firm. The partnership will also conduct training activities

5. Program Element Rationale and Expected Outcome

as described in the ELPP Master PIP.

a) Quantitative Baseline and Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

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By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

See ELPP Master PIP

d) <u>Quantitative Program Targets</u>

Target	Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
1	Government Buildings kWh	TBD	TBD	TBD
2	Number of Workshops	0	3	7
3	Number of Ordinances, Codes, etc	0	TBD	TBD

4	# of ME&O Events	3	8	13

6. Other Program Element Attributes

a) **Best Practices**

Offer best practices information via improved website and other outreach.

b) **Innovation**

Develop municipal sustainability dashboard to simplify sustainability reporting including energy efficiency and renewable energy.

c) <u>Interagency coordination</u>

Through the Energy and Water Conservation Subcommittee, the partnership will coordinate partnership programs with other stakeholders, including water districts, the building industry, other utilities, environmental community, and members of the public.

d) Integrated/coordinated Demand Side Management

See the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

Air quality and water are key elements of our environmental sustainability programs. The partnership will facilitate integration of these efforts.

f) <u>Pilots</u>

No pilots are planned for this program.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	Since 2007, the SGVCOG has begun developing model environmental ordinances on a number of topics including: energy efficiency, solar energy, green buildings, water recycling and/or conservation, building materials, trees, recycling, solid waste, open space, and walkability/bikeability. Model ordinances, general plans, and green city action plans are being collected from cities within the San Gabriel Valley, as well as other jurisdictions in Southern California and beyond. Model ordinances related to Title 24 and other energy efficiency strategies will be made available on the partnership website. The SGVCOG staff will work with both elected officials and city staff to encourage adoption of these ordinances.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	The SGVCOG staff is planning to coordinate a Green Buildings workshop to encourage member agencies to adopt a Green Buildings program which may include expedited permitting and entitlement approval processes, or fee structures and other incentives. Through the Energy Working Group, the SGVCOG staff will work with member agency staff to encourage the adoption of similar programs.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	Since 2007, the SGVCOG staff has been involved in the planning and outreach for a number of EE workshops targeted at city, County and school district staff, business owners, and other community leaders. For the 2009-2011 cycle, the SGVCOG hopes to expand the number of workshops to be hosted on a quarterly basis as well as develop a workshop "series" format that would encourage participants to attend multi-session workshops where issues will be discussed in greater detail.
1-6:Link emission reductions from "reach"	The SGVCOG's EENR Committee has established five working groups (air, water, open space, solid waste and energy) in order to address issues in significantly greater detail and develop comprehensive recommendations and programs to be submitted to the EENR Committee and the Governing Board for review. Since that time, SGVCOG has been contacting staff at all member agencies, staff from IOUs, and experts in the field of energy efficiency to participate in this Energy Working Group. Staff anticipates that this committee will begin meeting in Spring 2009. The purpose of this working group will be to identify funding opportunities for EE projects, develop model ordinances related to EE, collaborate on community awareness strategies, and plan future energy efficiency workshops and conferences for the San Gabriel Valley's elected officials, community leaders and other stakeholders. Through this working group, city staff, IOUs and experts will be able to develop a dialogue about challenges and barriers to implementation for energy efficiency projects and develop coordinated solutions. This will also facilitate peer to peer training as city facility managers and energy managers will have a forum to share best practices and lessons learned.
1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program	

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	
3-1: Adopt specific goals for efficiency of local government buildings, including:	
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	
3-4: Explore creation of line item in local governments' budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	The SGVCOG member agencies have committed to energy/climate change leadership in a number of ways. In 2008, the SGVCOG hosted an AB 32 workshop, which addressed a variety of areas related to climate change and greenhouse gas reduction. The SGVCOG staff plans to continue working with its member agencies as AB 32 is implemented.
	The SGVCOG has also identified a need to further recognize local agencies that adopt progressive environmental programs. By creating an awards/recognition program, the EENR Committee hopes to encourage other member agencies to take a similar leadership role. Currently, the SGVCOG staff and members of the EENR Committee are planning to work to develop an environmental award program in partnership with the local chambers of commerce.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	In addition to an Energy Working Group, the EENR Committee has established an active Water Working Group.
	This group has begun reviewing a number of issues related to recycled water/waste water as well as other water projects that can be integrated with EE projects.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	

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Southern California Edison

1. Program Name: San Joaquin Valley Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in ELPP Master PIP.

3. Projected Program Gross Impacts Table – By Calendar Year

Table 2 – Refer to Table 2 in ELPP Master PIP.

4. Program Element Description and Implementation Plana) List of Program Elements

The three core program elements are those identified in the Energy Leader Partnership Program Master Program Implementation Plan (ELPP Master PIP): Element A – Government Facilities, Element B – Strategic Plan Activities, and Element C – Core Program Coordination.

b) <u>Overview</u>

The San Joaquin Valley Energy Leader Partnership is a Local Government Partnership proposed to be composed of the County of Tulare; the cities of Exeter, Farmerville, Lindsey, Portersville, Tulare, Visalia, Woodlake; the utilities Southern California Edison (SCE), Southern California Gas, and potentially Pacific Gas & Electric (PG&E); and the implementing partner, the San Joaquin Valley Clean Energy Organization (SJVCEO).

The partnership's comprehensive portfolio of activities is designed to:

- Seek innovative approaches to energy efficiency in California's central valley environment;
- Increase adoption of energy efficiency measures and best practices within municipalities and communities by continuing a "culture" of energy efficiency through focused educational and outreach events; and
- Increase the effective delivery of technical and financial energy services to residents and businesses.

ME&O activities will consist of:

- Staff training;
- Appearances of SCE's Mobile Energy Unit at home shows, fairs and farmers' market nights;
- Technical training at local colleges;
- Marketing and co-branding with SCE core programs; and
- Evaluation of implementing an AB 811 financing mechanism for citizens of Tulare County.

Core Program Element A - Government Facilities

This area will deliver energy savings over the next three-year program cycle. Every local government that participates in the partnership will achieve specified energy savings and greenhouse gas reductions from the facilities and infrastructure that it manages through technology retrofits, operational improvements, and policy changes. Participating local governments will take advantage of partnership incentives for municipal facilities and, wherever possible, of eligible rebate, incentive, and technical assistance programs offered by their serving utilities.

A.1) Retrofit of county and municipal facilities

Through partnership support, the County and participating cities will conduct audits of their facilities. Potential opportunities identified from current assessments include but are not limited to lighting, air conditioning, controls, thermal energy storage, and solar generation.

A.2) Retro-commissioning (of buildings or clusters of buildings)

The partnership focuses on identifying HVAC retrofit opportunities through the retrocommissioning of municipal buildings. This provides a systematic whole-system approach to energy efficiency, since many chronic building problems can be resolved and energy waste reduced by making low-cost or no-cost adjustments identified by the retro-commissioning process.

A.3) Integrating Demand Response into the audits

The partnership's plans include identifying and performing successful comprehensive energy efficiency projects with member cities, and enrolling service accounts from the county and each city in demand response programs. This is in alignment with those described in detail in the ELPP Master PIP and the Energy Leader Partnership model.

A.4) Technical assistance for project management, training, audits, etc.

Each partnership has a specific budget for each of these elements. Standard programs available include energy efficiency training, energy audits, and technical assistance in alignment with the ELPP Master PIP.

A.5) On-bill financing (OBF)

OBF will not be available at the beginning of the program cycle. However, it may be added in the future, as each city and county in the partnership has indicated an interest in using OBF. In alignment with the Strategic Plan's emphasis on leveraging financial tools to encourage action on efficiency, guidance from the CPUC on financing, SCE will offer on-bill financing through its Financial Solutions program (see Financial Solutions PIP) and will assess expanding these services to both residential and non-residential markets in the future.

Core Program Element B: Strategic Plan Support

B.1) Code Compliance Support

The partnership will explore the creation of an energy code compliance improvement program, which will use various strategies in the partner cities to improve compliance

with building energy standards and appliance regulations. The partnership will conduct focused energy code training targeted to the Tulare County region, including workshops for municipal planning and building staff, building professionals, and contractors.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

As well as establishing documentation in alignment with the ELPP Master PIP, the San Joaquin Valley Partnership's objectives will include development of Energy Action Plans and Climate Action Plans, in line with the goals and objectives of the Strategic, to document baseline energy use and emissions. These baselines will be used to set and achieve emission reductions and energy savings. Individual county and city plans will be used to develop a regional energy savings plan.

B.4) Financing for the community

The partnership will develop an education and outreach program for the partnership communities in alignment with the strategies as described in the ELPP Master PIP.

B.5) Peer to Peer Support

The partnership will actively participate and support in the peer-to-peer program in forums for the partnering cities and through the strategies in the ELPP Master PIP.

Core Program Element C: Core Program Coordination

C.1) Outreach & Education

The partnership will establish a comprehensive Marketing Education & Outreach (ME&O) Plan that will incorporate:

- Educational workshops to assist the county and cities in moving forward with energy savings projects, policies, codes, and ordinances
- General awareness events and exhibits to publicize the partnership and its goals throughout the communities (including environmental fairs and expos)
- Marketing of energy efficiency programs through a variety of media channels including mailers, press releases, and quarterly e-newsletters, and
- Presentation of a minimum of 12 special workshops strategically located throughout Tulare County and in the SCE Agricultural Technology Application Center (AgTAC) energy center.

C.2) Residential and Small Business Direct Install

The partnership will continue its support of the core program (which launched sweeps in Tulare County in the 2006-08 program cycle) and will encourage participation through leveraging county and City Chambers of Commerce, bill mailing inserts, and public television access. The partnership will also fund and execute focused multi-family and single-family residential direct install activities.

C.3) Third-party program coordination

The partnership will actively support third party programs through the strategies in the ELPP Master PIP.

C.4) Retrofits for just-above LIEE-qualified customers

The partnership will support this program in alignment with the ELPP Master PIP.

C.5) Technical assistance for program management, training, audits, etc.

The partnership will allocate a portion of its direct implementation budget for this activity. In addition, the partnership anticipates bringing technical and financial assistance from the following additional programs to its communities:

- SCE, SCG, & PG&E Energy Center offerings;
- EnergyStar®-Qualified Refrigerator Rebates;
- Refrigerator and Freezer Recycling;
- Electric Water Heater Rebates;
- EnergyStar®-Qualified Lighting;
- Express Efficiency Program;
- Multi-family Energy Efficiency Rebate Program;
- Non-Residential Audits Program;
- Retro-commissioning Program;
- Savings By Design Program;
- Standard Performance Contracts Program; and
- Variable Speed Pool Pump Rebate Program.

c) <u>Non-incentive services</u>

The partnership will include a portfolio of partnership ME&O activities to increase community enrollment in energy programs and other SCE, SCG, and PG&E services, resources, and assets brought to support the ME&O Plan, such as:

- Serving communities with the Mobile Energy Unit;
- Continuing to provide SCE Account Manager/Executive support;
- Providing training at SCE's Agricultural Technical Applications Center or AGTAC;
- Establishing a speakers bureau;
- Providing limited giveaways such as opportunity drawings, free brochures and free CFLs;
- Assisting with designing and printing of brochures and other collateral materials; and
- Supporting through media, press, publicity, etc.

d) <u>Target audience</u>

The target audience for the San Joaquin Valley Energy Leader Partnership includes:

- City and county staff, and management and policymakers (elected officials);
- Residential and business customers, in cities, counties and those in unincorporated areas; and
- Students of the Tulare County Community Colleges.

e) Implementation

In addition to the strategies and coordination in the ELPP Master PIP, the partnership:

- Will develop a comprehensive portfolio of ME&O activities; and ,
- Is proceeding to schedule near-term activities and events, including advertising in regional and local newspapers, providing cable TV and newspaper interviews about energy efficiency opportunities, holding workshops, and providing community exhibits, most of which are expected to have an attendance of from 1,500-3,000 people.

The program's strategies include an integrated approach to energy consumption and reduction, in order to increase awareness of energy efficiency, demand response, Low-Income Energy Efficiency, California Alternative Rates for Energy, Self-Generation Incentive, and the California Solar Initiative (CSI) programs.

5. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

See the ELPP Master PIP.

c) **Quantitative Program Targets**

Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1: Government Facilities (kWh reduction)	TBD	TBD	TBD
Target #2: Community Direct Install (kWh reduction)	TBD	TBD	TBD

San Joaquin Valley Energy Leader Partnership

Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #3: Number of workshops	0	2	4
Target #4: Number of Ordinances, Codes, etc.	0	TBD	TBD
Target #5: Number of ME&O events	2	12	24

6. Other Program Element Attributes

a) **Best Practices**

In addition to the strategies in the ELPP Master PIP, the partnership will develop specific education programs to identify, develop, and capture energy efficiency opportunities within the region's communities.

b) <u>Innovation</u>

The partnership will collaborate with its municipal participants, including school districts and special districts, to develop strategies to implement integrated and comprehensive projects that will encompass energy efficiency, demand response, and renewable energy generation elements.

The partnership will hold 12 training workshops and 36 exhibits over the 2009-2011 program cycle at community events to:

- Demonstrate energy efficiency activities and practices;
- Provide energy code training targeting the needs of the county and city partners;
- Promote whole-building performance to get better space conditioning;
- Coordinate emerging "green" or sustainability standards;
- Promote sustainability programs, including the California New Homes Program, the Home Energy Efficiency Program, the Appliance Recycling Program, and the Business and Consumer Electronics Program; and
- Promote benchmarking and performance tracking and the On-Line Buyer's Guide.

c) <u>Interagency coordination</u>

Through its local government and consulting network, the partnership will encourage coordination with agencies and initiatives noted in the ELPP Master PIP, as well as with the participating IOUs, SCE, SCG, and PG&E.

d) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

The program plans to identify and enroll service accounts from the county and each city in demand response programs. Also, see the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

The partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

f) <u>Pilots</u>

No pilots are planned through this partnership.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The partnership will evaluate adopting more stringent model codes on a voluntary but rewarded basis, including excess Title 24 performance in the fee-waiver program, or adopting the new California "Green Building Code" on a voluntary basis through 2010, making it mandatory in 2011, if a sustained funding level is provided by the CPUC to support these activities.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Each partner in the partnership will evaluate and adopt expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments as feasible.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The partnership will evaluate, and adopt as appropriate, a point-of-sale energy disclosure, if a sustained funding level is provided by the CPUC to support these activities and if standardized ENERGY STAR [®] benchmarked data (per recent legislation) is available on each meter at the point of sale.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Each partner in the partnership will explore pursuing the adoption of an AB 811 financing mechanism for its jurisdiction, in alignment with the strategies in the ELPP Master PIP.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	Within the partnership and through other partnerships, the partners and the SJVCEO will participate on a quarterly basis in eight (8) comprehensive peer-to-peer educational & outreach forums that emphasize specific actions to take to help achieve local reach code goals.
1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program	Each partner will evaluate and adopt, through the partnership, all appropriate energy DSM programs, and will integrate the larger AB 32 / SB 375 compliance requirements as appropriate, if a sustained funding level is provided by the CPUC to support these activities.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will support each partner in developing and implementing Training & Education programs to achieve additional Title 24 compliance, if a sustained funding level is provided by the CPUC to support these activities.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Each local agency of the partnership will evaluate and adopt, as appropriate, policies on energy components required for the professional licensing of local inspectors and contractors that they hire.
3-1: Adopt specific goals for efficiency of local government buildings	The partnership plans to achieve the ELP model's "Silver" target level in the aggregated municipal facilities of the partners, resulting in at least a 5% savings over the 2003 energy use baseline, during the 2009-2011 partnership.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	Each partner in the partnership will evaluate and adopt, as appropriate, commissioning, performance measurement, and verification as a core part of its energy action plan.
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Each partner in the partnership will evaluate the creation of a line item in its budget (or other options) that allow energy efficiency cost savings to be returned to the department and/or projects that provided the savings, to thus fund additional efficiency.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	Not applicable.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-1: Local governments commit to clean energy/climate change leadership.	Each partner in the partnership will evaluate and adopt, as appropriate, a Strategic Energy Plan that includes long- and short-term energy and sustainability objectives in line with the California Long Term Energy Efficiency Strategic Plan (Strategic Plan).
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Each partner in the partnership will evaluate and adopt, as appropriate, the development of aggressive sustainability goals into their general plan updates. These will include emphasizing sustainability through green building design & technologies, reduction of GHG emissions, increased use of renewable energy, and conservation of existing sources of energy.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	The partnership will coordinate wastewater, storm water and potable water capital projects, with SCE, SCG, and PG&E to ensure that they are as energy-efficient as possible.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	Each partner in the partnership will evaluate, develop, and adopt, as required, zoning and development authority changes to comply with AB 32 / SB 375.

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Southern California Edison

1. Program Name: South Bay Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in the ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in the ELPP Master PIP.

4. Program Element Description and Expected Outcome

a) List of Program Elements

The three core program elements are similar to those identified in the ELPP Master PIP: Element A - Government Facilities, Element B - Strategic Plan Activities, and Element C - Core Program coordination.

Core Program Element A: Government Facilities

This area will deliver energy savings during the next three-year program cycle. Every local government that participates in the partnership will achieve specified energy savings and greenhouse gas reductions from the facilities and infrastructure that it manages through technology retrofits, operational improvements and policy changes. Participating local governments will take advantage of partnership incentives for municipal facilities and, wherever possible, of eligible rebate, incentive and technical assistance programs offered by their serving utilities.

A.1) Retrofit of county and municipal facilities

The 15 cities (see list below) within the South Bay Cities Council of Governments maintain over 500 municipal buildings. The partnership has begun the process of updating previous reviews performed on city facilities, and conducting additional assessments for school facilities and special districts. The assessments are intended to be completed within the first quarter of 2009 and will be used to complete comprehensive energy efficiency retrofits in municipal facilities. Potential opportunities include but are not limited to: lighting, air conditioning and computer network savings.

A.2) Retro-Commissioning (of buildings or clusters of buildings)

The partnership focuses on identifying HVAC retrofit opportunities through the retrocommissioning of municipal buildings. This provides a whole-system approach to energy efficiency. Many chronic building problems and energy waste can be resolved by making the low-cost or no-cost adjustments identified by the Retrocommissioning process.

A.3) Integrating Demand Response into the audits

The partnership plans include identifying and performing successful comprehensive energy efficiency projects with member cities, and enrolling service accounts from each city in demand response programs in alignment with those in the ELPP Master PIP and the Energy Leader Partnership model.

A.4) Technical assistance for project management, training, audits, etc.

Each partnership has a specific budget for each of these elements. Standard programs available include energy efficiency training, energy audits, and technical assistance in alignment with the ELPP Master PIP.

A.5) On-bill financing

Cities in the partnership will be encouraged to explore the use of on bill financing if provided by their utility. Cities will be encouraged to explore the use of On-Property Tax Bill financing for residential energy efficiency projects allowed by the State of California through AB 811.

Core Program Element B: Strategic Plan Support

B.1) Code Compliance Support

The South Bay Energy Leader Partnership will explore the creation of an energy code compliance improvement program and various strategies across the partnering cities to improve compliance with building energy standards and appliance regulations. The partnership will conduct focused energy code training targeted to the South Bay region including workshops for municipal planning and building staff, building professionals, and contractors.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the ELPP Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

B.3) Guiding Document(s) Support

The South Bay Energy Leader Partnership objectives will include development of Energy Action Plans and Climate Action Plans to document baseline energy use and emissions, as well as establishing documentation in alignment with the strategies as described in the ELPP Master PIP. These baselines will be used to set and achieve emission reductions and energy savings. Individual city plans will be used to develop a regional energy savings plan.

B.4) Financing for the community

The South Bay Energy Leader Partnership will develop an education and outreach program for the partnership communities in alignment with the strategies as described in the ELPP Master PIP.

B.5) Peer to Peer Support

The South Bay Energy Leader Partnership will actively participate and support in the peer-to-peer program in forums for the partnering cities and through the strategies as described in the ELPP Master PIP.

Core Program Element C: Core Program Coordination

C.1) Outreach & Education

The partnership has an established comprehensive Marketing Education & Outreach (ME&O) Plan that will be expanded to incorporate: educational workshops to assist cities in moving forward with energy savings projects, policies, codes, and ordinances; general awareness events and exhibits to publicize the partnership and its goals throughout the communities (including environmental fairs and expos); marketing energy efficiency programs through a variety of media channels including mailers, press releases, and quarterly e-newsletters; and provide a minimum of 16 special workshops throughout the 15 cities.

C.2) Residential and Small Business Direct Install

The partnership will establish training and outreach efforts to support and coordinate with the SCE core programs for South Bay commercial and small businesses customers as well as leverage existing member cities chambers of commerce, bill mailing inserts, and municipal channel 3 television access to distribute information and drive greater participation.

C.3) Third-party program coordination

The partnership will actively support third part programs through the strategies as described in the ELPP Master PIP.

C.4) Retrofits for just-above LIEE-qualified customers

The South Bay Energy Leader Partnership will support this program in alignment with the strategies as described in the ELPP Master PIP.

C.5) Technical assistance for program management, training, audits, etc.

The partnership anticipates bringing technical and financial assistance from the following additional programs to its communities: SCE & SCG Energy Center offerings, Energy Star® Qualified Refrigerator Rebates, Refrigerator and Freezer Recycling, Electric Water Heater Rebates, and Energy Star® Qualified Lighting; Express Efficiency; Multi-family Energy Efficiency Rebate Program; Non-Residential Audits; Retro-Commissioning; Savings by Design; Standard Performance Contracts; Variable Speed Pool Pump Rebate Program.

b) <u>Overview</u>

The South Bay Energy Leader Partnership consists of the cities of Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Lomita, Manhattan Beach, Palo Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Torrance through their membership in the South Bay Cities Council of Governments, Southern California Edison, and the Southern California Gas Company. The partnership is implemented by the South Bay Cities Council of Governments through the South Bay Environmental Services Center.

Through the participation of Southern California Gas, the West Basin Water District, and the LA County Sanitation Districts in the partnership, a comprehensive and

integrated approach to energy efficiency, natural gas efficiency, water efficiency as well as wastewater, storm water and potable water capital projects will be identified and developed ensuring that the municipalities are as energy efficient as possible.

This 2009-2011 South Bay Energy Leader Partnership builds upon the already successful South Bay Environmental Services Center partnership. The South Bay Energy Leader Partnership's comprehensive portfolio of activities is designed to promote energy efficiency activities while focusing on a larger conservation program which includes water conservation, solid waste and alternative mobility strategies. Through focused outreach and educational activities, the programs convey the message that "saving energy is good for the environment and saves money too" and this message is emphasized through the importance of energy efficiency measures and best practices. The program will also provide the tools necessary to take advantage of rebates and financial incentives for all public agencies, their residents and businesses.

c) <u>Non-incentive services</u>

The South Bay Partnership will leverage its portfolio of ME&O activities to deliver non-incentive services such as those listed below. These non-incentive services are designed to increase community enrollment in energy core programs and participation in SCE services and resources:

- Mobile energy unit;
- Account manager support ;
- Training at the Customer Technology Application Center (CTAC);
- Speakers bureau;
- Limited giveaways such as opportunity drawings and free CFLs;
- Scheduling special events such as Operation Lamp Exchange;
- Marketing;
- Design and printing of brochures and other collateral materials; and
- Media/Press/Publicity support.

d) Target audience

The target audience consists of:

- City and county staff, management and policymakers (elected officials); and
- Residential and business customers in the South Bay region.

e) <u>Implementation</u>

In addition to the strategies and coordination as described in the ELPP Master PIP:

- The partnership has developed a comprehensive portfolio of ME&O activities and is proceeding to schedule near-term activities and events. These include advertising in regional and local newspapers, cable TV and newspaper interviews about energy efficiency opportunities, and work shops as well as community exhibits most with an attendance of 1,500-3,000 people.
- The partnership's strategies include an integrated approach to energy consumption and reduction, increasing awareness of energy efficiency, demand response, Low-Income Energy Efficiency, California Alternative Rates for

Energy Program, Self-Generation Incentive Program, and California's Solar Initiative.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) Program Design to Overcome Barriers

The Cities that form the South Bay Energy Leader Partnership will have barriers consistent with, and will employ those strategies to overcome them, as described in the ELPP Master PIP.

d) **Quantitative Program Objectives**

Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1 Municipal	TBD	TBD	TBD
Retrofits (kWh)			
Target #2 Number of	2	6	10
workshops			
Target #3 Number of			
Ordinances, Codes,	0	TBD	TBD
etc.			
	12	24	36
Target #4 Number of			
ME&O events			

Table 5

6. Other Program Element Attributes

a) **Best Practices**

In addition to those strategies described in the ELPP Master PIP, the South Bay Energy Leader Partnership will embody the following best practices:

- Leverage the strong member municipal relationships developed by the partnership in the 2006-08 cycle to further develop and capture energy efficiency opportunities within public agencies and cities facilities; And,
- Expand the existing South Bay Energy Leader Partnership education programs to identify, develop and capture energy efficiency opportunities within the region's communities.

b) <u>Innovation</u>

The partnership will collaborate with its municipal participants, including school districts and special districts, to develop strategies to implement integrated and comprehensive projects that will encompass energy efficiency, demand response, and renewable elements.

The partnership will also hold 16 training work shops and 36 exhibits over the course of the 36 months of the 2009-2011 cycle at community events to demonstrate: energy efficiency activities and practices, energy code training to target the needs of the South Bay region, promote whole-building performance to get better space conditioning, coordinate emerging "green" or sustainability standards, and promote programs that promote sustainability including California New Homes Program; Home Energy Efficiency Program, Appliance Recycling Program, Benchmarking and Performance Tracking, and On-Line Buyer's Guide and Business and Consumer Electronics Program.

c) Interagency coordination

Through the participation of Southern California Gas, the West Basin Water District, and the LA County Sanitation District in the partnership, a comprehensive and integrated approach to energy efficiency, natural gas efficiency, water efficiency as well as wastewater, storm water and potable water capital projects will be identified and developed ensuring that the municipalities are as energy efficient as possible. The South Bay Energy Leader Partnership through its local government and consulting network will encourage coordination with agencies and initiatives as noted within the ELPP Master PIP as well as with the participating IOUs, SCE and SCG, and the South Bay region water agencies and sanitation district.

d) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

The South Bay Energy Leader Partnership program plans include identifying and enrolling municipal service accounts from each city in demand response programs in alignment with the Energy Leader Partnership model and the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

The partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

f) <u>Pilots</u>

The partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The SBCCOG local public agencies of the partnership will evaluate adopting them on a voluntary but rewarded basis, including excess Title 24 performance in the fee- waiver program or adopting the new California "Green Building Code" on a voluntary basis through 2010, making it mandatory in 2011.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Each local agency of the SBCCOG, through the partnership will evaluate adopting expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments as appropriate.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The SBCCOG local public agencies of the partnership will evaluate adopting as appropriate, a point of sale energy disclosure dependant upon availability of standardized energy star benchmarked data (per recent legislation) on each meter at the point of sale.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	The local agencies of the partnership will contemplate pursuing the adoption of an AB 811 financing mechanism for its jurisdiction in alignment with the strategies as described in the ELPP Master PIP.
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes.	Within the South Bay ELP and through other partnerships, the local agencies of the partnership, and the SBESC, will participate in 12 comprehensive peer to peer educational & outreach forums on a quarterly basis that emphasize specific actions to take to help achieve the local agencies' reach code goals.
1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program	Each local agency of the SBCCOG will evaluate adopting, through the partnership, how DSM programs can help achieve AB 32/SB 375 compliance requirements and how the might be integrated as appropriate.
California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
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2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will support each agency in developing and implementing Training & Education programs to achieve additional T-24 compliance.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Each local agency of the SBCCOG will evaluate adopting as appropriate, policies regarding energy components of the professional licensing of local inspectors and contractors hired.
3-1: Adopt specific goals for efficiency of local government buildings	The partnership goal is to achieve the ELP model silver target level in the aggregated local agency municipal facilities resulting in at least a 5% savings over the 2003 energy use baseline during the 2009-2011 Partnership.
3-2: Require commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings.	Each local agency of the SBCCOG will evaluate adopting as appropriate, commissioning, performance measurement, and verification as a core part of their energy action plan.
3-4: Explore creation of line item in local governments' budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Each local agency of the SBCCOG will evaluate and adopt as appropriate, creation of a line item in their budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	SBESC will seek opportunities for innovative initiatives to include in the local government program.
4-1: Local governments commit to clean energy/climate change leadership.	Each local agency of the SBCCOG will evaluate and adopt as appropriate, a strategic Energy Plan that includes long and short term energy & sustainability objectives in line with the adopted California Long Term Energy Efficiency Strategic Plan.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Each local agency of the SBCCOG will evaluate adopting as appropriate, development of aggressive sustainability goals into their General Plan updates that include emphasizing sustainability through green building design & technologies, reduction of GHG emissions, increased use of renewable energy, and conservation of existing sources of energy.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	Through the addition of SCG, the West Basin Water District, and the Los Angeles County Sanitation Districts to the partnership, water efficiency projects, including low flow aerators and shower heads will be added. Additionally, as funding allows wastewater, storm water and potable water capital projects will be combined with energy savings projects to ensure that they are as energy efficient as possible.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority.	Each local agency of the SBCCOG will evaluate developing and adopting as required, zoning and development authority changes to comply with AB 32 / SB 375.

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1. Program Name: South Santa Barbara County Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in the ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in the ELPP Master PIP.

4. Program Element Description and Implementation Plana) List of Program Elements

The three core program elements are similar to those identified in the ELPP Master PIP: Element A - Government Facilities, Element B - Strategic Plan Activities and Element C - Core Program Coordination.

b) <u>Overview</u>

The partnership is a joint project of Southern California Edison (SCE), the County of Santa Barbara and the cities of Santa Barbara, Goleta and Carpentaria. The Partnership leverages partner resources to reduce energy use, increase energy efficiency awareness and reduce greenhouse gas emissions, in Santa Barbara County and partnering cities.

Core Program Element A - Government Facilities

Participating local governments will take advantage of partnership incentives for municipal facilities and wherever possible, of eligible rebate, incentive and technical assistance programs offered by their serving utilities.

A.1) Retrofit of County and Municipal Facilities

The partnership will provide an opportunity for a comprehensive retrofit of municipal facilities. Incentives will be administered through Southern California Edison (SCE) and Southern California Gas (SCG) Local Government Partnership Portfolio. Upgrades will include mechanical systems, lighting and other measures. Training will be conducted for County and City personnel to instruct them on the use and benefit from new systems installed for long-term energy efficiency.

The county of Santa Barbara has about 700 facilities; the city of Santa Barbara has 500 facilities. The cities of Carpentaria and Goleta have significantly less city-owned facilities; but their leaders in are equally enthusiastic about participation in the partnership. A preliminary list of municipal retrofits has been identified and Santa Barbara alone has identified approximately 100 facilities for retrofitting that include monitoring based commissioning of building mechanical systems, replacement of large water pumps with efficient systems, conversion to variable speed pumping systems, lighting efficiency retrofits of building and sports lighting systems, and

many others. Retrofits to municipal facilities will consist primarily of lighting (34%) and HVAC change outs and controls (34%). The balance (32%) of energy saving retrofits will be spread among various measures including pumps, motors and controls. Opportunities will be identified through comprehensive Energy Efficiency Demand Response (EE/DR) audits which will be conducted as part of the program.

Enhanced incentives offered to encourage higher levels of commitment to energy savings are an integral part of this program. Whole facility approaches will be accorded top priority. A minimum threshold of "Partner Level" of participation is expected for participants. Santa Barbara City currently require all new construction projects to be LEED certified and exceed Title 24 Standards by at least 10%.

While many projects have been identified as having the potential to participate however, further review is required to forecast the energy savings impact. Two of the four partners with prospective projects meet or exceed their minimum participation threshold. The partners still in the investigative stage do have minimum thresholds that need to be met.

A.2) Retro-commissioning (of buildings or clusters of buildings)

The partnership will offer Retro-commissioning (RCx) as part of their portfolio. Ideal projects will be at least 100,000 sq. ft. and will not have had a major retrofit within the past five years. Smaller projects will be considered and opportunity evaluated on a case-by-case basis. One project, Santa Barbara City Hall, has been identified as a potential candidate. In addition, the partners will implement monitoring based commissioning (MBCx) projects on select buildings. The MBCx projects will utilize newly installed and existing electronic control systems to aid in the Retro-commissioning of mechanical and lighting systems in the selected buildings. Data acquired by the control system will be used to diagnose building system problems, and will aid in the process of repairing system deficiencies and tuning the systems to maximize occupant comfort and energy efficiency.

All projects will be cost effective with a total Resource Cost (TRC) greater than 1.5 and have a maximum payback of 10 years on the use and benefit from new systems installed for long-term energy efficiency.

A.3) Integrating Demand Response into the Audits

Essential program service element includes combining comprehensive energy audits, and energy efficiency with demand response. Projects receiving integrated EEDR audits and who incorporate energy efficiency recommendations will participate at least at a Valued Partner level of demand response. Participants will be encouraged to apply for additional incentives that are available. The city of Santa Barbara is planning to integrate Load Rolling and Demand Limiting features into every digital control system installed in city buildings for the control of mechanical systems. These systems will be able to implement Demand Response either manually or automatically, based on a signal from the utility (SCE).

A.4) Technical assistance for project management, training, audits, etc.

The partnership will assist county and city government officials in understanding, managing, and reducing their energy use and costs, and position the partners as leaders in the region in energy management practice. Assistance will be offered to planners, designers, inspectors, plan checkers, employees and building occupants. This plan will include design assistance, plan review, Title 24 training, the audit process, technology review and building awareness. This assistance will be delivered by government or industry representatives, IOU Technical Staff and consultants.

A.5) On-bill financing

The partnership will participate in both the SCE and SCG on-bill financing for municipal facilities that install energy-efficient equipment or implement energyefficient strategies. Financing and installation of equipment will be considered for partial or full extended repayment in the amount up to that offered through the applicable core program and will be included as a component line item of the monthly utility bill for repayment to the IOU. In addition, local governments will consider participating in the CEC's low interest municipal energy loan program.

Core Program Element B – Strategic Plan Support

The partnership will use the following strategies in support of the Strategic Plan.

B.1) Code compliance support

The partnership will work with SCE, SCG and other organizations, to assist county and city building and planning officials gain a better understanding of new and existing energy codes. This will be facilitated primarily through training and development of local plan checkers and building inspectors.

The partnership will also conduct energy code compliance training and offer Title 24 training to design professionals, building professionals planners and inspectors, tailored to exceed the minimum Standards.

B.2) Reach Code Support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

The partners will consider establishing and enforcing Reach codes that require exceeding Title 24 standards by at least 20%. Alternatively, new facilities may be required to be LEED certified.

The city of Santa Barbara currently supports exceeding Title 24 Standards, through their adopted energy ordinance, by at least 20% and will continue working with community contractors and architects to evaluate further revisions to the building code to exceed the newly revised Title 24 by up to 20%. Technical assistance will be needed to complete the evaluation. Santa Barbara will share model documents and

South Santa Barbara County Leader Partnership

technical expertise with partnership agencies to assist them to exceed Title 24 by 20%. Requiring a Built Green certification or another accepted green building standard will be considered as part of the building code review. Designers and builders will be offered local outreach and training to assist them in reaching these requirements.

Requiring a Built Green certification or another accepted green building standard will be considered as part of the building code review. The partnership will also encourage implementation of a Green Purchasing Policy promoting sales of Energy Star rated equipment.

B.3) Guiding Document(s) Support

The partnership will support local government integrating energy efficiency comprehensively into their policies, plans and goals. Supporting documents include: local building codes and standards, sample documentation, building energy ordinances and resolutions, training and technical manuals. These and other materials that support sustainability initiatives will be made available to the community.

B.4) Financing for the Community

The partnership will explore methods of increasing participation in energy efficiency efforts through various types of creative financing for the community that have not yet been identified.

B.5) Peer-to-peer Support

The partnership will establish an Energy Forum to facilitate peer-to-peer support consisting of an effective means whereby the partners can share experiences and success stories with one another. This will facilitate the replication of successful County and City-sponsored programs and the establishment of Partnership Best Practices.

Core Program Element C – Core Program Coordination

C.1) Marketing Outreach & Education

The partnership will provide marketing and community outreach, education and training and community sweeps and other initiatives designed to connect the community with opportunities to take action to save energy, money and the environment. In addition, the program will act as a portal for all energy offerings, delivering information on demand response, self-generation and low income programs, California Alternative Rate for Energy (CARE) and the California Solar Initiative (CSI) via its website at: www.sceeps.org.

C.2) Residential and Small Business Direct Install

The partnership will continue to offer and encourage participation in the Direct Install retrofit and other SCE core programs as needed targeting small businesses, multi-family residential and mobile homes. Lighting retrofits for outdoor lighting, indoor lighting retrofits, cold cathode retrofits, refrigeration and HVAC efficiency measures for businesses will be promoted.

C.3) Third-Party Program Coordination

Third party vendors are being solicited to assist with delivering specific elements of the program. Third party vendors will play a significant role in the implementation of the Direct Install program.

C.4) Retrofits for Just-Above LIEE-Qualified Customers

Not expected to be part of this partnership's offering.

C.5) Technical Assistance for Program Management, Training, Audits, etc.

The partnership will provide comprehensive technical training, planning assistance and marketing materials. Strategies will include: press releases, targeted mailings, newsletters, marketing collateral, television and radio ads targeting business managers and community leaders. Title-24 compliance seminars will be offered to plan checkers, building officials, inspectors, designers and builders. Self-audit tools and other web-based information will be offered to the community.

Santa Barbara County will leverage its local infrastructure to "spread the word" about energy efficiency and extend the reach of Statewide and local energy codes. Specific applications include countywide outreach and education seminars and special local events to disseminate a single integrated energy efficiency message to all residents and businesses in the county.

One of the distinguishing characteristics of the partnership is its intent to develop and maintain a coordinated "Municipal Forum" to provide on-going integration of communications and idea sharing. The Forum is intended to leverage the county- and city-run television channels, a central web site, email programs, and webinars to facilitate communications.

c) <u>Non-incentive services</u>

In addition to offering incentives the partnership will provide numerous non-incentive services including Peer-to-Peer Leadership, Energy Efficiency Trainings, Marketing, Education and Outreach, Information, Education and Funneling or core and third-party programs and Energy Champion Recognition.

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) Target audience

See the ELPP Master PIP. The partnership will also target special districts in partnering cities, for example water districts, and school districts.

e) Implementation

Program cost efficiency will be captured throughout our partner cities by maximizing replicable program elements, leveraging resources and staff support from each partner as defined in our participation model, and implementing initiatives that create demonstrated permanent and persistent energy savings.

As an evolving partnership, the partnership has built a solid infrastructure, established partner trust, and gained invaluable knowledge and experience, all of which will result in a seamless and cost-efficient 2009-2011 implementation. This includes tried and tested implementation strategies, extensive resource databases and tracking mechanisms, approved marketing and outreach materials, planning templates, contractor and engineering relationships as well as other resources that can be carried over.

Implementation processes are discussed in the ELPP Master PIP in the respective core program elements.

5. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) **<u>Program Design to Overcome Barriers</u>**

A major barrier to energy efficiency is the state of the state and local economy. Overcoming the increased first-cost barrier will be a major hurdle. In difficult economic times, when companies are looking at their bottom line and local governments are making cuts to popular programs, it is a challenge to convince decision makers that investing in energy efficiency is the best course of action. They do realize that energy inefficiency costs money that directly impacts their bottom line but swallowing the additional costs incurred to be energy wise involves making very difficult choices that could be avoided.

Seminars identifying ways to fund energy efficiency, on-bill financing, CEC funding, utility incentives, State and Federal tax breaks and the Green Procurement Policy will all help reduce first-cost and support overcoming this barrier.

d) **<u>Quantitative Program Targets</u>:**

Table 5

Target	Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
1	Kw, kWh	TBD	TBD	TBD
2	Number of Workshops	4	8	16
3	Number of Ordinances, Codes, etc.	1	1	2
4	# of ME&O Events conducted that target Residential customers	4	8	16

6. Other Program Element Attributes

a) **Best Practices**

Local governments are a rich area of untapped energy efficiency potential. While the governmental entities themselves are often supportive of energy efficiency, there are many barriers that thwart their efforts to "lead by example". The partnership is specifically structured to help local governments be successful, and then to leverage their energy and demand savings success to encourage their residents and businesses to do the same.

b) <u>Innovation</u>

The city of Santa Barbara plans to certify all existing municipal buildings under LEED for Existing Buildings Operation and Maintenance as they are retrofitted. All new mechanical systems will be retrofitted with direct digital control (DDC) systems with load rolling and demand limiting capability that can be used to monitor performance and transmit a signal implement DR.

In Marketing and Outreach and Education (ME&O), the partnership is utilizing funds to target sectors of the community sometimes "forgotten" in promoting energy efficiency measures, Through selective targeting of non-profits, such as the Boys and Girls Clubs and faith-based organizations for retrofit opportunities, the partnership is reaching non-traditional audiences with an energy efficiency message. In addition, materials are produced in English and Spanish, which also promote a more inclusive energy efficiency message.

The partnership is cross-partnered with other entities in Santa Barbara County to spread the word about energy efficiency and sustainability by partnering with local

environmental organizations, architects and contractor groups such as Architecture 2030, Building Green Business and other "green" groups. The focus is to integrate energy efficiency and green sustainability issues into one overall message and to cross-reference these in our marketing, outreach and education initiatives.

c) Interagency coordination

The partnership plans to coordinate its program with the CARB, local water agencies, schools, non-profit organizations, and local special districts and joint powers authorities operating within the County or broader south coast region.

d) Integrated/coordinated Demand Side Management

The IOU's have identified integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

This partnership will focus attention on the utility core programs and encourage the community to participate in more than one utility program and other non-utility programs. The partnership will identify energy efficiency improvements and demand response opportunities through a customer solutions approach to comprehensive audits.

e) <u>Integration across resource types (energy, water, air quality, etc.)</u>

One of the partnership's strategies is to coordinate energy and water efficiency messages to leverage both.

f) <u>Pilots</u>

The city of Santa Barbara will pilot with SCE's Codes and Standards program to track energy savings from building permits issued. This data will help evaluate the effectiveness of building code updates. Consistent with AB32 goals, the energy savings will be translated to a reduction in greenhouse gas emissions in the community.

g) <u>EM&V</u>

SCE is working with the partnership to create a "virtual" program implementation binder. This will be a living document that will be updated at least quarterly to help SCE, the partnership and the individual participating cities and county to identify where they are as opposed to where they need to be to honor their commitment to the partnership. It will also facilitate an open dialogue between SCE and the partnership about the types and timing of incentives and other resources needed to support the partnership.

The partnership binder will track achievements at two levels; the individual participating cities and county, and the partnership's progress overall towards

meeting its committed energy and demand savings, with respect to each program elements.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	The partnership's Approach to Achieving the Strategic Plan's Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	The City of Santa Barbara will evaluate options to exceed Title 24 by an additional 20% with the goal of adopting revisions to the building code. Technical assistance will be needed to complete the evaluation.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	The partnership's members either are, or will consider offering expedited processing for facilities that exceed Title 24 or propose certification through LEED or Built Green initiatives. Benefits may include expedited permitting, and/or reduced fee structures.
1-3: Develop, adopt and implement model point-of-sale and other point-of- transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through bonds and pay off on property taxes; develop other EE financing tools.	The partnership's participants have expressed interest in participating in SCE's on-bill financing program and in applying for low interest CEC loans for energy efficiency projects.
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes.	Technical training will be provided to the local government professionals, contractors, and facility maintenance professionals to improve knowledge and awareness of energy efficiency in building renovation and new construction. The partnership agencies will share strategies that affect building codes, standards and incentives, review best practices for exceeding current Title 24 standards, and provide advice to assist cities with their own planning and implementation.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	The partnership's Approach to Achieving the Strategic Plan's Goal
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	The partnership's members will collect data on energy-efficient projects to evaluate the effect of potential Reach codes and the link to CARB's AB 32 program. Consistent with AB 32 goals, the energy savings will be translated to a reduction in greenhouse gas emissions in the community.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will also conduct energy code compliance training and offer Title 24 training to design professionals, building professionals planners and inspectors, tailored to exceed the minimum Standards.
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	
3-1: Adopt specific goals for efficiency of local new and existing government buildings	The city of Santa Barbara will continue with their policy that requires new construction and renovations of municipal facilities to exceed Title 24 by 20%. Other members will consider requiring municipal retrofit projects to participate at least at the Valued Partner level.
3-2: Require commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings.	The partnership will explore requiring commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings in an effort to promote exceeding current energy standards.
3-3: Improve access to financing to support Local Government EE/DSM, such as lowering interest rate of Energy Commission's loan fund, and utility on-bill financing.	The partners are very interested in participating in, and promoting utility on-bill financing and low interest energy efficiency loans.
3-4: Explore creation of line item in Local Government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	The partnership's Approach to Achieving the Strategic Plan's Goal
3-5: Develop innovation incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	Partner agencies will consider incorporating energy efficiency and renewable energy as a priority in the update of building codes and General Plans. The agencies will showcase energy and climate change initiatives and results as projects are completed.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	The partnership envisions facilitating a peer-to-peer effort that allows each governmental entity to leverage the knowledge and experience of the others and take a more integrated approach to overall energy savings and greenhouse gas reduction through its Municipal Forum. The city of Santa Barbara will complete its General Plan update with land use and zoning policies that encourage or provide incentives for energy efficient buildings. Examples include development priority for "green" economic development, incentives for voluntary energy efficiency retrofits, and a housing density bonus for reduced footprint projects.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	Santa Barbara County is served by 17 water purveyors. The partnership will work with the Santa Barbara County Water Agency to coordinate with these purveyors for more energy efficient groundwater pumping, water treatment, waste water treatment and local conveyance. The partnership will enlist assistance from the county's Department of General Services to work with the Water Agency.

California Long Term Energy Efficiency	The partnership's Approach to
Strategic Plan (Strategic Plan) Strategy	Achieving the Strategic Plan's Goal
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority.	The city of Santa Barbara will complete its General Plan update with land use and zoning policies that encourage or provide incentives for energy efficient buildings. Examples include development priority for "green" economic development, incentives for voluntary energy efficiency retrofits, and a housing density bonus for reduced footprint projects

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Southern California Edison

1. Program Name: Ventura County Energy Leader Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in the ELPP Master PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in the ELPP Master PIP.

4. Program Element Description and Implementation Plan

a) List of Program Elements

The three core program elements are similar to those identified in the ELPP Master PIP: Element A - Government facilities, Element B- Strategic Plan Activities and Element C - Core Program Coordination.

b) **Overview**

The alliance consists of nine cities and one county. The cities of Camarillo, Fillmore, Moorpark, Ojai, Port Hueneme, Santa Paula, Thousand Oaks, and Ventura, along with Ventura County, are members of the partnership.

The partnership's Board of Directors is composed of elected officials from various public agencies and provides the policy and leadership for the program. The Board has been instrumental in building an ethic of energy efficiency in the region that has led to friendly competition among public agencies and greater desire among community activists to have their own local "green councils" to take action. The partnership is not a mandated public agency, but rather an outcome of collaboration among regional leaders concerned specifically with energy issues.

The partnership provides a consistent local government entity that promotes greater coordination and integration of efforts. It leverages energy efficiency to self generation, demand reduction, green building, recycling, cogeneration, conversion energy and other new approaches to building a network of reliable resources and sustainable implementation practices.

The Board has placed emphasis on project retrofit implementation, leveraging ratepayer and taxpayer funds to maximize return on investment. As the local partner, and based on past experiences, the partnership developed an innovative regional process and program methodology which generated significant energy savings and demand reduction, in prior cycles and will continue in the 2009-2011 IOU funding cycle.

Core Program Element A - Government Facilities

A.1) Retrofit of county and municipal facilities

The Alliance members will assist municipal facilities in each community in finding and implementing measures that save energy. Comprehensive Energy Efficiency (EE) and, where applicable, Demand Response (DR) audits will be conducted to identify the potential for installing energy-efficient measures. These measures include lighting, and sensors, HVAC systems, variable frequency drives (VFD) and motors, boiler and small measures such as vending misers, exit signs, and hot water system technology that reduce demand on 24/7 energy consumption. Energy savings are expected to be 75% lighting, 15% VFD and 10% HVAC measures.

A.2) Retro-commissioning (RCx) (of buildings or clusters of buildings)

Each member of the partnership is currently evaluating its existing building stock to determine which facilities could be targets for retro-commissioning. To date, no projects have been selected; however, a number of facilities are expected to be candidates. More detailed analysis is needed to determine the potential impact from this measure.

A.3) Integrating Demand Response into the audits

The partnership members will evaluate each project and determine if a detailed EE audit could yield energy savings and further determine if DR could potentially benefit the customer. The partners will support energy planning, and policy integration among building officials, contractors, architects, managers and public officials to advance energy efficiency and support demand reduction., and advance sustainable energy improvements where most cost effective.

A.4) Technical assistance for project management training, audits, etc.

The partners will offer training, technical seminars and briefings to building inspectors, plan checkers and building officials for Title 24 code compliance. Sessions will be conducted in a manner similar to that provided at IOU energy centers (for example, SCE's Customer Technology Application Center and SCG's Energy Resource Center) but located in the region. Additional workshops will be offered to elected officials with guidelines on how to meet and exceed minimum building standards. Technical support is readily available for project identification, bid document development, contractor recruitment, project management, enhanced incentives, financing options and savings verification.

A.5) On-bill financing

On-bill financing will not be available at the beginning of the program cycle. However, it may be added in the future, as each city and county in the partnership has indicated an interest in using on-bill financing. In alignment with the Strategic Plan's emphasis on leveraging financial tools to encourage action on efficiency, as well as guidance from the Commission on financing, SCE will continue on-bill financing pilots and will assess expanding these services to both residential and non-residential markets in the future. See the Financial Solutions PIP's OBF option.

Core Program Element B - Strategic Plan Support

B.1) Code compliance support

More individual project support will be provided to organizations that promote the understanding of energy efficiency as an essential "first step" in building design, and facility operations. By further example, practical briefings and seminars will be presented to facilitate code compliance and understanding energy efficiency as having the ability to provide reasonable "return on investments."

B.2) Reach code support

The partnership will seek to establish meaningful CEC-approved Reach codes as part of its effort to add value to energy efficiency in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes & Standards PIP.

Emphasis will be placed on supporting higher code compliance and building the local green workforce through the expansion of locally available high quality trainings. More individual project support will be provided to organizations that promote the understanding of energy efficiency as an essential "first step" in building design, and facility operations.

Further, practical briefings and seminars will be presented to facilitate understanding of energy efficiency Reach Codes as the ability of energy efficiency to yield lower operating costs increases.

B.3) Guiding document(s) support

Sample documents will be available. Supporting documents will include State and local building codes, Standards documentation, Title 24 Compliance Forms, sample building ordinances, resolutions that address energy efficiency, training and technical manuals, energy use calculations and other sustainability materials. All of the above will be available to building professionals and municipal personnel, along with guidance toward use of Best Practices. Partners will coordinate with consultants secured by SCE to provide support in the preparation of guiding documents and templates, especially as it relates to utility energy elements.

B.4) Financing the community

In addition to conducting facility audits, the partnership will support the planning necessary for agencies to fund and implement the energy measures identified. The support includes delivering energy efficiency options in a particularly challenging economic period. Through enhanced public sector incentives, rebates, loans, and tax credits, the partners will work to develop innovative approaches with stakeholders to leverage all available resources in the delivery of EE and DR projects. Donor-funded projects will be given the recognition and credit in alignment with their contributions.

B.5) Peer-to-peer support

The Ventura County Energy Leader Partnership seeks to keep member partners "in the loop" and to share knowledge and Best Practices among themselves and with

other partnerships, through expanded marketing efforts, greater use of email and webbased information. Much of this information is already available from the IOUs and other support groups. The partnership website (www.vcenergy.org) is regularly updated and managed to connect local training efforts to those of the partner utilities. By facilitating peer discussions, professional networks, broadening local and regional communication the message of energy efficiency and sustainability will be supported.

Core Program Element C - Core Program Coordination

C.1) Outreach and education

The partnership will provide energy efficiency information by maintaining a clearinghouse for relevant policy, commission proceedings and practices that support energy efficiency. They will provide technical support to identify candidate buildings and facilities eligible for retrofits, support product application, enhanced incentives levels and energy measurement and savings verification services.

The members will support community educational efforts in such activities as Earth Day events, career days, home tours and demonstrations with the intent to show energy efficiency as the cornerstone and "first step" to improving the built community and showing the way to higher standards for new construction and new purchases. They will operate the Ventura County Energy Resource Center providing technical support, trainings and information services in support of the Strategic Plan and IOU energy savings goals. See the ELPP Master PIP for other outreach efforts described in the Energy Leader Program Model.

C.2) Residential and small business Direct Install

The partnership does not have any plans to conduct Direct Install initiatives for this partnership.

C.3) Third-party program coordination

The partnership will work with local third party contractors who provide services that are not directed to the public sector; but, rather are focused on individual customers or groups of customers, including low income customers. See the ELPP Master PIP.

C.4) Retrofits for just above LIFE-qualified customers

The partnership will work with low-income and non-profit housing developers to integrate energy efficiency for just above LIFE-qualified customers. SCE's Multi-Family Energy Efficiency Program will be leveraged as appropriate.

C.5) Technical assistance for program management, training, audits etc.

The partnership will facilitate training, technical seminars and briefings to building inspectors, plan checkers and elected officials for Title 24 code compliance and other energy and sustainability offerings. The partnership will provide practical support and consultants throughout the region. They will also provide self-audit tools, assistance for residential customers, technical, planning, and implementation assistance. Marketing materials supporting energy efficiency will be made available in strategic locations such as city halls and libraries.

c) <u>Non-incentive services</u>

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core programs. The portfolio will include other SCE services, resources, and assets brought to support the ME&O Plan, including:

- Mobile Energy Unit;
- SCE's Account Manager/Executive support;
- SCE's Customer Technology Application Center (CTAC) training;
- SCE's Speakers Bureau;
- Providing limited giveaways (*for example*, opportunity drawings and free CFLs); and
- Providing marketing, design, and printing of brochures and other collateral materials.

d) Target audience

See discussion in the ELPP Master PIP. The partnership will also target special districts and non profit organizations.

e) Implementation

The Ventura Partnership will support the implementation of the Energy Leader Model as identified in the ELPP Master PIP for each of the core program elements.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) Program Design to Overcome Barriers

Public agencies are the implementers of numerous public sector mandates. While energy efficiency is important, it is not a mandate; therefore, the ability of this partnership to advance energy efficiency by reducing barriers to participation is both cost effective to the public and a wise investment of ratepayers funds precisely directed to retrofits of public buildings, processing plants, health facilities and clinics all in support of public good, safety and welfare. The ratepayers are also taxpayers who benefit from installations of new efficiencies that are in part funded by ratepayers for technical support and incentives which result in verifiable energy savings. Public sector partners are capable partners with the IOUs to implement demand reduction in times of emergency and peak demands. Local governments need longer lead time for planning and implementation of any project, need designated incentives and must abide by contract and labor rules that are not typical to the balance of the commercial sector customers. The partnership provides the vehicle to achieve savings that would otherwise be limited or lost.

Recognizing that retrofitting the huge inventory of existing public buildings is key to achieving energy independence and building a local green economy that can generate jobs and support the Strategic Plan. Public sector buildings and facilities are essential to health and safety, security, education, and civil society. Retrofit projects include specific replicable measures that spread among hundreds of installations/applications in facilities that operate every day, around-the-clock and provide a backbone to private sector, commercial and business applications that may further power the shared political and physical environment.

e) **<u>Quantitative Program Targets</u>**

Program Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Kw, kWh	TBD	TBD	TBD
Number of Workshops	3	6	9
Number of Ordinances, Codes, etc.	1	2	4
# of ME&O Events conducted that target Residential customers	5	9	14

Table 5

6. Other Program Element Attributes

a) **Best Practices**

The partnership will promote the following Best Practices:

- Building economies of scale through the Regional Energy Office
- Bundling retrofits to public sector and non-profits
- Offering enhanced incentives and reduced paperwork managed through the partnership, and
- Jump-starting the "green economy" by coupling ratepayer and taxpayer funds to achieve measurable savings.

b) <u>Innovation</u>

- <u>LED Exit Sign Initiative:</u> This initiative was created as an innovative marketing and outreach approach to result in real savings. LED exit signs are directed to facility operators for installation at their own expense. The partnership proposes to expand this program to both public and non-profit commercial customers within Ventura County, by marketing this program through organizations such as the local Chambers of Commerce, as well as other professional and service groups that request energy efficiency briefings. The LED exit sign is a "calling card" measure that will yield direct savings when tied to the partnership's marketing/information activities.
- <u>Public Swimming Pool Initiative</u>: This initiative is proposed with the goal of improving the efficiency of the many large public swimming pools within Ventura County and encouraging efficient use of natural gas. These pools are operated by cities, school districts, park and recreation districts, and non-profit organizations that all share the same utility partners. The program will emphasize the installation of pool covers and high-efficiency replacement heating boilers and controls to optimize the operation of the boiler. Participants will be directed into the appropriate Express Efficiency rebate, as well as be considered as candidates for on-bill financing, CEC loan program and other forms of finance.

c) Interagency coordination

The partners will collaborate with local governments, cities, county agencies, school districts, water districts, housing authorities, etc. to advance energy efficiency, retrofit projects that lead to energy and demand reduction, carbon reduction and greenhouse gas reductions, and which support growing trends to couple efficiencies and economies to maximize sustainability. The partnership will focus interagency coordination at the local/regional level, working with the Ventura County Air Pollution Control District (ARB). The partnership has begun regular communication with the CEC to participate in possible PIER and other opportunities as they arise and will coordinate with SCE's Codes and Standards Program.

d) Integrated/coordinated Demand Side Management

The IOU's have identified Integrated Demand Side Management (IDSM) as an important priority. As a result they have proposed the establishment of a Statewide Integration Task Force (Task Force). SCE's local government partnerships will monitor the progress of the statewide IDSM efforts and work closely with the Task Force to identify comprehensive integration approaches and to implement best practices.

The partnership will work with local third party contractors who provide services that are not directed to the public sector; but, rather are focused on individual customers or groups of low income customers. See the ELPP Master PIP.

e) Integration across resource types (energy, water, air quality, etc.)

The partnership is working with low-income and non-profit housing developers to integrate energy efficiency in new design. The partnership also works regularly with the largest industry in the county, which includes the farm/agriculture industry. Work is jointly undertaken with public sector offices such as planning departments and water agencies to link mandates with energy efficiency rebates (that is, carrot/stick approach).

f) <u>Pilots</u>

- <u>Mobile Water/Energy Lab Initiative</u>: The community is very interested in conserving all types of its resources. The partnership is working together with the utilities and municipal water agencies to fund and implement a mobile water/energy lab. The goal of this pilot program is to develop an awareness of the strategies and technologies which can result in gas, electric and water savings. This lab will be a showcase for conservation and can be featured at schools, fairs, conventions, seminars and trade shows to name a few. Funding will be secured from other sources for activities not eligible for partnership funding.
- <u>Hot Water Efficiency Initiative</u>: This initiative is a new and significant marketing, outreach and training program that will be directed toward homeowners, property managers, contractors and design professionals. The goal of this pilot program is to develop an awareness of the strategies and technologies which can result in significant reductions in water heating and builds on evolving efforts to connect energy and water efficiency as part of sustainable practices. Ongoing training sessions will focus on the benefits and challenges of the various strategies, and will include product samples and displays. including a variety of handouts, such as utility brochures and locally developed relevant materials. Hands-on demonstrations will be coordinated with participating suppliers, installers and contractors.

g) <u>EM&V</u>

See the ELPP Master PIP.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives:

Table 6

California Long Term Energy Efficiency	Program Approach to Achieving
Strategic Plan (Strategic Plan) Strategy	Strategic Plan Goal
1-1: Develop, adopt and implement model	The Ventura County government is
building energy codes (and/or other green	exploring AB 811 opportunities and may
codes) more stringent than Title 24's	extend it to cities. Its; success will be
requirements, on both a mandatory and	dependent upon statewide economy and
voluntary basis; adopt one or two	related public agency budgets and funding
additional tiers of increasing stringency.	crisis.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Ventura County and various cities in the region already provide "head of the line" service to "green projects"; success for further expedited services will be dependent upon statewide economy and related public agency budgets, including those agencies that rely on full cost recovery and funding crisis.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	The partnership will coordinate with the Ventura County Building & Safety Department to develop new mobile information program using fines recovered from POS litigation. The partnership will cooperate with IOU's to support the roll- out of POS programs in the region.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	The partnership working with the County of Ventura and several cities in the research of AB 811 and other appropriate district/bonds or other mechanisms.
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	The partnership tracks IOU training opportunities, as well as CEC, PIER, and other agencies. The partnership will host and/or participate along with Partner cities in events in the southern California region to advance Commission adopted State EE Plan.
1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program	The partnership will build on existing links to and collaboration with the Ventura County Air Pollution Control District (VCAPCD) to determine where energy efficiency can support reduction in emissions. The partnership will report emission reductions with each public agency and non-profit organization's retrofit project.
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	The partnership will host regular training events for building inspectors; the partnership expected to participate with Ventura County Building Department in joint presentations to further leverage opportunities.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	The partnership links with a local professional network of public agency inspectors and code enforcement offices to inform and invite participation in partnership and IOU organized training programs.
3-1: Adopt specific goals for efficiency of local government buildings, including:	The partnership will meet with Ventura County, nine cities, various school districts and public water districts in the formation and staffing of internal committees to set goals and develop collaborative plans to achieve 5% or greater energy efficiency.
3-2: Require commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings.	The partnership will lend technical support to individual local cities and the county in the development of cost effective new requirements.
3-3: Improve access to financing to support local government EE/DSM, such as lowering interest rate of Energy Commission's loan fund, and utility on-bill financing.	The partnership has been successful in supporting local governments' quest for CEC loans and OBF; VCREA will continue in this effort.
3-4: Explore creation of line item in local governments' budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	The partnership will continue its efforts to encourage actual budget tracking/identification of energy efficiency savings as appropriate to various budgeting processes.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	
4-1: Local governments commit to clean energy/climate change leadership.	The partnership is a unique regional leader as the sole "energy efficiency to renewable energy" public agency. Additional public agencies are expected to participate and lend leadership.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	The partnership's staff/consultants work with the county, various cities and communities, and a number of school and local government committees to advance general plans and leverage other public planning documents that support energy efficiency.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Program Approach to Achieving Strategic Plan Goal
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	The partnership's staff/consultants work with the county, various cities and communities, and a number of school and local government committees to advance sustainability plans and leverage other public planning documents that support energy efficiency and reduce energy demand.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	The partnership lacks direct authority over any public agencies, but will provide the technical support to local governments that consider using "carrot/stick" approaches.

5

1.	Program Name:	Institutional and Government Core Energy Efficiency
		Partnership Program
	Program ID:	SCE-L-005
	Program Type:	Core

2. Projected Program Budget Table

Table 1¹

	Total	Total		Integration	
	Administrativ	Marketing &	Total Direct	Budget	Total Budget
	e Cost	Outreach	Implementatio	Allocated to	By Program
SCE-L-005 Main Program Name / Sub-Program	(Actual)	(Actual)	n (Actual)	other	(Actual)
CROSSCUTTING					
Institutional and Government Core Energy Efficiency Partnership Program	\$ 1,029,885	\$ 22,500	\$ 3,241,615		\$ 4,294,000
California Community Colleges Energy Efficiency Partnership	\$ 1,407,922	\$ 60,000	\$10,573,078		\$12,041,000
California Department of Corrections and Rehabilitation Energy Efficiency Partn	\$ 775,999	\$ 15,000	\$ 2,450,000		\$ 3,241,000
County of Los Angeles Energy Efficiency Partnership	\$ 522,000	\$ 15,000	\$ 2,200,000		\$ 2,737,000
County of Riverside Energy Efficiency Partnership	\$ 838,097	\$ 15,000	\$ 2,873,903		\$ 3,727,000
County of San Bernardino Energy Efficiency Partnership	\$ 503,500	\$ 7,500	\$ 1,675,000		\$ 2,186,000
State of California Energy Efficiency Partnership	\$ 904,000	\$ 65,000	\$ 2,700,000		\$ 3,669,000
UC/CSU Energy Efficiency Partnership	\$ 1,440,999	\$ 60,000	\$12,518,000		\$14,019,000
TOTAL:	\$ 7,422,402	\$ 260,000	\$ 38,231,597	\$-	\$45,914,000

3. Projected Program Gross Impacts Table² – by calendar year

Table 2

		2009-11 EE	2009-11 EE	2009-11 EE
		Program Gross	Program Gross	Program Gross
SCE-L-005	Institutional and Government Core Energy Efficiency Partnership	kWh Savings	kW Savings	Therm Savings
	IGREEN	9,384,376	1,392	-
	California Community Colleges Energy Efficiency Partnership	38,926,292	5,774	-
	California Department of Corrections and Rehabilitation Energy Efficiency	7,188,089	1,066	-
	County of Los Angeles Energy Efficiency Partnership	7,188,096	1,140	-
	County of Riverside Energy Efficiency Partnership	8,042,578	1,425	-
	County of San Bernardino Energy Efficiency Partnership	5,466,335	874	-
	State of California Energy Efficiency Partnership	7,982,776	1,184	-
	UC/CSU Energy Efficiency Partnership	45,516,901	6,705	-
	TOTAL	129,695,443	19,561	-

¹ Definition of Table 1 Column Headings: <u>Total Budget</u> is the sum of all other columns presented here

<u>Total Administrative Cost</u> includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).

<u>Total Direct Implementation</u> – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.

Total Marketing & Outreach includes all media buy costs and labor associated with marketing production. Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.

Total Budget is the sum of all other columns presented here

Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

² For all-electric IOUs, the therm column should include interactive effects.

4. Program Description

a) Describe program

The Institutional and Government Core Energy Efficiency Partnership Program (IGPP) is an umbrella program comprising seven sub-programs. The IGPP incorporates two distinct program types: Statewide institutional programs and county local government programs. During the 2006-2008 program cycle SCE successfully implemented six institutional and government partnerships that will continue, with one additional program added to the IGPP portfolio for 2009 – 2011 implementation.

Statewide institutional partnership programs include partnerships with community colleges, university systems, the California Department of Corrections and Rehabilitation and the California state government. County local government partnership programs include county governments located within SCE's service territory. Distinctions between each of these program types are incorporated here and will be outlined more specifically in the PIPs for the individual partnerships.

Some county local government partners are included in the Institutional and Government Partnership portfolio because the program has a strong emphasis on the implementation of energy efficiency in county municipal facilities. SCE is cognizant of the CPUC objectives to direct local government partnerships to work with communities in developing strategies that align with the California Long Term Energy Efficiency Strategic Plan (Strategic Plan).

At this juncture, some of our county governments have indicated they are not yet ready to fully participate in broader strategic initiatives, including community outreach and training activities. During this program cycle, the teams will strive to build the capacity for developing a community outreach and development plan for these local governments, and address the other objectives as articulated in the Strategic Plan (code compliance, reach codes and other local government strategies).

The Institutional and Government core program includes a funding mechanism that provides additional budget to support new projects and establish new partnerships during the 2009 - 2011 program cycle. This partnership approval will be coordinated Statewide if applicable and will follow the 2009 - 2011 process to develop new partnerships. These reserved funds could also be used for additional projects within the existing partnerships based upon SCE determination of need and optimal cost-effectiveness.

The seven proposed sub-programs are listed in Figure 1 below:

Statewide	Description	Sources of Funding &	
Programs	Description	Assistance	
California	The CCC Energy Efficiency Partnership	Federal grants, state financing,	
Community	has been a successful collaboration	local bonds, IOU incentives,	
Colleges (CCC)	between the California Community	comprehensive technical	
Energy	Colleges (CCC) and the four Investor-	assistance and on-bill financing	

Figure 1: Statewide Institutional Partnership Programs

Statewide Programs	Description	Sources of Funding & Assistance
Efficiency	Owned Utilities (IOUs) The CCC is a	opportunities in accordance with
Partnership	two-vear public institution of higher	Strategic Plan objectives.
1 withership	education that is composed of 109	
	colleges Statewide and organized into 72	
	self-governing Districts.	
California Dept.	The CDCR Energy Efficiency	Federal grants, state financing,
of Corrections	Partnership is a customized Statewide	IOU incentives and on-bill
and	energy efficiency partnership program	financing opportunities in
Rehabilitation	that coordinates Statewide projects with	accordance with Strategic Plan
(CDCR) Energy	CDCR in Adult Institutions, Parole	objectives.
Efficiency	Offices, Community Conservation	
Partnership	Camps, and Juvenile Facilities which	
	encompass an estimated 48 million	
	square feet of occupied space. It	
	accomplishes immediate, long-term peak	
	energy demand savings and establishes a	
	permanent framework for sustainable,	
	long-term comprehensive energy	
	management programs at CDCR	
	institutions served by California's IOU's.	
UC/CSU Energy	The University of California, California	Federal grants, state financing,
Efficiency	State University (UC/CSU), Southern	local bonds, IOU incentives,
Partnership	California Edison (SCE) and the other	comprehensive technical
	Investor-Owned Utilities (IOUs) are	assistance and on-bill financing
	collaborating to continue the UC/CSU	opportunities in accordance with
	Energy Efficiency Partnership to share	Strategic Plan objectives.
	energy efficiency best practices and to	
	implement Statewide energy efficiency	
	projects in 33 UC and CSU campuses for	
	immediate and long-term energy savings	
	and peak demand reduction.	
State of	The State of California and IOUs are	Federal grants, state financing,
California	collaborating to assist the state's 36	local bonds, IOU incentives,
Energy	agencies to reduce the energy they	comprehensive technical
Efficiency	purchase from the grid by 20 percent by	assistance and on-bill financing
Partnership	the year 2015, as required by the	opportunities in accordance with
	governor's Executive Order S-20-04	Strategic Plan objectives.
	(i.e., Green Building Initiative (GBI)).	
	Like all Executive Orders, the GBI is an	
	unfunded mandate that requires State	
	agencies to support the governor's	

Local Government Programs	Description	Sources of Funding & Assistance		
County of Los Angeles Energy Efficiency Partnership	The County of Los Angeles Energy Efficiency Partnership is a continuation of the existing, successful 2004 - 2005, and 2006 - 2008 programs with SCE and SCG. The 2009 - 2011 partnership will build on the lessons learned and will continue to focus on identifying energy efficiency and retro-Commissioning activities in county facilities in support of the recently-adopted County of Los Angeles Energy and Environmental Policy. County partnerships will be looking at a broader scope with potential influence to the community. This will prepare them to transition to the Energy Leader Model.	Federal grants, state financing, local bonds, IOU incentives, comprehensive technical assistance and on-bill financing opportunities in accordance with Strategic Plan objectives.		
County of Riverside Energy Efficiency Partnership	The partnership brings additional resources to expand the county's efforts to enhance electric and gas energy efficiency projects through state-of-the- art new construction and retrofits of existing buildings. This partnership integrates with the goals, objectives, and strategies articulated in the Strategic Plan. County partnerships will be looking at a broader scope with potential influence to the community. This will prepare them to transition to the Energy Leader Model.	Federal grants, state financing, local bonds, IOU incentives, comprehensive technical assistance and on-bill financing opportunities in accordance with Strategic Plan objectives.		
County of San Bernardino Energy Efficiency Partnership	The County of San Bernardino Energy Efficiency Partnership is designed to achieve immediate and long term energy saving and demand reduction. The program will focus on delivering cost effective energy efficiency projects through state-of-the-art new construction and retrofits of existing buildings which	State financing, IOU incentives and on-bill financing opportunities in accordance with Strategic Plan objectives.		

Figure 2: County Local Government Partnership Programs

Local Government Programs	Description	Sources of Funding & Assistance
	will raise the awareness about the	
	benefits of energy efficiency to the	
	county.	
	County partnerships will be looking at a	
	broader scope with potential influence to	
	the community. This will prepare them	
	to transition to the Energy Leader Model.	

Program Elements

The following four core program elements are common to all Institutional and Government Partnership programs:

- Institutional and Government Facilities;
- Strategic Plan Support;
- Core Program Coordination; and
- Funding Mechanism for New Partnerships.

Core program elements and sub-elements common to all partnerships are presented in the Figure 3 below, and described in more detail in the sections that follow:

Figure 3: List of Program Elements, sub-programs and Types

Core Program		Sub-program Elements	Type of
Elements			Program
			Element
1 – Institutional and	1a	Energy Efficiency Retrofits	Resource
Government Facilities*		Retro-Commissioning (RCx) &	Resource
	1b	Monitoring Based Commissioning	
		(MBCx)	
	1c	New Construction	Resource
	1.4	Technical assistance audits,	Resource
	10	engineering, project reviews, etc.	
	1e	On-Bill Financing	Non-Resource
2 – Strategic Plan	2a	Code Compliance Support	Non-Resource
Support	2b	Reach Code Support	Non-Resource
	2c	Guiding Document(s) Support	Non-Resource
	2d	Funding Sources	Non-Resource
	2e	Peer-to-Peer Support	Non-Resource
3 – Core Program	3a	Outreach & Education	Non-Resource
Coordination	<u>3b</u>	Demand Response Coordination	Demand

			Response
	3c	Third Party Program Coordination	Non-Resource
	3d	Emerging Technologies	Non-Resource
		Technical support for program	Non-Resource
	36	management, training, etc.	
4 – Institutional and		Funding Mechanism for additional	Resource
Government Resource	4	projects and new partnerships mid	
		cycle	

Note*: Institutional and Government Facilities

A common program objective is to reduce energy usage through facility and equipment improvements, shared best practices, education and training. The partnership model is intended to raise awareness, build resources and skills, and deliver energy services. To reduce peak demand and create energy savings in existing facilities, Institutional and Government partnerships work with partnering agency staff to develop a pool of retrofit projects for implementation contingent upon the availability of funds. Program activities to increase the efficiency of institutional and government facilities are described in Figure 4 below.

Figure 4: Government Facilities sub-program Elements, Descriptions and Funding Sources

Sub-program	Description	Source of Funding	
Elements		and Assistance	
1a-Energy	Achieve energy & demand savings by identifying	IOU provides	
Efficiency	and implementing energy efficiency opportunities	enhanced incentives	
Retrofits	in new & existing facilities.	& technical	
		assistance.	
1b-RCx &	Achieve energy & demand savings by retro-	IOU provides	
MBCx	commissioning existing facilities.	enhanced incentives	
		& technical	
		assistance.	
1c-New	Achieve energy & demand savings by utilizing	IOU provides	
Construction	the utilities internal new construction services	enhanced incentives	
	group to assist in the design and development of	& technical	
	building construction above Title 24.	assistance.	
1d-Engineering	Technical assistance audits, engineering, project	IOU provides	
Support	reviews, etc.	technical assistance	
		and engineering	
		support.	

1e-On-Bill	Zero to low-interest loans for energy efficiency	SCE's on-bill
Financing projects that are repaid through payments assessed and collected through normal monthly energy bills (see below note)		financing will be supplemented with information about
		other potential sources of low cost financing, such as CEC.

Figure 4.1a Energy Efficiency Retrofit

This energy efficiency element may include: 1) lighting retrofit projects such as complete internal and external lighting retrofits (T5 technology, LED applications, newer 28 watt T8's, and in some cases replacing magnetic ballasts and T12 lamps), building-wide lighting controls, and sensors; 2) replacement of motors, variable frequency drives, energy management system upgrades; and, 3) HVAC upgrades/replacements including; chiller replacements and central plant upgrades. The percentages of lighting/HVAC/other measures are provided in the sub-programs. The partnerships will investigate opportunities to include energy efficiency and demand response measures in all major new construction and renovation projects, special repair projects, and standard scheduled maintenance operations.

To reduce peak demand and create energy savings in the existing facilities of the institutional partners, the partnerships will work with the facilities staff to identify facilities and develop a pool of retrofit projects for implementation. The scope of the projects will be contingent on the availability of funds; however, the partnerships will work to ensure that projects are lined-up in the event that additional funding is securable.

Each of the partnerships will have methodologies for identifying projects that work within their respective organizational structures. The identification strategy will involve the partnership teams preparing lists of potential projects and the institutional customers matching this list with available budgets and existing comprehensive modernization plans. The Partnership will also ensure a balanced and comprehensive portfolio, offering a mix of strategies and measures to be implemented. Identification of potential sites includes utilities providing lists of service accounts with their annual consumption and peak demand values and consultants visiting selected sites to evaluate the efficiency upgrade potential of those sites.

In some cases, the U.S. Department of Energy's Portfolio Manager web site will be used to evaluate ENERGYSTAR scores for buildings. (This evaluation system is only applicable to some of the building types in these partnerships.) High-scoring buildings (above 75) basically meet the requirements of Executive Order S-20-04. Lower-scoring buildings will be higher potential candidates for either retrofit projects or retro commissioning.

Many partnerships will also pursue opportunities to facilitate the installation of distributed generation and renewable energy. Some have installed solar power and/or

cogeneration, and at least one is actively looking for a possible site to install a fuel cell. When applicable, the partnerships may assist in these ongoing operations by providing incentives and technical aid to support of energy efficiency elements of those activities.

Some partners are also participating in demand response and peak load management programs. As with renewable energy, the partnerships will enable greater visibility of the available programs in these areas that could benefit both the utilities and the customers.

Figure 4.1b Retro-Commissioning and (RCx) Monitoring-Based Commissioning (MBCx)

The RCx and MBCx projects will serve as opportunities to demonstrate a cost-effective approach to optimizing facility operations, saving both electric and gas energy, reducing operating costs while improving occupancy comfort, and improving environmental quality and reducing greenhouse gas emissions. Where applicable and cost effective, rooftop units tune up may also be include in the process. The outcome of the projects will serve as an example to other internal departments within each customer organization, to other government agencies, and to private sector entities to encourage them to retrocommission their facilities.

Activities for this element may include but are not limited to the following:

- Selecting candidate buildings for RCx/MBCx based on results of benchmarking efforts or participation in the SCE retro-commissioning program.
- Developing RCx/MBCx plans for each candidate building.
- Investigating opportunities through technical assessments of major building systems (lighting, HVAC, etc.).
- Conducting pre-functional tests of building systems.
- Identifying and correcting minor no-cost/low-cost deficiencies as well as capital improvement measures for future planning that may further improve system operation.
- Utilizing analysis/modeling/simulation software to model building operation and determine scenarios for optimum performance.
- Conducting functional performance tests to ensure proper operation of the optimized systems.
- Developing training manuals and monitoring capabilities (if applicable) to ensure persistence of energy savings.
- Developing plans to comply with the governor's executive order and/or local government directives for future benchmarking and RCx activities.

Figure 4.1c New Construction and Design Assistance

New Construction is a significant opportunity to achieve a breakthrough in energy savings for institutional and government partners. The partnerships will endeavor to influence implementation of energy efficiency measures that exceeds current Title 24 code in all newly constructed buildings. Although some of these institutional and government entities have overarching directives that strive for laudable energy efficiency goals, in practice, these goals are not always implemented. Budget, competing pressures
and other constraints, as well as a lack of awareness or knowledge may inhibit the realization of these goals in many new construction projects.

The 2009 – 2011 partnership programs will establish a process to integrate the new construction design assistance program under the partnership umbrella. This integration will provide a coordinated project management function with partnership management team oversight. Existing new construction services resource will be utilized to support the new construction projects while using the Saving-By-Design program guidelines. Similar to SBD, the partnership programs will help the partners, their architects, engineers, specialized consultants, and other key actors throughout their organization to achieve optimum energy and resource efficiency in their design projects through offerings such as multi-level design and technical and financial assistance. In addition, the partnership will consider additional incentive dollars to implement those measures that demonstrate persistent energy savings but may be value-engineered out of the project scope due to budget and time constraints.

The collaborated effort will ensure that all applicable new construction projects will have the opportunity to participate in the programs, allow for early and aggressive intervention and continued project monitoring will minimize lost opportunities that may result when a building's energy performance is not a primary design consideration. Energy efficiency will be promoted in new construction or major remodel/renovation projects through three complementary and coordinated components – Whole Building Approach (Integrated Design), Systems Approach, and the Simplified Approach for Small Projects.

By helping our partners to design and build more energy efficiency, the collaborative effort will support the Strategic Plan goals of zero net energy for commercial buildings by 2030.

Figure 4.1d Engineering Technical Support

Technical Support is provided to help customers identify projects for potential implementation and will coordinate with Demand Response and other demand side management programs for an integrated approach. This support may include:

- Training and education;
- Energy audits;
- Technical assistance;
- Design assistance; and
- Due diligence/project review.

Figure 4.1e On-Bill Financing

The Financial Solutions program offered by SCE is a local, non-resource program that will be coordinated closely with the other IOUs, financial institutions, and both the CPUC and CEC. The program is local because the actual offerings will vary by service area depending on local financial institutions and customer needs. On-bill financing is a non-resource element within the Financial Solutions program and will offer zero-interest financing for qualifying energy efficiency installations of lighting, refrigeration, and air

conditioning measures for core SCE Market Segments, such as the Commercial and Industrial Market Segments and for government and institutional partnership programs.

Many of the government and institutions are unable to incorporate energy efficiency designs or retrofits due to the lack of capital funds and complex procurement and funding procedures after the initial budget has been approved. The OBF element can be an effective tool that will increase participation and minimize lost opportunities For more information see Financial Solutions PIP.

2 – Strategic Plan Support

The IGPP supports the Strategic Plan through promotion of code compliance, reach codes, sustainability policy development, project financing and by providing opportunities for partners to lead by example. Under State law, local governments, through their building permit and inspection processes, are responsible for enforcement of Titles 20 and 24. The partnerships will work together to develop a process for counties to identify and increase code compliance. Through the IGPP engagement channel, the Codes and Standards Program and the WE&T Synergies Programs can support local governments' Title 24 enforcement activities by providing energy code training for plan checkers, inspectors, and the trades. Local governments can adopt building standards more stringent than State and Federal mandates and implement reach codes and systems of voluntary rewards and incentives. IGPP will provide templates and tools for development of institution and government energy and sustainability plans, communicate options for financing projects and create forums for partners to share lessons learned. IGPP Strategic Plan support activities are summarized in Figure 5:

Sub-program	Description	Source of Funding
Elements		and Assistance
2a-Code	Support segment customers with project review	Technical support
Compliance	that will lead to energy code compliance. Where	through project due
Support	applicable for county governments, will support	diligence review
	code compliance training to build staff	and code
	knowledge and code compliance through the	compliance training
	construction cycle.	support
2b- Reach	Support segment customers with adoption of	Technical
Code Support	policies that will implement projects above Title	assistance and
	24 requirements.	recommendation
		efforts.
2c-Guiding	Provide technical support and recommendations	Technical support
Document(s)	for development of templates and tools to support	to develop
Support	partnerships through their energy policies and	guidelines for
	sustainable efforts that will align with the	Energy Action Plan
	Strategic Plan.	template
2d-Project	Federal grants, state financing, local bonds, IOU	Project
Financing, and	incentives, comprehensive technical assistance	management

Figure 5: Strategic Plan Support sub-program Elements, Descriptions and Funding Sources

Other Funding Sources	and on-bill financing opportunities in accordance with Strategic Plan objectives.	support to identify potential funding
		sources.
2e-Peer-to-Peer	Partners present energy efficiency experience at	Outreach efforts to
Support	conferences and share best practices to	collaborate and
	communicate information on a peer-to-peer basis.	share best practices
		in appropriate
		venues (e.g.
		industry
		conferences)

Figure 5.2a Code Compliance Support

Due diligence reviews may be conducted that will ensure code compliance and the potential of meeting or exceeding code requirement by desired levels. Integration of the New Construction element into partnership process will ensure early notification, involvement and review of design and support plan check processes to ensure recommendations continue to be intact through the design, approval and construction process. Typically, when construction issues arise, such as limited construction funds, designed energy efficiency elements will be valued engineered out of the project. However, with an active management approach, the partnership will minimize the value engineering activities and will achieve more projects that exceed code.

The partnership will work together to develop a process for counties to identify and increase code compliance work. Codes and Standards and the WE&T Synergies Program support and leverage local governments' Title 24 enforcement activities with energy code training for plan checkers, inspectors, and the trades.

Figure 5.2b Reach Code Support

The partnership model is a good approach for reach code support. Lost opportunities can be minimized by having an active management team that will work with each partner organization to identify new construction and modernization projects. With partnership involvement through technical support and financial incentives, new construction designs will be encouraged to exceed code and retrofit projects will meet and/or exceed code.

To the extent possible, the partnership will provide technical support and training opportunities to partners' organizations or local government jurisdictions in their efforts to develop policies and/or green ordinances that exceed current codes.

Figure 5.2c Guiding Document Support

Guiding document support will be provided by IOUs to create templates and tools for development of energy and sustainability plans. The templates will help the government and institutional partners navigate through the vast body of information and the complex issues related to energy and environmental policies. The guiding document will enable partners to use this tool for guiding future decision making process and will bring about the desired adoption of higher standards for energy efficiency and other sustainable activities that will align with the Strategic Plan.

Figure 5.2d Funding Sources

Partnership programs will communicate options for accessing available funds for implementing energy saving projects, such as: federal grants, state financing, local bonds, IOU incentives and on-bill financing opportunities in accordance with Strategic Plan objectives. The partnership team and participating partner organization may explore financing alternatives such as rebates and incentives, on-bill financing, CEC funding, AB 811 funding mechanism, application of existing budget, and Energy \$Mart financing to maximize the state or county's investment in energy efficiency.

Often the strengths of the customer organizations are leveraged in order to provide various in-kind contributions that benefit the entire program. These contributions include, but are not limited to, project management, facility personnel, marketing, site location venues and administrative time.

Figure 5.2e Peer-to-Peer Support

Peer-to-peer support is considered a key part of SCE's partnership strategy. Forums will be created for partners to share best practices and to support each other. Institutional and Government partners utilize the conference venue and partnership workshops to present lessons learned and share success stories to expand outreach and encourage other segment customers to implement these various strategies.

Core Program Elements		Sub-program Elements	Type of Program Element
3 – Core Program	3a	Outreach & Education	Non-Resource
Coordination	3b	Integrated Demand-Side Management (IDSM)	Reduce peak electric demands by enrolling non-critical municipal facilities (i.e., those not needed for emergency services &/or that will not incur incremental risks to public health & safety or damage to systems & operations) in integrated demand-side management programs (Distributed Generation, California Solar Initiative and Demand Response)
	3c	Third Party Program Coordination	Non-Resource
3	3d	Emerging Technologies	Non-Resource
	3e	Technical assistance for program management, training, audits, etc.	Non-Resource

Figure 6 - Core Program Coordination sub-program Elements and Program Types

Figure 6.3a Outreach, Education and Training Element

Workshops will be coordinated and delivered in conjunction with other partnership efforts. In addition, the partnership team will coordinate with existing training centers such as SCE's Customer Technology Application Center (CTAC) and Agricultural Technology Application Center (AgTAC), Southern California Gas's Energy Resource Center, and PG&E's Pacific Energy Center to deliver various technical training courses to improve the skills and knowledge of facility staff.

The education and training activities will include workshops for facility managers. They will receive training on best practices for implementation of energy efficiency retrofit projects, building operations, and new technologies that may be applicable to the effective completion of their daily tasks. Participants will have an opportunity to explore the utility programs currently available. In addition, the partnerships will provide opportunities for participants to share best practices with other facility managers.

The training of multiple groups and types of personnel within the institutional partners will help ensure partnership coordination of the project implementation process and coordination and cooperation of all key actors from all departments within the organization.

This will:

- Increase the transfer of DSM knowledge and implementation experience;
- Increase awareness and knowledge of the benefits of energy efficiency initiatives;
- Integrate efforts between partnership activities and utility programs offerings;
- Reduce the number of projects that are implemented without attention to energy efficiency;
- Increase the number of institutional departments and/or local government agencies that use energy efficiency as a key decision-making parameter; and
- Increase communication and build peer-to-peer relationships among various key personnel in the facilities management groups of many departments, agencies, and organizations.

Figure 6.3b Integrated Demand Side Management

IOU energy efficiency and demand response program staff will collaborate with partners to conduct comprehensive audits and identify energy efficiency measures and demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid duplication and to collaborate on incentive offerings which will all minimize customer interruptions.

The partners will identify facilities or an aggregation of facilities under a service account in order to establish opportunities for demand response participation that will meet the program eligibility of a 30 kW minimum DR opportunity per service account.

The partnership will also assist, where applicable, facility management staff that are interested in solar technology and will provide recommendations applicable to facility

operations through energy audits to improve its facilities with less costly EE/DR measures before implementing more costly solar technologies.

Figure 6.3c Third Party Program Coordination

Management team will discuss all offerings and ensure communication of third party programs. If there are third party programs that have unique features currently not offered by the partnerships, the management team will review the program to determine whether the partnerships can benefit. After the offering has been approved by the partnership and deemed beneficial, the team will coordinate the tasks to be completed by the partners to achieve energy savings and demand reduction. The third party program will then be utilized to augment the services and these activities will be communicated through the partnership team.

Figure 6.3d Emerging Technologies Element

Institutional and government customers provide venues for the piloting of new technologies and may test technologies that potentially could be scaled up across the state. The Codes and Standards Program considers partnerships a high priority in the selection of test sites and also links with CEC's PIER program. Codes and Standards and the WE&T Synergies Program will support local governments' Title 24 enforcement activities with energy code training for plan checkers, inspectors, and the trades.

Furthermore, some of the customers have expressed interested in serving as beta test sites for new technologies. Through the partnerships, the utilities will be able to work handin-hand with the Energy Commission researchers and the institutional and government partners to develop pilot projects to demonstrate the technologies. These partnerships may well become key avenues by which new products or technologies can be installed, tested, and evaluated.

Figure 6.3e Technical Support

Subcontractor Activities

Subcontractors may be used to assist in program administration and management, and will provide professional and technical support for implementing each of the program elements. Where applicable, a program consultant will assist in day-to-day coordination and communication among the statewide partners as follows:

- Provide staffing to the management team and program specific subcommittees and implementation teams;
- Coordinate, schedule, and document results and action items from program team meetings;
- Prepare and conduct formal presentations and participate in conferences as required by the management team;
- Develop and maintain a project tracking and reporting database system;
- Assist the IOUs and partners in partnership reporting;
- Assist in the development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and preparation of minutes for the Training and Education component; and

• Miscellaneous professional and technical assistance as requested by the IOUs.

Figure 7 – Funding Mechanism for New Partnerships Programs, Sub-program Elements and Types

Core Program Elements	Sub-program Elements		Type of Program Element
4 – Institutional and Government Resource	4	Funding Mechanism for additional projects and new partnerships mid cycle	Resource

This funding mechanism is designed to establish new partnerships. In order to create a new partnership, the I&G customer would develop an abstract similar to those used in the initial program planning for the 2009 - 2011 program cycle. If the partnership is with SCE only, the abstract would be submitted to the SCE program manager, either directly or through the customer's SCE customer representative. The program managers would then review the abstract and ascertain its viability and costeffectiveness, as well as the availability of remaining funds. If the proposed partnership appears viable and there are sufficient funds remaining, the program manager will work with the potential partner to develop a program implementation plan and obtain appropriate levels of approvals before implementation.

If the partnership is Statewide, it will include California's other IOUs (Pacific Gas and Electric, Southern California Gas, and/or San Diego Gas and Electric). The development will be coordinated with the participating IOUs to ensure consistency in program development, program implementation plan, incentive rates, and management and reporting. Partnership approval will be coordinated statewide and will follow the steps as noted above.

The reserve funds could also be used for additional projects within the existing partnerships based upon SCE's determination of need and optimal cost-effectiveness.

b) List measures

The Institutional and Government Partnership program described herein is an umbrella program comprises multiple statewide institutional and county local government programs. Measure technologies and corresponding incentive levels may vary depending upon partnership specific requirements. The following table provides a general description of program measures and incentive levels:

Measure Name	Rebate to end use
	customer
	or its assignee (\$/unit)
Customized - Indoor Lighting	\$0.1524
Customized - Indoor Lighting Controls & EMS	\$0.1524
Customized - Outdoor Lighting	\$0.1524
Customized - Outdoor Lighting Controls	\$0.1524
Customized – Motors	\$0.1824
Customized – Variable Frequency Drives (VFD)	\$0.1824
Customized - HVAC EMS	\$0.1824
Customized – Chillers	\$0.24
Customized – HVAC	\$0.24
RCx/MBCx	\$0.24
Overall Building Performance	\$0.10 above SBD core
System Approach - Light Power Density	\$0.10 above SBD core
System Approach – Chillers	\$0.10 above SBD core
System Approach – Daylighting	\$0.10 above SBD core
System Approach – HVAC Energy Reduction	\$0.10 above SBD core

Figure 8: List of I&G Measures

Unless stated otherwise in the Individual Partnership sub-program PIPs, the measure mix will be Lighting (60%), HVAC (20%) and other measures (20%).

c) <u>Non-incentive Customer Services</u>

The Institutional and Government partnerships engage in activities that may not be directly or immediately linked to reduction of energy, but are critical to the advancement and success of partnerships. These activities may include non-energy tasks such as:

- 1. Technical assistance including due diligence/project review for retrofit and retro-commissioning (RCx)/monitoring-based commissioning (MBCx) project development;
- 2. Design assistance for new construction;
- 3. Energy audits; and
- 4. Training, Education and Outreach conduct technology workshops, presentations at industry and association conferences, attendance at conferences, meetings, community fairs and outreach events, and distribution of educational materials.

Other non-incentive customer services may include:

- Strategic Plan support (meetings, policy, and coordination with state agencies);
- Quality Assurance and Evaluation support (codes & standards, project evaluation and engineering support);
- Funding Sources (investigating feasibility of, and preparing documents for applications for state or government energy grants); and
- Program Administration and Management support (preparing tracking spreadsheets, database inputs, and project agreement packages).

5. Program Rationale and Expected Outcome

SCE and the other IOUs face the challenge of implementing cost effective energy efficiency programs that will result in both immediate, long-term peak energy and demand savings in their service territories. The institutional and government customers consume vast quantities of energy and make up a large portion of the both the electric and natural gas load in the State of California. These entities are large, complex organizations with a broad set of goals, stakeholders, processes and constituencies. They serve and/or support various segments of the market. They are diverse from a geographic, climate, and operational needs standpoint.

But with size and diversity comes a considerable opportunity to save energy use and cost on a scale that is meaningful to the IOUs and to California. The Institutional Energy Efficiency Partnership Program is designed to meet these challenges.

SCE's objectives for the Institutional partnership are to:

- Influence energy decisions by demonstrating the successful implementation of a comprehensive approach to achieving energy management goals. This approach includes support in assessing and setting performance goals, developing an action plan, implementing projects to achieve energy savings and verifiable results.
- Deliver immediate and long term energy saving and demand reduction results through integrated partnership activities. These activities will utilize Energy Efficiency (EE), Demand Response (DR), California Solar Initiative (CSI), Self Generation Incentive Programs (SGIP) as applicable to the partner.
- Facilitate enhanced compliance with codes and standards (AB 32, LEED, Exceeding Title 24 standards, etc.).
- Reduce greenhouse gas emissions in California through a reduction in electricity and gas consumption of the partnership programs. SCE will calculate the reduction of CO2 reduction in metric tons by determining the annual life-cycle energy savings in accordance with California Assembly Bill 32 (AB 32).
- Leverage partners' internal communication structure to bring IDSM information to internal departments more effectively.
- Direct a stronger focus on helping partners lead by example through addressing energy efficiency opportunities in their own facilities. Specifically, the partnerships will provide (1) technical assistance in identifying energy efficiency retrofit and retro-commissioning (RCx) projects, (2) financial assistance to help

overcome barriers to implementation of these projects, and (3) combined EE/DR audits.

Expected Outcomes

The partnerships will deliver energy savings and peak demand reduction in the facilities of the partner customers and other government agencies. These energy savings will be accomplished by evaluating the energy efficiency potential of existing buildings and then implementing retrofits and/or retro commissioning of those buildings. Additional savings will be achieved by working in the early stages of new construction projects to assure the most energy-efficient design acceptable to the customer (and to increase the desire to make highly energy-efficient designs "acceptable"). Customers that are eligible for demand response programs will be directed to those resources established within SCE.

Other program results will:

- Encourage executive management support for energy efficiency. Create opportunities to save energy, reduce operating costs, and improve occupancy comfort.
- Demonstrate cost-effective implementation of energy projects by supplementing the customers' project funding with the incentives offered by the utilities.
- Evaluate the value of energy efficiency activities and the benefits associated with retro-commissioning.
- Exhibit the potential for future public/private partnership efforts.
- Construct long-term plan for retrofit and retro-commissioning projects to be implemented throughout the program cycle. Plan will include; a comprehensive audit of customer facilities, identification of eligible projects and implementation.
- Share best practices and achievements from partnership activities in public forums such as CPUC Workshops, Industry Events, and peer to peer interactions.
- Increase awareness of energy efficiency among elected leaders, agency managers, operating staff, and the general public.

a) **<u>Quantitative Baseline and Market Transformation Information</u>**

Market Transformation (MT) metrics proposed in Tables 3 and 4 are preliminary. The proposed metrics are meant to initiate a collaborative effort to elaborate meaningful metrics that will provide overall indicators of how markets as a whole are evolving. MT metrics should neither be used for short-term analyses nor for specific program analyses; rather, should focus on broad market segments.

Market transformation is embraced as an ideal end state resulting from the collective efforts of the energy efficiency field, but differing understandings of both the MT process and the successful end state have not yet converged. The CPUC defines the end state of MT as "Long-lasting sustainable changes in the structure or functioning of a market achieved by reducing barriers to the adoption of energy efficiency measures to the point where further publicly-funded intervention is no longer appropriate in that specific market."³ The Strategic Plan recognizes that process of

³ California Public Utilities Commission Decision, D.98-04-063, Appendix A.

transformation is harder to define than its end state, and that new programs are needed to support the continuous transformation of markets around successive generations of new technologies⁴.

Market transformation programs differ from resource acquisition programs on 1) objectives, 2) geographical and 3) temporal dimensions, 4) baselines, 5) performance metrics, 6) program delivery mechanisms, 7) target populations, 8) attribution of causal relationships, and 9) market structures⁵. Markets are social institutions⁶, and transformation requires the coordinated effort of many stakeholders at the national level, directed to not immediate energy savings but rather to intermediary steps such as changing behavior, attitudes, and market supply chains⁷ as well as changes to codes and standards. Resource acquisition programs rely upon the use of financial incentives, but concerns have been raised that these incentives distort true market price signals and may directly counter market transformation progress⁸. According to York⁹, "Market transformation is not likely to be achieved without significant, permanent increases in energy prices. From an economic perspective, there are 3 ways to achieve market transformation: (1) fundamental changes in behavior, (2) provide proper price signals, and (3) permanent subsidy."

The question of what constitutes successful transformation is controversial because of a Catch-22: Market transformation is deemed successful when the changed market is self-sustaining, but that determination cannot be made until after program interventions are ended. Often, however, the need for immediate energy and demand savings or immediate carbon-emissions reductions will mean that program interventions may need to continue, which would interfere with the evaluation of whether MT is self-sustaining. Market transformation success has also been defined in terms of higher sales of efficient measures than would have otherwise occurred against a baseline absent of program interventions. The real world, however, provides no such control condition. Evaluators must estimate these baselines from quantitative factors such as past market sales that may be sparse and/or inaccurate - particularly for new products. Evaluations must also defer to expert judgments on what these baselines may have been as well as on the degree of successful market

⁶ Blumstein, C., Goldstone, S., & Lutzenhiser, L. (2001) "From technology transfer to market transformation". Proceedings of the European Council for an Energy Efficient Economy Summer Study. Available at http://www.eceee.org/conference_proceedings/eceee/2001/Panel_2/p2_7/Paper/

⁴ California Public Utilities Commission (2008) *California Long Term Energy Efficiency Strategic Plan*, p. 5. Available at http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf

⁵ Peloza, J., and York, D. (1999). "Market Transformation: A Guide for Program Developers." Energy Center of Wisconsin. Available at: http://www.ecw.org/ecwresults/189-1.pdf

⁷ Sebold, F. D., Fields, A., Skumatz, L., Feldman, S., Goldberg, M., Keating, K., Peters, J. (2001) *A Framework for Planning and Assessing Publicly Funded Energy Efficiency*. p. 6-4. Available at www.calmac.org.

⁸ Gibbs, M., and Townsend, J. (2000). The Role of Rebates in Market Transformation: Friend or Foe. In *Proceedings from 2000 Summer Study on Energy Efficiency in Buildings*.

⁹ York, D., (1999). "A Discussion and Critique of Market Transformation", Energy Center of Wisconsin. Available at http://www.ecw.org/ecwresults/186-1.pdf.

transformation¹⁰. Due to the subjective nature of these judgments, it is imperative that baselines as well as milestone MT targets be determined and agreed upon through collaborative discussion by all stakeholders, and these targets may need periodic revision as deemed necessary by changing context.

Market transformation draws heavily upon diffusion of innovation theory¹¹, with the state of a market usually characterized by adoption rate plotted against time on the well-known S-shaped diffusion curve. In practice, however, the diffusion curve of products may span decades¹². Market share tracking studies conducted 3, 5 or even 10 years after the start of an MT program may reveal only small market transformation effects¹³. The ability to make causal connections between these market transformation effects and any particular program's activities fades with time, as markets continually change and other influences come into play.

These challenges mentioned above are in reference to programs that were specifically designed to achieve market transformation; and these challenges are only compounded for programs that were primarily designed to achieve energy and demand savings. However, since the inception of market transformation programs almost two decades ago, many lessons have been learned about what the characteristics of successful MT programs are. First and foremost, they need to be designed specifically to address market transformation. "The main reason that (most) programs do not accomplish lasting market effects is because they are not designed specifically to address this goal (often because of regulatory policy directions given to program designers.)¹⁴" The Strategic Plan recognizes that regulatory policies are not yet in place to support the success of market transformation efforts¹⁵, but also reflects the CPUC's directive to design energy efficiency programs that can lay the groundwork for either market transformation success or for codes and standards changes.

Above all else, the hallmark of a successful market transformation program is in the coordination of efforts across many stakeholders. The most successful MT programs have involved multiple organizations, providing overlapping market interventions¹⁶. The Strategic Plan calls for coordination and collaboration throughout, and in that spirit the utilities look forward to working with the CPUC and all stakeholders to help achieve market transformation while meeting all the immediate energy, demand, and environmental needs. Drawing upon lessons learned from past MT efforts, the Energy

¹⁰ Nadel, S., Thorne, J., Sachs, H., Prindle, B., and Elliot, R.N. (2003). "Market Transformation: Substantial Progress from a Decade of Work." American Council for an Energy-Efficient Economy, Report Number A036. Available at: http://www.aceee.org/pubs/a036full.pdf

¹¹ Rogers (1995) Diffusion of Innovations, 5th Ed.

¹² Example in bottom chart of this graphic from NYTimes:

http://www.nytimes.com/imagepages/2008/02/10/opinion/10op.graphic.ready.html

¹³ Sebold et al (2001) p. 6-5,

¹⁴ Peters, J.S., Mast, B., Ignelzi, P., Megdal, L.M. (1998). *Market Effects Summary Study Final Report: Volume 1.* "Available at http://calmac.org/publications/19981215CAD0001ME.PDF.

¹⁵ CPUC (2008) Strategic Plan, p. 5.

¹⁶ Nadel, Thorne, Saches, Prindle & Elliot (2003).

Center of Wisconsin's guide for MT program developers¹⁷ suggests that the first step is not to set end-point definitions, progress metrics or goals. Rather, the first steps include forming a collaborative of key participants. As the Strategic Plan suggests, these may include municipal utilities, local governments, industry and business leaders, and consumers. Then, with the collective expertise of the collaborative, we can define markets, characterize markets, measure baselines with better access to historical data, and define objectives, design strategies and tactics, implement and then evaluate programs. The collaborative will also provide insights that will set our collective expectations for the size of market effects we can expect, relative to the amount of resources we can devote to MT. No one organization in the collaborative will have all the requisite information and expertise for this huge effort. This truly needs to be a collaborative approach from the start.

The metrics and baselines described below in Tables 3 and 4 are presented for the purposes of starting the much-needed discussion between all key participants. These are suggestions, intended to allow key participants to pilot-test processes for establishing baseline metrics, tracking market transformation progress, and for refining evaluation tools. Early trial of these evaluation metrics will reveal any gaps in data tracking so that we may refine our processes before full-scale market transformation evaluations take place.

The set of metrics we selected is intentionally a small set, for several reasons. First, as mentioned, the full set of metrics and baselines need to be selected by key participants. Second, we anticipate that market share data for many mid- and low-impact measures will be too sparse to show MT effects and not cost-effective to analyze. Third, we selected core measures and metrics that would both be indicative of overall portfolio efforts. These measures are also likely to be offered on a broad level by other utilities, providing a greater base of sales and customer data that could be analyzed for far-reaching MT effects.

Therefore, for the Institutional and Government Partnerships, the utilities recommend development of a baseline, and tracking the number of cities, counties and government institutions that have plans for written energy efficiency provisions. Such a metric relates directly to the Strategic Plan (Goal 12.3.4) in terms of measuring progress towards 50% plans for sustainability.

With this discussion in mind, IOUs propose the following metrics for this sector:

Table 5	
Baseline Metric	
	Metric A
Energy Efficiency Action Plans	Baseline inventory of cities, counties and government institutions within the IOU territory with that have adopted Energy
	terniory with that have adopted Ellergy

Table 3

¹⁷ Peloza & York, (1999).

Efficiency Action Plans

b) Market Transformation Information

As stated above, market transformation draws heavily upon diffusion of innovation theory, with the state of a market characterized by adoption rate plotted against time on the well-known S-shaped diffusion curve. In practice, however, the diffusion curve of products may span decades. Market share tracking studies conducted 3, 5 or even 10 years after the start of an MT program may reveal only small market transformation effects. Therefore it is problematic, if not impractical, to offer internal annual milestones towards market transformation sectors and specific program activities.

As a consequence, it is not appropriate to offer more than broad and general projections. Any targets provided in the following table are nothing more than best guesstimates, and are subject to the effects of many factors and market forces outside the control of program implementers.

	Internal Market Transformation Planning Estimates			
Market Sector and				
Segment	2009	2010	2011	
Baseline inventory of				
cities, counties and				
government				
institutions within the	Improvement over	Improvement over	Improvement over	
IOU territory with that	baseline, over time	baseline, over time	baseline, over time	
have adopted Energy				
Efficiency Action				
Plans				

Table 4

c) Program Design to Overcome Barriers

The institutional and government partnerships are large and complex organizations. As such, they represent millions of square feet of building space and millions of potential kilowatt-hours of energy savings.

The complexity of these institutions creates barriers to effective efficiency improvements, due to internal processes, regulations, funding and bureaucracy. The partnerships have worked diligently to overcome these barriers, though many still exist. Partnership teams have been established and include: customer staff, utility staff, and consulting professionals. These teams enable the partnerships to overcome these barriers through a number of important mechanisms described below:

Figure 9: Primary Barriers and Strategies

Primary Barriers	Strategies to Overcome Barriers	
Project Funding Constraints. Energy	Incentives help relieve budgetary constraints and	
efficiency is costly and budgets are	assist the economic evaluations of the customers by	

Primary Barriers	Strategies to Overcome Barriers
limited. The decision-makers who can	making energy efficiency more cost-effective. In
approve project details often choose	addition to their purely economic role, the
not to implement the higher-cost,	incentives play an important part in promoting the
more-efficient systems, equipment, or	importance and visibility of energy efficiency.
technologies. Incentive dollars are	
most often allocated to the general	The Energy \$Mart Loan program has been created
fund which makes for an inability to	to finance energy projects through the Department
ensure incentives are allocated toward	of General Services.
the participating department budget.	
	<u>The IOUs</u> will communicate the process of utilizing
Although IOUs have developed on-bill	on-bill financing as an integral part of all energy
infancing, many institutional and local	developed as a way of financing amellor retrofit and
government entities are not yet able to take	developed as a way of financing smaller retroit and modernization ungrades. Work with partners to
advantage of this funding source.	ansura they are able to use this financing option
	ensure mey are able to use this financing option.
	Internal Policy for Incentives
	Assist customer with identifying ways of
	authorizing funding departments to recapture
	dollars received from incentives to reinvest in
	future energy projects.
Knowledge Barrier. Economic decisions are	Education and training This component will
often short-sighted, with capital limitations	enhance the awareness of energy efficiency, which
taking precedence over long-term savings,	in turn will remove some of the caused by lack of
even when accurate economic analysis would	information or erroneous economic analysis.
select the higher initial cost of higher-	Utilize SCE's Customer Technology Application
efficiency choices.	Center (CTAC) for educating customers about the
	benefits of demand side management.
Tachnology Advancement: The importance	
of energy efficiency within the state and the	Emerging Technologies: The utilities, their research
world is encouraging rapid development of	organizations, and their connection with the various
newer technologies However it is virtually	state research organizations are vital links to the
impossible for either key decision-makers	partners.
(such as county supervisors or university	New technology will be a very useful component of
boards) or their technical staff (such as	the education and training element of the
facilities directors and their staffs) to stay	partnerships. The partnerships will be able to
current with the rapidly evolving market.	provide information to the managerial and technical
Even when they learn about the new	personnel of the institutional customers to help
technologies, it is very difficult to ascertain	them determine which technologies are worthy of
the true energy efficiency value of the new	consideration in either new construction or retrofits.
technologies and to distinguish scientific	
research from sales hyperbole.	
Dissemination of Utility Programs: may be	Integration: allows the partnership management

Primary Barriers	Strategies to Overcome Barriers
confusing and perceived as cumbersome to facilities personnel, and energy management staff. Utilities offer many resources and energy programs, but they may seem too difficult to navigate.	team to be the single source of contact that enables institutional customers to take advantage of all energy programs offered by the IOUs. This integration will break down many customer barriers to participation in multiple programs. Future strategic plans are being developed to include new construction, emerging technologies, education and training, demand response, California Solar Initiative (CSI), self-generation, on-bill financing, and other utility programs within the scope of partnership activities.
<u>Staffing:</u> Many institutional and government customers do not have the time or resources to methodically evaluate their buildings and identify the most salient energy efficiency projects. These customers desire additional technical assistance.	<u>Professional assistance:</u> The partnership team is able to prepare comprehensive lists of projects, evaluate their energy savings potential, and bring them to the team for review. The customer can then use this information to accelerate the timing of some projects, modify the scope of others, and rely on strategic energy planning, rather than simple maintenance schedules, for energy efficiency enhancements.
Establishing New Partnerships - Three year funding, once approved, would not allow for innovation and the establishment new partnerships.	<u>New Partnership Program Startups</u> : As the awareness and success of the institutional partnerships grow, more government agencies may wish to form partnerships. We propose reserving an extra budget to accommodate these partnerships as they develop during the course of the three-year program cycle.
<u>Coordination of Utility Programs:</u> Customers have traditionally had to communicate with multiple utility departments with competing IOU offerings in order to take advantage of demand side management products and services. This is time consuming and challenging for the customer.	 <u>Single Point of Contact:</u> The partner customer would like a single point contact for energy programs that can help them make the most logical, effective energy decisions, and not have to sort out competing IOU offerings. The partnerships have taken a proactive approach to coordinating program communication. One strategy is to assemble a collective package of energy offerings that incorporates partnership and external resources. The partnership teams are committed to using the most appropriate programs and will make sure that the right people for each IOU program are brought in at the right time for their implementation and assist in avoiding lost opportunities.

Primary Barriers	Strategies to Overcome Barriers

d) **Quantitative Program Objectives**

Each partnership sub-program will provide individual unique targets and estimated quantitative information on number of projects, companies, non-incentive customer services and/or incentives that program aims to deliver and/or complete in 2009-11 timeframe. References will be provided where available. This table represents some examples of these targets.

Program Target by Program Target by Program Target by Program Name 2009 2010 2011 **Institutional and Government Facilities** kWh/kW kWh/kW kWh/kW Energy Savings TBD TBD TBD Ensure 100% of all Ensure 100% of all Ensure 100% of all audits are coordinated audits are coordinated audits are coordinated EE/DR Audits EE/DR efforts. if EE/DR efforts. if EE/DR efforts. if applicable. applicable. applicable. Lighting and Identify potential for Identify potential for Identify potential for Retrofits. Retrofits. Retrofits. HVAC Retrofits RCx and MBCx Benchmark facilities Benchmark facilities to Benchmark facilities to to determine determine potential. determine potential. potential. Complete projects New Construction Communicate Develop project Integration Strategy agreement plan to establish future ensure penetration of between internal pipeline. departments and all existing and future offerings and potential projects. incentive structure. **Strategic Plan Support** See Tables in Section 5e **Core Program Integration** Education and Number of Partner Number of Partner Number of Partner Outreach Presentations TBD Presentations TBD Presentations TBD Development Determine which Complete documentation of documentation partners will use On-Financial package and project Bill Financing, participation rates for partnerships and Solutions: Onagreement for establish a model for determine any lessons **Bill Financing** partners. how On-Bill Financing can be used with learned or roadblocks. Institutional and Government customers.

Table 5: Program Targets

California Solar Initiative	Establish communication plan for ensuring partners have been educated regarding solar potential	Develop project agreement plan and determine necessary stakeholders.	Complete documentation of participation potential and what is necessary for partners to participate

e) Advancing Strategic Plan goals and objectives

Institutional and Government partnerships are a natural fit with the goals, objectives, and strategies articulated in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan). The partnerships have demonstrated that three objectives — Innovation, Integration, and Collaboration—are indeed the key to achieving the next generation of cost-effective, energy efficiency programs and the resulting reduction in greenhouse gas (GHG) emissions by applying both Commercial and Local Government sector strategies to the Statewide IOU partnerships as follows:

Figure 10: Institutional and Government Partnership Program Advance	ement of
Strategic Plan Goals and Objectives	

Commercial Sector – Section 2		
2-1: Lead by Example: State/local	Where the budget allows, customer owned	
governments and major corporations	buildings are benchmarked and retro-	
commit to achieve energy efficiency, EE,	commissioned.	
(or green) targets in existing buildings.		
2-5: Develop tools and strategies to use	Implement monitor based commissioning and	
information and behavioral strategies,	provide training for energy managers to	
commissioning, and training to reduce	continuously monitor and optimize building	
energy consumption in commercial	operational performance.	
buildings		
2-6: Develop effective financial tools for	Develop financial solutions that are compatible	
EE improvement to existing buildings.	with the state legal requirements. Exploring	
	avenues that may work around lease terms to	
	address perceived tenant/owner "split	
	incentives" issue.	
2-8: Improve utilization of plug load	Leverage PC network software and vending	
technologies within the commercial sector.	machine controls to reduce commercial	
	building plug loads.	
Commercial Sector – Section 3		
3-1: Drive continual advances in lighting	Work with PIER to pilot lighting products on	
technology through research programs and	state-owned facilities where available.	
design competitions.		
3-2: Create demand for improved lighting	Piloting emerging technologies in lighting	
products through demonstration projects,	collaboration with building owners.	
marketing efforts, and utility programs.		
DSM Integration and Coordination - Section 8		

1-1: Carry out integrated marketing of	Integrate demand-side management programs
DSM opportunities across all customer	(Distributed Generation, California Solar
classes.	Initiative and Demand Response) in order to
	limit lost opportunities.

Figure 11: Local Government Partnership Program Advancement of Strategic Plan Goals and Objectives

Local Government Sector – Sections 1, 2, 3 and 4		
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	To the extent possible, the partnership will work with policy makers to implement building or new construction goals that exceed Title 24 requirements by a percentage determined by the customer (for example, all new construction will be more than X% above T24).	
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Partnership will support training activities to facilitate the adoption and persistence of enhanced code compliance practices.	
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	Partnership is supportive of the partners' role in any permitting or expedited approval policy for green building.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Partnership team can assist with technical support and training to facilitate the process.	
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes	Develop information campaign and training opportunities on mechanics and benefits of model programs targeting decision-makers and Boards of Supervisors.	
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program	N/A	
1-7: Develop energy efficiency related "carrots" and "sticks" using local zoning and development authority.	To the extent possible, the partnership will provide training to increase adoption of policy once it is developed.	
2-2: Dramatically improve compliance with	N/A	

and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	N/A
3-1: Adopt specific goals for efficiency of local government buildings, including:	Align with local policies for LEED new construction and existing buildings and implement energy efficiency technologies to exceed these goals.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	Support benchmark existing buildings against ratings such as Energy Star and its Portfolio Manager and continue commissioning programs on selected high-use buildings.
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Work with county partners to explore and document model policies and mechanisms by June 2010.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in LG pilot projects.	Coordinate this approach with Research & Technology activities: • Develop and begin first projects by 12/2010.
4-1: Local governments commit to clean energy/climate change leadership.	Assist initial set of local governments in commitments; develop and communicate appropriate messages.
4-2: Use local governments' general energy plan and other elements to promote energy efficiency, sustainability, and climate change.	Develop model General Plan templates Leaders among local governments adopt policies in General Plan elements.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	Identify opportunities and challenges for more energy/environmentally integrated development and infrastructure
	Develop and implement pilot projects, such as the California Sustainable Communities

	initiative.
4-5: Develop EE-related "carrots" and	To the extent possible, the partnership will
"sticks" using local zoning and	provide training to increase adoption of policy
development authority*	once it is developed.

* In the September 2008 version (final) of the Strategic Plan, this strategy has been classified as a "Reach" Code goal: Number 1-7.

6. Program Implementation

The partnership model is intended to build the capacities (resources) and capabilities (skills) unique to the institution. Partners would then have the resources and skills for delivering energy services within their facilities and raising awareness among the various departments (facility management, planning & design, maintenance and staff departments, etc) about these various facilities.

a) Statewide IOU Coordination

i. Program Name

Institutional and Government partnerships coordinate locally and Statewide with other California IOUs (PG&E, SCG, SDG&E).

ii. Program delivery mechanisms

Program delivery mechanisms will build upon the implementation strategies from the previous successful delivery of immediate and long-term energy savings results. The implementation plan for this cycle will be refined to account for progress already made and will include:

- Coordination with other energy efficiency programs and ongoing Statewide and local government partnerships;
- Energy efficiency retrofits program element implementation (including project selection and implementation);
- Monitoring-based commissioning (MBCx) and MBCx Express implementation;
- Energy efficiency education and best practices development and training implementation; and
- Integration with portfolio of products & services (e.g. California Solar Initiative, Savings By Design, new construction and Demand Response activities) into a partnership that enables easier customer access and streamlined IOU management of programs.

iii. Incentive Levels

A more detailed description can be found above in Section 4.b. List Measures - Technologies and corresponding incentive levels.

Project Type	Incentive Amount
Lighting projects	\$0.15 to \$0.24/kWh
Motors/VFDs/Compressors/Others	\$0.18 to \$0.24/kWh
HVAC projects with kWh savings	\$0.24/kWh
New construction projects	\$0.10 above core SBD rates.

iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.

The Institutional and Government partnership structure builds on previously successful outreach and communication networks between the partner and its various agencies. This "buy-in" from the top opens up communications channels to the whole system. Combined with the existing management structure from the 2006-2008 programs, this will facilitate outreach activities through pre-established channels for 2009 - 2011. Due to support from the top of the organization, partnership programs will be very visible and provide opportunities to leverage existing conferences and meetings to raise awareness for the program among internal departments.

v. IOU program interaction with CEC, ARB, Air Quality Management Districts, local government programs and other government programs, as applicable

The IOUs are continuously monitoring their respective government partners to leverage best practices and new/innovative programs.

vi. Similar IOU and POU Programs

The four IOUs strive to have consistency in their respective program offerings, and where practical, to make the transactional experience for the state agencies seamless and transparent. Where applicable, a program consultant will assist in day-to-day coordination and communication among the Statewide partners as follows:

- Provide staffing to the management team and program specific subcommittees and implementation teams;
- Coordinate, schedule, and document results and action items from program team meetings;
- Prepare and conduct formal presentations and participate in conferences as required by the management team;
- Develop and maintain a project tracking and reporting database system;
- Assist the IOUs and partners in partnership reporting;
- Assist in the development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and preparation of minutes for the Training and Education component;
- Miscellaneous professional and technical assistance as requested by the IOUs.

b) Program delivery and coordination

i. Emerging Technologies program

IGPP partners have expressed significant interest in serving as beta test sites for new technologies. Through the partnerships, the utilities will be able to work hand-in-hand with the Energy Commission researchers and the institutional and government partners to develop pilot projects to demonstrate the technologies. These partnerships may well become key avenues by which new products or technologies can be installed, tested, and evaluated. During the 2006-08 program cycle IGPP partners have engaged IOU Emerging Technologies programs about deployment of technologies such as Light Emitting Diode (LED) street lights and have developed plans to install pilot projects.

ii. Codes and Standards program

The Codes and Standards Program recognizes IGPP as a high priority in the selection of test sites and also links with CEC's PIER program. Codes and Standards and the WE&T Synergies Program will support local governments' Title 24 enforcement activities with energy code training for plan checkers, inspectors, and the trades.

iii. WE&T efforts

Workforce Education & Training Strategies, SCE's 2009 – 2011 WE&T program includes three important core delivery components: WE&T Strategic Planning & Implementation, WE&T Synergies, and WE&T EARTH Education and Training. Each component is designed to target specific market segments, and accomplish the larger education and training Strategic Plan goals and objectives.

In aggregate they will target key workforce (and potential workforce) areas including: community colleges and adult education, K-12 students, technicians and contractors, Green Campuses, and minority, low-income, and disadvantaged communities.

iv. Program-specific marketing and outreach efforts (provide budget)

Will be provided in each Institutional and Government sub-program PIP.

v. Non-energy activities of program

Training and Education Program Element, if applicable, will be detailed in each sub-program PIP.

vi. Non-IOU Programs coordination

To address third-party coordination, the management team will discuss all offerings and ensure communication of third- party programs. If there are thirdparty programs that have unique features currently not offered by the partnerships, the third party program may be utilized to augment the services and these activities will be communicated through the partnership team.

vii. CEC work on PIER

Some of the partnerships have worked with the PIER program, which has resulted in the installation of several pilot projects in 2007. These innovative projects included an integrated classroom lighting system (ICLS), bi-level stairway lighting, and demand-controlled ventilation systems for kitchen exhaust hoods. Applicable PIER program coordination will be stated in sub-programs.

viii. CEC work on codes and standards

Will be detailed, if applicable, in each Institutional and Government sub-program PIP.

ix. Non-utility market initiatives

Will be provided in each Institutional and Government sub-program PIP.

c) <u>Best Practices</u>

Institutional and Government partnerships have provided documentation that is valuable and provides lessons learned for a variety of institutional and government customers. Some of these best practices are noted in Figure 12 below:

Type of Best Practice	Best Practice	Institutional Application(s)
Goals & Objectives	Develop and use clearly articulated objectives that are internally consistent, actionable and measurable.	Share clearly defined and obtainable goals that are developed with partner input. Track goals through bi-weekly management team meetings to ensure they are achieved.
	Develop tools to track the portfolio's performance on a continuous basis and report progress.	The detailed program plan is a living document that will facilitate continuous tracking and reporting.
	Design programs within the portfolio based on sound program plans; where appropriate, utilize clearly but concisely articulated program theories.	The plan & program structure are based on sound program plans & theories.
Planning	Conduct baseline research	Baseline research was conducted of each partnership and the individual participating cities & counties.
	Build feedback loops into program design and logic Maintain the flexibility to rebalance portfolio initiatives, as needed, to	The detailed program plan provides a mechanism for closely monitoring progress and making adjustments as may be needed to meet the partnership goals and objectives.

Figure 12: Institutional and Government Best Practices

Type of Best Practice	Best Practice	Institutional Application(s)
	achieve the portfolio's goals and objectives.	
Staffing	Select highly qualified in- house staff &/or outside contractors to manage, design, implement and evaluate programs. Clearly define portfolio implementation responsibilities and clarify roles to minimize confusion.	SCE Project Managers have been assigned to each partnership to assure continuous open communications and implementation success. The roles and responsibilities of SCE and the various partners and participants are clearly defined in the detailed program plan. SCE's resources will be supplemented with pre-qualified technical support contractors selected by SCE though competitive solicitations to cost-effectively provide the portfolio of technical assistance needed to support its partners.
Integration	Leverage relationships from complementary organizations such as utilities, trade allies, and industry specialists.	Structured to leverage all resources, assets and relationships of SCE, its partners, and their participants, constituents, stakeholders, and other related individuals & organizations.
Reporting & Tracking	Clearly articulate the data requirements for measuring portfolio and program success. Design tracking systems to support the requirements of all major users: program administrators, managers, contractors and evaluators.	The detailed program plan, coupled with frequent meetings between/among SCE, its partners and their members/ constituents is designed to track and report partnership progress and successes.

d) Innovation

Many partnerships have recognized that a well thought out sustainability policy and energy plan are keys to making good energy decisions.

The partnership teams have identified opportunities in their customers' buildings for energy efficiency innovation. While rare in large governments before the program began, partnerships embraced and instituted Monitoring Based Commissioning (MBCx) and Retro-Commissioning (RCx) as the result of the 2006-2008 programs. Still in the pilot project stages and with a built environment consisting of millions of square feet, the opportunities for energy savings through MBCx/RCx are enormous and are a major focus of the 2009 – 2011 partnership program.

e) Integrated/coordinated Demand Side Management

To address Integrated Demand Side Management, IOU energy efficiency and demand response program staff will collaborate with partners to conduct comprehensive audits and identify energy efficiency measures and demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid duplication and to collaborate on incentive offerings which will all minimize customer interruptions.

The partners will identify facilities or an aggregation of facilities under a service account in order to establish opportunities for demand response participation that will meet the program eligibility of a 30kW minimum DR opportunity per service account.

The partnership will also assist, where applicable, facility management staff that are interested in solar technology and will provide recommendations in facility operations through energy audits to improve its facilities with less costly EE/DR measures before implementing more costly solar technologies. In addition, partnerships will coordinate with the new proposed Statewide IDSM Task Force (see IDSM PIP).

f) Integration across resource types (energy, water, air quality, etc.)

Provided in each Institutional and Government sub-program PIP.

g) <u>Pilots</u>

Is provided (if applicable) in each Institutional and Government sub-program PIP.

e) <u>EM&V</u>

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2009 – 2011 after the program implementation plans are filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy Division studies. More detailed plans for process evaluation and other program-specific evaluation efforts cannot be developed until after the final program design is approved by the CPUC and in many cases after program implementation has begun, since plans need to be based on identified program design and implementation issues.

7. Diagram of Program



8. Program Logic Model(s)

Institutional and Government



UC/CSU





California Community College



California Depart of Corrections and Rehabilitation

State of CA Logic Model External Influences: Resources Consultants State of CA lOUs Agencies Contractors (optional) Program Broad economic conditions, market events, cost of energy, federal standards, perceived need for Factors can influence program at all levels and time-frames. Outreach to 36 Education and Continuous Activities Identification of Retrofit Projects Agencies Training Commissioning 10 .11 -12 13 Installation of Outputs Energy Project Develop Alt Training Sessions & Develop ESCO Project Delivery Approval: 1) Technical Energy Metering/ Monitoring Equip Mgmt. Staff Best Practices Workshops Infrastructure Commun. 2) Financial Infrastructure at Sub-meter Level 16 18 -20 Short-terms Outcomes Secure Financing Increased for Approved Projs., then Retrofit Project Operational Guidelines Measures Standard Energy Infoat the Building Retention o Facilities Staff Estab lishe d Systemwide Systems Level Implementation .22 -24 Intermediate Outcomes Staff Trained to Increased Improved EE Reduction of Identify and Implement EE and DR Projects installation of EE and DR Equipment kW, kWh, or therm and peak Operations and Maintenance and Processes de man du se Long-term Outcomes conservation, etc. Long-term Energy, Environmental , and Other Improved EE Participation in State Agency Facilities Sustainable Comprehensive Energy Non-Energy Benefits Management

State of CA

County of Los Angeles



County of Riverside





County of San Bernardino

5a
1. **Program Name:** California Community Colleges Energy Efficiency Partnership **Program Type:** Core

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in the I&G Core PIP.

3. Projected Program Gross Impacts Table – by calendar year

Table 2 – Refer to Table 2 in the I&G Core PIP.

4. Program Description

a) Describe program

The California Community College (CCC) system is a two-year public institution of higher education that is composed of 109 colleges Statewide and organized into 72 self-governing Districts. It serves more than 2.6 million students from a wide range of cultural and economic backgrounds, and represents the largest system of higher education in the world. Southern California Edison (SCE), along with the three other Investor Owned Utilities (IOUs) will continue this collaboration, which started with the 2006-2008 CCC/IOU Energy Efficiency Partnership to continue sharing the energy efficiency best practices as well as implement energy efficiency projects for immediate and long-term energy savings and peak demand reduction.

This partnership provides a unique opportunity to deliver cost effective energy savings while leveraging the CCC's local and Statewide new construction bond funding. The 2009-11 CCC Energy Efficiency Partnership will expand its efforts for the implementation of energy-efficient Retrofits, New Construction Design Assistance facilitated by the Savings By Design program, Demand Response, Retro-Commissioning, and Monitoring-Based Commissioning (MBCx) projects. The program will also focus its efforts on training and education, which will expand existing education programs by training faculty and staff in best practices on energy efficient technology implementation and energy management.

Projects will adopt a comprehensive approach by including retrofits and their DSM alternatives to include: demand-response, DG (renewable self-generation), solar hot water and water efficiency.

The 2009-11 CCC Energy Efficiency Partnership will expand its efforts in the delivery of energy efficiency and provide the following program elements:

- Energy-efficient retrofits of equipment and systems.
- New construction design assistance. This will be a focus of the partnership due to the significant bond-funded construction of new and renovated facilities that are occurring at the CCCs at an unprecedented rate.
- Retro-commissioning/monitoring-based commissioning (RCx/MBCx) projects.
- Provide a "portal" to other IOU energy programs for a coordinated, integrated DSM program.

The training and education program will train facility maintenance and operations staff in best practices on energy efficient technology implementation and energy management. In addition, the partnership will explore opportunities to partner with existing curriculum development efforts to train the next generation of the "green workforce," which has been identified as a critical component for California's future economy

b)	List measures	
·- /		

Measure Categories	Technologies
Lighting	Includes indoor and outdoor
	fluorescent, HID, Light Emitting Diode
	(LED) replacements, lighting controls,
	and other lighting projects.
Controls and other Equipment	Includes fans, motors, Variable
	Frequency Drives (VFD), air
	compressors, EMS systems and other
	equipment not covered under the
	lighting or HVAC categories.
Air Conditioning and Refrigeration	Includes system and major subsystem
	replacements
Other	Includes New Construction, RCX,
	MBCX and others

Incentives

Incentives will be paid on projects based on a cents per kWh saved. These rates are an average of \$ 0.24/kwh saved. Incentives are paid by the utility to the agency upon completion of the project. They are based upon the agreed-upon energy savings determined as part of the project evaluation, subject to changes made during the project's implementation. Incentive rates for the new partnership will be as follows:

- Lighting projects will be at \$0.24/kWh;
- Motors/VFDs/Compressors/Others \$0.24/kWh, and
- HVAC projects with electrical savings will be \$0.24/kWh

c) <u>List non-incentive customer services</u>

The CCC EE Partnership will include non-energy activities such as creating presentations for industry and association conferences, attending various conferences, meetings, and outreach events, and distributing marketing materials through education programs.

The partnership will also continue the progress made with establishing a Statewide approach to training and building operations to facilitate long-term energy efficiency savings. The training and education component of the partnership involves training of campus design staff, project managers, energy managers and others in using best energy practices in the construction, retrofit, and monitoring based commissioning of campus buildings and central plant infrastructures.

Non Incentive Services	Delivery Mechanism
Education and Training	Delivered through creating presentations for industry
	and association conferences, attending various
	conferences, meetings and outreach events, and
	distributing marketing materials through education
	programs. Includes training energy managers, facility
	maintenance staff and design staff, project manager
	and others in using best practices in the construction,
	retrofit, retro-commissioning and monitoring based
	commissioning of buildings and central plant
	infrastructure.
Emerging Technologies	Delivered through Emerging Technologies.
	Partnerships will work with ET to develop potential
	pilots for emerging technology development.
Funding Sources	Partnership funds and Partner funds.
Subcontractor Activities	Subcontractors may be used to assist in program
	administration and state wide coordination among
	partners.
Program Administration	Utility program managers will:
and Management	Identify project tasks, establish schedule of
	deliverables and responsibilities, ensuring the
	deliverance of successful program implementation.
	Obtain inputs from the partners and facilitate the
	decision-making on key program elements.
	Facilitate and coordinate partnership team
	communications.
	Provide analytical assistance as needed.
	Provide accurate program information for reporting to
Quality Assume as and	The team will establish and example available assurements
Quality Assurance and	The team will establish and oversee quality assurance
Evaluation	neasures for the partnership program, including
	These procedures and the associated reporting will be
	developed in more detail as a part of program
	implementation. In general however, the partnership
	will continue the level of due diligence and quality
	assurance of the present IOU energy efficiency
	offerings, including a representative percentage of
	pre/post installation confirmation inspections for small
	hardware projects, and pre/post inspections on all
	large or specialized hardware projects (such as
	installation of energy efficient equipment, facility
	retrofits, and building commissioning and new
	construction projects).

Non Incentive Services	Delivery Mechanism
Codes and Standards	The team will refine and promote voluntary policies
	and requirements adopted by the customers for energy
	efficiency and sustainability to create incrementally
	more efficient buildings in parallel with the adoption
	of more stringent, mandatory codes and standards by
	local and state jurisdictions. For those customers such
	as county governments, the partnerships will be able
	to work with county officials as they consider local
	building codes and standards for implementation
	within their counties.

5. Program Rationale and Expected Outcome

The 2009 – 2011 CCC Energy Efficiency Partnership will build upon, enhance, and streamline the implementation strategies employed in the 2006-08 partnership, and adopt new strategies over the life of the program as they emerge or are proven as ready for the market. The implementation plan will be refined to adopt best practices and "lessons learned" from our experience in 2006-08, as well as other partnership and Statewide programs.

Program Implementation Strategies and Elements

The 2009 – 2011 CCC EE Partnership will employ the following strategies and program elements:

- Establishment of a cost-effective program portfolio of energy and demand savings goals and associated incentive budgets using a comprehensive, systematic "bottoms-up" approach based on CCC District 5-year fully funded plans for maintenance and capital improvement projects. Estimates for other program elements not in the 5-year plans, such as for MBCx, central plants, food service, and emerging technologies will be developed based on historical savings averages from 2006-08 and assumptions for project and technology deployment. In certain cases, projects will be verified directly with the campuses to confirm accuracy of the model and provide more accurate estimates. The results will be summarized in an *integrated demand-side management Portfolio* for use by the IOUs to support CPUC filings.
- Implementation of an improved program management and structure that adopts lessons learned regarding communications and definition of roles and responsibilities from the past cycle resulting in a more streamlined, effective approach for 2009 2011. The program will continued to be administered by a management team consisting of representatives from the CCC Chancellor's office, key CCC Districts, all four IOUs, and a program administration and management consultant who will track project progress and keep the lines of communication and information flowing. Working subcommittees made up of management team members and other resources will act as "working groups" to provide a nimble approach to program tasks and activities;

Another major change for 2009 – 2011 is the refinement of the Outreach Team, which tested several models in 2006 – 2008, and has evolved into a effective team consisting of customer-focused IOU account managers, team leadership from the Chancellor's office and key district staff that can reach key campus and district decision makers with the appropriate information about program benefits to influence adoption of programs. The backup to this outreach strategy is an IOU and consultant technical and engineering staff that can quickly and accurately assess project opportunities, complete energy savings calculations, and process project applications with campuses.

The following program elements will operate on a Statewide, *integrated* basis, providing immediate energy savings and setting the foundation for a long-term program that focuses on the sustainability and best practices:

- An energy efficiency retrofit program element, based on the portfolio of projects identified above;
- An existing building and central-plant retro-commissioning (RCx) and monitoring-based commissioning (MBCx) program element. The RCx/MBCx element began as a pilot program for the CCC/IOU Partnership in the 2006-08 cycle with significant success. Based on these results it will become a major focus of the 2009 2011 partnership; and
- An innovation program element will be developed, consisting of high technology (IT systems) efficiency improvements, energy-efficient food service technology installations, and emerging technology/PIER pilot programs. The CCC have made significant progress in adopting innovative projects during the 2006-08 program cycle and anticipate greater participation in the next cycle.

The goal of the 2009 – 2011 partnership is to fully integrate the New Construction Design Assistance program under the partnership umbrella to capture those opportunities. CCC would like to integrate the design assistance into their new construction and major renovation project process to review designs and receive recommendations for incremental energy efficiency improvements beyond minimum code requirements and help make the CCCs a leader in achieving the Big and Bold initiatives to achieve zero net energy. This will be accomplished through technical and programmatic assistance to the districts and campuses for the development of strategic energy plans to guide their energy-efficiency programs.

The partnership will further refine the training and education program focusing on energy efficiency courses for CCC facilities, operations and maintenance staff, and a partnership with other CCC and community stakeholders working on curriculum development for students and industry to develop the "green workforce".

The partnership will establish a "portal" to other IOU energy programs such as demand response, the California solar initiative, self-generation incentive program, and related agricultural, water efficiency, and green building programs to offer a coordinated, integrated approach to demand-side management.

The partnership will look for opportunities to integrate demand response and other DSM services into the program implementation plan by identifying qualified facilities or aggregation of facilities under a service account for DR participation that will meet the program eligibility of a 30 kW minimum demand response opportunity per service account. Resources will be leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy efficiency and demand response program staff will collaborate with partners to conduct comprehensive audits and identify energy efficiency measures as well as demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid duplication, collaborate on incentive offerings and minimize customer interruptions.

When applicable, the partnership will also assist facility managers who are interested in solar technology and provide recommendations through energy audits to improve their facility operations with less costly EE/DR measures before implementing the more expensive solar technology.

SCE's objectives for the CCC Partnership include:

- Positioning the partnership as a unique, strategic relationship to help impact energy decisions by demonstrating the successful implementation of a comprehensive approach to achieving energy management goals;
- Coordinating with SCE's Workforce Development program to train the next generation of the efficiency-related workforce and improve the knowledge and skills of the current generation—from local code officials, campus energy managers and HVAC technicians to campus staff —to develop the human resources needed to achieve market transformation;
- Leveraging existing organizational infrastructures to effectively implement other programs and projects at the Statewide level;
- Engaging the partnership to deliver energy savings and demand reduction both through partnership activities and serving as channels for SCE's energy efficiency and other demand-side management programs; and
- Impacting the release of greenhouse gases in California through a reduction in electricity and gas consumption. SCE will calculate the reduction of CO2 reduction in tons by determining the annual life-cycle energy savings in accordance with California Assembly Bill 32 (AB 32).

Strategies for Success

The CCC Partnership Program is a unique, Statewide energy efficiency program that accomplishes immediate, long-term peak energy and demand savings and establishes a permanent framework for a sustainable, comprehensive energy management program at the CCC campuses served by SCE and the other IOUs. This program capitalizes on the vast resources and expertise of CCC and the IOUs working together to ensure a successful and cost-effective program that:

• Meets the objectives of the CPUC as articulated in Decision $03-08-067^{18}$;

¹⁸ CPUC Decision 03-08-067 (August 23, 2003) solicits energy efficiency program proposals from utilities and nonutility parties, adopts evaluation criteria, establishes a funding cycle and addresses how funds may be allocated and how program proposals may be reviewed. [http://docs.cpuc.ca.gov/Published/Final_decision/29216.htm]

- Achieves the goals of the state Energy Action Plan to optimize energy conservation and resource efficiency; and
- Addresses the goal of the Governor's Green Building Action Plan by assisting campuses with the retrofit and retro-commissioning of existing buildings.

The program is an extension of the CCC Partnership first established in the 2006 – 2008 energy efficiency program cycle, and will capitalize on lessons learned in the areas of improved program delivery efficiency and communication between the stakeholders. The new program will also address a backlog of cost effective projects that were identified in the previous cycle, but could not be completed because of budget limitations.

Expected Outcomes

The following are the desired outcomes of the CCC EE Partnership:

- Achieving immediate, cost-effective energy and demand savings;
- Continuing the success of the 2006-08 program and utilizing the momentum of the program to implement the backlog of projects and identifying new projects for 2009 2011;
- Improving energy efficient operations and maintenance practices at the campuses;
- Training CCC energy managers to identify and implement energy efficient opportunities;
- Creating opportunities to partner with existing curriculum development efforts to train the next generation of the "green workforce" which has been identified as a critical component for California's future economy;
- Initiating an energy efficiency partnership program that is designed to accomplish immediate and long-term energy and peak demand savings goals;
- Disseminating information to increase awareness and acceptance of energy efficiency practices;
- Improving communication and collaboration amongst the CCC and four IOUs to delivery energy efficiency programs;
- Creating an infrastructure for the permanent adoption of processes at the facility system level; and
- Improving efficiencies in program delivery, sharing of best practices and educational tools, and leveraging of local knowledge.

We will help to develop the Green Task force of tomorrow by providing an energy efficiency based curriculum for students and staff. Partnerships will continue to: Lead and coordinate all energy efficiency, demand response, and solar initiatives by being the main point of contact for DSM offerings coordinating all projects, including Energy Efficiency (EE), Demand Response (DR), California Solar Initiative (CSI), Self Generation Incentive (SGIP) Programs as applicable to the partner,

Leverage partners' communications and outreach infrastructure to reach customers and/or internal departments more effectively, and

Align energy efficiency program opportunities closely with Green Rating opportunities, and increase program participation by ensuring that green rating systems reflect or parallel program offerings.

a) **<u>Quantitative Baseline and Market Transformation Information</u>:**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

SCE and the other IOUs face the challenge of implementing cost effective energy efficiency programs that will result in immediate, long-term peak energy and demand savings in their service territories. The CCC system consumes vast quantities of energy and make up a significant portion of the both the electric and natural gas load in the State of California. This educational system represents the largest system of higher education in the world, with a broad set of goals, stakeholders, processes and constituencies. The CCC system is diverse from a geographic, climate, and operational needs standpoint.

However, with this size and diversity also comes considerable opportunity to save energy use and cost on a scale that is meaningful to the IOUs and to California. The California Community College Board of Governors released its Energy and Sustainability Policy in January 2008, providing a blueprint for all Districts to follow. Using this guiding principle, many Districts and Campuses have developed and implemented their own policies to reduce energy, and some Districts have even emerged as leaders in the effort to reduce the impacts of global warming. Through the achievements of the 2006-2008 partnership programs, the CCC's have come to understand that reducing energy use over the life-cycle of a building or system is a smart investment both financially and environmentally. The biggest opportunity is that Statewide, the CCC's have embarked on a massive new construction and renovation process fueled by local and state bond measures. This construction effort provides a unique opportunity for the partnership to provide technical and financial assistance to ensure that the energy efficiency potential of these projects is maximized. Finally, with the Draft California Long Term Energy Efficiency Strategic Plan (Strategic Plan) comes a framework to address some of the challenges from a Statewide policy level.

d) **<u>Quantitative Program Targets</u>:**

Table 5			
CCC/IOU Partnership	Program Target by 2009	Program Target by 2010	Program Target by 2011
	Institutional and	d Government Facilities	
Total kWh and kW	TBD kWh/kW	TBD kWh/kW	TBD kWh/kW
EE/DR Audits	Complete audits at 20% of campuses. Ensure 100% of all audits are coordinated EE/DR efforts if applicable	Complete audits at 40% of campuses. Ensure 100% of all audits are coordinated EE/DR efforts if applicable	Complete audits at 40% campuses. Ensure 100% of all audits are coordinated EE/DR efforts if applicable
Lighting and HVAC Retrofits	Complete Lighting and HVAC retrofits energy savings are TBD.	Complete Lighting and HVAC retrofits energy savings are TBD.	Complete Lighting and HVAC retrofits energy savings are TBD.
MBCx	Complete MBCx projects savings are TBD.	Complete MBCx projects savings are TBD.	Complete MBCx projects savings are TBD.
New Construction	Complete New Construction projects energy savings are TBD. Communicate Integration Strategy between internal departments and offerings and incentive structure.	Complete New Construction projects energy savings are TBD. Communicate Integration Strategy between internal departments and offerings and incentive structure	Complete New Construction projects energy savings are TBD. Communicate Integration Strategy between internal departments and offerings and incentive structure
	Strategi	C Plan Support	
	Coro Pro	gram Integration	
Education and Outreach	TBD Number of Partner Presentations	TBD Number of Partner Presentations	TBD Number of Partner Presentations
Financial Solutions: On-Bill Financing	Development documentation package and project agreement for partners.	Determine which agencies will use OBF; establish a model for how on-bill financing can be used with Institutional and Government customers.	Complete documentation of participation rates for partnerships and determine any lessons learned or roadblocks.
California Solar Initiative	Establish communication plan	Develop project agreement plan and	Complete documentation of

CCC/IOUProgram Target byPartnership2009		Program Target by 2010	Program Target by 2011
	for ensuring partners have been educated regarding solar potential	determine necessary stakeholders.	participation potential and what is necessary for partners to participate

Note: These are estimated targets. The program will need to have flexibility in allocating resources to each program elements to ensure overall program success.

e) Advancing Strategic Plan goals and objectives

Institutional and Government partnerships are a natural fit with the goals, objectives, and strategies articulated in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan). The partnerships have demonstrated that innovation, integration, and collaboration are the key to achieving the next generation of cost-effective, energy efficiency programs and the resulting reduction in greenhouse gas (GHG) emissions by applying both Commercial and Local Government sector strategies to the CCC partnership as follows:

Commercial Sector – Sections 2 and 3			
2-1: Lead by Example: State/local	Where the budget allows, customer owned		
governments and major	buildings are benchmarked and retro-		
corporations commit to achieve	commissioned.		
energy efficiency, EE, (or green)			
targets in existing buildings.			
2-5: Develop tools and strategies	Implementing monitor based		
to use information and behavioral	commissioning and training energy		
strategies, commissioning, and	managers to continuously monitor and		
training to reduce energy	optimize building operational performance.		
consumption in commercial			
buildings			
2-6: Develop effective financial	Developing the on-bill financing offerings		
tools for EE improvement to	to be compatible with the institutional		
existing buildings.	requirements. Exploring avenues that may		
	work around lease terms to address		
	perceived tenant/owner "split incentives"		
	issue.		
2-8: Improve utilization of plug	Leveraging the PC network software and		
load technologies within the	vending machine controls to reduce		
commercial sector.	commercial building plug loads.		
3-1: Drive continual advances in	Work with PIER to pilot lighting products		
lighting technology through	on state-owned facilities where available.		
research programs and design			
competitions.			
3-2: Create demand for improved	Piloting emerging technologies in lighting		

lighting products through	with collaboration with the building
demonstration projects, marketing	owners.
efforts, and utility programs.	

In addition, the partnership management teams have and will continue to:

- Be very successful in developing a collaborative approach;
- Overcome many of the barriers that diverse stakeholder groups encounter;
- Successfully navigated these challenges, improve communications, firmly identify roles and responsibilities, and develop a continuity of both people and a management approach that works very well for the partnership;
- Firmly aligned goals: saving energy, improving the environment, and saving money for the CCC customers;.
- Embrace Monitoring Based Commissioning (MBCx) and Retro-commissioning (RCx) at their facilities;
- Some of the campuses have also worked with the PIER SPEED program, which has resulted in the installation of several pilot projects in 2007 and 2008;
- Work with the PIER and IOU ET teams to leverage the pilot projects into larger scale emerging technology programs and projects in 2009 2011;
- Work with the IOU Food Service Technology groups in an outreach effort to educate food service, maintenance, and facilities decision makers in the newer energy efficiency technologies emerging in this area. Innovation in the food service technology sector will be an important focus for the partnerships in 2009 2011;
- Lead the deployment of many information technology energy efficiency measures. Retrofit measures have included server virtualization, PC power management, CRT to LCD monitor replacements, and high-efficiency UPS systems;
- Be innovative in setting policy for energy efficiency and sustainability; and
- Promote the voluntary policies and requirements that fit with the Strategic Plan initiative in the Codes and Standards area to adopt voluntary energy efficiency standards as a precursor to progressively more stringent mandatory building codes and standards.

6. Program Implementation

a) <u>Statewide IOU Coordination</u>:

i. Program name:

California Community Colleges (CCC) Energy Efficiency Partnership.

ii. Program delivery mechanisms:

Partnership management teams have worked very hard and have been very successful in developing a collaborative approach to managing the programs. These teams evolved over the past few years to overcome many of the barriers that the program's diverse stakeholder groups encounter when working together for the first time. As with any project of this nature, many hard lessons were learned over the years. The management teams have successfully navigated these challenges, improved communications, firmly identified roles and responsibilities,

and developed a continuity of both people and a management approach that works very well for their own partnerships. The key for these teams has been that their goals are firmly aligned: saving energy, improving the environment, and saving money. This collaborative style of program management places the partnerships in excellent position for success in 2009 - 2011.

The teams have also worked actively to identify opportunities in their customers' buildings for innovation in energy efficiency. As a result of the 2006-2008 programs, partnerships have embraced Monitoring Based Commissioning (MBCx) and Retro-Commissioning (RCx), even though this program element is still in the pilot project stage and was virtually unheard of before the partnerships were formed. The opportunities for energy savings through MBCx/RCx are enormous, as the built environment consists of millions of square feet This program element is a major focus of the 2009 – 2011 partnerships. The CCC Partnership implements the strategies listed in the California Energy Efficiency Strategic Plan under Workforce Development Program, to develop the human capital needed to achieve its goal by 2020. These strategies are listed under the training and education section.

Finally, the partnerships have been innovative in setting policy for energy efficiency and sustainability. The Energy and Sustainability Plan, which the CCC Board of Governors adopted in January 2007, is intended as a template for CCC Districts to adopt similar policies and goals that can be implemented going into 2009 and beyond. Many other partnerships have recognized that a well thought out sustainability policy and energy plan is one of the keys to making good energy decisions, and are following this lead.

The partnerships efforts to ramp up voluntary policies and requirements fits with the Strategic Plan initiative in the Codes and Standards area to adopt voluntary energy efficiency standards as a precursor to progressively more stringent mandatory building codes and standards. Because of the proactive approach of the partnerships in this area, and with the assistance of the IOUs through the partnership teams, the transition to mandatory requirements will be much smoother. These efforts that are going on simultaneously across the state with the assistance of the partnership teams, are some of the innovative catalysts for success in the 2009 – 2011 program cycle.

Integration of energy efficiency programs with the institutional partnerships has been and will continue to be an important factor for success. Integration is demanded by the customers. Many of the partnerships do not have dedicated energy management staff, and this responsibility is usually shared by business officers and facility director staff. Energy efficiency may not even be in their job description, and in-depth knowledge of the differing and usually disjointed IOU energy programs may not be one of their strengths. The IOUs have consistently heard over the years from their partners that an integrated approach to energy program offerings is vitally important for the management teams to make informed decisions on energy projects. This applies not only to energy efficiency, but also new construction design assistance, demand response, permanent load shifting, and self-generation incentive programs.

The partner customer would like a single point contact for energy programs that can help them make the most logical, effective energy decisions, and not have to sort out competing IOU offerings. The partnerships have taken a proactive approach to the integration of program communication. One strategy is to assemble a package of offerings that covers all the energy bases and is not just confined to the direct offerings from the partnership. These offering packages are presented one-on-one by the partnership team to various other personnel within the institution. The partnership teams are committed to using the most appropriate programs and will make sure that the right people for each IOU program are brought in at the right time for their implementation.

An area that needs improvement in terms of integration for the 2009 – 2011 program cycle is new construction design assistance. Traditionally, this has been handled through the IOU Savings by Design programs. While this program has helped many customers and has resulted in significant energy savings over the years, the experience from the 2006-2008 partnerships is that there have also been significant lost opportunities. These lost opportunities have primarily been a result of the disjointed approach that the utilities have taken in communicating programs Statewide, the lack of knowledge of the IOUs regarding upcoming and planned projects of the customers, and the lack of understanding that many institutions and their architects have in effectively incorporating energy-efficient design into their new construction projects.

The goal of the 2009 – 2011 partnership is to fully integrate the New Construction Design Assistance Program under the partnership umbrella and to provide a common platform and single point contact to communicate this. Because the partnership teams are closely aligned with the customers and better understand their needs and requirements, as well as their capital and construction plans, the partnerships will further minimize lost opportunities in new construction.

Key Activity	Description
Identify key stakeholders to participate	The partnership management team
	identifies key stakeholders in each
	agency. They may be selected to
	participate in the project team.
Conduct solicitation for potential	The retrofit project team coordinates
projects from participating agencies	with the customer to generate a pool of
	projects to be evaluated.
Compile and evaluate projects based on	The retrofit project team performs due
project criteria and cost effectiveness	diligence on proposed projects to

Major Activities:

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requirements.	determine if each project meets the
	criteria and cost-effectiveness
	requirements. The project team
	provides a list of recommended
	projects.
Approve projects for funding	The partnership management team
	reviews project team recommendations
	for potential projects.
Identify funding sources	The partnership team will explore
	financing alternatives such as rebates
	and incentives, on-bill financing,
	application of existing budget, and local
	and state bonds financing to maximize
	the state's investment in energy
	efficiency.
Coordinate project implementation	The project team provides oversight of
with partners and contractors.	project implementation and coordinates
1	with customer and contractors to ensure
	successful and timely implementation.
Verify project installation and provide	The project team conducts 100%
incentive payments.	inspection. Upon verification, project
1 7	team approves the completed projects
	for incentive payments.
Compile project results and complete	The project team compiles all relevant
final report.	project information including measure
I	information; energy savings; program
	incentives paid; etc.
Coordinate with EM&V contractor	If required, management team
where applicable.	coordinates with the project teams and
	key stakeholders to support any
	requests from the CPUC approved
	EM&V contractors.

iii. Incentive levels

Incentive levels are as follows:

- Lighting projects- \$0.24/kWh;
- Motors/VFDs/Compressors/Others \$0.24/kWh;
- HVAC projects with electrical savings \$0.24/kWh, and
- New construction projects \$0.10 above core SBD rates.

iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.

A change for the upcoming 2009 – 2011 program cycle is the refinement of the Outreach Team, which tried several models in 2006-2008, and has evolved into an effective team consisting of customer-focused IOU Account Executives, team leadership from the Community College Chancellor's Office, and key District

staff. Because of the positive relationships that have been formed, the Outreach team has been able to reach the campus and District decision makers more effectively. The IOUs and consultant technical and engineering staff have also been able to quickly and accurately assess project opportunities, complete energy savings calculations, and process project applications with campuses.

The CCC Partnership will also continue its activities with creating presentations for industry and association conferences, attending various conferences, meetings, and outreach events, and distributing marketing materials to contractors, architects, and Community College staff members Statewide.

Key Activity	Description
Outreach	The partnership management team begins outreach efforts by contacting each campuses head of facilities management informing them of the availability of funds for approved measures and activities in the partnership. The team schedules meetings to discuss options, implementation criteria, benefits of program participation, and program offerings.
Customer Follow-Up	The partnership management team, in coordination with staff from the state and the IOUs, visit each targeted site to talk with facilities managers about the various options and proposed energy efficiency measures. After confirming an appropriate site for implementing measures and/or retro-commissioning, the management team meets the appropriate facilities managers to present the anticipated energy savings, other benefits, and considerations associated with the implementation.
Implementation and Training	The partnership management team share energy efficiency knowledge and implementation experience with other public agency entities through a series of meetings and workshops. These meetings and workshops are coordinated with other partnership programs.

v. IOU program interactions with CEC, CARB, Air Quality Management Districts, local government programs, other government programs as applicable

Program interactions are referenced for partnerships in the I&G Core PIP, Section 6v.

vi. Similar IOU and POU programs Not applicable

b) **<u>Program delivery and coordination</u>**

Referenced in the I&G Core PIP, Section 6b.

c) <u>Best Practices</u>

Referenced in the I&G Core PIP Section 6c.

d) <u>Innovation</u>

Some of the partnerships have also worked with the PIER SPEED program, which has resulted in the installation of several pilot projects in 2007 and 2008. These innovative projects included the integrated classroom lighting system (ICLS), bi-level stairway lighting, and demand-controlled ventilation systems for kitchen exhaust hoods. Some partnerships have also had discussions with the IOU Emerging Technologies programs about deployment of technologies such as LED street lights, and have developed plans to install pilot projects. The partnerships will continue to work with the PIER and IOU ET teams to leverage the pilot projects into larger scale emerging technology programs and projects in 2009 – 2011.

Some partnerships are also working with the IOU Food Service Technology groups in an outreach effort to educate food service, maintenance, and facilities decision makers in the newer energy efficiency technologies emerging in this area. Innovation in the food service technology sector will be an important focus for the partnerships in 2009 - 2011.

Institutional partnerships have also led the deployment of many information technology energy efficiency measures. Retrofit measures have included server virtualization, PC power management, CRT to LCD monitor replacements, and highefficiency UPS systems.

The plan for the 2009 – 2011 partnership is to leverage these innovative pilot projects to a fully focused and large scale offering for the California Community Colleges.

e) Integrated/coordinated Demand Side Management

Referenced in the I&G Core PIP, Section 6e.

f) <u>Integration across resource types (energy, water, air quality, etc.)</u> Referenced for partnerships in the I&G Core PIP Section 6f.

g) <u>Pilots</u>

No pilots planned.

h) <u>EM&V</u>

Referenced in the I&G Core PIP, Section 6h.

7. Diagram of Program

See Section 7 in the I&G Core PIP.

8. Program Logic Model

See Section 8 in the I&G Core PIP for Program Logic Model. See Attachment 1 below for Project work flow.



1	Legend		
	Symbol	Description	
		Process	
	Ω	Document	
		Team Review Report	
	0	Report Preparation	
	\Box	Off-page reference	
		Update Web Site	
	\diamond	Decision	

Attachment 1: CCC Project Flow







Campus/District	IOU	Newcomb Anderson	Project Team	Management
		McCormick		Team
From Agree- ment				
Execution				
Order Material /				
Subcontracts				
Invoice # 2 Issued - Material on site /				
Subcontract executed				
Update				
Site	Invoice # 2 Paid			
Installation Start	Update			
	Web Site			
Update				
Site				
50% Complete				
Update Web Site				
Installation				
Complete				
Web Site				
Final Report / Invoice # 3				
Submitted				
	IOU			
Web Site	Verification/ Pay Invoice # 3			
	Undate	Reports		
	Web Site	for Team Review	Project Team Reports	→ Mgmt Team Reports
•••••				
	*			



5b

 Program Name: California Department of Corrections and Rehabilitation Energy Efficiency Partnership
 Program Type: Core

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in the I&G Core PIP.

3. Projected Program Gross Impacts Table – by calendar year

 Table 2 – Refer to Table 2 in the I&G Core PIP.

4. Program Description

a) Describe program

Southern California Edison (SCE) and the California Department of Corrections and Rehabilitation (CDCR) are collaborating to continue the California Department of Corrections and Rehabilitation Energy Efficiency Partnership for the 2009 – 2011 cycle. The CDCR Partnership is a customized Statewide energy efficiency partnership program that accomplishes immediate, long-term peak energy demand savings and establishes a permanent framework for sustainable, long-term comprehensive energy management programs at CDCR institutions served by California's four large IOUs.

This program capitalizes on the vast opportunities for efficiency improvements, and uses the resources and expertise of CDCR and IOU staff to ensure a successful and cost-effective program that meets all objectives of the California Public Utilities Commission (CPUC or Commission). The program also leverages the existing contractual relationship between CDCR and Energy Service Companies (ESCOs) to develop and implement energy projects at CDCR facilities Statewide. CDCR comprises adult institutions, parole offices, community conservation camps, and juvenile facilities, which encompass an estimated 48 million square feet of occupied space.

In the 2006-2008 program cycle, SCE and the other IOUs collaborated with CDCR facility staff to identify opportunities for energy-efficiency projects by conducting audits at each location, and compiled equipment information to create a pool of projects for implementation. CDCR worked diligently to remove barriers that had previously prevented energy-efficiency projects from being implemented with state agencies. The IOU management team executed an agency-specific agreement with CDCR to capitalize on the agency's authority to complete on-site facility construction and renovation. Unlike other state agencies, CDCR has an Office of Facilities Management that handles all construction and operates independently from the Department of General Services (DGS). Based on past success, the IOU management team will facilitate another agency-specific agreement with CDCR for the 2009 – 2011 program cycle.

CDCR initiated a Request for Proposal (RFP) to procure contractors, engineering subcontractors, and Energy Services Companies to assist with project implementation at all Statewide prison facilities. CDCR was also one of the first agencies to take advantage of the Energy \$Mart financing program available through the Department of Finance (DOF) and administrated by the Department of General Services (DGS) to finance their energy-efficiency projects. Energy \$mart financing has provided over 4.7 million dollars, coupled with IOU incentives, to fund energy-efficiency projects at CDCR facilities. Energy \$Mart loans have provided the main source of financial funding for CDCR energy-efficiency projects and will continue to act as the primary source in the next program cycle.

Subsequently, the IOU management team has initiated a Request for Proposal (RFP) to procure an energy engineering and consulting firm devoted exclusively to the CDCR partnership program. The IOU management team has developed a cost-sharing model to help fund the Project Administrator dedicated to CDCR energy-efficiency activities.

Future projects will continue to adopt a comprehensive approach by incorporating retrofits, new construction, and Demand Side Management (DSM) alternatives to include demand-response, renewable self-generation, solar hot water and water efficiency. SCE, CDCR, and the other IOUs are confident that this partnership will be very successful through the next three-year cycle and are committed to expanding the program in the future.

Measure Name	Rebate to end use
	customer or its
	assignee (\$/unit)
Customized - Indoor Lighting	\$0.24
Customized - Indoor Lighting Controls & EMS	\$0.24
Customized - Outdoor Lighting	\$0.24
Customized - Outdoor Lighting Controls	\$0.24
Customized - Motors	\$0.24
Customized - VFDs	\$0.24
Customized - HVAC EMS	\$0.24
Customized - Chillers	\$0.24
Customized - HVAC	\$0.24
RCx/MBCx	\$0.24
Overall Building Performance	\$0.10 above SBD core
System Approach - Light Power Density	\$0.10 above SBD core
System Approach - Chillers	\$0.10 above SBD core
System Approach - Daylighting	\$0.10 above SBD core
System Approach - HVAC Energy Reduction	\$0.10 above SBD core

b) List measures

c) List non-incentive customer services

The partnership shall provide the following non-incentive services:

- Training and education;
- Energy audits;
- Technical assistance;
- Design assistance;
- Due diligence/Project Review;
- Marketing/Outreach; and
- Support of Assembly Bills 32 and 900, and Senate Bill 20-04.

5. Program Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

The CDCR/IOU program has the following challenges/barriers:

Barrier: Project Funding Constraints

Solutions:

- 1. Energy \$Mart Loans;
- 2. On-bill financing;
- 3. Increase purview of CEC loans to include CDCR; and
- 4. Additional innovative financing options.

<u>Barrier:</u> Financial market situation: The current financial crisis has taken its toll on the Energy \$Mart financing program. The Energy \$mart program has significantly reduced the amount of preferred lenders in the portfolio, resulting in a time-intensive competitive process for loan procurement.

Solution:

Continue to develop and research alternative funding mechanisms for energy-efficiency projects.

<u>Barrier:</u> High cost for project overhead: CDCR is unique in that the department must account for the traditional project cost plus additional labor (guarding) and facility access.

Solution:

The partnership will continue to offer high incentive rates to adjust for additional costs and to make projects viable.

d) **<u>Quantitative Program Targets</u>**

Та	bl	e	5	
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Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
	Institutional and	d Government Facilities	
Total Net Savings Target	TBD kWh/kW	TBD kW/kWh	TBD kWh/ kW
EE/DR Audits	Perform audits that encompass EE/DR that would fill the pipeline. With this pipeline, a certain percentage of proposed projects will turn into committed projects.	Perform audits that encompass EE/DR that would fill the pipeline. With this pipeline, a certain percentage of proposed projects will turn into committed projects.	Perform audits that encompass EE/DR that would fill the pipeline. With this pipeline, a certain percentage of proposed projects will turn into committed projects.
Lighting and HVAC Retrofits	In working closely with the partner, they have indicated that there is still plenty of lighting and HVAC retrofit opportunities through the next three years. The planned target for 2009 is conservative due to the uncertainty of the state's ability to have projects through the Energy \$Mart program. This planned target is TBD	If the state's fiscal problems are resolved and a project pipeline is built up with approved funding, the planned target for this year is TBD.	If the state's fiscal problems are resolved and a project pipeline is built up with approved funding, the planned target for this year is TBD.
RCx and MBCx	The majority of the	The majority of the	The majority of the

	opportunities for	opportunities for	opportunities for
	CDCR are retrofits	CDCR are retrofits	CDCR are retrofits
	However there may	However, there may be	However there may be
	be some retro-	some retro-	some retro-
	commissioning or	commissioning or	commissioning or
	monitor based	monitor based	monitor based
	commissioning	commissioning	commissioning
	opportunities The	opportunities The	opportunities The
	target for this year is	target for this year is	target for this year is
	TBD.	TBD.	TBD.
New Construction	In support of AB 900,	In support of AB 900,	In support of AB 900,
	the program will plan	the program will plan	the program will plan
	on new construction	on new construction	on new construction
	opportunities with a	opportunities with a	opportunities with a
	planned target of	planned target of TBD.	planned target of TBD.
	TBD.		
	Strategi	c Plan Support	
See Section 5e			
	Core Prog	gram Integration	
Education and	TBD # of Partner	TBD # of Partner	TBD # of Partner
Outreach	Presentations	Presentations	Presentations
	Development	Determine which	Complete
	documentation	agencies will use OBF;	documentation of
Financial	package and project	establish a model for	participation rates for
Solutions:	agreement for	how on-bill financing	partnerships and
On-Bill Financing	partners.	can be used with	determine any lessons
	-	Institutional and	learned or roadblocks.
		Government customers.	
CSI	Establish	Develop project	Complete
	communication plan	agreement plan and	documentation of
	for ensuring partners	determine necessary	participation potential
	have been educated	stakeholders.	and what is necessary
	regarding solar		for partners to
	potential.		participate.

Note: These are estimated targets. The program will need to have flexibility in allocating resources to each program elements to ensure overall program success.

e) Advancing Strategic Plan goals and objectives:

Institutional and government partnerships are a natural fit with the goals, objectives, and strategies articulated in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan). The partnerships have demonstrated that the three objectives of the Strategic Plan — innovation, integration, and collaboration — are keys to

achieving the next generation of cost-effective, energy-efficiency programs and the resulting reduction in greenhouse gas (GHG) emissions by applying both commercial and local government sector strategies to the state/IOU partnership as follows:

Commercial Sector – Sections 2 and 3		
2-1: Lead by Example: State/local	Where the budget allows, benchmarking	
governments and major	and retro-commissioning customer-owned	
corporations commit to achieve	buildings.	
energy efficiency, EE, (or green)		
targets in existing buildings.		
2-5: Develop tools and strategies	Implementing monitor-based	
to use information and behavioral	commissioning and training energy	
strategies, commissioning, and	managers to continuously monitor and	
training to reduce energy	optimize building operational performance.	
consumption in commercial		
buildings.		
2-6: Develop effective financial	Developing the on-bill financing offerings	
tools for EE improvement to	to be compatible with the state legal	
existing buildings.	requirements. Exploring avenues that may	
	work around lease terms to address	
	perceived tenant/owner "split incentives"	
	issue.	
2-8: Improve utilization of plug	Leveraging the PC network software and	
load technologies within the	vending machine controls to reduce	
commercial sector.	commercial building plug loads.	
3-1: Drive continual advances in	Work with PIER to pilot lighting products	
lighting technology through	on state-owned facilities where available.	
research programs and design		
competitions.		
3-2: Create demand for improved	Piloting emerging technologies in lighting	
lighting products through	in collaboration with the building owners.	
demonstration projects, marketing		
efforts, and utility programs.		

6. Program Implementation

a) Statewide IOU Coordination

i. Program name: California Department of Corrections and Rehabilitation (CDCR) Energy Efficiency Partnership.

ii. Program delivery mechanisms

The 2009 – 2011 CDCR Energy Efficiency Partnership uses and builds upon the implementation strategies employed during the last program cycle. The implementation plan for this cycle is refined to account for successes that have already been achieved and includes:

- Coordination with other energy-efficiency programs and ongoing Statewide and local government partnerships;
- Implementation of energy efficiency retrofits program elements (including project selection and implementation);
- Retro-commissioning (RCx) implementation;
- Energy-efficiency education, best practices development, and training implementation; and
- Integration with IOU's portfolio of DSM products and services resulting in easier customer access and IOU program management.

Program Management Structure

A management team consisting of representatives from CDCR, SCE, and the other IOUs will continue to administer the program. A Program Administrator and management sub-contractor will track project progress and keep the lines of communication and information consistent. The management team will set overall program policy and ensure that the program stays on plan throughout its life cycle, and will meet roughly every three weeks. Sub-committees or "teams," made up of members of the management team and other representatives, will perform the detailed work associated with the program elements, and make recommendations to the management team for action. This will potentially include a retrofit team, MBCx Express Team, and a training and education team. The team will be providing a more coordinated and integrated approach and will increase the penetration of energy efficiency and avoid lost opportunities.

Program Elements

This partnership program will achieve immediate energy savings and peak demand by applying the following program elements:

Retrofit Program

CDCR will implement the retrofit projects in this program through contracts with ESCOs and other vendors. The partnership has identified potential projects from facility assessments and has a pool of projects that served as a basis for CDCR financing requests. This pool provides valuable planning information to determine incentive levels, incentive payment structure, budget forecasts, and to establish the implementation strategies and schedules.

Retro-Commissioning (RCx)/Monitoring-Based Commissioning (MBCx) This element of the program is a unique approach to obtaining savings that

This element of the program is a unique approach to obtaining savings that combines the expertise of utility and sub-contractor, and the installation of energy monitoring and metering equipment at the building system level. Through these resources, where applicable, a systematic, comprehensive RCx program will be implemented in existing facilities. It will provide a cost-effective approach to achieving optimized operating facilities, save

both electric and gas energy, reduce operating cost and improve occupant comfort.

Energy Efficiency Education and Best Practices Development and Training

The partnership will facilitate education and training opportunities for facility personnel. The education and training element will be in collaboration with other partnerships to target facility and maintenance staff. It will be a venue for individuals responsible to share information and experiences related to facility operations, industry best practices, and successful project implementation. The strategy for the education and training element is to leverage the resources of IOU technology centers and develop curriculum that will address the specific needs of the partner.

New Construction and New Construction Design Assistance

The partnership will work closely with design teams of future new construction projects to implement energy-efficiency, load management, and renewable energy aspects to projects. Where applicable, the partnership will use the Savings by Design field services to ensure that all new construction has the opportunity to take advantage of the technical services of Savings by Design. This program will help identify and recommend energy-efficiency measures beyond current codes and also supplement incentives to help install higher efficiency and more costly equipment.

Emerging Technologies

The partnerships may assist in ongoing operations by providing applicable incentives and technical aid for installing emerging technologies. This will expedite the adoption of the technologies into the market place. In addition, the partnerships' pooled resources will allow the partner to pursue additional possibilities for distributed generation that they would not otherwise pursue. Efforts to include clean or renewable generation in their facilities will assist the partners in meeting the state's 20% demand reduction goal.

Integration with Demand Response and Other DSM Services The partnership program will develop a plan to provide a financial incentive for demand response initiatives involving the purchase and installation of equipment by SCE business customers.

The partnership will look for opportunities to integrate demand response and other DSM services into the program. Resources are leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy-efficiency and demand response program staff members collaborate with partners to conduct comprehensive audits

to identify energy-efficiency measures and demand response opportunities. The approach reduces the consumption of technical resources by assigning EE and DR audits tasks to the same audit team. This tactic reduces any duplication of effort that could occur between two separate teams and allows the combined team to collaborate more efficiently during discussions about customer incentive qualifications, thereby minimizing the likelihood of delays.

The partners endeavor to identify facilities (or the aggregation of facilities) under one service account to establish the opportunities for DR participation. The minimum service account program eligibility requirement is one 30 kW demand response opportunity.

The partnership will also assist, where applicable, facility and operations managers who are interested in solar technology. IOU technical support staff can utilize energy audits to provide recommendations to improve facility operations through EE/DR measures prior to implementing more costly solar technologies. This strategy supports the Energy Action Plan's loading order.

Funding Sources

The partnership intends to take advantage of incentives available through the partnership program. If accepted and implemented, these projects receive incentives for incremental energy savings for each measure that complies with the program's guidelines. The IOUs work with their internal program staff to allocate appropriate incentive amounts from all applicable programs and to ensure that state agencies include complete and correct incentive information in the Life Cycle Cost Analysis that they submit when they arrange for financing through the Energy \$Mart program.

Key Activity	Description
Identify key stakeholders to participate	The partnership management team identifies key stakeholders within CDCR. They may be selected to participate in the project team or provide guidance to the management team.
Conduct solicitation for potential projects from participating agencies	CDCR will utilize the existing relationships with contractors and ESCOs to help identify viable projects.
Compile and evaluate projects based on project criteria and cost effectiveness requirements.	The Project Administrator and management team will develop a list of potential projects based on information received from ESCOs and contractors. A management team decision will

Major Activities

Key Activity	Description
	be made on project viability.
Approve projects for funding	The partnership management team reviews project team recommendations for potential projects.
Identify funding sources	The partnership team and CDCR explores financing alternatives, such as rebates and incentives, on-bill financing, application of existing budget, and Energy \$Mart financing to maximize CDCR's investment in energy efficiency.
Coordinate project implementation with partners and contractors.	The Project Administrator and management team provides oversight of project implementation and coordinates with customer and contractors to ensure successful and timely implementation.
Verify project installation and provide incentive payments.	The Project Administrator conducts 100% inspection. Upon verification, project team approves the completed projects for incentive payments.
Compile project results and complete final report.	The Project Administrator and management team compile all relevant project information, including measure information; energy savings; program incentives paid; etc.
Coordinate with EM&V contractor where applicable.	If required, the management team coordinates with the project teams and key stakeholders to support any requests from the CPUC-approved EM&V contractors.

Sub-contractor Activities

Sub-contractors will assist in project administration and management in each of the three program elements: retrofit, retro-commissioning/monitoring-based commissioning, and new construction. The sub-contractor will assist, as needed, in the project coordination and communication among the partners (CDCR and four IOUs). The tasks include but not limited to the following:

- Support project implementation teams;
- Assist in identifying project tasks, establishing a schedule of deliverables and responsibilities. Helping IOUs to effectively deliver the program and assist CDCR in ensuring successful program implementation and obtain inputs from the partners to facilitate decision-making on key program elements.
- Assist in the three program elements, especially in the coordination and facilitation of partnership meetings, and provide timely and accurate

meeting minutes. The sub-contractor will facilitate communications between the partnership and the CDCR facilities, as well as providing analytical assistance to the IOUs, and the CDCR Energy Management office.

- Provide assistance to track and ensure successful program implementation based on specific deliverables required by the partnership.
- Assist the IOUs and CDCR in providing timely and accurate program information for reporting to the CPUC.
- Assist in the development of workshop agendas and facilitation of workshops and training sessions.

CDCR will hire energy-efficiency retrofit sub-contractors to install the energy-efficiency measures for the retrofit component and commission agents to assist in the performance of MBCx projects. CDCR may also hire engineering sub-contractors to assist with project development, as needed.

Quality Assurance and Evaluation Activities

The CDCR/IOU partnership team will establish and oversee quality assurance measures for the partnership program, including oversight and verification of sub-contractor activities. In general, however, the partnership will continue the level of due diligence and quality assurance by inspecting a representative percentage of pre-/post- installation confirmation inspections for small hardware projects and pre-/-post inspections on all large or specialized hardware projects (installation of energy efficient equipment, facility retrofits, and building commissioning and new construction projects).

An independent sub-contractor managed by the CPUC will complete the Commission-mandated EM&V effort.. If requested, the partnership will fully collaborate with the EM&V contractor to support the EM&V activities.

iii. Incentive levels

Measure	Incentive Level	
Lighting projects	\$0.24/kWh	
Motors/VFDs/Compressors/Others	\$0.24/kWh	
HVAC projects with electrical	\$0.24/kWh	
savings		
New construction projects	\$0.10 above core SBD rates	

iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.

The CDCR/IOU partnership will rely on existing communication between the CDCR institutions and Operation and Maintenance (O&M) staff. Combined with the partnership management team structure, this practice will facilitate marketing activities through pre-established channels.

Key Activity	Description
Outreach	The partnership management team and program administrator will use pre-existing communication channels to disseminate information throughout CDCR. Since the partnership is an agency-specific agreement all interested parties are represented on the management team. Other pertinent parties are addressed my management team on an as needed basis.
Customer Follow-Up	CDCR partnership is an agency specific program. Follow-up is conducted at management team meetings held every 3 weeks.
Implementation and Training	The partnership management team and Program Administrator share energy efficiency knowledge and implementation experience with all pertinent parties through a series of meetings and workshops. These meetings and workshops are coordinated with other partnership programs, as necessary.

v. IOU program interactions with CEC, CARB, Air Quality Management Districts, local government programs, other government programs as applicable

IOUs are continuously monitoring their respective local government partners to leverage off best practices and new/innovative programs. IOUs are also researching opportunities with the CEC to help provide alternative funding sources, such as CEC loans for CDCR medical facilities. In regards to the ARB, constant observation on air pollution policies helps CDCR meet the mandate of AB 32.

vi. Similar IOU and POU programs

The four IOUs strive to have consistency in their respective program offerings, where practical, to make the transactional experience for the state agencies seamless and transparent. Where the IOUs differ in their implementation strategies, the management team educates and guides the state agencies to ensure complete process follow-through. If POUs have interest in implementing EE programs, the partnership shall provide technical assistance in designing these programs, if requested.

b) Program delivery and coordination

The CDCR Energy Efficiency Partnership is in a unique position in which by collaboration, has certain delivery and coordination activities made possible by the agreements that are in place as required when entering into the partnership.

i. Emerging Technologies program

If opportunities allows, the IOUs bring forth emerging technologies to the partner either through PIER project opportunities or the management team's introduction of technology demonstration projects.

ii. Codes and Standards program

N/A.

iii. WE&T efforts

WE&T type of activities is an integral part of the MBCx strategy where facilities staff are trained to maintain building optimization, adding value to their skill sets and further securing their need in the workforce.

iv. Program-specific marketing and outreach efforts (provide budget)

The outreach efforts for the partnership involve the Energy Management Section of the Facilities Management Division working directly with the individual prison sites.

v. Non-energy activities of program

Non-energy activities include the technical assistance the partner may need but does not have the resource available in-house. The program provides this kind of support as an added benefit to the partner, in addition to the monetary incentives they may receive from the IOUs. CDCR, however, has adequate resources with ESCOs on board.

vi. Non-IOU Programs

Not applicable

vii. CEC work on PIER

PIER technology projects are introduced into the programs at the project level when opportunities arise.

viii. CEC work on codes and standards

Not applicable

ix. Non-utility market initiatives Not applicable
<u>California Department of Corrections and Rehabilitation Energy</u> <u>Efficiency Partnership</u>

c) <u>Best Practices</u>

The key to the partnership's success is the application of best practices developed or learned from prior successful programs or other partnerships.

Type of Best Practice	Best Practice	Institutional Application(s)
Goals &	Develop and use clearly articulated objectives that are internally consistent, actionable and measurable.	Share clearly defined and obtainable goals that are developed with partner input. Track goals through bi-weekly management team meetings to ensure they are achieved.
Objectives	Develop tools to track the portfolio's performance on a continuous basis and report progress.	The detailed program plan is a living document that will facilitate continuous tracking and reporting.
	Design programs within the portfolio based on sound program plans; where appropriate, utilize clearly but concisely articulated program theories.	The plan & program structure are based on sound program plans & theories.
Planning	Conduct baseline research	Baseline research was conducted of each partnership and the individual participating cities & counties.
	Build feedback loops into program design and logic Maintain the flexibility to rebalance portfolio initiatives, as needed, to achieve the portfolio's goals and objectives.	The detailed program plan provides a mechanism for closely monitoring progress and making adjustments as may be needed to meet the partnership goals and objectives.
Staffing	Select highly qualified in- house staff &/or outside contractors to manage, design, implement and evaluate programs. Clearly define portfolio implementation responsibilities and clarify roles to minimize confusion.	SCE Project Managers have been assigned to each partnership to assure continuous open communications and implementation success. The roles and responsibilities of SCE and the various partners and participants are clearly defined in the Program Plan. SCE's resources will be supplemented with pre-qualified technical support contractors selected by SCE though competitive solicitations to cost- effectively provide the portfolio of technical assistance needed to support its partners.

California Department of Corrections and Rehabilitation Energy Efficiency Partnership

Type of Best Practice	Best Practice	Institutional Application(s)
Integration	Leverage relationships from complementary organizations such as utilities, trade allies, and industry specialists.	Structured to leverage all resources, assets and relationships of SCE, its partners, and their participants, constituents, stakeholders, and other related individuals & organizations.
Reporting & Tracking	Clearly articulate the data requirements for measuring portfolio and program success. Design tracking systems to support the requirements of all major users: program administrators, managers, contractors and evaluators.	The detailed program plan, coupled with frequent meetings between/among SCE, its Partners and their members/ constituents is designed to track and report partnership progress and successes.

d) <u>Innovation</u>

Not applicable

e) Integrated/coordinated Demand Side Management

Demand response programs provide tariff-based benefits to customers who design and utilize demand response procedures. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan to provide a financial incentive for the energy savings resulting from the equipment through the partnership shall be developed.

The partnership will look for opportunities to integrate demand response and other DSM services into the program. Resources are leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy efficiency and demand response program staff members collaborate with partners to conduct comprehensive audits to identify energy efficiency measures and demand response opportunities. The approach reduces the consumption of technical resources by assigning EE and DR audits tasks to the same audit team because this tactic reduces any duplication of effort that could occur between two separate teams and allows the combined team to collaborate more efficiently during discussions about customer incentive qualifications, thereby minimizing the likelihood of delays.

The partners endeavor to identify facilities (or the aggregation of facilities) under one service account to establish the opportunities for DR participation. The minimum service account program eligibility requirement is one 30 kW demand response opportunity.

<u>California Department of Corrections and Rehabilitation Energy</u> <u>Efficiency Partnership</u>

The partnership will also assist, where applicable, facility and operations managers who are interested in solar technology. IOU technical support staff can utilize energy audits to provide recommendations to improve facility operations through EE/DR measures prior to implementing more costly solar technologies. This strategy supports the Energy Action Plan's loading order.

f) <u>Integration across resource types (energy, water, air quality, etc.)</u> Not applicable

g) <u>Pilots</u>

Not applicable

h) <u>EM&V</u>

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2009-2011 after the program implementation plans are filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy Division studies. More detailed plans for process evaluation and other program-specific evaluation efforts cannot be developed until after the final program design is approved by the CPUC and in many cases after program implementation has begun, since plans need to be based on identified program design and implementation issues.

7. Diagram of Program

See the I&G Core PIP, Section 7.

8. Program Logic Model

See the I&G Core PIP, Section 8.

5c

1. Program Name: County of Los Angeles Energy Efficiency Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in the I&G Core PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in the I&G Core PIP.

4. Program Element Description and Implementation Plan

The 2009 - 2011 County of Los Angeles Energy Efficiency Partnership is a continuation of the existing, successful 2004 - 2005 and 2006 - 2008 programs with SCE and Southern California Gas (SCG). The 2009 - 2011 Partnership will build on the lessons learned and will continue to focus on identifying energy efficiency activities in county facilities in support of the recently adopted county of Los Angeles Energy and Environmental Plan.

The partnership program will support the energy efficiency components of the Energy and Environmental Plan initiatives by identifying projects and strategies to reach the 38 different county departments that the Internal Services Department (ISD) serves. In addition, there are departments and public agencies affiliated with the county (Public Housing, Sanitation Districts, School Districts County Metro Transit Authority, and Waterworks and Wastewater utilities) that have previously not participated in past partnership programs. By tailoring outreach and implementing innovative ways to participate (emerging technologies, integration with state-wide pilots, e.g. water districts, and flexible funding) the partnership will increase energy efficiency participation in these LA County departments.

a) List of program elements

- 1. Retrofit (HVAC, lighting, Emerging Technology, others);
- 2. Retro-Commissioning and Monitoring-Based Commissioning;
- 3. Energy Efficiency Education and Best Practices Development and Training;
- 4. New Construction and Design Assistance (SBD);
- 5. Emerging Technologies;
- 6. Integration with Demand Response and other DSM Services;
- 7. Funding Sources (for example, on-bill financing and grants);
- 8. Coordination with other IOU Program Offerings (*for example*, core programs, solar, water renewable-portfolio, and others); and
- 9. Policy Assistance: Energy Policy.

b) <u>Overview</u>

Retrofit Program

The Retrofit projects in this program will be implemented by the County of Los Angeles through contracts with contractors and engineering consultants. The partnership has identified potential projects from facility assessments and has a data set of projects that served as a basis for implementation. This data set provides valuable planning information to determine incentive levels, incentive payment structure, budget forecasts, and to establish the implementation strategies and schedules.

Retro-Commissioning (RCx) / Monitoring-Based Commissioning (MBCx)

This element of the program is a continuation of a unique approach to obtaining savings that combines the expertise of county staff, utility and subcontractor expertise, and the use of the County's Enterprise Energy Management Information System (EEMIS). Through these resources, a systematic, comprehensive RCx program will be implemented in existing facilities. It will provide a cost effective approach to achieving optimized operating facilities, save both electric and gas energy, reduce operating cost and improve occupant comfort.

Energy Efficiency Education and Best Practices Development and Training

The partnership will facilitate education and training for facility and maintenance personnel. The education and training element will support the outreach and education initiatives as articulated in the County's Energy and Environmental Policy. There will be a venue for those individuals responsible for managing energy to share information and experiences related to facility operations, to gain knowledge of industry best practices in energy efficiency management, and successful project implementation, among other issues. The strategy for the education and training element is to leverage the resources of IOU technology centers and develop curriculum that will address the specific needs of the partner. Lastly, the partnership will seek opportunities to improve project coordination and communication to strengthen the relationships among the partnership team, LA County departments and ISD.

New Construction and New Construction Design Assistance

As with retrofits, the county has a stated desire to implement more efficient and sustainable measures in new construction projects. In practice, however, budgetary constraints often prevent this. Financial incentives, together with upper-level management commitment increase the ability of the county's energy managers to see that these goals are actually met. The partnership will work closely with design teams of future projects, both large and small, to implement energy efficiency, load management, and renewable energy to the maximum extent feasible.

Emerging Technologies

The partnership may also pursue opportunities to facilitate the installation of emerging technologies. Where applicable the partnership will provide incentives and

technical aid for installing emerging technologies in County facilities to influence the technology being adopted into market.

Integration with Demand Response and other DSM services

Demand response programs provide tariff-based benefits to customers implementing demand response activities. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan to provide a financial incentive for the energy savings resulting from the equipment through the Partnership program will be developed.

The Partnership will look for opportunities to integrate demand response and other DSM services into the program implementation plan. Resources will be leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy efficiency and demand response (EE/DR) program staff will collaborate with partners to conduct comprehensive audits and identify energy efficiency measures as well as demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid duplication, collaborate on incentive offerings and will minimize customer interruptions.

The partners seek to identify facilities or aggregation of facilities under a service account to establish opportunities for DR participation that will meet the SCE program eligibility of a 30 kW minimum demand response opportunity per service account.

The partnership will also assist, where applicable, facility management staff that are interested in solar technology and will provide recommendations in facility operations through energy audits to improve its facilities with less costly EE/DR measures prior to implementing more costly solar technologies.

Funding Source

The utilities will work with the County of Los Angeles ISD staff to allocate appropriate partnership incentives for qualified projects and collaborate with all applicable DSM programs to ensure agencies can include incentive information in the life cycle cost analysis to support the financing request, where applicable. The County is currently pursuing on-bill financing efforts, with their County Council, and if able to participate in this option, will work collaboratively with the Partnership to identify applicable projects. In addition, any grants or other State funding for which the County may be eligible will be pursued, and the Partnership will assist with alternate funding sources.

Coordination with other IOU Programs

The partnership will be utilized as a "portal" to other IOU energy programs such as the California Solar Initiative, Self-Generation Incentive Program, and Demand Response, as well as related agricultural, water efficiency, green building programs, and others as appropriate. These other IOU departments/programs will be engaged in and active in the process of identifying opportunities and working with the partnership team to ensure an integrated and smooth process.

Policy Assistance: Energy Policy

The partnership will support energy reduction and environmental initiatives described in the Los Angeles County Energy and Environmental Plan, adopted by the County in 2008. Support may include technical assistance, training, applicable incentives and emerging technology support. The partnership intends to utilize the IOU core programs, as applicable, as well as coming up with unique and innovative ways to support the County's Energy and Environmental Plan through outreach, pro-active communication and regular Partnership activities.

c) <u>Non-incentive services</u>

Non-incentive services will include integrated audits not only for ISD operated buildings, but also for the 38 different county departments that Internal Services Department (ISD) serves, such as: Department of Public Works, Sheriff, Health Services, Public Housing, Sanitation Districts, School Districts under the Office of Education, the County Metro Transit Authority, and the county's Waterworks and Wastewater utilities. These audits will be identified through the Partnership and will include RCx, retro-fit, Demand Response opportunities, emerging technologies, solar or self generation programs as applicable.

In addition to the audits, other non-incentive services will include any training or education services provided by the IOUs to County staff, utilizing SCE's CTAC facility, and on-site training as appropriate.

d) Target audience

The Partnership will primarily target LA County owned and or operated buildings. The target audience will be wide sweeping internally to the County because of the joint efforts of the partnership to expand to other County departments under the leadership of Internal Services Department. Additionally the outreach and education will focus on building engineers, managers etc, to promote and maintain energy efficiency installations at all County facilities. County leadership (Department heads, County Council, Board of Supervisors, etc) will also be targeted through outreach efforts, to assist with County adoption of energy efficiency measures and promotion of the Partnership.

e) Implementation

The implementation plan for this program cycle will include the continuation of activities implemented in the 2006 - 2008 County of LA Partnership. The partnership will apply lessons learned from the current partnership as well as from other local and Statewide partnership programs.

SCE will retain the overall administration of the partnership program. The partnership will work together to establish funding guidelines for various projects, sharing technical expertise, and implementing projects. The partnership also will

coordinate the use of ISD's own resources and total program resources to identify and develop projects, manage individual projects, and track costs and savings.

A new approach will be employed to contract for construction and engineering work. In the current program cycle, the County was able to establish a process to procure contractors to implement projects. This responsibility will shift from the utilities to the county to facilitate the implementation process. However, project decisions will continue to be made by the management team on a Partnership level though discussions at our regularly scheduled Partnership meetings.

The program will continue to be managed by the County of Los Angeles, SCE, and SCG.. The management team will set overall program policy and ensure that the program stays on plan throughout its life cycle, and will meet roughly every two weeks. Subcommittees or "teams" made up of members of the management team and other representatives will perform the detailed work associated with the program elements, and make recommendations to the management team for action. This will potentially include retrofit, retro-commissioning, new construction, and training & education as well as coordinated activities with other demand-side management programs such as Demand Response (DR), California Solar Initiative (CSI), and emerging technologies (ET). The team will be providing a more coordinated and integrated approach and will increase the penetration of energy efficiency activities or savings and avoid lost opportunities.

5. Program Element Rationale and Expected Outcome a) <u>Quantitative Baseline and Market Transformation Information</u>

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

 $\label{eq:table4-Refer} \textbf{Table 4} - \text{Refer to the overarching program for market transformation metrics}$

c) **<u>Program Design to Overcome Barriers</u>**

Funding from the County for projects has been, and may continue to be a barrier to participation. The partnership plans on overcoming these barriers by continuing the foundation made in the 2006-08 program which includes regular status/Partnership meetings, meeting with contractors and vendors, and project managers working on construction and RCx projects in the County. The partnership has been able to

participate in County projects early in the planning stage, to ensure the most efficiency energy designs and equipment are implemented, and the construction costs are able to be offset by partnership incentives. The partnership may also provide flexibility in incentive structure and may reduce the actual measure incentive to cover additional engineering services and costs provided to the County through the partnership (e.g. pay additional engineering costs to ensure project is implemented, but this may affect the total incentives available for the project due to cost-effectiveness considerations). Up-front, or advanced incentive payment structure may also be employed in this cycle, providing the County with a percentage of the actual project incentive dollars in advance of the actual installation of equipment, so that the County can use the incentive dollars to procure equipment, or hire contractors to do the installation of approved measures. County budget was calculated for the 2009 – 2011 cycle to align with the limited number of buildings identified for Retro-Commissioning within the County (many facilities were completed RCx in the 2006-2008 program), and based upon retro-fit forecasts provided by the County.

c) **Quantitative Program Targets**

Table 5				
LA County Partnership: Government Facilities				
Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011	
EE/DR Audits	Ensure 100% of all audits are coordinated EE/DR efforts if applicable. Promote EE opportunities first, in order to correctly assess and implement DR reduction potential.	Ensure 100% of all audits are coordinated EE/DR efforts if applicable. Promote EE opportunities first, in order to correctly assess and implement DR reduction potential.	Ensure 100% of all audits are coordinated EE/DR efforts if applicable. Promote EE opportunities first, in order to correctly assess and implement DR reduction potential.	
Lighting and HVAC Retrofits	Utilize partnership activities and completed audits to identify and implement retrofit measures. Lighting retrofits may account for 20% of all retrofit opportunities, and HVAC may account for 60% and the remaining 20%	Utilize partnership activities and completed audits to identify and implement retrofit measures. Lighting retrofits may account for 20% of all retrofit opportunities, and HVAC may account for 60% and the remaining 20% would be "other" (e.g.	Utilize partnership activities and completed audits to identify and implement retrofit measures. Lighting retrofits may account for 20% of all retrofit opportunities, and HVAC may account for 60% and the remaining 20% would be "other" (e.g.	

	would be "other" (e.g. vending misers, software controls, etc). Retrofits energy savings are TBD.	vending misers, software controls, etc). Retrofits energy savings are TBD.	vending misers, software controls, etc). Retrofits energy savings are TBD.
RCx and MBCx	Identify County buildings for possible RCx/MBCx opportunities, secure RCx/MBCx vendors and being Investigation process for implementation. RCx has typically accounted for 90% of all projects completed by the partnership in the 2006-08 cycle. RCx/MBCx energy savings are TBD.	Identify County buildings for possible RCx/MBCx opportunities, secure RCx/MBCx vendors and being Investigation process for implementation. RCx has typically accounted for 90% of all projects completed by the partnership in the 2006- 08 cycle. RCx/MBCx energy savings are TBD.	Identify County buildings for possible RCx/MBCx opportunities, secure RCx/MBCx vendors and being Investigation process for implementation. RCx accounted for 90% of all projects completed by the partnership in the 2006-08 cycle. RCx/MBCx energy savings are TBD.
New Construction	Communicate Integration Strategy between internal departments and offerings and incentive structure. LA County has not typically had a lot of new construction projects, however the partnership has earmarked budget and expected kWh/kW savings for remodeling projects and some new buildings anticipated within the cycle (libraries, data	Communicate Integration Strategy between internal departments and offerings and incentive structure. LA County has not typically had a lot of new construction projects, however the partnership has earmarked budget and expected kWh/kW savings for remodeling projects and some new buildings anticipated within the cycle (libraries, data center, etc). Energy savings from New Construction	Communicate Integration Strategy between internal departments and offerings and incentive structure. LA County has not typically had a lot of new construction projects, however the partnership has earmarked budget and expected kWh/kW savings for remodeling projects and some new buildings anticipated within the cycle (libraries, data center, etc). Energy savings from New Construction

	center, etc). Energy savings from New Construction are TBD.	are TBD.	are TBD.
kWh/kW Total Savings	TBD kWh TBD kW	TBD kWh TBD kW	TBD kWh TBD kW
Core Program Integ	ration		
Education and Outreach	Utilize CTAC and other existing resources for training and education of County staff, specifically on RCx sustainability, EE and DR integration.	Utilize CTAC and other existing resources for training and education of County staff, specifically on RCx sustainability, EE and DR integration.	Utilize CTAC and other existing resources for training and education of County staff, specifically on RCx sustainability, EE and DR integration.
Financial Solutions: On-Bill Financing	Continue work with IOU and County council to broker an acceptable Agreement to take advantage of OBF, if at all possible. If County is not able to participate, this will not be an element of the partnership. If agreement is reached, then partnership will identify qualified projects and implement energy efficiency measures offset by OBF.	Continue work with IOU and County council to broker an acceptable Agreement to take advantage of OBF, if at all possible. If County is not able to participate, this will not be an element of the partnership. If agreement is reached, then partnership will identify qualified projects and implement energy efficiency measures offset by OBF.	Continue work with IOU and County council to broker an acceptable Agreement to take advantage of OBF, if at all possible. If County is not able to participate, this will not be an element of the partnership. If agreement is reached, then partnership will identify qualified projects and implement energy efficiency measures offset by OBF.
California Solar Initiative: CSI	Implement communication plan for ensuring partners have been educated on solar potential of County buildings, and work with County on their	Work through the Partnership team to continue education, and look for opportunities for solar installation within the County. Possibly target new construction projects	Complete documentation of participation potential and what is necessary for partners to participate, if any potential projects were

proposed Solar Web site which would allow constituents to estimate kWh reductions and costs/payback. (Outreach and Education Effort).	for solar technology. Continue any progress on County initiated Solar Web site.	identified.
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Note: These are estimated targets. The program will need to have flexibility in allocating resources to each program elements to ensure overall program success.

6. Other Program Element Attributes

a) **Best Practices**

The partnership will continue lessons learned from previous partnership cycles, most significantly in the Retro-Commissioning (RCx) arena. The LA County Energy Efficiency Partnership has been a strong leader in this area and has successfully implemented RCx projects in more than 30 buildings over the previous 2 partnership cycles (2004-2008) saving the County millions of dollars in avoided energy costs, maintenance, and operations, as well as saving more than 17 Million kWh. Lessons learned about timeline, implementation, monitoring and reporting will be applied to the current cycle to capture efficiencies and streamline processes. Additionally, the communication process and teamwork approach best-practices will continue to be implemented and improved upon in the next cycle, so that all stakeholders share responsibilities, risk and reward.

b) <u>Innovation</u>

For $\overline{2009 - 2011}$ the partnership team will continue working collaboratively with County staff to deliver energy efficiency elements and demand-side management activities in support of the County's aggressive Policy goal of reducing energy consumption in County facilities by 20% by the year 2015. The partnership will seek to identify and implement energy efficiency projects in "hard to reach" Countyaffiliated public agencies. By working with the County's water and wastewater utilities not only will energy saving projects be identified, the partnership will support a potential CEC Pier energy grant to identify and implement water savings measures that produce energy savings in water pumping and treatment.

Environmental Stewardship

Under the County's Energy and Environmental Policy, the County has joined the CA Climate Action Registry and Cool Counties signifying the County's intent to establish its "environmental footprint" by quantifying greenhouse gas (GHG) production responsibility, commit to reducing its GHG production in support of state and federal programs, and developing a climate action plan. The County's Policy identifies energy efficiency, renewable resources, and water efficiency as key areas in reducing GHG production.

Through the reduction of electric and gas consumption this program will greatly reduce the production of (GHG). SCE will calculate the reduction of CO2 reduction in tons by calculating the annual life-cycle energy savings, in accordance with California Assembly Bill 32 (AB 32) which caps global warming emissions to 2000 levels by 2010 (11% below business as usual), to 1990 levels by 2020 (25% below business as usual), and 80% below 1990 levels by 2050.

The County Policy also establishes a number of waste reduction, landfill diversion, recycling, alternative transportation/green fleet, green purchasing and other environmental programs for both County employees and constituents that are part of the Environmental Stewardship category under the Policy.

Public Education and Outreach

The County holds regular County Energy & Environmental Fairs for employees and constituents as part of its Public Education and Outreach category under the Policy. The utilities have participated in the past two quarterly fairs.

The County is a founding member and current chair of the Local Government Sustainable Energy Coalition. The Local Government Sustainable Energy Coalition is an association of California public entities formed to share information and resources to strengthen and leverage their communities' commitments to a sustainable energy future – a future that provides for essential energy resources, restrains energy demand, increases energy efficiency and renewable energy production, and improves energy security and reliability, while enhancing environmental values and community well-being. The County will work through its utility partnership to grow the Coalition in an effort to increase energy and sustainability knowledge throughout the southern California region's local governments and public agencies.

Sustainable Building Design

Under its Policy, the County requires U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) certification at the Silver level for new County buildings greater than 50,000 square feet. LEED certification is a designation offered by the USGBC to recognize projects that optimize energy and water use efficiency, enhance the sustainability of the project site, improve indoor environmental quality, and maximize the use and reuse of sustainable and local resources.

The partnership team will identify and support the appropriate energy efficiency elements of the LEED certification process. SCE's Savings By Design programs will be leveraged for technical resources and incentives to support the sustainable design initiative. The team will identify opportunities to support the energy efficiency element of the County's effort on the Green Building component of the Sustainable Design initiative. These energy savings will be accomplished by evaluating the energy efficiency potential of existing buildings and then implementing retrofits

and/or retro commissioning in some of those buildings. Additional savings will be achieved by working in the early stages of new construction projects to assure the most energy-efficient design acceptable to the County (and to increase the desire to make highly energy-efficient designs "acceptable").

The County is also currently investigating the feasibility of adoption of LEED certification for existing buildings. Similarly, utility incentive programs and the partnership will be leveraged to enhance the energy efficiency aspects of any LEED EB program adopted by the County.

Additionally, the County Policy includes a program to investigate the requirement of LEED certification (or other certification standard) for privately developed buildings in County unincorporated area. The goal is to develop and implement a County ordinance requiring certification for new residential and commercial construction. The partnership may help support this program through public education and outreach on green building benefits, advertising of existing incentives, technical resources, and pilot program incentives. A draft ordinance is before the County's Regional Planning Commission and additional public hearings and presentations to the Board of Supervisors are still being scheduled. It will be the partnership's goal to help this ordinance pass and provide early (pilot program) incentives to assist in its implementation.

c) Interagency Coordination

Coordination with the California Air Resource Board (CARB), California Energy Commission (CEC), and Public Interest Energy Research (PIER) or Codes and Standards; and others as opportunities arise.

d) Integrated/coordinated Demand Side Management

The partnership will continue integration to other IOU energy programs such as the demand response, solar initiative, and self-generation programs, as well as related agricultural, water efficiency, and green building programs. Demand response programs provide tariff-based benefits to customers implementing demand response activities. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan will be developed to provide a financial incentive for energy savings resulting from the equipment supplied through the partnership program. The partnership will look for opportunities to integrate demand response and other DSM services into the program implementation plan. Resources will be leveraged to improve implementation efficiency. IOU energy efficiency and demand response program staff will collaborate with partners to conduct comprehensive audits and identify energy efficiency measures and demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid duplication and collaborate on incentive offerings which will all minimize customer interruptions.

e) <u>Integration across resource types (energy, water, air quality, etc.)</u> See Section 4 above.

f) <u>Pilots</u>

There are currently no pilot projects incorporated into the partnership. Any future pilot opportunities will be considered and agreed upon by all partnership parties.

g) <u>EM&V</u>

See the I&G Core PIP, Section 6h.

7. <u>Partnership Program Advancement of Strategic Plan Goals and Objectives</u>:

Table 6

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Approach to Achieving Strategic Plan Goal
1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	Partnership will work with LA County policy makers to adopt and implement building or new construction goals that exceed Title 24 requirements by a percentage determined by the County (e.g. all new construction in the County will be more than X% above T24)
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Not expected to be influenced by partnership activities; however, the Partnership is supportive of the County's role in any permitting or expedited approval policy for green building.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	Not expected to be influenced by partnership activities, however the partnership is supportive of the County's role in any permitting or expedited approval policy for green building.
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	Not expected to be influenced in the LA County Energy Efficiency Partnership.
1-5: Develop broad education program and peer-to-peer support to local government's to adopt and implement model reach codes.	Develop information campaign on mechanics and benefits of model programs targeting local government decision- makers and community leaders and Board of Supervisors.
1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program.	CARB adopts regulation providing local government emission reduction credit for "reach" standards.
	State Attorney General and Office of Planning & Research provide guidance on using CEQA authority to target energy and GHG savings in LG development authority.

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Approach to Achieving Strategic Plan Goal	
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	Support partners to improve compliance. See Codes & Standards PIP.	
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Support partners to improve compliance. See Codes & Standards PIP.	
3-1: Adopt specific goals for efficiency of local government buildings, including:	Support implementation of local policies for LEED new construction and existing buildings.	
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	Support benchmarking of targeted buildings against ratings such as ENERGY STAR and its Portfolio Manager.	
	Continue commissioning programs on selected high-use buildings.	
3-4: Explore creation of line item in LG budgets or other options that allow EE cost	Explore and document model policies and mechanisms by June 2010	
savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Implementation plan in place by Dec 2010 for mechanisms to fund.	
3-5: Develop innovation Incubator that competitively selects initiatives for	Coordinate this approach with Research & Technology activities.	
inclusion in LG pilot projects.	Develop and begin first projects by December 2010.	
4-1: LGs commit to clean energy/climate change leadership.	Assist initial set of local governments in commitments; develop and communicate appropriate messages.	
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and	Develop model General Plan (Energy Plan already adopted by the County of LA) amendments.	
chinate change.	Leaders among local governments adopt policies in General Plan elements.	
	Publicize to other local governments.	

California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Strategy	Approach to Achieving Strategic Plan Goal
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use.	Help identify targeted opportunities and challenges for more energy/environmentally integrated development and infrastructure. Develop and implement pilot projects, such as the California Sustainable Communities Initiative.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority.	Not expected to be influenced in the LA County Energy Efficiency Partnership.

5d

1. Program Name: County of Riverside Energy Efficiency Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in the I&G Core PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in the I&G Core PIP.

4. Program Element Description and Implementation Plan

a) List of program elements

The list of program elements include:

- Retrofit (HVAC, lighting, Emerging Technology, others);
- Retro-Commissioning and Monitoring-Based Commissioning;
- Energy Efficiency Education and Best Practices Development and Training;
- New Construction and Design Assistance (SBD);
- Emerging Technologies;
- Integration with Demand Response and other DSM Services;
- Funding Sources: e.g. on-bill financing, grants, etc.;
- Coordination with other IOU Program Offerings (core programs, solar, water and others); and
- Policy Assistance: Energy Policy.

Element Details

• <u>Retrofit Program</u>:

The Retrofit projects in this program will be implemented by the County of Riverside through contracts with contractors and engineering consultants. The partnership has identified potential projects from facility assessments and has a data set of projects that served as a basis for implementation. This data set provides valuable planning information to determine incentive levels, incentive payment structure, budget forecasts, and to establish the implementation strategies and schedules.

• <u>Retro-Commissioning (RCx) / Monitoring-Based Commissioning</u> (MBCx):

This element of the program is a continuation of a unique approach to obtaining savings that combines the expertise of county staff, utility and subcontractor. Through these resources, a systematic, comprehensive RCx program will be implemented in existing facilities. It will provide a cost effective approach to achieving optimized operating facilities, save both electric and gas energy, reduce operating cost and improve occupant comfort.

• <u>Energy Efficiency Education and Best Practices Development and</u> <u>Training</u>:

The partnership will facilitate education and training for facility and maintenance personnel. The education and training element will support the outreach and education initiatives as articulated in the County's Energy Policy. There will be a venue for those individuals responsible for managing energy to share information and experiences related to facility operations, and gain knowledge of industry best practices in energy efficiency management and successful project implementation, among other issues. The strategy for the education and training element is to leverage the resources of IOU technology centers and develop curriculum that will address the specific needs of the partner. Lastly, this partnership will seek opportunities to improve project coordination and communication to strengthen the relationships among the partners.

• <u>New Construction and New Construction Design Assistance</u>: As with retrofits, the county has a stated desire to implement more efficient and sustainable measures in new construction projects. In practice, however, budgetary constraints often prevent this. The partnership's incentives, together with the visibility and upper-level management commitment the partnership brings, increase the ability of the county's energy manager to see these desires are actually met. The partnership will work closely with design teams of future projects, both large and small, to implement energy efficiency, load management, and renewable energy to the maximum extent feasible.

• <u>Emerging Technologies</u>:

The partnership may also pursue opportunities to facilitate the installation of emerging technologies. The partnership may assist in these ongoing operations by providing applicable incentives and technical aid for installing emerging technologies and facilitate the technology to be adopted in the market.

• <u>Integration with Demand Response and other DSM services</u>: Demand response programs provide tariff-based benefits to customers implementing demand response activities. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan to provide financial incentives for the energy savings will be developed.

The partnership will look for opportunities to integrate demand response and other DSM services into the program implementation plan. Resources will be leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy efficiency and demand response (EE/DR) program staff will collaborate with partners to conduct comprehensive audits and identify energy efficiency measures as well as demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid duplication, collaborate on incentive offerings and minimize customer interruptions.

The partners will seek to identify facilities or aggregation of facilities under a service account to establish opportunities for DR participation that will meet the program eligibility of a 30 kW minimum demand response opportunity per service account.

Where applicable, the partnership will also assist facility management staff who are interested in solar technology, and will provide recommendations in facility operations through energy audits to improve its facilities with less costly EE/DR measures prior to implementing more costly solar technologies.

• Funding Source:

The utilities will work with the County of Riverside's internal program staff to allocate appropriate partnership incentives for qualified projects. The utilities will collaborate with all applicable DSM programs to ensure that agencies can include incentive information in the life cycle cost analysis to support the financing request, where applicable. If the County approves the adoption of On Bill Financing, the partnership will look for opportunities for funding through this additional source.

• <u>Coordination with other IOU Programs</u>:

The partnership will be utilized as a "portal" to other IOU energy programs such as the California Solar Initiative, Self-Generation Incentive Program, and Demand Response, as well as related agricultural, water efficiency, green building and other programs, as appropriate. These other IOU departments/programs will be both engaged and active in the process of identifying opportunities and working with the partnership team to ensure an integrated and smooth process..

• <u>Policy Assistance: Energy Policy</u>:

The partnership will support the County in drafting a formal Energy Policy/Plan for County facilities. The Plan may include adopted procedures for implementation, maintenance, purchasing, Codes & Standards, information about AB 811 and AB 32, and others. The County has not yet indicated they were moving to formalize this process/plan. However, the partnership will encourage them to do so and will provide technical and administrative support to build a sound energy plan.

b) <u>Overview</u>

SCE and the County of Riverside continue to implement the partnership. Southern California Gas Company (SCG) has committed to participating as well. SCG brings additional resources to expand the county's efforts to enhance electric and gas energy

efficiency projects through state-of-the-art new construction and retrofits of existing buildings. This partnership interlocks with the goals, objectives, and strategies articulated in the Strategic Plan.

This is a collaborative effort between utility program managers, county facility managers and other internal organizations. The partnership's goal is to build an infrastructure that delivers cost-effective energy efficiency projects and provides a comprehensive outreach and education element with the goal of raising partner and customer awareness about the benefits of energy efficiency.

Program Management Structure

The program will continue to be administered by a management team consisting of representatives from the County of Riverside, SCE, and SCG, and will track project progress and keep the lines of communication and information flowing. The management team will set overall program policy and ensure that the program stays on plan throughout its life cycle, and will meet roughly every two weeks.

Subcommittees or "teams" made up of members of the management team and other representative will perform the detailed work associated with the program elements, and make recommendations to the management team for action. This will potentially include retrofit, retro-commissioning, new construction, and training & education as well as coordinated activities with other demand-side management programs such as demand response (DR), California Solar Initiative (CSI), and emerging technologies (ET). The team will be providing a more coordinated and integrated approach and will increase the penetration of energy efficiency and avoid lost opportunities.

Projects will adopt a comprehensive approach by including retrofits and their DSM alternatives to include: demand-response, distributed generation (renewable self-generation), solar hot water and water efficiency, as applicable.

c) <u>Non-incentive services</u>

Non-incentive services for the 2009 – 2011 County of Riverside Energy Efficiency Partnership will include integrated audits for County operated buildings, and also for the different county departments that Facilities Management serves or influences, such as: Department of Public Social Services, Fire, Sheriff, Mental Health, Housing Authority, Planning, Regional Medical Center and Waste Management. These audits will be identified through the partnership and will include RCx, retrofit, Demand Response opportunities, emerging technologies, solar or self generation, and others.

In addition to the audits, other non-incentive services will include any training or education services provided by the IOUs to County staff, utilizing SCE's CTAC facility, and on-site training as appropriate.

Riverside County is currently pursuing on-bill financing efforts with their County Council, and if able to participate in this option, will work collaboratively with the partnership to identify applicable projects. In addition, any grants or other State Funding the County may be eligible for, for energy efficiency projects, will be pursued and the partnership will assist with these alternate funding sources as much as possible.

d) <u>Target audience</u>

The partnership will primarily target Riverside County-owned and/or operated buildings. Additionally the outreach will focus on building engineers, managers etc, to promote and maintain energy efficiency installations at all County facilities. County leadership (Department heads, County Council, Board of Supervisors, etc) will also be targeted through outreach efforts, to assist with County adoption of energy efficiency measures and promotion of the partnership.

e) <u>Implementation</u>

The implementation plan for this program cycle will include the continuation of activities implemented in the 2006 - 2008 County of Riverside Partnership. The partnership will apply lessons learned from the current partnership as well as from other local and Statewide partnership programs.

SCE will retain the overall administration of the partnership. The partnership will work together to establish funding guidelines for various projects, sharing technical expertise, and implementing projects. The partnership also will coordinate the use of the County's own resources and total program resources to identify and develop projects, manage individual projects, and track costs and savings. However, project decisions will continue to be made by the management team on a partnership level.

5. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information:

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>:

One of the main barriers to participation is obtaining a proven executable process in place for identifying and implementing energy efficiency projects within the County. In addition, funding has been, and may continue to be a barrier to participation. The

partnership plans on overcoming these barriers by continuing the foundation made in the 2006-08 program which includes regular status/partnership meetings, meeting with contractors and vendors, and recently, the buy in and participation from County project managers working on construction and design projects in the County. The partnership has been able to participate in County construction projects early in the planning stage, to ensure the most efficiency energy designs and equipment are implemented, and that construction costs are able to be offset by partnership incentives, which will be used to fund additional County projects.

The partnership may also provide flexibility in incentive structure and may reduce the actual measure incentive to cover additional engineering services and costs provided to the County through the partnership (e.g. pay additional engineering costs to ensure project is implemented, but this may affect the total incentives available for the project due to cost-effectiveness considerations). Up-front, or advanced incentive payment structure may also be employed in this cycle, providing the County with a percentage of the incurred project incentive expenses in advance of the equipment installation, so that the County can use the incentive funding to procure equipment or hire contractors to perform installation of approved measures.

d) <u>Quantitative Program Objectives</u>:

Note: These are estimated targets. The program will need to have flexibility in allocating resources to each program elements to ensure overall program success.

County of Riverside Energy Efficiency Partnership: County Facilities			
	Program Target by	Program Target by	Program Target by
Program Name	2009	2010	2011
EE/DR Audits	Ensure 100% of all	Ensure 100% of all	Ensure 100% of all
	audits are coordinated	audits are coordinated	audits are coordinated
	EE/DR efforts, if	EE/DR efforts, if	EE/DR efforts, if
	applicable. Promote	applicable. Promote	applicable. Promote
	EE opportunities first,	EE opportunities first,	EE opportunities first,
	in order to correctly	in order to correctly	in order to correctly
	assess and implement	assess and implement	assess and implement
	DR reduction potential.	DR reduction potential.	DR reduction potential.
Lighting and			
HVAC Retrofits	Utilize partnership	Utilize partnership	Utilize partnership
	activities and	activities and	activities and
	completed audits to	completed audits to	completed audits to
	identify and implement	identify and implement	identify and implement
	retrofit measures.	retrofit measures.	retrofit measures.
	Lighting retrofits may	Lighting retrofits may	Lighting retrofits may
	account for 20% of all	account for 20% of all	account for 20% of all
	retrofit opportunities,	retrofit opportunities,	retrofit opportunities,
	and HVAC may	and HVAC may	and HVAC may

Table 5

	account for 60% and	account for 60% and	account for 60% and
	the nemerican 2000	the nemocining 2000	the nemerican a 20%
	the remaining 20%	the remaining 20%	the remaining 20%
	would be other (e.g.	would be other (e.g.	would be other (e.g.
	vending misers,	vending misers,	vending misers,
	software controls, etc).	Software controls, etc).	Software controls, etc).
	Retroits energy	Ketronits energy	Ketrofits energy
	savings are TBD.	savings are TBD.	savings are TBD.
RCx and MBCx	Identify County	Identify County	Identify County
	buildings for possible	buildings for possible	buildings for possible
	RCx/MBCx	RCx/MBCx	RCx/MBCx
	opportunities, secure	opportunities, secure	opportunities, secure
	RCx/MBCx vendors	RCx/MBCx vendors	RCx/MBCx vendors
	and begin Investigation	and begin Investigation	and begin Investigation
	process for	process for	process for
	implementation. RCx	implementation. RCx	implementation. RCx
	has not yet been	has not yet been	has not yet been
	implemented in County	implemented in County	implemented in County
	buildings; however, as	buildings; however, as	buildings; however, as
	opportunities are	opportunities are	opportunities are
	identified, the	identified, the	identified, the
	partnership will pursue	partnership will pursue	partnership will pursue
	this energy savings	this energy savings	this energy savings
	approach.	approach.	approach.
	RCx/MBCx energy	RCx/MBCx energy	RCx/MBCx energy
	savings are TBD.	savings are TBD.	savings are TBD.
New	Communicate	Communicate	Communicate
Construction	Integration Strategy	Integration Strategy	Integration Strategy
	between internal	between internal	between internal
	departments, offerings	departments, offerings	departments, offerings
	and incentive structure.	and incentive structure.	and incentive structure.
	Riverside County has	Riverside County has	Riverside County has
	many New	many New	many New
	Construction projects	Construction projects	Construction projects
	identified for potential	identified for potential	identified for potential
	completion within the	completion within the	completion within the
			2000 2011
	2009 - 2011	2009 - 2011	2009 – 2011
	partnership cycle. New	2009 – 2011 partnership cycle. New	2009 – 2011 partnership cycle. New
	partnership cycle. New Construction will	2009 – 2011 partnership cycle. New Construction will	2009 – 2011 partnership cycle. New Construction will
	partnership cycle. New Construction will account for the	2009 – 2011 partnership cycle. New Construction will account for the	2009 – 2011 partnership cycle. New Construction will account for the
	partnership cycle. New Construction will account for the majority of projects for	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The
	partnership cycle. New Construction will account for the majority of projects for this partnership. The	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The
	partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has
	partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and
	partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and expected kWh/kW	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and expected kWh/kW	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and expected kWh/kW
	partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and expected kWh/kW savings for remodeling	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and expected kWh/kW savings for remodeling	2009 – 2011 partnership cycle. New Construction will account for the majority of projects for this partnership. The partnership has earmarked budget and expected kWh/kW savings for remodeling

	buildings anticipated	buildings anticipated	buildings anticipated
	within the cycle	within the cycle	within the cycle
	(libraries, Sheriff's	(libraries, Sheriff's	(libraries, Sheriff's
	Stations, etc). Energy	Stations, etc). Energy	Stations, etc). Energy
	savings from New	savings from New	savings from New
	Construction are TBD.	Construction are TBD.	Construction are TBD.
kWh/kW Total	TBD kWh	TBD kWh	TBD kWh
Savings			
Savings			
	Core Pro	gram Integration	
Education and	Utilize CTAC and	Utilize CTAC and	Utilize CTAC and
Outreach	other existing resources	other existing resources	other existing resources
	for training and	for training and	for training and
	education of County	education of County	education of County
	staff, specifically on	staff, specifically on	staff, specifically on
	EE and DR integration	EE and DR integration	EE and DR integration
	and benefits of RCx.	and benefits of RCx.	and benefits of RCx.
Financial	Continue work with	Continue work with	Continue work with
Solutions:	IOU and County	IOU and County	IOU and County
On-Bill	council to broker an	council to broker an	council to broker an
Financing	acceptable Agreement	acceptable Agreement	acceptable Agreement
Timunomg	to take advantage of	to take advantage of	to take advantage of
	On-Bill Financing if at	On-Bill Financing if at	On-Bill Financing if at
	all possible. If County	all possible. If County	all possible. If County
	is not able to	is not able to	is not able to
	participate this will not	participate this will not	participate this will not
	be an element of the	be an element of the	be an element of the
	partnership. If	partnership. If	partnership. If
	partnership. If	agreement is reached	partnership. If
	then the pertnership	then the pertnership	then the northership
	will identify qualified	will identify qualified	will identify qualified
	will identify qualified	will identify qualified	will identify qualified
	projects and implement	projects and implement	projects and implement
	energy entitlency	energy entitlency	energy enforcemery
	measures offset by	measures offset by	measures offset by
Laitioting CSI			
muauve: CSI	for any ing partners	for any ing partners	for any ing martine
	for ensuring partners	for ensuring partners	for ensuring partners
	nave been educated on	nave been educated on	nave been educated on
	solar potential of	solar potential of	solar potential of
	County buildings.	County buildings.	County buildings.
	Possibly target new	Possibly target new	Possibly target new
	construction projects	construction projects	construction projects
	for solar technology.	for solar technology.	for solar technology.

Note: These are estimated targets. The program will need to have flexibility in allocating resources to each program elements to ensure overall program success.

6. Other Program Element Attributes

a) **Best Practices**

The partnership will continue lessons learned from previous partnership cycles, most significantly in the Retro-Commissioning (RCx) arena. The partnership has been a strong leader in this area and has successfully implemented RCx projects in more than 30 buildings over the previous 2 Partnership cycles (2004-2008) saving the County millions of dollars in avoided energy costs, maintenance, and operations, as well as saving more than 17 Million kWh, more than any other single entity. Lessons learned about timeline, implementation, monitoring and reporting will be applied to the current cycle to capture efficiencies and streamline processes. Additionally, the communication process and teamwork approach best-practices will continue to be implemented and improved upon in the next cycle, so that all stakeholders share responsibilities, risk and reward. Other best practices are referenced in the I&G Core PIP 6c.

b) <u>Innovation</u>

Referenced in the I&G Core PIP 6d.

c) <u>Interagency Coordination</u>

Referenced in the I&G Core PIP 6e.

d) Integrated/coordinated Demand Side Management

The partnership will continue integration to other IOU energy programs such as the demand response, the California Solar Initiative, and self-generation programs, as well as related agricultural, water efficiency, and green building programs. Demand response programs provide tariff-based benefits to customers implementing demand response activities. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan to provide financial incentives for the energy savings will be developed.

The partnership will look for opportunities to integrate demand response and other DSM services into the program implementation plan. Resources will be leveraged to improve implementation efficiency. IOU energy efficiency and demand response program staff will collaborate with partners to conduct comprehensive audits and identify energy efficiency measures and demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid duplication and collaborate on incentive offerings which will all minimize customer interruptions.

Please see I&G Core PIP.

e) <u>Integration across resource types (energy, water, air quality, etc)</u> Fully covered under Section 4.

f) <u>Pilots</u>

Currently, there have not been any pilot projects incorporated into the partnership, however, any future opportunities for innovative or market-transforming pilots will be considered, and agreed upon by all parties in the partnership. Pilot initiatives could include resource and/or non-resource activities as prescribed by the CPUC.

g) <u>EM&V</u>

Referenced in I&G Core PIP 6h.

7. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6. California-Term Energy Efficiency Strategic Plan Implementation

1-1. Develop adopt and implement model	The partnership will work with Riverside
building energy codes (and/or other green	County policy makers to adopt and
codes) more stringent than Title 24's	implement building or new construction
requirements, on both a mandatory and	goals that exceed Title 24 requirements by
voluntary basis: adopt one or two	a percentage determined by the County
additional tiers of increasing stringency.	
1-2: Establish expedited permitting and	Not expected to be influenced by
entitlement approval processes, fee	partnership activities; however, the
structures and other incentives for green	partnership is supportive of the County's
buildings and other above-code	role in any permitting or expedited
developments.	approval policy for green building.
1-3: Develop, adopt and implement model	Not expected to be influenced by
point-of-sale and other point-of	partnership activities; however, the
transactions relying on building ratings.	partnership is supportive of the County's
	role in any permitting or expedited
	approval policy for green building.
1-4: Create assessment districts or other	Not expected to be influenced in the
mechanisms so property owners can fund	County of Riverside Partnership.
EE through city bonds and pay off on	
property taxes; develop other EE financing	
tools.	
1-5: Develop broad education program and	Develop information campaign on
peer-to-peer support to local governments	mechanics and benefits of model programs
to adopt and implement model reach codes	targeting local government decision-
-	makers and community leaders and Board
	of Supervisors.

1-6:Link emission reductions from "reach" codes and programs to CARB's AB 32 program	 CARB adopts regulation providing local government emission reduction credit for "reach" standards State Attorney General and Office of Planning & Research provide guidance on using CEQA authority to target energy and GHG
2-2: Dramatically improve compliance with	savings in LG development authority. Support improved compliance. See Codes
and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	& Standards PIP
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Support improved compliance. See Codes & Standards PIP
3-1: Adopt specific goals for efficiency of local government buildings, including:	Support implementation of local policies for LEED new construction and existing buildings.
3-2: Require commissioning for new buildings, and re-commissioning and retro- commissioning of existing buildings.	Support benchmarking of targeted buildings against ratings such as ENERGY STAR and its Portfolio Manger. Continue commissioning programs on selected high-use buildings.
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the	Explore and document model policies and mechanisms by June 2010
department and/or projects that provided the savings to fund additional efficiency.	Implementation plan in place by Dec 2010 for mechanisms to fund.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	Coordinate this approach with Research & Technology Activities, if applicable.
4-1: Local governments commit to clean energy/climate change leadership.	Assist initial set of local governments in commitments; develop and communicate appropriate messages.

County of Riverside Energy Efficiency Partnership

4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Help the County develop its Energy Plan, and implement elements of the plan in County buildings.
4-4: Develop local projects that integrate	Help identify opportunities and
EE/DSM/water/wastewater end use.	challenges for more
	energy/environmentally
	integrated development and
	infrastructure
	Help develop and implement pilot
	projects, such as the California
	Sustainable Communities
	Initiative.
4-5: Develop EE-related "carrots" and	Not expected to be influenced in the
"sticks" using local zoning and	County of Riverside Energy Efficiency
development authority.	Partnership.

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Southern California Edison

County of San Bernardino Energy Efficiency Partnership

1. **Program Name:** County of San Bernardino Energy Efficiency Partnership

2. Projected Program Budget Table

Table 1 – Refer to Table 1 in the I&G Core PIP.

3. Projected Program Gross Impacts Table

Table 2 – Refer to Table 2 in the I&G Core PIP.

4. Program Element Description and Implementation Plan

a) List of program elements

- **1.** Retro-fit (HVAC, lighting, Emerging Technology, others)
- 2. Retro-Commissioning and Monitoring-Based Commissioning
- 3. Energy Efficiency Education and Best Practices Development and Training
- 4. New Construction and Design Assistance (SBD: Saving By design)
- 5. Emerging Technologies
- 6. Integration with Demand Response and other DSM Services
- 7. Funding Sources: e.g., on-bill financing, grants, etc.
- **8.** Coordination with other IOU Program Offerings (core programs, solar, water and others)
- **9.** Policy Assistance: Energy Policy

Element Details:

<u>Retrofit Program</u>

The energy efficiency measures identified in the project list include energy efficiency retrofits: such as lighting retrofits (T5 technology, LED applications, newer 28 watt T-8s), building wide lighting controls, HVAC and chiller upgrades/replacements and central plant projects. The partnership will work with facility staff to identify appropriate facilities to develop a list of projects for implementation. The retrofit projects in this program will be implemented by the County of San Bernardino through contracts with contractors and engineering consultants.

Retro-Commissioning (RCx) / Monitoring-Based Commissioning (MBCx)

This element of the program is a unique approach to obtaining savings that combines the expertise of County staff, utility and subcontractor staff. Through these resources, a systematic and comprehensive RCx program will be developed to implement within existing facilities.

The program will provide a cost effective approach through the review of current methods of building operations and development of plans to optimize the operation

for maximum savings on both electric and gas energy. This will reduce operating cost and improve occupant comfort.

Energy Efficiency Education and Best Practices Development and Training

The partnership will facilitate education and training for facility and maintenance personnel. The education and training element will support the outreach and education initiatives as articulated in the County's Energy and Environmental Policies. By focusing on the establishment of training sessions to benefit the County's personnel, the Strategic Plan will be served. There will be a venue for those individuals responsible for managing energy to share information and experiences related to facility operations, to gain knowledge of industry best practices in energy efficiency management, and successfully implement projects, among other issues.

The strategy for the education and training element is to leverage the resources of IOU technology centers and develop curriculum that will address the specific needs of the Partner. Lastly, this partnership will seek opportunities to improve project coordination and communication to strengthen the relationships among the partners.

New Construction and New Construction Design Assistance

As with retrofits, the County has a stated desire to implement energy efficiency. In practice, however, budgetary constraints often prevent this. The partnership's incentives, together with the visibility and upper-level management commitment the partnership brings, increases the ability of the County's energy manager to see these desires realized. The partnership will work closely with design teams of future projects, both large and small, to implement energy efficiency, load management, and renewable energy to the maximum extent feasible. The County's population growth continues and many new projects are planned.

Emerging Technologies

The partnership may also pursue opportunities such as server virtualization and PC power networking to facilitate the installation of emerging technologies. The partnership may assist in these ongoing operations by providing applicable incentives and technical aid for installing emerging technologies to facility the technology to be adopted in market.

Integration with Demand Response and other DSM services

The DR program can include a plan to provide a financial incentive for the energy savings resulting from the purchase and installation of equipment that will successfully shift demand from on-peak hours to non-peak hours. The partnership can utilize DR as follows:

• The partnership will seek opportunities to integrate demand response and other DSM services into the program implementation plan;

Resources will be leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy efficiency and demand response (EE/DR) program staff will collaborate with partners to conduct

comprehensive audits and identify energy efficiency measures as well as demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid duplication, collaborate on incentive offerings and will minimize customer interruptions;

- The partnership will identify facilities or an aggregation of facilities under a service account to establish the opportunities for DR participation that will meet the program eligibility of a 30 kW minimum demand response opportunity per service account; and
- The partnership will, when applicable, assist facility management staff that is interested in solar technology and, through energy audits, provide recommendations to improve facilities through use of less costly EE/DR measures before implementing more costly solar technologies.

Funding Source

The utilities will work with the County of San Bernardino internal program staff to allocate appropriate Partnership incentives for qualified projects and collaborate with all applicable DSM programs to ensure that agencies can include incentive information in the life cycle cost analysis to support the financing request, where applicable.

The partnership can assist the County with a feasibility study and develop a method for prioritizing projects. The partnership can also provide On Bill Financing that will offer zero-interest financing to qualified energy efficiency projects.

If the County approves adoption of On Bill Financing, the partnership will use this additional source to fund more projects that will lead to additional energy saving for the County.

Coordination with other IOU Programs

The partnership will be used as a "portal" to other IOU energy programs such as the California Solar Initiative, Self-Generation Incentive Program, and Demand Response, as well as related agricultural, water efficiency, green building programs, and others as appropriate. These other IOU departments/programs will actively engage in the process of identifying opportunities and working with the partnership team to ensure a smooth and integrated process.

Policy Assistance: Energy Policy

The partnership will support the County in drafting a formal Energy Policy/Plan for County facilities. This plan may include adopted procedures for implementation, maintenance, purchasing, Codes & Standards, information about AB 811, and AB 32 and others.

The County has not yet indicated if it is moving to formalize this process/plan, however, the Partnership will encourage it to do so and will provide technical and administrative support to build a sound energy plan.
The partnership will focus on providing technical assistance and helping the County in identifying projects for potential implementation.

The partnership team will prepare comprehensive lists of projects, evaluate their energy savings potential, and bring them to the team for review. The departments can then use this information to accelerate the timing of some projects, modify the scope of others, and rely on strategic energy planning, rather than simple maintenance schedules, for energy efficiency enhancements.

b) <u>Overview</u>

SCE, Southern California Gas (SCG), and the County of San Bernardino will form a 2009 - 2011 energy efficiency Partnership that will build upon and expand the County's efforts to enhance energy efficiency through state-of-the-art new construction and retrofits of existing buildings.

Institutional and Government partnerships are a natural fit with the goals, objectives, and strategies expressed in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan).

The partnership program will focus on delivering an integrated support model for the County of San Bernardino to take advantage of the entire portfolio of energy programs and services and other resources. Included in these efforts will be coordination with Demand Response (DR), California Solar Initiative (CSI), new construction, and more.

This partnership will assist the County in achieving its green policy initiatives to formulate an integrated approach to energy efficiency. This will be a collaborative effort with the aim of building an infrastructure that would efficiently deliver cost effective energy efficiency projects thus reducing the "carbon footprint" created by County facilities. It would also provide a comprehensive outreach and education element with the goal of raising awareness about the benefits of energy efficiency. County facilities will be targeted for the retrofit, retro-commissioning (RCx), and new construction elements.

c) <u>Non-incentive services</u>

The partnership will focus on technical assistance and help the County in identifying projects for potential implementation. The partnership team will prepare comprehensive lists of projects, evaluate their energy savings potential, and bring them to the team for review. The departments can then use this information to accelerate the timing of some projects, modify the scope of others, and rely on strategic energy planning, rather than simple maintenance schedules, for energy efficiency enhancements.

d) <u>Target audience</u>

The partnership will primarily target buildings owned and/or operated by the County. The target audience will be wide sweeping internally to the County because of the joint efforts of the Partnership to expand to other County departments under the leadership of Facilities Management Department. In addition, the outreach will focus on building engineers, managers etc., to promote and maintain energy efficiency installations at all County facilities.

County leadership (Board of Supervisors, department heads, etc.) will also be targeted through outreach efforts, to assist with County adoption of energy efficiency measures and promotion of the partnership. The partnership will assist County leaders in identifying potential energy efficiency projects and providing information such as estimated energy saving and feasibility study to help the County in making their decisions.

e) <u>Implementation</u>

The 2009-11 County of San Bernardino EE Partnership will use and build upon the implementation strategies employed by other Partnerships during the current and previous program cycle.

The partnership will be administered by a management team, consisting of representatives from the County of San Bernardino, SCE, and SCG who will track project progress and keep the lines of communication and information flowing. The management team will set overall program policy and ensure that the program will meet regularly and stay on plan throughout its life cycle.

Subcommittees or "action teams" made up of members of the management team and other representatives will perform the detailed work associated with the program elements, and make recommendations to the management team for action. This will potentially include a retrofit team, retro-commissioning team, and a training & education team. The team will be providing a more coordinated and integrated approach and will increase the penetration of energy efficiency and avoid lost opportunities.

f) Program Management Structure

The partnership will continue to be administered by a management team consisting of representatives from the County of San Bernardino, SCE, and SCG, who will track project progress and keep the lines of communication and information flowing. The management team will set overall program policy and ensure that the program stays on plan throughout its life cycle. Subcommittees or "teams" made up of members of the management team and other representative will perform the detailed work associated with the program elements, and make recommendations to the management team for action.

This will potentially include retrofit, retro-commissioning, new construction, and training & education as well as coordinated activities with other demand-side management programs such as demand response (DR), California Solar Initiative (CSI), and Emerging Technologies (ET). The team will be providing a more

coordinated and integrated approach and will increase the penetration of energy efficiency and avoid lost opportunities.

5. Program Element Rationale and Expected Outcome

a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 3 – Refer to the overarching program for quantitative baseline metrics

b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

c) <u>Program Design to Overcome Barriers</u>

Some of the barriers that the County faces are time and technical assistance. Many local government customers do not have the time to methodically evaluate their buildings and identify the most salient energy efficiency projects. Facility personnel may lack time, resources or the technical expertise to evaluate those projects and determine the best energy efficiency improvements. In addition, the State of California has enacted legislation to aggressively improve the energy efficiency of new buildings and reduce greenhouse gas emissions.

The partnership will address these concerns by considering the framework and implementation methodology of the existing institutional and local government partnerships and implementing their inherent strategies. The partnership team will then tailor its management structure and implementation plans that will best address the needs and uniqueness of the County of San Bernardino.

This program will draw upon the lessons learned such as the benefits of retrocommissioning, effectiveness of energy efficiency, and implementing energy efficiency in new buildings. This will improve the program's design and implementation processes to ensure a sustainable, long-term, comprehensive energy management program for the County.

d) **Quantitative Program Objectives**

Note: The following are estimated targets. The program will need to have flexibility in allocating resources to each program elements to ensure overall program success.

County of San Bernardino Energy Efficiency Partnership

Table 5			
County of San Bernardino Energy Efficiency Partnership: Government Facilities			
Due gue Merre	Program Target by	Program Target by	Program Target by
Program mame	2009	2010	2011
	Ensure 100% of all	Ensure 100% of all	Ensure 100% of all
EE/DD Audita	audits are coordinated	audits are coordinated	audits are coordinated
EE/DK Audits	EE/DK efforts if	EE/DK efforts if	EE/DK efforts if
	applicable. Promote	applicable. Promote	applicable. Promote
	EE opportunities first,	EE opportunities first,	EE opportunities first,
	In order to correctly	In order to correctly	In order to correctly
	DD reduction potential	DB reduction notantial	DD reduction potential
Lichting and	DR reduction potential.	DR reduction potential.	DR reduction potential.
Lighting and	Littize Dorthorship	I Hilizo Dorthorship	I Hilizo Dorthorship
HVAU Dotrofito	Othize Partnership	Othize Partnership	othize Partnership
Kellonis	completed audits to	completed audits to	completed audits to
	identify and implement	identify and implement	identify and implement
	retrofit measures	retrofit measures	retrofit measures
	I johting retrofits may	I johting retrofits may	I johting retrofits may
	account for 50% of all	account for 50% of all	account for 20% of all
	retrofit opportunities.	retrofit opportunities	retrofit opportunities
	and HVAC may	and HVAC may	and HVAC may
	account for 40% and	account for 40% and	account for 60% and
	the remaining 10%	the remaining 10%	the remaining 20%
	would be "other" (e.g.	would be "other" (e.g.	would be "other" (e.g.
	vending misers,	vending misers,	vending misers,
	software controls, etc).	software controls, etc).	software controls, etc).
	Retrofits energy	Retrofits energy	Retrofits energy
	savings are TBD.	savings are TBD.	savings are TBD.
RCx and	Identify County	Identify County	Identify County
MBCx	buildings for possible	buildings for possible	buildings for possible
	RCx/MBCx	RCx/MBCx	RCx/MBCx
	opportunities, secure	opportunities, secure	opportunities, secure
	RCx/MBCx vendors	RCx/MBCx vendors	RCx/MBCx vendors
	and being Investigation	and being Investigation	and being Investigation
	process for	process for	process for
	implementation. RCx	implementation. RCx	implementation. RCx
	has not yet been	has not yet been	has not yet been
	implemented in County	implemented in County	implemented in County
	buildings; however, as	buildings; however, as	buildings; however, as
	opportunities are	opportunities are	opportunities are
	identified, the	identified, the	identified, the
	partnership will pursue	partnership will pursue	partnership will pursue
	this energy savings	this energy savings	this energy savings
	approacn.	approacn.	approacn.

	Communicate	Communicate	Communicate
	Integration Strategy	Integration Strategy	Integration Strategy
	between internal	between internal	between internal
	departments, offerings	departments, offerings	departments, offerings
	and incentive structure.	and incentive structure.	and incentive structure.
	Identify potential	Identify potential	Identify potential
	projects for completion	projects for completion	projects for completion
New	within the $2009 - 2011$	within the $2009 - 2011$	within the $2009 - 2011$
Construction	partnership cycle The	partnership cycle The	partnership cycle The
	partnership bas	partnership bas	partnership bas
	earmarked budget and	earmarked budget and	earmarked budget and
	expected kWh/kW	expected kWh/kW	expected kWh/kW
	savings for remodeling	savings for remodeling	savings for remodeling
	projects and some new	projects and some new	projects and some new
	buildings anticipated	buildings anticipated	buildings anticipated
	within the cycle	within the cycle	within the cycle
	Energy savings from	Energy savings from	Energy savings from
	New Construction are	New Construction are	New Construction are
	TBD	TBD	TBD
			1001
kWh/kW Total	TBD kWh	TBD kWh	TBD kWh
Savings	TBD kW	TBD kW	TBD kW
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
	Core Prog	gram Integration	
<b>Education and</b>	Utilize CTAC and	Utilize CTAC and	Utilize CTAC and
Outreach	other existing resources	other existing resources	other existing resources
	for training and	for training and	for training and
	education of County	education of County	education of County
	staff, specifically on	staff, specifically on	staff, specifically on
	EE and DR integration	EE and DR integration	EE and DR integration
	and benefits of RCx.	and benefits of RCx.	and benefits of RCx.
Financial	Continue work with	Continue work with	Continue work with
Solutions:	IOU and County	IOU and County	IOU and County
On-Bill	council to broker an	council to broker an	council to broker an
Financing	acceptable Agreement	acceptable Agreement	acceptable Agreement
	to take advantage of	to take advantage of	to take advantage of
	On-Bill Financing, if at	On-Bill Financing, if at	On-Bill Financing, if at
	all possible. If County	all possible. If County	all possible. If County
	is not able to	is not able to	is not able to
	participate, this will not	participate, this will not	participate, this will not
	be an element of the	be an element of the	be an element of the
	partnership. If	partnership. If	partnership. If
	agreement is reached,	agreement is reached,	agreement is reached,
	then partnership will	then partnership will	then partnership will
	identify qualified	identify qualified	identify qualified

	projects and implement	projects and implement	projects and implement
	energy efficiency	energy efficiency	energy efficiency
	measures offset by	measures offset by	measures offset by
	OBF.	OBF.	OBF.
California	Implement	Implement	Implement
Solar	communication plan	communication plan	communication plan
Initiative: CSI	for ensuring partners	for ensuring partners	for ensuring partners
	have been educated on	have been educated on	have been educated on
	solar potential of	solar potential of	solar potential of
	County buildings.	County buildings.	County buildings.
	Possibly target new	Possibly target new	Possibly target new
	construction projects	construction projects	construction projects
	for solar technology	for solar technology.	for solar technology

Note: The values above are estimates only.

#### 6. Other Program Element Attributes

#### a) <u>Best Practices</u>:

Referenced in the I&G Core PIP 6a.

#### b) <u>Innovation</u>

The partnership plans to investigate projects in high technology (IT systems) areas such as server virtualization and PC power management. These projects will lead to additional energy savings for the County with minimal efforts. The plan for the 2009 – 2011 partnership is to leverage these innovative pilot projects to a fully focused and large scale offering for the partnership.

#### c) Interagency Coordination

See the I&G Core PIP 6c.

#### d) Integrated/coordinated Demand Side Management

The partnership will continue integration to other IOU energy programs such as the demand response, solar initiative, and self-generation programs, as well as related agricultural, water efficiency, and green building programs. Demand response programs provide tariff-based benefits to customers implementing demand response activities. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan will be developed to provide a financial incentive for energy savings that result from the equipment supplied through the partnership.

The partnership will look for opportunities to integrate demand response and other DSM services into the program implementation plan. IOU energy efficiency and demand response program staff will collaborate with partners to conduct audits and identify energy efficiency measures and demand response opportunities. The approach will reduce technical resources by combining EE/DR audits to avoid

duplication and collaborate on incentive offerings which will all minimize customer interruptions.

## e) Integration across resource types (energy, water, air quality, etc)

See Section 4 above.

#### f) <u>Pilots</u>

Currently, no pilot projects have been incorporated into the Partnership. However, any future opportunities for innovative or market-transforming pilots will be considered and agreed upon by all parties in the Partnership. Pilot initiatives could include resource and/or non-resource activities as prescribed by the CPUC.

#### g) <u>EM&V</u>

Referenced in the I&G Core PIP 6h.

#### 7. Partnership Program Advancement of Strategic Plan Goals and Objectives

#### Table 6

1-1: Develop, adopt and implement model	Partnership will work with the County
building energy codes (and/or other green	policy makers to adopt and implement
codes) more stringent than Title 24's	building or new construction goals that
requirements, on both a mandatory and	exceed Title 24 requirements.
voluntary basis; adopt one or two	
additional tiers of increasing stringency.	
1-2: Establish expedited permitting and	Not expected to be influenced by
entitlement approval processes, fee	Partnership activities, however the
structures and other incentives for green	Partnership is supportive of the County's
buildings and other above-code	role in any permitting or expedited
developments.	approval policy for green building.
1-3: Develop, adopt and implement model	Not expected to be influenced by
point-of-sale and other point-of	partnership activities; however the
transactions relying on building ratings.	partnership is supportive of the County's
	role in any permitting or expedited
	approval policy for green building.
1-4: Create assessment districts or other	Not expected to be influenced in the
mechanisms so property owners can fund	County of San Bernardino Partnership.
EE through city bonds and pay off on	
property taxes; develop other EE financing	
tools.	
1-5: Develop broad education program and	Develop information campaign on
peer-to-peer support to local governments	mechanics and benefits of model programs
to adopt and implement model reach codes	targeting local government decision-
	makers and community leaders and Board
	of Supervisors.

<ul> <li>1-6: Link emission reductions from "reach" codes and programs to CARB's AB 32 program</li> <li>2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load</li> </ul>	<ul> <li>CARB adopts regulation providing local government emission reduction credit for "reach" standards.</li> <li>State Attorney General and Office of Planning &amp; Research provide guidance on using CEQA authority to target energy and GHG savings in LG development authority.</li> <li>Work with County to develop strategies to improve compliance. See Codes &amp; Standards PIP.</li> </ul>
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	Work with County to develop strategies to improve compliance. See Codes & Standards PIP.
3-1: Adopt specific goals for efficiency of local government buildings, including:	Support implementation of local policies for LEED new construction and existing buildings.
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	<ul> <li>Support benchmarking of targeted buildings against ratings such as ENERGY STAR and its Portfolio Manager.</li> <li>Continue commissioning programs on selected high-use buildings.</li> </ul>
3-4: Explore creation of line item in local government budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	Work with the County to create a method that permits this task.
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in local government pilot projects.	Coordinate this approach with Research & Technology Activities.
4-1: Local governments commit to clean energy/climate change leadership.	Assist initial set of local governments in commitments; develop and communicate appropriate messages.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Assist County in developing a model General Plan.

# County of San Bernardino Energy Efficiency Partnership

4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	<ul> <li>Help identify opportunities and challenges for more energy/environmentally integrated development and infrastructure.</li> <li>Help to develop and implement pilot projects, such as the California Sustainable Communities Initiative</li> </ul>
4-5: Develop EE-related "carrots" and	Not expected to be influenced in the
"sticks" using local zoning and	County of San Bernardino Energy
development authority	Efficiency Partnership.

# 5f

- 1. **Program Name:** State of California Statewide Energy Efficiency Partnership **Program Type:** Core
- 2. Projected Program Budget Table

 Table 1 – Refer to Table 1 in the I&G Core PIP.

#### **3.** Projected Program Gross Impacts Table² (by calendar year)

**Table 2** – Refer to Table 2 in the I&G Core PIP.

#### 4. Program Description

#### a) Describe Program

Southern California Edison (SCE) and the State of California are collaborating to continue the State of California Energy Efficiency Partnership for the 2009 – 2011 program cycle. This partnership's goals include sharing Energy Efficiency (EE) best practices and implementing projects to capture immediate and long-term energy savings and to produce mechanisms for peak demand reduction.

The partnership will assist the state's agencies to reduce the energy purchased from the grid by 20% by 2015, as required by Executive Order S-20-04 (called the Green Building Initiative, or GBI). Like all Executive Orders, the GBI is an unfunded mandate that requires State agencies to support the governor's environmental agenda. Accompanying the GBI is the Green Building Action Plan (GBAP), which requires all new construction and large renovations to meet Leadership in Energy and Environmental Design (LEED) silver certification requirements, and directs the state to benchmark, retro-commission, and retrofit its existing building stock.

The objective of the partnership is to develop creative strategies to maximize the implementation of energy efficiency opportunities throughout the state. Through the partnership, the state can increase the value that agencies receive on their investments in energy efficiency measures. The overall goal is to uncover opportunities for retrocommissioning and retrofits by leveraging IOU incentive programs, and provide a mechanism for the State to receive technical assistance from IOUs.

Measure Name	Rebate to end use
	customer
	or its assignee (\$/unit)
Customized - Indoor Lighting	\$0.15
Customized - Indoor Lighting Controls & EMS	\$0.15
Customized - Outdoor Lighting	\$0.15

#### b) List Measures

Measure Name	Rebate to end use customer or its assignee (\$/unit)
Customized - Outdoor Lighting Controls	\$0.15
Customized - Motors	\$0.18
Customized - VFDs	\$0.18
Customized - HVAC EMS	\$0.18
Customized - Chillers	\$0.24
Customized - HVAC	\$0.24
RCx/MBCx	\$0.24
Overall Building Performance	\$0.10 above SBD core
System Approach - Light Power Density	\$0.10 above SBD core
System Approach - Chillers	\$0.10 above SBD core
System Approach - Daylighting	\$0.10 above SBD core
System Approach - HVAC Energy Reduction	\$0.10 above SBD core

#### c) List Non-Incentive Customer Services

The partnership shall provide the following non-incentive services:

- 1. Audit services;
- 2. Technical assistance;
- 3. Training and education;
- 4. Design assistance;
- 5. Due diligence project review; and
- 6. Outreach activities.

#### 5. Program Rationale and Expected Outcome

#### a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

**Table 3** – Refer to the overarching program for quantitative baseline metrics

#### b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at

the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

**Table 4** – Refer to the overarching program for market transformation metrics

#### c) Program Design to Overcome Barriers

The State of California's departments and systems are complex organizations with diverse geographic, climatic, and operational needs that serve a broad range of stakeholders and constituents. The IOUs are working to remove the following:

*Barrier: Lack of Agreement of Objectives* – In order for the partnership to have a clear vision that supports the goal, it is clear that a guiding agreement needs to be set it place to allow the team to initiate the effort.

*Solution*: A Memorandum of Understanding (MOU) with the State to implement the partnership program in support of the Green Building Initiative.

*Barrier: Project Implementation Mechanism* – The State of California's departments and systems are large, complex organizations with diverse geographic, climatic, and operational needs that serve a broad range of stakeholders and constituencies. As the primary state procurement agency, the Department of General Services needed to have a project delivery mechanism in order to take advantage of the great energy savings opportunities for the state's agency facilities.

Solution: The approach taken by the management team is to provide a comprehensive implementation approach that is to be implemented in stages. The objective is the implement low to no-cost measures in the near term (0-3 months) to help realize savings to gain traction. As the state budget is approved later in the year, the management team will start the more comprehensive smaller projects with each IOUs unique delivery system. The need for different delivery systems for each IOU is dictated by their individual capabilities/strengths and also limitations. The roadmap in Attachment 1 lays out this plan and the measure matrix and timeline in Attachment 2 identifies the end sample end use technologies and the preliminary timeline for implementation.

# Barrier: Project Funding Constraints

Solution:

- Increased IOU incentives;
- Energy \$Mart Loan;
- CEC loans;
- Performance contracting with Energy Service Companies (ESCOs);
- On-bill financing; and
- Additional innovative financing options.

#### Barrier: Information Dissemination

*Solution:* The management team is currently developing an information tool for agencies to communicate the savings potential of implementing projects with likely energy efficiency measures that may appear in agencies' typical facilities. This allows an IOU to perform detailed energy audits for use in a project proposal.

*Barrier:* Gap in ESCO Process and Small Projects – 95% of the state's building inventory is less than 25,000 sq. ft.

*Solution:* The management team is exploring alternative project delivery and financing models, which may include a mechanism that creates seed money for starting up projects and integrating it with on-bill financing. This would be augmented by innovative pilot project delivery models such as the project co-funding approach, low to no cost measure offerings, and third party program bridging to pilot concepts that may fill gaps in the program.

*Barrier:* Inability to delegate incentives to internal budgets *Solution:* Work with California Department of Finance to authorize agencies to keep incentives.

*Barrier:* Lack of consensus between executive buy-in and facility management. *Solution:* Management team to push for coordinated meetings with executives and facility management.

Barrier: Unfunded mandates

*Solution:* Assign funding for specific energy efficiency projects, and increase purview of state agencies under CEC loans.

#### e) **Quantitative Program Targets**

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
_	Institutional and	d Government Facilities	-
Total Net Savings Target	TBD kWh/ TBD kW	TBD kWh/ TBD kW	TBD kWh/ TBD kW
EE/DR Audits	Perform audits that encompass EE/DR that would fill the pipeline. With this pipeline, a certain percentage of proposed projects will turn into committed projects.	Perform audits that encompass EE/DR that would fill the pipeline. With this pipeline, a certain percentage of proposed projects will turn into committed projects.	Perform audits that encompass EE/DR that would fill the pipeline. With this pipeline, a certain percentage of proposed projects will turn into committed projects.
Lighting and HVAC Retrofits	A majority of State facilities are smaller "regional" offices that have predominantly lighting and HVAC	A majority of State facilities are smaller "regional" offices that have predominantly lighting and HVAC retrofit opportunities.	A majority of State facilities are smaller "regional" offices that have predominantly lighting and HVAC retrofit opportunities.

#### Table 5

	Program Target by	Program Target by	Program Target by
Program Name	2009	2010	2011
	retrofit opportunities.	The energy savings	The energy savings
	targets are TBD	targets are TBD.	targets are TBD.
RCx and MBCx	County courthouses are recently handed over to the state. This will present retro- commissioning or monitor based commissioning if the state is able to obtain Energy \$mart loan	If the state is successful in pushing RCx or MBCx projects through the ESCO process in 2009, projects in the pipeline created may contribute to a target of TBD.	If the state is successful in pushing RCx or MBCx projects through the ESCO process in 2009, projects in the pipeline created may contribute to a target of TBD.
	funding through the ESCO process. The energy savings targets are TBD.		
New Construction	The partnership shall continuously pursue	The partnership shall continuously pursue	The partnership shall continuously pursue
	new construction	new construction	new construction
	opportunities. The	opportunities. The	opportunities. The
	energy savings	energy savings targets	energy savings targets
	targets are TBD.	are TBD.	are TBD.
Sac Section 50	Strategi	c Plan Support	
See Section Se	Cana Dua	nom Integration	
Education and	Core Pro	gram Integration	Number of Dortron
Education and	Presentations - TBD	Presentations - TBD	Presentations - TRD
Financial Solutions: On-Bill Financing	Development documentation package and project agreement for partners.	Determine which agencies will use on- bill financing, establish a model for how On- Bill Financing can be used with Institutional and Government customers.	Complete documentation of participation rates for partnerships and determine any lessons learned or roadblocks.
California Solar	Establish	Develop project	Complete
Initiative	communication plan for ensuring partners have been educated regarding solar potential.	agreement plan and determine necessary stakeholders.	documentation of participation potential and what is necessary for partners to participate.

Note: These are estimated targets. The program will need to have flexibility in allocating resources to each program elements to ensure overall program success.

#### e) Advancing Strategic Plan Goals and Objectives

Institutional and government partnerships are a natural fit with the goals, objectives, and strategies articulated in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan). The partnerships have demonstrated that innovation, integration, and collaboration are indeed the key to achieving the next generation of cost-effective, energy efficiency programs and the resulting reduction in greenhouse gas (GHG) emissions by applying both Commercial and Local Government sector strategies to the State/IOU partnership as follows:

#### Table 6

Commercial Sector – Sections 2 and 3		
2-1: Lead by Example: State/local	Where the budget allows, customer owned	
governments and major	buildings are benchmarked and retro-	
corporations commit to achieve	commissioned.	
energy efficiency, EE, (or green)		
targets in existing buildings.		
2-5: Develop tools and strategies	Implementing monitor based	
to use information and behavioral	commissioning and training energy	
strategies, commissioning, and	managers to continuously monitor and	
training to reduce energy	optimize building operational performance.	
consumption in commercial		
buildings		
2-6: Develop effective financial	Developing the on-bill financing offerings	
tools for EE improvement to	to be compatible with the state legal	
existing buildings.	requirements. Exploring avenues that may	
	work around lease terms to address	
	perceived tenant/owner "split incentives"	
	issue.	
2-8: Improve utilization of plug	Leveraging the PC network software and	
load technologies within the	vending machine controls to reduce	
commercial sector.	commercial building plug loads.	
3-1: Drive continual advances in	Work with PIER to pilot lighting products	
lighting technology through	on state-owned facilities where available.	
research programs and design		
competitions.		
3-2: Create demand for improved	Piloting emerging technologies in lighting	
lighting products through	with collaboration with the building	
demonstration projects, marketing	owners.	
efforts, and utility programs.		

#### 6. Program Implementation

#### a) Statewide IOU Coordination

i. **Program name:** The State of California Energy Efficiency Partnership Program.

#### ii. Program delivery mechanisms

The implementation plan for this cycle is refined to account for successes that have already been achieved and includes:

- A more streamlined program management structure;
- Coordination with other energy efficiency programs and ongoing Statewide and local government partnerships;
- Implementation of energy efficiency retrofits program elements (including project selection and implementation);
- Retro-Commissioning (RCx) implementation;
- Energy efficiency education, best practices development, and training implementation; and
- Integration with IOU's portfolio of DSM products and services resulting in easier customer access and IOU program management.

#### **Program Management Structure**

The program will be administered by a partnership management team that meets every month. The team consists of representatives from the State of California agencies and all four IOUs. This management team sets overall program policy and ensures that the program adheres to the plan.

Action teams that perform the detailed work may include a retrofit project development team, an RCx Team, and a training and education team. This team provides a more coordinated and integrated approach, both across state agencies and IOUs. This approach increases the effectiveness of overcoming the barriers in implementing energy efficiency projects; and it reduces the occurrence of lost opportunities.

#### **Program Elements**

#### Benchmarking

The identification of potential projects begins with a benchmarking effort. The state uses the United States Department of Energy's benchmarking tool, Portfolio Manager, to determine the ENERGY STAR® scores of all state-owned buildings. Low-scoring facilities may be candidates for retro-commissioning or retrofit projects such as:

- Buildings that receive scores of 75 or higher meet the requirements of Executive Order S-20-04;
- Buildings that receive an ENERGY STAR® score between 45 and 75 receive consideration for retro-commissioning;
- Buildings that receive scores lower than 45 are candidates for retrofits or renovation. These buildings would not benefit from retro-commissioning

since the low score indicates the existence of problems that lie outside the scope of retro-commissioning, such as major equipment replacement.

Once a retro-commissioning or a retrofit project maximizes a building's energy efficiency, it is benchmarked again during the measurement and verification (M&V) process. Benchmarking provides the information that the state needs to compile a yearly report on progress made toward achieving the 20 percent reduction in energy usage by 2015 (mandated by Executive Order S-20-04), and allows the IOUs to document the energy savings accrued by the partnership. The state conducts these activities with assistance from the IOUs. In fact, during the previous cycle, the partnership was instrumental in providing support to the State, the IOUs, and administrator for the Portfolio Manager program at the U.S. Department of Energy to allow the IOU energy usage data to seamlessly transfer to the DOE database for benchmarking. These modifications benefited not only the state, but other customers, as well as the federal program operators. This unanticipated benefit reflects the type of opportunities the partnership makes available to the state.

#### Retro-Commissioning

The partnership implements retro-commissioning projects in as many state facilities as possible. These projects provide an opportunity to demonstrate a cost effective approach to optimizing facility operations, saving both electric and gas energy, while reducing operating costs and improving occupancy comfort. Retro-commissioning activities may include but are not limited to:

- Selection of candidate buildings for RCx based on results of benchmarking effort and participation in SCE retro-commissioning program;
- Development of an RCx plan for each candidate building;
- Investigation of opportunities through energy audits and technical assessments of major building systems (lighting, HVAC, etc.);
- Performance of pre-functional tests of building systems;
- Identification and implementation of minor no-cost/low cost deficiencies;
- Recommendations for capital improvement measures for future planning that may further improve system operation;
- Utilization of eQuest or other modeling/simulation software to model building operations and determine scenarios for optimum performance;
- Execution of functional performance tests to ensure proper operation of the optimized systems;
- Development of a training manual and monitoring capabilities (if applicable) to ensure persistence of energy savings; and
- Creation of a plan to comply with governor's Executive Order for future benchmarking and RCx activities.

#### Retrofit and Modernization

To reduce peak demand and create energy savings in state facilities, the partnership works with the state to identify facilities and develop a pool of retrofit projects for implementation. The number and scope of the projects is contingent on the availability of funds; however, the partnership works to ensure that projects are prioritized up in the event that additional funding is secured. During this process, department staff acquires the experience and knowledge to identify and implement retrofit projects so that they can undertake energy efficiency projects independently.

Retrofit projects could include complete lighting retrofits (T5 technology, LED applications, newer 28 watt T-8's), building-wide lighting controls, and HVAC upgrades/replacements.

In conjunction with the state's efforts to achieve LEED certification for all buildings larger that 50,000 square feet as the GBI requires, the partnership investigates opportunities to include energy efficiency measures in all major new construction and renovation projects, special repair projects, and standard scheduled maintenance operations.

#### Integration with Demand Response and Other DSM Services

Demand response programs provide tariff-based benefits to customers who design and utilize demand response procedures. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan to provide a financial incentive for the energy savings resulting from the equipment through the partnership shall be developed.

The partnership will look for opportunities to integrate demand response and other DSM services into the program. Resources are leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy efficiency and demand response program staff members collaborate with partners to conduct comprehensive audits to identify energy efficiency measures and demand response opportunities. The approach reduces the consumption of technical resources by assigning EE and DR audits tasks to the same audit team because this tactic reduces any duplication of effort that could occur between two separate teams and allows the combined team to collaborate more efficiently during discussions about customer incentive qualifications, thereby minimizing the likelihood of delays.

The partners endeavor to identify facilities (or the aggregation of facilities) under one service account to establish the opportunities for DR participation. The minimum service account program eligibility requirement is one 30 kW demand response opportunity.

The partnership will also assist, where applicable, facility and operations managers who are interested in solar technology. IOU technical support staff can utilize energy audits to provide recommendations to improve facility operations through EE/DR measures prior to implementing more costly solar technologies. This strategy supports the Energy Action Plan's loading order.

#### Education and Training

The partnership seeks to increase upper management's awareness and decision makers' support for energy efficiency projects. Additionally, it hopes to leverage IOU and other available training programs. The partnership uses the existing infrastructure to accomplish outreach activities.

The success of this partnership is contingent on the ability of the partnership management team to communicate to state agencies the benefits and availability of energy efficiency projects. The Department of General Services (DGS) and the IOUs develop outreach efforts that allow them to meet with energy managers and facility operators of all state agencies to gather information about their benchmarking scores and the condition of their facilities. The management team identifies the best potential projects and works with agencies to create a viable project packages.

Education and training activities include workshops for state facility managers and other decision makers. They receive training on best practices for the implementation of energy efficiency retrofit projects, building operations, and new technologies that may be applicable to the effective completion of their daily tasks. Participants get opportunities to explore the programs that are currently available from the IOUs. Additionally, this program provides opportunities for participants to share best practices with other facility managers.

Workshops shall be coordinated and delivered in conjunction with other partnership efforts. The partnership management team coordinates with existing training centers such as SCE's Customer Technology Application Center (CTAC), SoCal Gas' Energy Resource Center, and PG&E's Pacific Energy Center. The team also utilizes training programs available from State agencies such as the California Energy Commission to deliver various technical training courses to improve the skills and knowledge of State facility staff.

#### Funding Sources:

The partnership intends to take advantage of incentives available through the partnership program. If accepted and implemented, these projects receive incentives for incremental energy savings for each measure that complies with the program's guidelines. The IOUs work with their internal program staff to allocate appropriate incentive amounts from all applicable programs and to ensure that state agencies include complete and correct incentive information in the Life Cycle Cost Analysis that they submit when they arrange for financing through the Energy \$Mart program.

The partnership team will also assist state agencies in efforts to employ on-bill financing opportunities. One reason the state has not taken advantage of IOU programs relates to the state's budgetary constraints and spending approval processes. On-bill financing provides the state with a feasible alternative for

funding small repair projects and equipment upgrades that will increase energy efficiency.

State agencies include in their yearly budgets funds for the recurring maintenance and replacement of equipment as well as for special repairs. The partnership will provide the state with an opportunity to maximize these allocations by utilizing the program elements to buy down the expense and increase the energy efficiency component of these projects. The project incentives will be applicable for eligible measures as defined by the CPUC Energy Efficiency Policy requirements.

Energy retrofit projects that exceed \$100,000 may be eligible for Energy \$Mart financing and the use of the pool of qualified ESCOs. The Department of Finance has approved the use of this financing mechanism for State projects. The partnership provides a mechanism for informing State agencies about the availability and function of this type of funding arrangement.

Key Activity	Description
Identify key stakeholders to participate	The partnership management team identifies key stakeholders in each agency. They may be selected to participate in the project team.
Conduct solicitation for potential projects from participating agencies	The retrofit project team coordinates with the customer to generate a pool of projects to be evaluated.
Compile and evaluate projects based on project criteria and cost effectiveness requirements.	The retrofit project team performs due diligence on proposed projects to determine if each project meets the criteria and cost-effectiveness requirements. The project team provides a list of recommended projects.
Approve projects for funding	The partnership management team reviews project team recommendations for potential projects.
Identify funding sources	The partnership team and participating state agency explore financing alternatives such as rebates and incentives, on-bill financing, application of existing budget, and Energy \$Mart financing to maximize the state's investment in energy efficiency.

Major Activities:

Key Activity	Description
Coordinate project implementation with partners and contractors.	The project team provides oversight of project implementation and coordinates with customer and contractors to ensure successful and timely implementation.
Verify project installation and provide incentive payments.	The project team conducts 100% inspection. Upon verification, project team approves the completed projects for incentive payments.
Compile project results and complete final report.	The project team compiles all relevant project information including measure information; energy savings; program incentives paid; etc.
Coordinate with EM&V contractor where applicable.	If required, management team coordinates with the project teams and key stakeholders to support any requests from the CPUC approved EM&V contractors.

#### Non-Energy Activities:

Working within the partnership structure, the state agencies and the IOUs utilize pre-screening energy audits to perform a preliminary identification of candidate buildings. Preliminary audits should reduce the number of Investment Grade Audits (IGAs) that fail to qualify for the program. The IOUs and the state use the results of these pre-screening audits to determine what to do next.

The partnership program provides training to facility staff through the program's retro-commissioning component to promote the persistence and sustainability of achieved energy savings. Additionally, the partnership provides opportunities for design teams at DGS and other agencies to learn about available incentives so that they may incorporate them into facility planning and construction.

In addition, the partnership will provide support to the state in meeting the requirements of AB 32. Through the education and training element, the state will be able to identify measures that will help it achieve the required reduction in greenhouse gas emissions. Once the measures are implemented, the measurement and verification requirements of the partnership program will assist the state in preparing the progress reports as required by AB 32 to the extent allowed by the CPUC energy efficiency policy.

#### Subcontractor Activities:

The partnership relies on contractors to carry out portions of the program. Subcontractors' activities may include but are not limited to:

- Assisting with Program Planning and Design areas including: program narrative preparation for filings, preparing project energy savings estimates and E3 cost-effectiveness calculators, and providing assistance in the development of marketing and outreach plans;
- Coordinating, scheduling, and documenting results and action items from program team meetings;
- Preparing and conducting formal presentations and participating in conferences as required by the Management Team;
- Maintaining a Project Tracking and Reporting database system;
- Assisting the IOUs and the State of California in CPUC reporting and regulatory communications;
- Assisting in the development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and the preparation of minutes for the Training and Education component; and
- Miscellaneous professional and technical assistance as requested by the IOUs to assist the state in identifying, implementing, and maintaining energy efficient measures.

#### Retro-commissioning and Retrofit Contractors

The Department of General Services (DGS) oversees the Request for Qualifications (RFQ) process to establish a pool of retro-commissioning contractors that meet criteria regarding their capabilities, company longevity, and solvency. The RCx and retrofit program elements operate on a Statewide, integrated basis, providing immediate energy savings and setting the foundation for a long-term program that focuses on the sustainability and best practices. Subcontractors are used to assist in program administration and management, and in the application of the program elements.

#### Quality Assurance and Evaluation Activities

For reporting purposes, both the State and the IOUs require a stringent measurement and validation (M&V) process. For ESCO projects, the state requires measurement of energy savings that are accurate and objective to ensure that the ESCO is meeting the conditions of their performance contract. An ESCO includes in its proposal a guarantee to provide an energy analysis compiled by an M&V agent that the state and the IOU, where applicable, must approve prior to payment. M&V services are equally important to the IOUs because they must provide a verification of savings to the California Public Utilities Commission to substantiate their use of public good charge funds. The state and the IOUs require assistance from subcontractors to perform M&V tasks.

The partnership management team establishes and oversees quality assurance measures for the partnership programs including oversight and verification of subcontractor activities. These procedures and the associated reporting are developed in detail during the program implementation process. Project teams provide the level of due diligence and quality assurance that are consistent with current partnership and utility programs. Test samples include a representative percentage of pre- and post-installation confirmation assignments.

Project Type	Incentive Amount
Lighting projects	\$0.15/kWh
Motors/VFDs/Compressors/Others	\$0.18/kWh
HVAC projects with electrical savings	\$0.24/kWh
New construction projects	\$0.10 above core SBD
	rates.

#### iii. Incentive levels

iv. Marketing and outreach plans (*e.g.*, research, target audience, collateral, delivery mechanisms)

The retrofit and retro-commissioning program elements use similar marketing approaches. The partnership management team, in coordination with DGS and other state agency staff conduct marketing and outreach efforts. These efforts are accomplished using contacts with facility administrators and managers. Team members inform them of the availability of energy efficiency services available through the partnership and other utility programs. Key marketing activities include:

Key Activity	Description
Outreach	The partnership management team begins outreach efforts by contacting the heads of facilities management for each department, informing them of the availability of funds for approved measures and activities in state facilities. The team schedules meetings to discuss options, implementation criteria, benefits of program participation, and program offerings.
Customer Follow-Up	The partnership management team, in coordination with staff from the state and the IOUs, visit each targeted site to talk with facilities managers about the various options and proposed energy efficiency measures. After confirming an appropriate site for implementing measures and/or retro-commissioning, the management team meets the appropriate facilities managers to present the anticipated energy savings, other benefits, and considerations associated with the implementation.
Implementation and Training	The partnership management team share energy efficiency knowledge and implementation experience with other public agency entities through a series of meetings and workshops. These meetings and workshops are coordinated with other

Key Activity	Description	
	partnership programs.	

#### v. IOU program interactions with CEC, CARB, Air Quality Management Districts, local government programs, other government programs as Applicable

The partnership shall utilize the available CEC funding mechanism for the state hospital projects. There are currently two state hospital facilities in the pipeline to take advantage of this opportunity.

#### vi. Similar IOU and POU programs

The four IOUs strive to have consistency in their respective program offerings where practicable. When their implementation strategies differ, the state agencies are guided by the management team to ensure complete process follow through. If POUs have interest in implementing EE programs, the partnership shall provide technical assistance in designing these programs if requested.

#### b) **<u>Program Delivery and Coordination</u>**

The State of California/IOU partnership is in a unique position in which by collaboration, has certain delivery and coordination activities made possible by the agreements that are in place as required when entering into the partnership. Below are types of coordination activities already in place within the partnership:

#### i. Emerging Technologies program

If opportunities allows, the IOUs bring forth emerging technologies to the partner either through PIER project opportunities or the management team's introduction of technology demonstration projects.

#### ii. Codes and Standards program

Not Applicable.

#### iii. WE&T efforts

Workforce education and training (WE&T) activities are an integral part of the MBCx strategy where facilities staff are trained to maintain building optimization adding value to their skill sets and further securing their need in the workforce.

#### iv. Program-specific marketing and outreach efforts

The outreach efforts for the partnership involve working with individual state agencies that may have the resources or determination to implement energy efficiency projects.

#### v. Non-energy activities of program

Non-energy activities include the providing of technical assistance the partner lacks. The program provides this kind of support as an added benefit to the partner in addition to the monetary incentives they may receive from the IOUs.

#### vi. Non-IOU Programs

The partnership understands that some third-party programs serve the purpose of filling program gaps. The IOUs consider this an added value and augments the program's offering with these non-IOU programs.

#### vii. CEC Work on PIER

CEC work on PIER – PIER technology projects are introduced into the programs at the project level when opportunities arise.

#### viii. CEC Work on Codes and Standards

Not Applicable

## ix. Non-Utility Market Initiatives

Not Applicable

#### c) <u>Best Practices</u>

The key to the partnership's success is the application of best practices developed or learned from prior successful programs or other partnerships.

Type of Best Practice	Best Practice	Institutional Application(s)
Goals &	Develop and use clearly articulated objectives that are internally consistent, actionable and measurable.	Share clearly defined and obtainable goals that are developed with partner input. Track goals through bi-weekly management team meetings to ensure they are achieved.
Objectives	Develop tools to track the portfolio's performance on a continuous basis and report progress.	The detailed program plan is a living document that will facilitate continuous tracking and reporting.
	Design programs within the portfolio based on sound program plans; where appropriate, utilize clearly but concisely articulated program theories.	The plan & program structure are based on sound program plans & theories.
Planning	Conduct baseline research	Baseline research was conducted of each partnership and the individual participating cities & counties.
	Build feedback loops into program design and logic Maintain the flexibility to rebalance portfolio initiatives, as needed, to achieve the portfolio's goals and objectives.	The detailed program plan provides a mechanism for closely monitoring progress and making adjustments as may be needed to meet the Partnership goals and objectives.
Staffing	Select highly qualified in-house staff &/or outside contractors to manage, design, implement and evaluate programs. Clearly define portfolio implementation responsibilities and clarify roles to minimize confusion.	SCE Project Managers have been assigned to each Partnership to assure continuous open communications and implementation success. The roles and responsibilities of SCE and the various Partners and participants are clearly defined in the detailed program plan. SCE's resources will be supplemented with pre-qualified technical support contractors selected by SCE though competitive solicitations to cost-effectively provide the portfolio of technical assistance needed to support its Partners.
Integration	Leverage relationships from complementary organizations such as utilities, trade allies, and industry specialists.	Structured to leverage all resources, assets and relationships of SCE, its Partners, and their participants, constituents, stakeholders, and other related individuals &

Type of Best Practice	Best Practice	Institutional Application(s)
		organizations.
Reporting & Tracking	Clearly articulate the data requirements for measuring portfolio and program success. Design tracking systems to support the requirements of all major users: program administrators, managers, contractors and evaluators.	The detailed program plan, coupled with frequent meetings between/among SCE, its partners and their members/ constituents is designed to track and report partnership progress and successes.

#### d) <u>Innovation</u>

A co-funding model allows the project implementation activities to be shared between the agency and the IOU in order to facilitate implementation where barriers exist. In the state's stringent contracting requirements, one approach is to perform contracting and contract payments through the IOU's project implementation infrastructure. This system works around obstacles that agencies would normally encounter with the state's infrastructure while still complying with internal requirements.

An On-Bill Financing pilot is currently in process with the California Department of Fairs and Exposition. The IOUs will complete this financing program's development with a take away from this pilot of the best practices as it affects on-bill financing.

#### e) Integrated/coordinated Demand Side Management

Demand response programs provide tariff-based benefits to customers who design and utilize demand response procedures. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan to provide a financial incentive for the energy savings resulting from the equipment through the partnership shall be developed.

The partnership will look for opportunities to integrate demand response and other DSM services into the program. Resources are leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy efficiency and demand response program staff members collaborate with partners to conduct comprehensive audits to identify energy efficiency measures and demand response opportunities. The approach reduces the consumption of technical resources by assigning EE and DR audits tasks to the same audit team because this tactic reduces any duplication of effort that could occur between two separate teams and allows the combined team to collaborate more efficiently during discussions about customer incentive qualifications, thereby minimizing the likelihood of delays.

The partners endeavor to identify facilities (or the aggregation of facilities) under one service account to establish the opportunities for DR participation. The minimum

service account program eligibility requirement is one 30 kW demand response opportunity.

The partnership will also assist, where applicable, facility and operations managers who are interested in solar technology. IOU technical support staff can utilize energy audits to provide recommendations to improve facility operations through EE/DR measures prior to implementing more costly solar technologies. This strategy supports the Energy Action Plan's loading order.

#### **f**) <u>Integration Across Resource Types (energy, water, air quality, etc.)</u> Not Applicable

#### g) <u>Pilots</u>

The program is exploring different options for program delivery models that may fill gaps in program design. A solutions package for the small retrofit and modernization project is needed for the majority of the projects. The program is currently underway with pilot projects that address the project development and financial barriers. These pilot projects are:

- A co-funding model permitting the project implementation activities to be shared between the agency and the IOU and work around obstacles with the state's infrastructure while still complying with internal requirements.
- An on-bill financing pilot is currently in process.

#### h) <u>EM&V</u>

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2009-2011 after the program implementation plans are filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy Division studies. More detailed plans for process evaluation and other program-specific evaluation efforts cannot be developed until after the final program design is approved by the CPUC and in many cases after program implementation has begun, since plans need to be based on identified program design and implementation issues.

#### 7. Diagram of Program

See Section 7 of the I&G Core PIP.

#### 8. Program Logic Model

See Section 8 of the I&G Core PIP.

See Attachment 1 below for – Measure Matrix and Timeline.

See Attachment 2 below – Roadmap.

Attachment 1 –	- Measure	Matrix	and	Timeline
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0-3 Months 3-6 Months		6-12 M	onths	12-36 Months			
IOU's would con with the Manu Installation - inco offset cost of p installa	Id contract directly Manufacturer for n - incentive would ost of product and nstallation - incentive would offset cost of product and installation		Two Paths - Utilize Esco Model or IOU resources for installation		Utilize ESCO Model/Capital Outlay Process and IOU incentives to offset cost		
Technology	Estimated Length of Installation	Technology	Estim ated Installation Tim e	Technology	Estim ated Installation Tim ing	Technologies	Estim ated Installation Tim e
Vending Machine Controls	2-3 Months	Occupancy Sensors	4 Months	Fluorescent Lighting Replacement	8 Months	Energy Management System	12-24 Months
PC Network Software	1-3 Months	CFL replacement	4-5 Months	Outdoor Lighting Replacement	6-8 Months	Lighting Projects requiring re-wiring	12-18 Months
LED Exit Signs	3 Months	Steam Traps	5-6 Months	Replacement	6-9 Months	Boilers	12-18 Months 18-24
Heaters 1-3 Months		Server Virtualization	4-5 Months	Adding VFD's Replacement of	8-10 Months	Chillers	Months 18-20
Participate		Domestic Hot Water Boilers	5-6 Months	SAN or UPS Motor	6-8 Months	Air Handler Replacement	Months 24-36
DHS		Fume Hood Occupancy Sensors	3-6 Months	Replacement HVAC Maintenance	8-10 Months	Wastewater Treatment Plants	Months 24-36
DOM		Furnaces Building Envelope (Insulation, Window	3-6 Months	and Coil Cleaning	6-7 Months	New Buildings	Months 24-36 Months
рмн		Food Service Equipment Replacement	3-6 Months	Examples of Agenc	ies to Participate	Centralized Systems	24-36 Months
Fairs and Expos		Examples of Agencies to Partici	pate	DHS		Reduce Distribution Losses- Distributed Systems (eliminating steam or hot water)	12-36 Months
Cal Trans		DMV		DMH		ALL AGENCIES	
BOE	вое Снр		Courts		-		
DGS DMH		DD	S				
State Compensation Ins. Fund DDS		-					
		Cal Trans		+			
		Fairs and Expos		+			
		DGS		1			



#### Attachment 2 – Roadmap

# 5g

1. Program Name: UC/CSU Energy Efficiency Partnership Program Type: Core

#### 2. Projected Program Budget Table

 Table 1 – Refer to Table 1 in the I&G Core PIP

#### 3. Projected Program Gross Impacts Table – by calendar year

 Table 2 – Refer to Table 2 in the I&G Core PIP

#### 4. Program Description

#### a) Describe program

The University of California, California State University (UC/CSU), and Southern California Edison and the three other Investor-Owned Utilities (IOUs) are collaborating to continue the UC/CSU Energy Efficiency Partnership Program to share energy efficiency best practices and to implement energy efficiency projects for immediate and long-term energy savings and peak demand reduction and establish a permanent framework for sustainable, comprehensive energy management programs.

The UC/CSU Energy Efficiency Partnership is a natural fit with the goals, objectives and strategies articulated in the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan). The partnership was designed to achieve immediate energy and demand savings and establish a permanent framework for sustainable, comprehensive energy management programs. The partnership program is an existing statewide nonresidential program that will continue in the 2009-11 program cycle. It will continue to offer incentives for retrofit projects, monitoring-based commissioning, and training for campus energy managers.

SCE and the other IOUs have implemented the partnership program with the goal of extending the reach and effectiveness of traditional utility programs by using the UC and CSU system communication and outreach channels. This will achieve broad penetration of energy efficiency services on campuses. SCE will engage the UC and CSU systems to be strategic partners to help reach campus end-use customers through partnership activities and serve as channels for the IOUs' other energy efficiency and demand reduction programs.

The Statewide partnership concept was pioneered during the 2004-05 program cycle by the four IOUs and the UC and CSU systems. The program was very successful in achieving the above goals. The UC/CSU/IOU Energy Efficiency Partnership will build on this success and emulate these strategies for the 2009-11 program cycle. Projects will adopt a comprehensive approach by including retrofits and DSM alternatives to include: demand response, solar and other distributed generation (renewable self-generation). SCE and the other IOUs face the challenge of implementing cost-effective energy efficiency programs that will result in immediate, long-term peak energy and demand savings in their service territories. The institutional partnerships consume vast quantities of energy and make up a significant portion of the both the electric and natural gas load in the State of California. These entities are large, complex organizations with a broad set of goals, stakeholders, processes, and constituencies. They are diverse from a geographic, climate, and operational needs standpoint. But with this size and diversity also comes a considerable opportunity to save energy use and cost on a scale that is meaningful to the IOUs and to California. The institutional and government Energy Efficiency partnerships is designed to meet these challenges.

With the 2004-2008 Partnership Programs, SCE and the other California IOUs embraced a Statewide partnership concept in energy efficiency programs. This effort was innovative, very successful, and led to significant energy savings throughout the SCE service territory. In addition to the savings achieved, this partnership has helped create a new paradigm for energy management which has established the infrastructure necessary for long-term, permanent energy savings.

SCE's objectives for the partnership include:

- Positioning the partnership as a unique, strategic relationship to help impact the partners' energy decisions by demonstrating the successful implementation of a comprehensive approach to achieving energy management goals;
- Coordinating with the proposed Workforce Education & Training Program to train the next generation of the efficiency-related workforce and improve the knowledge and skills of the current generation from local code officials, campus energy managers, and HVAC technicians to campus staff to develop the human resources needed to achieve market transformation;
- Leveraging existing organizational infrastructures to effectively implement other programs and projects at the Statewide level;
- Engaging the partnership to deliver energy savings and demand reduction both through partnership activities and by serving as channels for SCE's energy efficiency and other demand-side management programs; and
- Impacting the release of greenhouse gases in California by reducing electricity and gas consumption. SCE will calculate  $CO_2$  reduction in tons by determining annual life-cycle energy savings, in accordance with California Assembly Bill 32 (AB 32)¹⁹.

#### Strategies for Success

The UC/CSU Partnership is a unique energy efficiency program that accomplishes immediate, long-term peak energy and demand savings and establishes a permanent framework for a sustainable, comprehensive energy management program at the UC and CSU campuses served by SCE and the other IOUs. This program capitalizes on

¹⁹ AB 32 caps global warming emissions to 2000 levels by 2010 (11% below business as usual), to 1990 levels by 2020 (25% below business as usual), and 80% below 1990 levels by 2050.

the vast resources and expertise of UC/CSU and the IOUs working together to ensure a successful and cost-effective program that:

- Meets the objectives of the CPUC as articulated in Decision  $03-08-067^{20}$ ;
- Achieves the goals of the state Energy Action Plan to optimize energy conservation and resource efficiency; and
- Addresses the goal of the Governor's Green Building Action Plan by assisting campuses with the retrofit and retro-commissioning of existing buildings.

The program is an extension of the partnership first established in the 2004-2005 energy efficiency program cycle, and will capitalize on lessons learned in the areas of improved program delivery efficiency and communication between the stakeholders. The new program will also address a backlog of cost effective projects that were identified in the previous cycle, but could not be completed because of budget limitations.

#### Expected Outcomes

The following are the desired outcomes of the UC/CSU Partnership:

- Achieving immediate, cost-effective energy and demand savings;
- Continuing the success of the 2004-2005 and 2006-2008 program, using program momentum to implement backlogged projects, and identifying new projects for 2009 2011;
- Improving energy-efficient operations and maintenance practices at UC and CSU campuses;
- Training UC and CSU energy managers to identify and implement energy efficiency opportunities;
- Creating opportunities to partner with existing curriculum development efforts to train the next generation of the "green workforce" which has been identified as a critical component for California's future economy;
- Initiating an energy efficiency partnership program that is designed to accomplish immediate and long-term energy and peak demand savings goals;
- Disseminating information to increase awareness and acceptance of energy efficiency practices;
- Improving communication and collaboration among the partners and the IOUs to delivery energy efficiency programs;
- Creating an infrastructure for the permanent adoption of processes at the facility system level;
- Improving efficiencies in program delivery, sharing best practices and educational tools, and leveraging local knowledge;
- Leading and coordinating all demand-side management (DSM) by being the main point of contact for DSM offerings, coordinating all projects, including Energy Efficiency (EE), Demand Response (DR), California Solar Initiative

²⁰ CPUC Decision 03-08-067 (August 23, 2003) solicits energy efficiency program proposals from utilities and nonutility parties, adopts evaluation criteria, establishes a funding cycle and addresses how funds may be allocated and how program proposals may be reviewed. [http://docs.cpuc.ca.gov/Published/Final_decision/29216.htm]

(CSI), and Self Generation Incentive (SGIP) Programs as applicable to the partner.

- Leveraging Partners' communications and outreach infrastructure to reach customers and/or internal departments more effectively, and
- Aligning energy efficiency program opportunities closely with Green Rating opportunities, and increasing program participation by ensuring that green rating systems reflect or parallel program offerings.

#### b) List measures

Measure Categories	Technologies	
Lighting	Includes indoor and outdoor fluorescent, HID, LED	
	replacements, lighting controls, and other lighting projects.	
Controls and other	Includes fans, motors, VFDs, air compressors, EMS	
Equipment	systems and other equipment not covered under the	
	lighting or HVAC categories.	
Air Conditioning and	Includes system and major subsystem replacements	
Refrigeration		
Other	New Construction, RCx, MBCx and others	

Incentives will be paid on projects based on a cents per kWh saved. These rates are an average of \$0.24/kWh saved (gas savings at \$1.00 per therm). Incentives are paid by the utility to the agency upon completion of the project. They are based upon the agreed-upon energy savings determined as part of the project evaluation, subject to changes made during the project's implementation.

Incentive rates for the New Partnership will be as follows:

Types	Amounts	
Lighting projects Motors/VFDs/Compressors/Others HVAC projects with electrical savings	\$0.24/kWh	
New construction projects	\$0.10 above core SBD rates	

#### c) <u>List non-incentive customer services</u>

The partnership will provide the following non-incentive services:

- Audit services;
- Technical assistance;
- Training and education;
- Design assistance;
- Due diligence project review; and
- Outreach activities.
The partnership will include non-energy activities such as creating presentations for industry and association conferences, attending various conferences, meetings, and outreach events, and distributing marketing materials through education programs.

The partnership will also continue the progress made with the establishment of a Statewide approach to training and building operations to facilitate long-term energy efficiency savings. This component of the partnership involves training of campus design staff, project managers, energy managers, and others in using best energy practices in the construction, retrofit, and monitoring-based commissioning of campus buildings and central plant infrastructures.

Non-Incentive Services	Delivery Mechanism	
Education and Training	Delivered by creating presentations for industry and	
_	association conferences, attending various conferences,	
	meetings and outreach events, distributing marketing	
	materials through education programs, and training energy	
	managers, facility maintenance staff and design staff,	
	project managers, and others in using best practices in the	
	construction, retrofit, retro-commissioning, and monitoring-	
	based commissioning of buildings and central plant	
	infrastructure.	
Emerging Technologies	Delivered through Emerging Technologies (ET).	
	Partnerships will work with ET to develop potential pilots	
	for showcasing emerging technology development.	
Funding Sources	Partnership T&E funds, Partner T&E funds, Energy	
	Resource Center funds	
Subcontractor Activities	Subcontractors may be used to assist in program	
	administration and state wide coordination among partners.	
Program Administration	Utility program managers will ensure successful program	
and Management	implementation by:	
	Identifying project tasks	
	• Establishing schedule of deliverables and responsibilities	
	• Obtaining inputs from the partners and facilitating the	
	decision-making on key program elements	
	• Facilitating and coordinating partnership team	
	communications	
	• Providing analytical assistance as needed, and	
	<ul> <li>Providing accurate program information for reporting to</li> </ul>	
	the CPUC.	

# UC/CSU Energy Efficiency Partnership Program

Non-Incentive Services	Delivery Mechanism
Quality Assurance and	The team will establish and oversee quality assurance
Evaluation	measures for the partnership program, including oversight
	and verification of subcontractor activities. These
	procedures and associated reporting will be developed in
	more detail as part of program implementation. In general,
	however, the partnership will continue the level of due
	diligence and quality assurance of the present IOU energy
	efficiency offerings, including a representative percentage
	of pre- and post-installation inspections to verify small
	hardware projects, and pre- and post-installation inspections
	on all large or specialized projects and hardware projects
	(installation of energy-efficient equipment, facility retrofits,
	and building commissioning and new construction projects).
Policy Assistance: Energy	Influence UC/CSU partners to adopt energy efficiency best
Policy Development	practices and policy changes in accordance with the
	Strategic Plan.
Codes and Standards	The other key element will be the refinement and further
	adoption of voluntary policies and requirements adopted by
	customers for energy efficiency and sustainability to create
	incrementally more efficient buildings in parallel with the
	adoption of more stringent, mandatory Codes and Standards
	by local and state jurisdictions. For customers such as
	county governments, the partnership will work with county
	officials as they consider local building codes and standards
	for implementation.

#### 5. Program Rationale and Expected Outcome

#### a) **Quantitative Baseline and Market Transformation Information**

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

**Table 3** – Refer to the overarching program for quantitative baseline metrics

#### b) Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors and programs, not single sub-programs. Therefore, all metrics and goals are proposed at the highest program level. Please refer to the quantitative baseline and market transformation discussion, presented in the overall program PIP.

Table 4 – Refer to the overarching program for market transformation metrics

# c) Program Design to Overcome Barriers

#### Problem Statement and Barriers to Success

The Universities are large and complex organizations that represent millions of square feet of building space and millions of potential kilowatt-hours of energy savings. However, the size and complexity of these institutions often get in the way of effective energy efficiency improvements, both in new construction and in existing facilities.

#### Strategies for Success

The UC/CSU/IOU partnership has worked diligently to overcome the barriers that size and complexity create, though many still exist. The effort to resolve them is on-going, and each of the various partner customers has made significant progress. At the heart of the evolving success are the partnership teams made up of customer staff, utility staff, and consulting professionals. These teams enable the partnerships to overcome these barriers through a number of important mechanisms:

#### Single point of contact model

Primary Barriers	Strategies to Overcome Barriers
Funding Levels and Project Funding	Incentives help relieve budgetary constraints and
Constraints. Energy efficiency is costly	assist customer economic evaluation by making
and budgets are limited. The actual	energy efficiency more cost-effective. In addition
decision-makers approving the details of a	to their purely economic role, incentives play an
project often choose not to implement	important part in promoting the importance and
higher-cost, more-efficient systems,	visibility of energy efficiency. When a
equipment, or technologies. Incentive	partnership can bring an incentive to the decision-
dollars are most often allocated to the	making body and make a public announcement, it
general fund, which hampers ensuring that	not only improves the economics of a project, but
incentives are allocated toward the	demonstrates its importance and increases public
participating department budget.	awareness of both the utility's and the customer's
	commitment to energy efficiency and
	environmental quality.
	IOU on-bill financing programs are being
	assessed as a way of financing smaller retrofit and
	modernization upgrades.
	<u>A third strategy will help customers identify ways</u>
	of authorizing funding departments to reinvest
	dollars received from incentives in future energy
	projects.

Primary Barriers	Strategies to Overcome Barriers
Lack of Long term Economic Decision- making. Economic decisions are often short-sighted, with capital limitations taking precedence over long-term savings, even when accurate economic analysis would select the higher initial cost of higher-efficiency choices.	<u>Education and training</u> brings energy efficiency awareness to decision-makers at all levels. The partnership will incorporate education and training for a variety of people including key department managers, facilities staff, and the general campus population. This component will enhance awareness of energy efficiency, which in turn will helps overcome some of the barriers caused by lack of information or erroneous economic analysis.
Evolving Technologies. Technology itself is rapidly developing, and even the best- informed energy professionals have difficulty distinguishing between sales propaganda and truly valid technical advancements.	Integration allows the partnership management team to be the single source of contact that enables the institutional customers to take advantage of all energy programs offered by the IOUs. This integration will break down barriers to participation in multiple programs. The program is innovatively collaborating with internal utility departments in order to advance this kind of integration. Future plans will be developed to include new construction, emerging technologies, education and training, demand response, California Solar Initiative (CSI), self-generation, on-bill financing, and other utility programs within the scope of partnership activities.
<u>Staffing.</u> Staff time is at a premium, with most facilities personnel having too much to do in too little time. Attention to proper energy efficiency is time-consuming and may get shelved as staff members work on more immediate and urgent problems. Staff members may need technical information they do not have or assistance they cannot afford.	<u>Professional assistance</u> from utility staff and partnership consultants allows potential projects to be identified and evaluated. Many campuses do not have the time to methodically evaluate their buildings and identify the most salient energy efficiency projects. Furthermore, facility personnel often lack the technical expertise to evaluate those projects and determine the best energy efficiency improvements. The partnership team is able to prepare comprehensive lists of projects, evaluate their energy savings potential, and bring them to the team for review. The customer can then use this information to accelerate the timing of some projects, modify the scope of others, and rely on strategic energy planning, rather than simple maintenance schedules, for energy efficiency enhancements.

Primary Barriers	Strategies to Overcome Barriers
Project Scope. Minor projects, including	Focused attention is a vital intangible benefit of
many in which significant energy	the partnerships. The partnership teams meet on a
efficiency improvements could be made,	regular basis. They track the progress of existing
are often handled within lower levels of the	projects and constantly keep an eye out for future
organizations and do not reach the attention	projects. Partnership teams have documented
of energy professionals.	situations in which cost-effective projects that lay
	dormant for up to five years were finally
	implemented as a result of the continuous
	attention and pressure placed on customer
	management by the partnership team.
Information Dissemination: Some of the	The management team is currently developing an
campuses lack the technical expertise to	<u>information tool</u> for some agencies that will help
develop or manage projects. Therefore	reveal the savings potential of implementing
they lose opportunities to improve	projects with likely energy efficiency measures
efficiency when staff is unaware of	that may appear in agencies' typical facilities.
available technology and measures, or	This is meant to appeal to facilities managers or
when lack of funds and/or management	decision makers and allow the IOU to perform
support causes the removal of such	detailed energy audits that eventually lend
measures from a project.	themselves to project proposals.
Gap in ESCO Process and Small Projects:	The management team is exploring <u>alternative</u>
The previous program cycle taught the	project delivery and financing models which may
management team that while the ESCO	include a mechanism that creates seed money for
process and Energy\$mart project financing	starting up projects and integrating it with the on-
mechanism may work for larger projects,	bill financing. This would be augmented by
smaller projects cannot pass the Life-Cycle	innovative pilot project delivery models such as
Cost Analysis, and so the ESCOs do not	the project co-funding approach, low- to no-cost
find smaller projects attractive. Many	measure offerings, and third-party program
campuses have buildings less than 25,000	bridging, to pilot concepts that may fill gaps in
sq. ft. which do not meet ESCO financial	the program.
models.	

The partnership anticipates that each of the partners will continue to work through the various obstacles that inhibit the full implementation of energy efficiency within their institutions. This is a gradual and evolving process, and some of the partners have more significant barriers than others. Nonetheless, the partnership model is effective for all of them and leads to considerable energy savings and demand reduction, both in new construction and in existing buildings. For many campuses, budget requirements are becoming even tighter. The continuation of the partnerships will help assure that barriers do not become even more significant as budgets are reduced.

#### Program Design & Delivery Mechanisms

#### Customer Contributions

The partnership often leverages the strengths of customer organizations in order to provide various in-kind contributions that benefit the entire program. These

contributions include, but are not limited to, project management, facility personnel, marketing, site location venues, and administrative time.

The customer-partners provide major support to the partnerships and the energyefficiency projects sponsored by the partnerships. The equipment and installation costs of retrofit, new construction, and RCx/MBCx projects are paid for by the customers. The projects are managed by them or by a project manager paid for by customer funds.

Key personnel from the institutional partners also attend the routine partnership team meetings and provide additional work directing overall partnership activities and managing various energy efficiency projects. In some cases these are full-time positions paid for by the customer. Customer managers and various facilities and technical staff also provide assistance on an as-needed basis to the utility staff and/or partnership consultants for their various duties. This assistance includes such things as researching and locating building plans and providing access for and assisting with site surveys and monitoring activities.

The Partnership will continue the work started in the 2006-2008 program cycle to address opportunities in the College and University segments which need to adopt more energy efficient practices.

# d) **Quantitative Program Targets**

UC/CSU Portnorship	Program Target by	Program Target by 2010	Program Target by
Institutional and Government Facilities			2011
Total kWh and kW	Total kWh and kW TBD kWh/ TBD kW TBD kWh/ TBD kW TBD kWh/ TBD kW		
EE/DR Audits	Complete audits at two campuses. Ensure 100% of all audits are coordinated EE/DR efforts if applicable	Complete audits at five campuses. Ensure 100% of all audits are coordinated EE/DR efforts if applicable	Complete audits at four campuses. Ensure 100% of all audits are coordinated EE/DR efforts if applicable
Lighting and HVAC Retrofits	Complete Lighting and HVAC retrofits for savings of TBD kWh/ TBD kW.	Complete Lighting and HVAC retrofits for savings of TBD kWh/ TBD kW.	Complete Lighting and HVAC retrofits for savings of TBD kWh/ TBD kW.
MBCx	Complete MBCx projects for savings of TBD kWh/ TBD kW.	Complete MBCx projects for savings of TBD kWh/ TBD kW.	Complete MBCx projects for savings of TBD kWh/ TBD kW.

#### Table 5

# UC/CSU Energy Efficiency Partnership Program

UC/CSU Partnership	Program Target by 2009	Program Target by 2010	Program Target by 2011	
	Institutional and Government Facilities			
New Construction	Complete New Construction projects for savings of TBD kWh/ TBD kW. Communicate Integration Strategy between internal departments and offerings and incentive structure.	Complete New Construction projects for savings of TBD kWh/ TBD kW. Communicate Integration Strategy between internal departments and offerings and incentive structure.	Complete New Construction projects for savings of TBD kWh/ TBD kW. Communicate Integration Strategy between internal departments and offerings and incentive structure.	
Strategic Plan Support				
See Section 5e				
	Core Pro	gram Integration		
Education and Outreach	TBD Number of Partner Presentations	TBD Number of Partner Presentations	TBD Number of Partner Presentations	
Financial Solutions: On-Bill Financing	Develop documentation package and project agreement for partners.	Determine which agencies will use On-Bill Financing and establish a model for using on-bill financing with Institutional and Government customers.	Complete documentation of participation rates for partnerships and determine any lessons learned or roadblocks.	
CSI	Establish communication plan for ensuring that partners have been educated on solar potential	Develop project agreement plan and determine necessary stakeholders.	Complete documentation of participation potential and what is necessary for partners to participate	

Note: These are estimated targets. The program will need to have flexibility in allocating resources to each program elements to ensure overall program success.

# e) Advancing Strategic Plan goals and objectives

Institutional and Government partnerships are a natural fit with the goals, objectives, and strategies articulated in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan). The partnerships have demonstrated that innovation, integration, and collaboration are the key to achieving the next generation of cost-effective energy efficiency programs and resulting reductions in greenhouse gas (GHG) emissions, by applying both Commercial and Local Government sector strategies to the UC/CSU/IOU partnership as follows:

Commercial Sector Goals – Section 3	Strategies to Meet Goals
2-1: Lead by Example: State/local governments and major corporations commit to achieve energy efficiency, EE, (or green) targets in existing buildings.	Where the budget allows, customer owned buildings are benchmarked and retro-commissioned.
2-5: Develop tools and strategies to use information and behavioral strategies, commissioning, and training to reduce energy consumption in commercial buildings	Implementing monitoring-based commissioning, and training energy managers to continuously monitor and optimize building operational performance.
2-6: Develop effective financial tools for EE improvement to existing buildings.	Developing on-bill financing offerings compatible with the state legal requirements. Exploring avenues that may work around lease terms to address the issue of perceived tenant/owner "split incentives."
2-8: Improve utilization of plug load technologies within the commercial sector.	Leveraging PC network software and vending machine controls to reduce commercial building plug loads.
3-1: Drive continual advances in lighting technology through research programs and design competitions.	Work with PIER to pilot lighting products on state-owned facilities where available.
3-2: Create demand for improved lighting products through demonstration projects, marketing efforts, and utility programs.	Piloting emerging technologies in lighting with collaboration with the building owners.

#### 6. Program Implementation

#### a) Statewide IOU Coordination

i. Program name: UC/CSU Energy Efficiency Partnership Program

#### ii. Program delivery mechanisms

The Partnership will use and build on the implementation strategies employed during the last program cycle. Refining the implementation plan for this cycle, in order to account for successes that have already been achieved, will include:

- A more streamlined program management structure
- Coordination with other energy efficiency programs and ongoing Statewide and local government partnerships
- Implementation of energy efficiency retrofit program elements (including project selection and implementation)
- Retro-commissioning (RCx) implementation

- Energy efficiency education, best practices development, and training implementation, and
- Integration with IOU portfolios of DSM products and services, resulting in easier customer access and IOU program management.

# Program Management Structure

The partnership will continue to be administered by a partnership management team that meets every month. The team consists of representatives from the UC and CSU system, all four IOUs, and — if the project volume warrants the need — a program administration and management consultant who tracks project progress and keeps the lines of communication and information flowing. The management team sets overall program policy and ensures that the program adheres to the plan. Action teams that perform the detailed work may include a retrofit project development team, an RCx Team, and a training and education team. This team approach provides better coordination and integration across both state agencies and IOUs, increases the effectiveness of overcoming barriers in implementing energy efficiency projects, and reduces the occurrence of lost opportunities.

# Program Elements

# Monitoring-Based Commissioning (MBCx)

The partnership implements MBCx projects in all buildings larger then 50,000 square feet. These projects provide as an opportunity to demonstrate a cost-effective approach to optimizing facility operations, saving both electric and gas energy, while reducing operating costs and improving occupants' comfort. With metering installed as part of the project, the buildings can be continually monitored after energy retrofits are completed to ensure sustainability of achieved savings.

Activities for this element may include but are not limited to:

- Selection of candidate buildings for MBCx based on size, age, building envelope, and condition of HVAC and lighting in the building;
- Development of an MBCx plan for each candidate building;
- Investigation of opportunities through energy audits and technical assessments of major building systems (lighting, HVAC, etc.);
- Performance of pre-functional tests of building systems;
- Identification and implementation of minor no-cost/low-cost deficiencies;
- Recommendations for capital improvement measures for future planning that may further improve system operation;
- Utilization of metered data and eQuest or other modeling and simulation software to model building operations and determine scenarios for optimum performance;
- Execution of functional performance tests to ensure proper operation of the optimized systems; and
- Development of a training manual and monitoring capabilities (if applicable) to ensure persistence of energy savings.

## Retrofit and Modernization

To reduce peak demand and create energy savings in all facilities, the partnership works with the universities to identify facilities and develop a pool of retrofit projects for implementation. The number and scope of the projects is contingent on the availability of funds; however, the partnership works to ensure that project priorities are moved if additional funding is secured. During this process, department staff acquires the experience and knowledge to identify and implement retrofit projects so that they can undertake energy efficiency projects independently.

Retrofit projects could include complete lighting retrofits (T5 technology, LED applications, newer 28 watt T-8s), building-wide lighting controls, and HVAC upgrades and replacements.

In conjunction with the state's efforts to achieve LEED certification for all buildings larger that 50,000 square feet, as the GBI requires, the partnership investigates opportunities to include energy efficiency measures in all major new construction and renovation projects, special repair projects, and standard scheduled maintenance operations.

#### Integration with Demand Response and Other DSM Services

Demand response programs provide tariff-based benefits to customers who design and use demand response procedures. For demand response initiatives involving the purchase and installation of equipment by SCE business customers, a plan to provide a financial incentive for the energy savings resulting from the equipment through the Partnership Program will be developed.

The Partnership will look for opportunities to integrate demand response and other DSM services into the program. Resources will be leveraged to improve implementation efficiency and reduce transactional impacts on partnership staff. IOU energy efficiency and demand response program staff members will collaborate with partners to conduct comprehensive audits to identify energy efficiency measures and demand response opportunities. The approach will reduce the consumption of technical resources by assigning EE and DR audits tasks to the same audit team, as this tactic reduces any duplication of effort that could occur between two separate teams and allows the combined team to collaborate more efficiently during discussions about customer incentive qualifications, thereby minimizing the likelihood of delays.

The partners will endeavor to identify facilities (or aggregated facilities) under one service account to establish opportunities for DR participation. The minimum service account program eligibility requirement is one 30 kW demand response opportunity.

The partnership will also assist, where applicable, facility and operations managers who are interested in solar technology. IOU technical support staff can

use energy audits to provide recommendations for improving facility operations through EE/DR measures before implementing more costly solar technologies.

#### Education and Training

The partnership will seek to increase upper management decision makers' awareness of and support for energy efficiency projects. Additionally, it will leverage IOU and other available training programs. The partnership will use the existing infrastructure to accomplish outreach activities.

Education and training activities will include workshops for facility managers and staff and other decision makers. They will receive training on best practices for the implementation of energy efficiency retrofit projects, building operations, and new technologies that may be applicable to the effective completion of their daily tasks. Participants will get opportunities to explore the programs that are currently available from the IOUs. Additionally, this program will provide opportunities for participants to share best practices with other facility managers.

Workshops will be coordinated and delivered in conjunction with other partnership efforts. The partnership management team will coordinate with existing training centers such as SCE's Customer Technology Application Center (CTAC), SoCal Gas' Energy Resource Center, and PG&E's Pacific Energy Center. The team will also use training programs available from State agencies, such as the California Energy Commission, to deliver various technical training courses to improve the skills and knowledge of State facility staff.

#### Funding Sources:

The partnership intends to take advantage of incentives available through the partnership program. If accepted and implemented, these projects will receive incentives for incremental energy savings for each measure that complies with the program's guidelines. The IOUs will work with their internal program staff to allocate appropriate incentive amounts from all applicable programs and to ensure that state agencies include complete and correct incentive information in the life cycle cost analysis when partners seek financing through CEC, local bond or state funding sources.

The partnership team will also assist state agencies in efforts to employ on-bill financing opportunities to provide a feasible alternative for funding small repair projects and equipment upgrades that will increase energy efficiency.

Key Activity	Description
Identify key stakeholders to participate	The partnership management team will identify key stakeholders in each agency who may be selected to participate in the project team.

#### Major Activities:

Key Activity	Description
Conduct solicitation for potential projects from participating agencies	The retrofit project team will coordinate with the customer to generate a pool of projects to be evaluated.
Compile and evaluate projects based on project criteria and cost-effectiveness requirements.	The retrofit project team will perform due diligence on proposed projects to determine if each project meets the criteria and cost-effectiveness requirements. The project team will provide a list of recommended projects.
Approve projects for funding	The partnership management team will review project team recommendations for potential projects.
Identify funding sources	The partnership team will explore financing alternatives such as rebates and incentives, on-bill financing, application of existing budget, and local and state bonds financing to maximize the state's investment in energy efficiency.
Coordinate project implementation with partners and contractors	The project team will provide oversight of project implementation and coordinate with customer and contractors to ensure successful and timely implementation.
Verify project installation and provide incentive payments	The project team will conduct inspections of 100% of all projects. Upon verification, project team will approve the completed projects for incentive payments.
Compile project results and complete final report	The project team will compile all relevant project information including measure information, energy savings, program incentives paid, etc.
Coordinate with EM&V contractor where applicable	If required, management team will coordinate with the project teams and key stakeholders to support any requests from the CPUC approved EM&V contractors.

# Non-Energy Activities

Working within the partnership structure, the team will use pre-screening energy audits to complete a preliminary identification of candidate buildings. Preliminary audits should reduce the number of Investment Grade Audits (IGAs) that fail to qualify for the program. The results of these pre-screening audits will feed the project pool.

# UC/CSU Energy Efficiency Partnership Program

The partnership program will provide training to facility staff through the program's retro-commissioning component to promote the persistence and sustainability of achieved energy savings. Additionally, the partnership will provide opportunities for design teams at the universities to learn about available incentives so that they may incorporate them into facility planning and construction.

In addition, the partnership will provide support to the partners in meeting the requirements of AB 32. Through the education and training element, the UC and CSU systems will be able to identify measures that will help them achieve the required reduction in greenhouse gas emissions.

#### Subcontractor Activities

The partnership relies on contractors to carry out portions of the program. Subcontractors' activities may include but are not limited to:

- Assisting with Program Planning and Design areas, including program narrative preparation for filings, preparing project energy savings estimates and E3 cost-effectiveness calculators, and providing assistance in the development of marketing and outreach plans;
- Coordinating, scheduling, and documenting results and action items from program team meetings;
- Preparing and conducting formal presentations and participating in conferences as required by the Management Team;
- Maintaining a Project Tracking and Reporting database system;
- Assisting the IOUs and the UC/CSU partners in CPUC reporting;
- Assisting in the development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and the preparation of minutes for the Training and Education component; and
- Miscellaneous professional and technical assistance as requested by the IOUs to assist the team in identifying, implementing, and maintaining energy efficient measures.

#### Quality Assurance and Evaluation Activities

For reporting purposes, both the State and the IOUs require a stringent measurement and validation (M&V) process. For ESCO projects, the state requires measurement of energy savings that are accurate and objective to ensure that the ESCO is meeting the conditions of their performance contract. An ESCO includes in its proposal a guarantee to provide an energy analysis compiled by an M&V agent that the state and the IOU, where applicable, must approve prior to payment. M&V services are equally important to the IOUs because they must provide a verification of savings to the California Public Utilities Commission to substantiate their use of Public Goods Charge funds. The state and the IOUs require assistance from subcontractors to perform M&V tasks. The partnership management team will establish and oversee quality assurance measures for the partnership programs, including oversight and verification of subcontractor activities. These procedures and the associated reporting will be developed in detail during the program implementation process. Project teams will provide the level of due diligence and quality assurance that are consistent with current partnership and utility programs. Test samples will include a representative percentage of pre- and post-installation confirmation assignments.

## iii. Incentive levels

Types	Amounts
Lighting projects	
Motors/VFDs/Compressors/Others	\$0.24/kWh
HVAC projects with electrical savings	
New construction projects	\$0.10 above core SBD rates

# iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.

The UC/CSU/IOU Partnership is fortunate to have a built-in marketing and communication network that connects the UC Office of the President, the CSU Chancellors Office, and the campus energy managers. This "buy-in" from the top opens up communications channels to the whole system. Combined with the existing management structure from the 2006-08 programs, this will facilitate marketing activities through pre-established channels for 2009-11. Due to support from the top of the organization, partnership programs will be very visible and provide opportunities to leverage existing UC and CSU conferences and meetings to raise awareness among campuses for the program. In 2006-08 this was accomplished via the UC Sustainability Conference and the CSU Facilities Conference. As such, marketing efforts are minimal and cost effective.

Key Activity	Description
Outreach	The partnership management team will begin outreach efforts by contacting each campus's head of facilities management and informing them of the availability of funds for approved measures and activities in the partnership. The team will schedule meetings to discuss options, implementation criteria, benefits of program participation, and program offerings.
Customer Follow-Up	The partnership management team, in coordination with staff from the state and the IOUs, will visit each targeted site to talk with facilities managers about the various options and proposed energy efficiency measures. After confirming an appropriate site for implementing measures and/or retro-commissioning, the management team will meet the appropriate facilities managers to present the anticipated energy savings, other benefits, and considerations associated with the implementation.

Key Activity	Description
Implementation and Training	The partnership management team will share energy efficiency knowledge and implementation experience with other public agency entities through a series of meetings and workshops, which will be coordinated with other partnership programs.

#### v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable.

Program interactions are referenced for partnerships in the I&G Core PIP, Section 6v.

#### vi. Similar IOU and POU programs

# b) Program delivery and coordination

Referenced in the I&G Core PIP, Section 6b.

# c) <u>Best Practices</u>

Referenced in the I&G Core PIP Section 6c.

# d) <u>Innovation</u>

The UC and CSU campuses have made significant progress in adopting innovative projects during the 2006-08 program cycles. Projects and technologies included high technology (IT systems) areas such as server virtualization, PC power management, CRT to LCD monitor replacements, and high efficiency UPS systems. Pilot projects were established with PIER for emerging technologies such as Integrated Classroom Lighting Systems (ICLS), bi-level stairway lighting systems, and demand-controlled kitchen exhaust hood ventilation controls. Additionally, in 2008, the partnership began collaborating with IOU food service technology groups to expand energy efficiency in campus cafeterias. The plan for the 2009-11 partnership is to leverage these innovative pilot projects to fully focused and large-scale offerings for the two universities.

# e) Integrated/coordinated Demand Side Management

Referenced in the I&G Core PIP, Section 6e.

# f) Integration across resource types (energy, water, air quality, etc)

Referenced for partnerships in the I&G Core PIP, Section 6f.

# g) <u>Pilots</u>

No specific pilots are planned.

# h) <u>EM&V</u>

Referenced in the I&G Core PIP, Section 6h.

## 7. Diagram of Program

See Section 7 of the I&G Core PIP.

## 8. Program Logic Model

See Section 8 of the I&G Core PIP.

See Attachment 1 below – UC/CSU Process Flow

# Attachment 1: UC/CSU Project Process Flow





# UC/CSU Energy Efficiency Partnership Program



# 6

Southern California Edison

1. Program Name: Integrated Marketing & Outreach Program ID: SCE-L-006 Program Type: Core

## 2. Projected Program Budget Table

Table 1

SCE-L-006 Main Program Name / Sub-Program	Adı Co	Total ninistrative st (Actual)	Tota &	al Marketing Outreach (Actual)	To Imp	otal Direct lementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Tota Prog	al Budget By gram (Actual)
CROSSCUTTING									
Non-Resource Marketing and Outreach									
Integrated Marketing and Outreach	\$	1,341,000	\$	10,764,000	\$	-		\$	12,105,000
Market Research *			\$	1,032,000					
Collateral *			\$	1,766,400					
Delivery *			\$	7,965,600					
MEU	\$	1,064,469	\$	627,275	\$	2,665,256		\$	4,357,000
Market Research *	\$	53,224	\$	-	\$	266,526			
Collateral *	\$	-	\$	62,728	\$	-			
Delivery *	\$	1,011,245	\$	564,547	\$	2,398,730			
Outreach	\$	347,094	\$	2,784,906	\$	-		\$	3,132,000
Market Research *			\$	-					
Collateral *			\$	556,981					
Delivery *			\$	2,227,925					
TOTAL	\$	2,752,563	\$	14,176,181	\$	2,665,256	\$-	\$	19,594,000
* Estimated budget allocation provided in this manner, per ED request. SCE does not budget or track program costs as indicated on this table.									

#### 3. Program Description

#### a) Describe program

SCE's DSM marketing efforts will be expanded and formalized within the Integrated Marketing & Outreach (IMO) Program. This program will provide funding to conduct and maintain market intelligence; enhance SCE's website to ensure customers receive integrated solutions; explore behavior-based marketing; and allow the utility to generate awareness of its integrated DSM solutions through the use of ongoing integrated seasonal marketing campaigns, the Mobile Energy Units (MEUs), and events outreach. This program focuses on the integration aspect of outreach by gathering data and delivering information to customers in a way that reaches customers now and provides intelligence to guide future outreach, while working in concert with the Statewide Marketing, Education and Outreach campaign.

SCE will continue to leverage the statewide marketing, education and outreach campaign, which will include the development of a new statewide DSM brand. The statewide marketing, education and outreach efforts build awareness for energy efficiency products and services, shift customers attitudes/perceptions, and drive customers to learn more about utility rebate and savings programs that can help them save energy, money and the environment.

Additionally, SCE will continue to conduct targeted marketing efforts to customers who have a high propensity for participating in a specific program, in order to drive

program enrollment. SCE will make the participation process as simple as possible in order to eliminate potential barriers to taking action.

The IMO will complement but not duplicate SCE's targeted marketing activities and the statewide marketing, education and outreach efforts. Specifically, the Statewide Marketing, Education and Outreach campaign builds awareness to shift customers' attitudes and perceptions about energy efficiency. These efforts pave the way for the IMO program's seasonal marketing campaigns, which will leverage the statewide efforts to raise consumer interest in energy efficiency by providing information on integrated solutions to common consumer energy management needs, such as cooling. While the seasonal campaigns will focus on promoting integrated DSM solutions, they will not replace the targeted marketing efforts that are needed to help secure participation goals within each measure.

In addition, the Integrated Marketing and Outreach program will enable the utility to better understand its customers and their energy management needs through market intelligence, while providing funding for on-going DSM outreach through the MEU and Events Outreach.

#### b) Statement of problem and program solutions to overcome the problem

SCE's IMO will help the utility overcome several challenges, which include:

- Improving the ability to target both residential and business customers The market intelligence effort within the IMO component will help SCE better understand its customers, by developing a data warehouse that will store several sources of customer data within a single repository. These data stored will include, but is not limited to, segment specific information, customer specific data (such as program participation and square footage/equipment information), and SCE historical billing or usage information. SCE is expecting to update its attitudinal segmentation for the residential market, and this data will be included in the Warehouse.
- Integrating DSM solutions on SCE's website The website currently provides customers with a list of programs that are available to help them meet their energy management needs. Although customers are able to scan the list of programs in search of solutions, the web pages do not effectively convey the integrated DSM that is available. Therefore, SCE is planning to enhance its website to integrate its DSM solutions and to provide easy-to-access information and decision-making tools. This will enable both residential and business customers to find holistic solutions to their energy management needs. The effort will also explore the potential for providing an integrated online application process in order to simplify the process for customers and increase participation.
- Moving customers from awareness to action The IMO's seasonal marketing campaigns will complement but not duplicate SCE's targeted marketing efforts and the statewide marketing, education and outreach efforts. The integrated seasonal marketing campaigns will generate broad-based awareness of SCE's DSM solutions to energy management needs, as they work in concert with targeted marketing efforts to secure customer participation. Integrated seasonal

marketing campaigns will utilize proven traditional channels, such as direct mail and advertising, while emphasizing non-traditional activities, such as expanded partnership activities and online social networking. The seasonal campaigns will also focus on reaching SCE's communities through the use of in-language advertising and grass-roots outreach, including working with community- and faith-based organizations (CBOs and FBOs, respectively, as well as the MEU). In addition, by monitoring the results of the Palm Desert Demonstration Partnership's behavior-based marketing pilot, the IMO will be able to determine strategies and goals for future efforts.

• Extending outreach to communities – Customers from diverse cultures or those who reside in remote locations may not have had access to the energy efficiency message. Therefore, the MEU and events outreach are two key strategies to provide a mechanism for SCE to reach these customers with integrated DSM solutions using brochures and written materials, interactive and static displays. The MEU is available to travel to communities throughout SCE's territory, in addition to appearing at large events. The MEU serves the entire SCE territory, and has its schedule displayed at <a href="https://www.sce.com/meu">www.sce.com/meu</a>.

In addition, events outreach will provide a focus on professional Business to Business and Business to Consumer based trade shows, large public and community events; often where the MEU is not able to participate, due to area space and/or logistical limitations. Events outreach will serve the entire SCE territory, but may also go beyond the SCE boundaries to participate in select national energy efficiency and demand side related and joint utility events.

#### c) Program goals, strategies and measurable objectives

Through IMO, SCE will accomplish several strategic goals:

• Conduct and maintain market intelligence – SCE will develop a data warehouse that will store several sources of customer data within a single repository. In addition, SCE will acquire external data and analytical tools that provide enhanced information on customer demographics and psychographics (attitudes) in order to customize and target marketing and outreach efforts.

An improved ability to customize and target marketing and outreach efforts will help SCE increase the effectiveness of its marketing and outreach efforts, and thereby minimize lost opportunities, by providing customers with relevant solutions.

• Enhance SCE's website – An enhanced, consumer-friendly website will serve as a comprehensive tool for providing integrated DSM strategies and solutions, including energy efficiency, demand response, solar, smart meters, electric transportation and Low Income Energy Efficiency (LIEE). It will also leverage the information and resources of the statewide EE/DSM web portal, which will be developed in conjunction with the ME&O strategies outlined in the Strategic Plan. The website enhancements will provide easy-to-access information and decision-making tools. For example, in alignment with important legislative initiatives (for example, AB 32), enhancements such as the carbon footprint calculator can help

educate customers about how their individual actions can help reduce greenhouse gas emission and help improve the environment.

This effort will also explore opportunities for simplifying the process and increasing customer participation. This program will support an initiative under way in 2009 to develop an integrated DSM application. Another potential enhancement may be the vendor marketplace tool. This online, "self-service" tool will leverage the contractor data on sce.com to provide SCE customers with the ability to search, evaluate, and select contractors for energy efficiency and demand response products, programs and services. This enhanced search engine will allow customers to search for contractors by geographic region, specialty, products/services/programs offered, and other relatable criteria, which is something SCE believes business customers will find valuable. SCE will not endorse any of these contractors, but will provide the list to customers as a service.

- Explore behavior-based marketing Identify the potential for a large-scale behavior-based marketing effort, by monitoring the results associated with a behavior-based marketing pilot for the Palm Desert Demonstration Partnership. Based upon the pilot's results, determine strategies and goals for future efforts.
- Continue integrated seasonal marketing campaigns SCE will launch seasonal marketing campaigns and sales promotions each year in order to generate awareness of the statewide brand and the benefits of energy efficiency behavior. The seasonal marketing campaigns will generate awareness of SCE's DSM solutions to energy management needs, as they work in concert with targeted marketing efforts to secure customer participation. To reach SCE's diverse customer base these campaigns will include a mix of traditional and non-traditional marketing (described in Section 5: Program Implementation, item c, Marketing Plan).
  - Expand reach to communities through the MEUs The MEUs will focus on economically disadvantaged communities with large numbers of customers that speak English as a second language or have a large, first-generation immigrant population. These customer groups will benefit from the hands-on experience the MEU provides, as this may be the first time they have been exposed to the concept of energy efficiency. The MEU provides an opportunity for these communities to understand that there are energy conservation and efficiency solutions available to them both at home and in their businesses. In addition, by saving energy, they will be able to lower operating expenses and save money. SCE will design and procure a new hybrid plug-in MEU during the 2009-2011 program cycle to help promote environmental initiatives and SCE programs and services. SCE will continue to offer energy-saving tips, such as the Energy Guide.
- Enhance outreach displays Update and develop static, interactive and technology based display units to promote and communicate consistent messaging throughout all event marketing and outreach efforts. Main units will emphasize an overall energy efficiency message and supplemental signage and technology-based displays will promote individual program/services information. These displays will allow flexibility in covering multiple events in different locations

both by the MEUs and events outreach. In addition, these new displays will provide SCE with opportunities to engage customers at outreach events in a dialogue about DSM opportunities and behaviors that will help save the customer energy, money and the environment.

# d) Target Audience

SCE's residential and business customers are the target audience for IMO activities. SCE will use customer segmentation and market intelligence to target customers, who are likely to participate, with relevant messaging as appropriate.

# e) Identify if and how this program will provide any elements of Workforce Education & Training

The MEU will support elements of the WE&T goals as outlined in the Strategic Plan by:

- Providing structured seminars at events to inform customers of the available training and education programs available to help develop a trained workforce that will be required to achieve California's clean energy goals;
- Providing information about educational/certificate programs at community colleges, energy centers, and union offices that lead to green careers; and
- Coordinating with WE&T Connections program to increase awareness at schools.

# 4. Program Rationale and Expected Outcome

Increased emphasis on integrating DSM programs within marketing and outreach is necessary to comply with the Commission's directive in D.07-10-032¹ that directs the utilities to "undertake joint marketing of energy efficiency programs with other customer energy technologies, such as demand response, smart meters and solar installations."

Accomplishing the long-term goal of integrating DSM programs, maximizing energy savings and changing customer behavior requires a multi-layered marketing effort across all stakeholders with responsibility for energy efficiency in all sectors. An effective marketing effort will move consumers through a continuum from awareness, to attitude change, to action, to long-term behavior change (see Exhibit A).

To move customers through the continuum from awareness to action will require both integrated and targeted marketing campaigns. While targeted marketing efforts will be funded exclusively by the program being promoted, the integrated campaigns will receive their funding from the IMO section within energy efficiency. In addition to energy efficiency funding, the integrated campaigns will receive funding from: demand response, California Solar Initiative (CSI) and Low-Income Energy Efficiency.

Integrated marketing and outreach campaigns will provide customers with DSM solutions that are relevant to their situation. To accomplish this task, the campaigns and outreach efforts will rely on market intelligence, website enhancements, behavioral marketing, the MEU, events outreach and seasonal marketing campaigns.

¹ CPUC Decision 07-10-032 (October 18, 2007) required investor owned utilities to prepare a single, statewide energy efficiency DSM Strategic Plan for 2009-2020. [http://docs.cpuc.ca.gov/word_pdf/DAILY_CALENDAR/79584.pdf]



# Exhibit A: Path to Action - Moving Customers through a Continuum

# a) If available, Quantitative Baseline and Market Transformation Information

By its nature, market transformation occurs as a result of numerous factors, and can not be directly attributed to all program efforts. Market transformation metrics cannot be readily offered for this program at present.

 Table 2 – Quantitative baseline metrics cannot be readily offered for this program

# b) Market Transformation Information:

By its nature, market transformation occurs as a result of numerous factors, and can not be directly attributed to all program efforts. Market transformation metrics cannot be readily offered for this program at present.

**Table 3** – Market transformation metrics cannot be readily offered for this program

# c) <u>Program Design to Overcome Barriers</u>

A formal IMO initiative was established to identify key marketing and outreach integration opportunities and to secure funding for these efforts. The key marketing and outreach activities include: conduct and maintain market intelligence, explore behavior-based marketing, enhance SCE's website, and continue integrated seasonal marketing campaigns, the MEU and events outreach.

These activities will help SCE overcome barriers associated with moving customers through the continuum from awareness to action, by creating consumer awareness around the DSM solutions SCE offers to common energy management needs, such as cooling. Designed to complement the statewide marketing, education and outreach

efforts and SCE's targeted marketing efforts, the IMO will serve as an important link between statewide efforts and SCE's targeted marketing efforts.

#### d) **Quantitative Program Targets**

The program will work towards achieving the following targets over the three-year program cycle. The proposed targets may be modified due to funding restrictions, especially for the 2009 bridge-funding year.

I dole 4			
	Program Target	Program Target by	Program Target by
Program Name	by 2009	2010	2011
Integrated "seasonal"			
marketing campaigns	Up to 3 per year	Up to 3 per year	Up to 3 per year
Website	Planning/Design	Launch bundled	Develop interactive
enhancements	Development	messaging	tools and services
Conduct and	Build the market intelligence process to integrate several	Standardize data	Implement
Conduct and Maintain market	sources of	nputs in propagation of data	implement
intelligence	information	warehouse	warehouse
		Watchouse	Watehouse
Mobile Energy Units	Up to 100 per year	Up to 100 per year	Up to 100 per year
Events Outreach Group	Up to 100 per year	Up to 100 per year	Up to 100 per year

#### Table 4

# e) Advancing Strategic Plan goals and objectives:

In alignment with the Strategic Plan, the IMO is designed to continue to leverage the statewide marketing, education and outreach efforts, which will include the new statewide brand. Additionally, SCE will continue to conduct targeted marketing efforts to customers who have a high propensity for participating in a specific program, in order to drive program enrollment.

The program will help to achieve the following near-term strategic goals identified in Sections 8 and 10 of the Strategic Plan:

- 1-1: DSM Integration and Coordination Carry out integrated marketing of DSM opportunities across customer classes – The MEUs will coordinate with DSM activities and institutions such as: SCE's Electric Transportation, Southern California Gas Company, local water agencies, and municipalities to provide customers with integrated marketing across customer class.
- 1-2: Marketing, Education, and Outreach Develop an integrated marketing plan for all Californians The IMO will carry out integrated marketing of SCE's DSM opportunities across customer classes, which will complement but not duplicate SCE's targeted marketing activities and the statewide marketing, education and outreach efforts. The MEU will coordinate with WE&T efforts to

help increase customer awareness in schools and provide information about educational /certificate programs that is offered through community colleges, energy centers, and union offices that leads to green careers.

• 1-3: Marketing, Education, and Outreach — Use social marketing techniques to build awareness and change consumer attitudes and perceptions. The MEU will utilize social marketing techniques to help generate customer leads to DSM programs.

# 5. Program Implementation

# a) Statewide IOU Coordination

SCE will continue to leverage the statewide marketing, education and outreach efforts, which will include the new statewide brand. The statewide marketing, education and outreach efforts build awareness for energy efficiency products and services, shift customers attitudes/perceptions, and drive customers to learn more about utility rebate and savings programs that can help them save energy, money and the environment.

# b) Program delivery mechanisms

IMO provides funding to conduct and maintain market intelligence, enhance SCE's website, explore behavior-based marketing, and for the MEUs, events outreach and ongoing seasonal marketing campaigns.

SCE will also launch seasonal marketing campaigns and sales promotions each year in order to generate awareness of the statewide brand and the benefits of energy efficiency behavior. The campaigns will feature integrated DSM solutions to common consumer issues, like managing cooling costs during summer. For example, a summer "cooling" campaign might tell customers that they can manage their cooling bills by signing up for both an HVAC Tune-Up (Comprehensive HVAC program – Energy Efficiency program) and the Summer Discount Plan (demand response program). By providing integrated product bundles, the campaign will generate awareness and encourage customers to change behavior and drive them toward relevant solutions.

SCE will use a mix of proven marketing tactics (for example, direct mail, online, advertising, etc.) and non-traditional communications (for example, partnerships, social networking, etc.) into its seasonal campaigns.

To generate awareness, SCE will work closely with existing partners (CARE Capitation agencies, Energy Assistance Fund agencies, and LIEE agencies), local government partnerships, social service agencies, and CBOs and FBO. SCE will seek to secure the involvement of these key organizations and partners throughout the campaign, beginning with the planning process. For example, SCE may ask CBOs representing ethnic communities for input on messaging concepts, as well as to help disseminate the messages to SCE customers within their community. SCE will also leverage MEU and events outreach, whenever appropriate, at outreach events and may utilize trained promotional staff at "live marketing" events, such as: home shows, trade shows, retail stores, malls, sporting, and public relations events. The MEU travels to communities and will appear at events where there is the greatest opportunity to reach customers. The MEU is designed to engage customers on location through the use of physical displays and exhibits that explain energy efficiency and offer a hands-on customer experience. The events outreach group will participate and promote integrated DSM solutions at larger, more expansive events where having one or more of the MEUs may not be physically or economically feasible. Events outreach will work in conjunction with the MEUs to cover multiple events in various areas to effectively reach targeted market segments simultaneously for greater customer response and feedback.

# c) Marketing Plan

The IMO will focus on integrating DSM options for broad-based audiences, both residential and business, by enhancing SCE's website to provide integrated DSM solutions and by providing seasonal campaigns that feature solutions to common consumer issues and to encourage customers to take action and change behavior.

SCE will utilize attitudinal segmentation to develop program-marketing messages that resonate with different types of customers. SCE will also apply statistical modeling techniques using customer descriptors, such as past program participation, historical energy usage, and household demographics, to identify and target customers most likely to participate in programs.

To generate broad-based awareness among SCE's diverse customer base, SCE will use a mixed, multi-media approach in the development of its marketing campaigns. This includes general and ethnic mass media, such as radio, newspaper and print. The ethnic media will include, but not be limited to: Spanish, Chinese, Vietnamese and Korean. The marketing campaign will also include direct-to-consumer information, such as bill inserts and direct mail that SCE will send to customers who were identified as being likely to participate. To help simplify the participation process for customers, SCE will push customers to integrated web pages or 'microsites' that feature the solutions being promoted. In addition, SCE will explore potential opportunities for simplifying the enrollment process and increasing participation through the development of an integrated online application and an online Vendor Marketplace tool.

SCE will also explore the use of non-traditional outreach methodologies, such as web-based, social networking, as a means for engaging customers in a discussion on creating an energy-efficient lifestyle. SCE will also conduct outreach activities in partnership with the utility's key partners (that is, retailers, cities, counties, community groups, et al). For example, SCE might work with retailers to provide instore promotional materials or advertising. Additionally, outreach events could include the use of live marketing teams, in which specially trained individuals promote integrated tools and services, and the MEUs, to help SCE build awareness, while creating a real-time, interactive connection with the customer.

In addition, the IMO will support targeted marketing efforts by conducting and maintaining market intelligence that will store various internal and external customer data, including segmentation analysis, within a single repository. This data will be utilized to help SCE further target relevant solutions to the appropriate market segment.

# d) **Best Practices**

SCE's IMO reflects best practices in market strategies, since it includes a market intelligence effort that will enable the utility to better understand its customers and, therefore, better able to move towards personalization and customization. According to Michael Mendenhall, the Chief Marketing Officer for Hewlett-Packard Company, in the Marketing Leadership Council article, *Identifying Emerging Marketing Trends*, personalization is one of the four major trends in marketing. Mendenhall states that customers are saying, "Know me and be relevant to me, otherwise I will tune you out."² SCE is aware of this trend and expects that the market intelligence effort will help the utility move toward personalization and customization, by providing a single data warehouse for storing customer data and by purchasing additional customer data and analytical tools.

# e) <u>Innovation</u>

In addition to the development of market intelligence, SCE will also explore behavior-based marketing as an innovative means of moving customers toward an energy efficient lifestyle. SCE will monitor the results associated with a behaviorbased marketing pilot for the Palm Desert Demonstration Partnership. Based upon the pilot's results, SCE will determine strategies and goals for future efforts.

# f) Integrated/coordinated Demand Side Management

The IMO is designed to integrate energy efficiency, demand response, LIEE, and CSI. These DSM options will be integrated through the enhancement of SCE's website, as well as within events outreach, the MEU, and SCE's seasonal³ marketing campaigns that feature solutions to common consumer issues, such as managing cooling costs during summer. These integrated efforts will receive their funding from the IMO section within energy efficiency. In addition, demand response, CSI, and LIEE will provide funding.

# g) <u>Integration across resource types</u> (energy, water, air quality, etc)

The seasonal campaigns, events outreach, MEU and website enhancements will integrate savings messages across resource types, whenever appropriate. For example, SCE might highlight an air quality (for example, environmental) savings

 $^{^2\,}$  Market Leadership Council, A Conversation with Michael Mendenhall, page 74-75, 2008.

message as a potential benefit in one of its seasonal campaigns. In addition, SCE will work with IOUs and other non-utility partners (for example, ENERGY STAR®), when appropriate, to generate awareness around energy-efficiency opportunities and trends. For example, in 2008, SCE partnered with ENERGY STAR® on a "Change a Light, Change the World" Compact Fluorescent Light (CFL) campaign. As a result of this campaign, SCE received over 100,000 customer pledges to replace an incandescent bulb with a CFL, and among customers who took the pledge, the mean number of bulbs they pledged to replace was approximately fourteen. SCE will also work with the IOUs to identify collaborative outreach opportunities, such as partnering, to provide joint information at Employment Development Department offices, located within our shared territory.

# h) <u>Pilots</u>

The MEU will employ the customer feedback survey and/or lead card and provide promotional items and the Residential Energy Guide to customers who completed the survey and/or lead card to help validate the effectiveness of the MEU to customers. This will be accomplished through:

- Social marketing techniques to build awareness and change consumer attitudes and perceptions; and
- Structured seminars at events to inform customers of the available training and education programs available to help develop a trained workforce that will be required to achieve California's clean energy goals.
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Events outreach will also utilize a similar lead card as the MEU to gather customer information, questions and feedback for larger scale professional tradeshows and events. Promotional items will be distributed to individuals who complete a lead card, application form or participate in an interactive demonstration taking place at a tradeshow or event booth area. Promotional items may also be provided at professional workshops and seminars in which SCE is invited to speak. The promotional items will be provided to remind attendees of SCE's integrated DSM solutions. Examples include the West Coast Energy Management Congress and EEI National Accounts Workshop.

# i) <u>EM&V</u>

The utilities plan to work together to develop a complete plan for 2009-2011 program cycle studies and budgets after the program plans are finalized and filed. This plan will be submitted to the CPUC in time for approval, along with the PIP.

Detailed plans for process evaluations and other evaluation efforts specific to this program will be developed after the final program design is approved by the CPUC and program implementation has begun, since final plans will be based on identified program design and implementation issues and questions.

As indicated above, we do not believe it is appropriate to develop market transformation expectations for this program. However, there may be other program

indicators, such as customer satisfaction and program baseline that we should consider. For program activities, such as seasonal marketing campaigns, behavior based-marketing initiatives and enhanced web interface for program information, these are often implemented in the context of selected programs or target programs. In these cases, these program baseline indicators should be evaluated at the specific program level.

For the purpose of the IMO, we may consider the following evaluation actions:

- Assess the effectiveness of the marketing actions in the context of affected programs; and
- Assess the effectiveness of MEU and outreach events in the context of their ability to drive referrals or traffic into other resource programs or their ability to affect program or portfolio level score.

#### 6. Diagram of Program



#### 7. Program Logic Model

