Southern California Gas Company



Appendix B.2: Section B

Program Implementation Plans (Clean Versions)

Partnership Programs

Appendix B.2:

Section B

Program Implementation Plans

(Clean Versions)

Partnership Programs

Program Code	Program Name	Page Number
Local Institutiona	al Partnership Programs	1
3738	California Dept. of Corrections and Rehabilitation	31
	Partnership (CDCR)	
3739	California Community Colleges Partnership (CCC)	38
3740	UC/CSU Partnership (UC/CSU)	53
3741	State of California Partnership (State of CA)	59
Local Governmen	nt Partnership Programs	85
3742	Los Angeles County Partnership	129
3743	Kern County Partnership	143
3744	Riverside County Partnership	152
3745	San Bernardino County Partnership	163
3746	Santa Barbara County Partnership	174
3747	South Bay Cities Partnership	183
3748	San Luis Obispo County Partnership	192
3749	San Joaquin Valley Partnership	204
3750	Orange County Cities Partnership	219
3751	Statewide Energy Efficiency Collaborative Partnership	225
3752	Community Energy Partnership	235
3753	Desert Cities Partnership	249
3754	Ventura County Partnership	258

1. **Program Name**: Local Institutional Partnership Program

Program ID: Various

Program Type: Institutional Partnerships

ID#	Program	Sub-Program
3738	California Dept. of Corrections and Rehabilitation Partnership (CDCR)	Sub-Program I*
3739	California Community Colleges Partnership (CCC)	Sub-Program II*
3740	UC/CSU Partnership (UC/CSU)	Sub-Program III*
3741	State of California Partnership (State of CA)	Sub-Program IV*

^{*} Each Sub-Program PIP is referenced in this document by designated Roman numeral.

2. Projected Program Budget Table

Program #	Main/Sub Program Name	Administrative Amount	Marketing Amount	Direct Implementation Amount	Incentive Amount	Total Program Budget Amount
	Local Institutional Partnership Programs					
3738	LInstP-CA Department of Corrections Partnership	\$148,361	\$120,908	\$249,124	\$0	\$518,394
3739	LInstP-California Community College Partnership	\$185,630	\$142,464	\$375,341	\$0	\$703,435
3740	LInstP-UC/CSU/IOU Partnership	\$258,098	\$191,564	\$496,399	\$0	\$946,060
3741	LInstP-State of CA/IOU Partnership	\$158,983	\$122,433	\$264,301	\$0	\$545,717
	TOTAL:	\$751,072	\$577,369	\$1,385,165	\$0	\$2,713,605

Note: Partnerships are considered non-resource programs and serve as a delivery mechanism for IOU programs.

3. Program Description

a) Describe Program

Institutional Partnerships are designed to create dynamic and symbiotic working relationships between Investor-Owned Utilities (IOU), state or local governments and agencies or educational institutions. The objective is to reduce energy usage through facility and equipment improvements, share best practices, and provide education and training to key personnel. SoCalGas' –2013-2014 statewide partnership portfolio will focus strongly on supporting the key California Energy Efficiency Strategic Plan (CEESP).The –2013-2014 Institutional Partnerships will also concentrate on innovative delivery channels and funding mechanisms to meet current economic conditions and achieve program integration and savings.

In the 2010-12 program cycle, SoCalGas successfully implemented three statewide institutional partnership programs; California Community Colleges (CCC), University of California and California State University (UC/CSU), California Department of Corrections and Rehabilitation (CDCR). Each statewide program was managed in conjunction with the other IOUs in the State of California. The –2013-2014 Institutional Partnerships will leverage off the past successes of the 2010 – 2012 Energy Efficiency portfolio and also strive to enhance offerings to meet the unique challenges of our institutional partners.

SoCalGas has developed a strong history of working closely with a variety of institutional customers to improve energy efficiency. These partnerships enable customers to focus on; conservation, demand response, load shifting, and renewable energy within their facilities. In doing so, the partnerships assist institutional agencies comply with the state's CEESP and specific mandates enforced by the Governor. Additionally, the partnerships enable the institutional agencies to learn about and utilize innovative programs. They help the partners integrate efficiency into their overall plan and budget. By their very nature the partnerships facilitate collaboration between utilities, institutional agencies, and technical experts.

The cooperative nature of the partnerships, as well as the enhanced awareness they place on energy efficiency, has enabled many large projects at institutional facilities to be implemented that otherwise would have failed had they not been championed by partnership teams. In prior years, many partnerships achieved several million kWh of savings that might have otherwise been lost or installed with less-efficient equipment resulting in lower savings achieved. Institutional partnerships help to provide a streamlined and comprehensive approach to the customer, eliminating competition and confusion between IOU offerings.

Institutional Partnerships have evolved over the years to not only deliver energy savings but to include well established management teams. These management teams are comprised of IOU staff and representatives from institutional partners for each statewide partnership. The primary focus of the management teams is to present a consolidated approach to project management. The management team also assists the partner in identifying facilities that can be thoroughly audited; utilizing a comprehensive building approach to maximize the energy efficient potential. The management team reviews potential projects and develops working documents to illustrate payback and return on investments. This approach allows for projects to be prioritized and evaluated for potential implementation.

In addition, the partnerships have demonstrated that the three pillars of the Strategic Plan—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. Institutional partnerships capitalize on the vast opportunities for efficiency improvements and utilize the resources and expertise of IOU staff to ensure successful and cost-effective programs that meets all objectives of the California Public Utilities Commission (CPUC or Commission).

With the rising costs of energy and the current economic situation, partnerships will be vital in helping to offset project costs for customers and allowing continued advancement in the area of energy efficiency. Each Statewide program has developed strategies to allow for new opportunities as partnerships are forged and projects are implemented.

The four sub-programs proposed are listed and described below. Individual Program Implementation Plans (PIPs) for each are provided later in the document

Program Elements for Institutional Partnerships

The adaption and coordination of the 3 core elements (Institutional Facilities, Strategic Plan and Core Program Coordination) are represented below and have been agreed upon through discussions with IOUs and CPUC. Below is a list of core and sub-program elements that will be pursued by all partnerships. Elements that are unique to a single or a few partnerships will be described separately in sub-program PIPs.

Core Program Elements	Sub-Program Elements	Type of Program Element
1 – Government and	Energy Efficiency Retrofits	Resource
Institutional Facilities	Retro-Commissioning (RCx) &	Resource
	Monitoring Based Commissioning	
	(MBCx)	
	Demand Response New Construction	Demand Response Resource
	Program Administrative Management and	Non-Resource (technical assistance for
	Engineering Support	project management, training, audits, etc.)
	On-Bill Financing	Non-Resource
2 – Strategic Plan Support	Code Compliance Support	Non-Resource
	Reach Code Support	Non-Resource
	Guiding Document(s) Support	Non-Resource
	Funding Sources	Non-Resource
	Peer-to-Peer Support	Non-Resource
3 – Core Program	Outreach & Education	Non-Resource
Coordination	New Construction and Demand Response	Resource – Demand Response
	Third Party Program Coordination	Non-Resource
	Emerging Technologies	Non-Resource
	Technical assistance for program	Non-Resource
	management, training, audits, etc.	

Energy Efficiency Retrofits

This energy efficiency element could include: (1) Replacement of boilers, motors, variable frequency drives, energy management system upgrades, and HVAC upgrades/replacements including; chiller replacements and central plant upgrades. The partnerships will investigate opportunities to include energy efficiency measures in all major new construction and renovation projects, special repair projects, and standard scheduled maintenance operations.

To create energy savings in the existing facilities of the institutional partners, the partnerships will work with the facilities staff of the various customers to identify facilities and develop a pool of retrofit projects for implementation. Partnerships will also utilize benchmarking to identify retrofit candidates. 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 secured.

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 matching the institutional customers with available budgets and existing modernization plans. Identification of potential sites includes utilities providing lists of service accounts with their annual

consumption and peak demand values and consultants visiting probable sites to evaluate the efficiency upgrade potential of those sites.

SoCalGas will provide integrated audits to government partners where cost effective and reasonable, ensuring coordination between programs and utilities for information sharing.

In some cases and where applicable, institutional partners will use of the U.S. Department of Energy's Portfolio Manager to identify eligible candidates for energy efficiency projects. High-scoring buildings (above 75) typically meet the requirements of Executive Order S-20-04 in their optimization of energy use. Lower-scoring buildings are identified as candidates for potential energy efficiency programs. This process allows the IOUs and the institutional partners to make the best cost-effective choice in installing energy efficient measures.

Retro-Commissioning and Monitoring-Based Commissioning

Each partnership will work to implement retro-commissioning (RCx) and/or monitoring-based commissioning (MBCx) projects. Some partnerships have already implemented such programs in some of their facilities, and they will continue to expand the number of facilities benefiting from these services. Others will work to implement them for the first time in a smaller number of facilities.

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. 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 or MBCx based on results of benchmarking efforts or participation in the SoCalGas 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 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.

New Construction and Design Assistance

The partnerships will strive to achieve energy efficiency within all new buildings constructed by the partner institutions. Although the partner institutions have overarching directives that strive for laudable energy efficiency goals, these goals are not always implemented in practice. Budget and other constraints, as well as lack of concern, awareness, or knowledge, inhibit the realization of these goals in many new construction projects.

The ability of the partnership management teams to even be aware of all new construction projects varies significantly between the partnerships. The ability of the partnerships, or even the institutional representatives on the partnership teams, to actually control the implementation of energy efficiency in these new construction projects is even more limited. Therefore, education about energy efficiency and increasing both awareness of and concern about the subject among key decision-makers is a vital role of the partnerships, both for retrofits and new construction. The success of the partnerships in reaching all (or most) of the new construction projects is dependent upon their ability to bring various agencies, departments, and managers together under the energy efficiency umbrella.

For new construction projects, the partnerships' initial goal is be to become aware of the various ongoing and planned projects within their institutions. This will be an easier task for the more centralized partners and more difficult for partners with distributed control.

Once the partnership teams are aware of new construction projects, they will work with the key decision makers to make sure they are on board with the importance of energy efficiency. The partnerships will also work closely with the utilities' Commercial New Construction Programs to provide assistance to the design teams for the new facilities. Because new construction energy efficiency is more effective when brought on board in the early design stages, the partnerships will strive to be pro-active in this manner, reaching out to newly planned projects as soon as they become known.

Funding Sources

Federal grants, state financing, local bonds, IOU incentives, O&M budgets, and on-bill financing are potential funding sources. The partnership team and participating institutional partners may explore additional financing alternatives such as rebates, on-bill credit, CEC funding, and independent financing to maximize the state'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.

On-Bill Financing

On-Bill Financing offering will provide zero to low interest financing for qualifying energy efficiency installations of lighting, refrigeration, and air conditioning measures for SoCalGas' Market Segments, such as the Commercial and Industrial Market Segments and for government and institutional partnership programs.

All participating customers will be pre-qualified for a loan based on the customers' utility bill and payment history. The length of the loan may vary depending on the customer segment and measure life. Typically, a business loan will not exceed a 5 year term, while a government or institutional loan will usually not exceed a 7 year term. In addition, the length of the loan will also be capped at the length of measure life.

Loans will have a range from a minimum of \$5,000 to approximately \$1,000,000 for government and institutions. Maximum amount for government and institutions may vary by partnership and customer segments and will be subject to further research.

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.

Demand Response

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 SoCalGas's business customers, a plan will be developed to provide a financial incentive for energy savings resulting from the equipment supplied through the partnership program.

Partnerships 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 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.

The partners will venture to identify facilities or an aggregation of facilities under a service account in order to establish opportunities for demand response participation.

Statewide	Description	Courses of Eurodina & Assistance
Programs	Description	Sources of Funding & Assistance

Statewide Programs	Description	Sources of Funding & Assistance
California Dept. of Corrections and Rehabilitation Partnership	The CDCR/IOU 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.	Federal grants (specifically for new construction and modernization), state financing, IOU incentives and on-bill financing opportunities in accordance with CEESP objectives.
State of California Partnership	State of California/Investor-Owned Utilities (IOU) are collaborating to assist the state's 36 agencies to reduce the amount of energy they purchase by 20 percent by 2015, as required by the governor's Executive Order S-20-04 (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 environmental agenda.	Federal grants (potential), state financing, IOU incentives, comprehensive technical assistance and on-bill financing opportunities in accordance with CEESP objectives.
UC/CSU/IOU Partnership	The University of California, California State University (UC/CSU), Southern California Gas and the IOUs are collaborating to continue this Partnership to share energy efficiency best practices and implement energy efficiency projects for immediate and long-term energy savings and peak demand reduction.	State financing, local bonds, IOU incentives, comprehensive technical assistance and on-bill financing opportunities in accordance with CEESP objectives.
California Community Colleges Partnership	The CCC/IOU Energy Efficiency Partnership has been a successful collaboration between the California Community Colleges (CCC) and the four Investor-Owned Utilities (IOUs). The CCC is a two-year public institution of higher education that is composed of 110 colleges statewide and organized into 72 self-governing Districts.	Federal grants, state financing, local bonds, IOU incentives, comprehensive technical assistance and on-bill financing opportunities in accordance with CEESP objectives.

b) List measures (technologies and corresponding incentive levels) to be provided in program and as used to develop the program's measure groupings.

The energy efficiency measures identified by all partnerships include both electric and gas measures.

Measure Categories	Technologies	
Controls and other Equipment	Includes fans, motors, VFDs, air compressors, EMS systems and other equipment not covered under the lighting or HVAC categories.	
Air Conditioning and Refrigeration	Air conditioning and refrigeration- Includes system and major subsystem replacements such as central plants, chiller/boiler retrofits, whole building, and any other energy efficiency components in major infrastructure projects;	
Other	New Construction, RCx, MBCx	

- All program delivery mechanisms such as third parties and other innovative delivery techniques are provided at designated program incentive rates.
- Incentives will be paid on projects based on a cents per kWh saved. These rates are an average of \$.24/kwh saved (for UC/CSU/CCC/CDCR, and State of CA) and will be detailed in the sub program for the specific partnership. 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. All gas savings will be at \$1.00 per therm.

Incentive levels are referenced for each specific partnership in Sub-Program PIP I, II, III, IV, Section 6, iii.

c) List non-incentive customer services

The Institutional and Government Partnerships may include non-energy activities such as presentations at industry and association events, attendance at conferences, meetings, and community/outreach fairs. Distribution of marketing materials will be included at each event. Additional services include:

- Quality Assurance and Evaluation
- Training and education
- Design assistance
- Due diligence / project review
- Strategic Plan Support
- Core Program Coordination
- Funding Sources
- Program Administration and Management Support
- Support of State Assembly Bills, Senate Bills, and Executive Orders

4. Program Rationale and Expected Outcome¹

SoCalGas 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. Institutional partners also frequently struggle to fund and implement energy efficiency activities because of budgetary and resource

.

¹ To be provided for each program and sub-program in PIP.

issues. The Institutional Energy Efficiency Partnership Program is designed to meet these challenges.

Partnerships help provide a streamlined approach to institutional customers. Each utility dedicates a specific management team to support a portfolio approach, provide additional resources, and introduce innovative ideas to meeting the dynamics of institutional customers. Utility incentives and funding mechanisms help make energy efficient projects more cost effective and viable for institutional customers during the current economic times.

The expected outcomes for the -2013 - 2014 partnership programs include:

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,
- Provide co-marketing and technical support services dependent upon the customer's specific needs,
- Serve a key and growing role in creating and maintaining goodwill between the utilities and public sector customers. Institutional Partnerships build strong relationships statewide with the other IOUs and statewide customers, as well as with cities and counties.
- Continue to successfully develop new partnerships enhanced by the following improvements:
 - 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) combination EE/DR audits.
 - The partnership will seek opportunities to facilitate enhanced compliance with codes and standards. (AB 32, LEED, Exceeding Title 24 standards, etc.)
- Help to integrate the offering of demand-side management (DSM) programs and design strategies that will assist with the California Energy Efficiency Strategic Plan (CEESP).
 - Energy efficiency and demand response audits will be integrated and the partnership management team will actively coordinate all DSM services.

SoCalGas will provide integrated audits to government partners where cost effective and reasonable, ensuring coordination between programs and utilities for information sharing.

- Simplify and standardize state policies and codes guiding local building design and zoning codes.
- o Building the capability to lead by example in energy-related technologies
- Maximize energy efficiency in new and existing construction and/or statewide policy
- Rapidly upgrade and expand energy efficiency training and information for energy managers and maintenance personnel.
- 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.

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 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 customer (and to increase the desire to make highly energy-efficient designs "acceptable").

Other program results will include:

- Showing that, with upper management support for energy efficiency, the customers can create opportunities to save energy, reduce operating costs, and improve occupancy comfort.
- Demonstrating that the partnership programs can be extremely cost-effective in the implementation of energy projects by supplementing the customers' project funding with the incentives offered by the utilities.
- Evaluating the value of energy efficiency activities and the benefits associated with retro-commissioning.
- Exhibiting the potential for future public/private partnership efforts.
- Conducting a comprehensive survey of the potential for energy projects at customer facilities, identifying the best candidates for retro-commissioning or retrofitting, and constructing a long-term plan for the implementation of these projects. These energy project plans will be important to ensure that the customers continue to plan and implement energy efficiency projects beyond the term of the partnership so that the reduction in energy consumption occurs by the 2015 deadline.

- Developing opportunities for various government agencies to share best practices and lessons learned from partnership activities, especially in the areas of benchmarking, energy efficiency, retrofits, retro-commissioning, and emerging technology.
- Increasing awareness of energy efficiency among elected leaders, agency managers, operating staff, and the general public.
- Publicizing the benefits of utility incentive programs within various government agencies.
- Providing specific information to the constituents of the institutional partners regarding the partners' achievements in energy efficiency as well as environmental improvements such as reducing greenhouse gases.
- Provide new and innovative ways to fund and implement energy efficient projects.

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." 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

Southern California Gas Company

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/

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, 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 selfsustaining, 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.

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.

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,

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.)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 developers 16 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 2 and 3 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.

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).

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 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:

	Baseline Metric
	Metric A
	Baseline inventory of cities, counties and government institutions within the IOU
Energy Efficiency Action Plans	territory 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.

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	2013	2014	
Baseline inventory of cities, counties and	Improvement over baseline, over time	Improvement over baseline, over time	

government	
institutions within the	
IOU territory 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.	

1) Program Design to Overcome Barriers: Describe priority barriers that the program will overcome and how program is designed -- through marketing, delivery mechanisms, incentive levels, or other means -- to overcome these barriers.

The existing partnerships have worked diligently to overcome barriers, though many still exist. The effort to resolve barriers is on-going, and significant progress has been made in each of the various partner customers. 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 and innovative mechanisms. The chart below outlines overarching barriers applicable to all partnerships. Specific barriers will be discussed in each sub-program PIPs below.

Primary Barriers	Strategies to Overcome Barriers
Funding: Project Funding Constraints. Energy	<u>Incentives</u> help relieve budgetary constraints and assist the
efficiency is costly and budgets are limited. The	economic evaluations of the customers by making energy
decision-makers approving the details of a project	efficiency more cost-effective. In addition to their purely
often choose not to implement the high-costing	economic role, the incentives play an important part in
more-efficient systems, equipment, or technologies.	promoting the importance and visibility of energy efficiency.
The Energy \$Mart Loan Program: This State	The Energy \$Mart Loan program has been created to finance
program has taken a hit with the current economy	energy projects through the Department of General Services.
and currently only carries one preferred lender.	CEC loans may be able to fulfill the gap in funding.
The IOUs On-Bill Financing: Not all utility OBF	The IOUs On-Bill Financing Programs are either being
programs are ready for implementation.	implemented or developed as a way of financing smaller retrofit
	and modernization upgrades
Internal Policy for Incentives:	<u>Internal Policy for Incentives</u>
Incentive dollars are most often allocated to the	Assist customer with identifying ways of authorizing funding
general fund which makes for an inability to ensure	departments to recapture dollars received from incentives to
incentives are allocated toward the participating	reinvest in future energy projects.
department budget.	
Knowledge Barrier. Economic decisions are often	Education and training brings energy efficiency awareness to
short-sighted, with capital limitations taking	decision-makers at all levels. Many of the partnerships have
precedence over long-term savings, even when	specific plans to incorporate education and training for a variety
accurate economic analysis would select the higher	of people including elected officials, key department managers,

Primary Barriers	Strategies to Overcome Barriers
initial cost of higher-efficiency choices.	facilities staff, personnel from other local governments (such as cities and school districts within the counties), and, in the case of the college partnerships, training within the general population.
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 many customer barriers to participation in multiple programs. Integration is innovatively being collaborated with internal utility departments in order to fulfill this strategy. 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.
Staffing. Staff time is at a premium, with most facility personnel. Attention to proper energy efficiency is time consuming and may get shelved as staff members work on more immediate problems.	Professional assistance from utility staff and partnership consultants allows potential projects to be identified and evaluated. Many institutional and government customers 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.
Information Dissemination: Some of the agencies lack the technical expertise to develop or manage projects.	The management team is currently developing an information tool for some agencies that will help reveal the savings potential of implementing energy efficiency measures in like size facilities. This is meant to appeal to the facilities managers or decision makers and allow the IOU to perform detailed energy audits that eventually lends itself to a project proposal.

We anticipate that each of the partnerships will continue to work through the various obstacles that inhibit the full implementation of energy efficiency within their customer institutions. This is a gradual and evolving process, and some of the partnerships 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 of the institutional customers, 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. Institutional Partnerships are designed to overcome barriers to participation and are designed to eliminate these barriers through:

Customer Contributions

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.

The customer-partners provide major support to the partnerships and the energy-efficiency projects sponsored by the partnerships. The equipment and installation of the retrofit, new construction, and RCx/MBCx projects is 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.

New Partnership Program Startups

As the awareness and success of the institutional partnerships grow, more government agencies may wish to form partnerships. We propose reserving an extra budget for these partnerships should they materialize during the course of the two-year transition cycle.

In order to create a new partnership, the government agency would develop an abstract similar to those used in the initial program planning for this transition cycle. This would be submitted to the partnership program manager, either directly or through the customer's account executive. The program managers would then review the abstract and ascertain its viability and cost-effectiveness, 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.

Should additional partnerships not be created, the reserve funds could be used for additional projects within the existing partnerships based upon the utilities determination of need and optimal cost-effectiveness.

Single Point of Contact

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.

2) Quantitative Program Targets: Provide estimated quantitative information on number of projects, companies, non-incentive customer services and/or incentives that program aims to deliver and/or complete in –2013 - 2014 timeframe. Provide references where available.

Program Name	Program Target by 2013	Program Target by 2014			
Institutional and Government Facilities					
EE/DR Audits	Ensure 100% of all audits are coordinated EE/DR efforts if applicable	Ensure 100% of all audits are coordinated EE/DR efforts if applicable			
Lighting and HVAC Retrofits	Identify potential for Retrofits	Identify potential for Retrofits			
RCx and MBCx	Benchmark facilities to determine potential	Benchmark facilities to determine potential			
New Construction	Communicate Integration Strategy between internal departments and offerings and incentive structure.	Develop project agreement plan to ensure penetration of all existing and future potential projects.			
	Strategic Plan Support				
See below					
	Core Program Integrati	ion			
Education and Outreach	A minimum of 5 Partner Presentations	A minimum of 5 Partner Presentations			
Financial Solutions Program: On-Bill Financing Element	Development documentation package and project agreement for partners.	Determine which partners will use OBF, establish a model for how OBF can be used with Institutional and Government customers.			
CSI	Establish communication plan for ensuring partners have been educated regarding solar potential	Develop project agreement plan and determine necessary stakeholders.			

3) Advancing Strategic Plan goals and objectives: Describe how program aggressively advances the goals, strategies and objectives of the California Long Term Energy Efficiency Strategic Plan. Reference and describe how program advances specific –2013 - 2014 near term action steps toward Strategies outlined

in plan.

The California Long-Term Energy Efficiency Strategic Plan (Strategic Plan) sets forth a statewide roadmap to maximized achievement of cost–effective energy efficiency in California's electricity and natural gas sectors between 2009 and 2020, and beyond. 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:

2-1: Lead by Example: State/local governments and major	Where the budget allows, customer owned buildings are
corporations commit to achieve energy efficiency, EE, (or green) targets in existing buildings.	benchmarked and retro-commissioned.
2-5: Develop tools and strategies to use information and	Implement monitor based commissioning and provide
behavioral strategies, commissioning, and training to reduce energy consumption in commercial buildings	training for energy managers to continuously monitor and optimize building operational performance.
2-6: Develop effective financial tools for EE improvement to existing buildings.	Develop financial solutions that are compatible 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 technologies within the commercial sector.	Leverage PC network software and vending machine controls to reduce commercial building plug loads.
Commercial Sector – Section 3	
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 collaboration with building owners.
demonstration projects, marketing efforts, and utility programs. DSM Integration and Coordination - Section 8 1-1: Carry out integrated marketing of DSM opportunities	building owners.
demonstration projects, marketing efforts, and utility programs. DSM Integration and Coordination - Section 8	

5. Program Implementation

a. Statewide IOU Coordination: Describe statewide IOU coordination efforts that will guide program implementation. Describe how the following will be coordinated and unified when available:

i) Program name
 Statewide Institutional Energy Efficiency Partnerships – (CDCR, State of CA, UC/CSU, CCC)

ii) Program delivery mechanisms

The partnerships will build upon the implementation strategies used in the 10-12 cycle. Mechanisms include:

- CORE / Target Market coordination
- Third Party Coordination
- Direct Install coordination with new and existing implementers
- Non-Residential Retrofit (NRR)
- Coordination with Non-residential New Construction (NRNC)

The implementation plan for this cycle will be refined to account for progress already made and will include:

- A more streamlined program management structure.
- 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.
- 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.

Third Party Program Coordination

Partnerships will ensure that third party programs are coordinated throughout partnership portfolios. Partnerships will present all delivery channels to customers to meet their unique needs. Due to funding constraints; third party program may be a more cost effective alternative to achieving energy savings. Management teams will coordinate internally to deliver third party programs as a combined front to the partner, eliminating multiple personnel and points of contact.

- iii) Incentive levels
 - See sub-program PIPs for specific incentive levels.
- iv) Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
 - The Institutional Partnership structure builds on previously successful marketing 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 2006-08 and 2010-12 programs, this will facilitate marketing activities through pre-established channels for 2013 2014. 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 among internal departments for the program.

Peer-to-Peer Support

Peer-to-peer support is considered a key part of the partnership strategy. Forums will be created for partners to share best practices and offer support for each other. Institutional partners utilize conferences and partnership workshops to present lessons learned and share success stories to expand outreach and encourage other segment customers to implement these various strategies for aligning with the CEESP.

See Sub-PIP tables Section 6, iv for Key Outreach Activities

v) IOU program interactions with CEC, ARB, 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, there is constant observation on air pollution policies to help partners meet the mandate of AB 32.

vi) Similar IOU and POU programs

The four IOUs strive to have consistency in their respective program offering where practical to make the transactional experience for the state agencies seamless and transparent. Where the IOUs differ in their implementation strategies, the state agencies are educated and guided by the management team to ensure complete process follow through. If IOUs have interest in

implementing EE programs, the partnership may provide technical assistance in designing these programs if requested.

- b) Program delivery and coordination: Addressing all applicable items on the list below, describe how the program will be delivered or implemented in concert with them, including, if applicable, coordination with other Agency programs or actions. Describe timeline by which market segment/sub-segment is expected to be "transformed". Where they exist, highlight any shared or leveraged budget categories and amounts (admin, incentives, ME&O, and other applicable categories).
 - *i)* Emerging Technologies program:

Emerging Technologies Element

Institutions provide venues for the piloting of new technologies and may test technologies that could potentially be implemented 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.

The importance of energy efficiency within the state and the world is encouraging rapid development of new technologies and improved energy efficiency. However, it is virtually impossible for either key decision-makers or their technical staff to keep up with the rapidly evolving market. Even when they learn about the new technologies, it is very difficult to ascertain the true energy efficiency value of the new technologies and to distinguish scientific research from sales hyperbole.

The utilities, their research organizations, and their connection with the various state research organizations are vital links to the partners. New technology will be a useful component of the education and training element of the partnerships. The partnerships will be able to provide information to the managerial and technical personnel of the institutional customers to help them determine which technologies are worthy of consideration in energy efficiency.

Furthermore, some of the customers are very interested in serving as beta test sites for new technologies. Partnerships may well become key avenues by which new products or technologies can be installed, tested, and evaluated. The partnerships and their institutions will be able to work hand-in-hand with the utility and/or Energy Commission researchers in this arena.

Many of the Higher Education partnerships also include in house development and research of new emerging technologies lending to the ever increasing request for institutional partners to pilot new technologies.

ii) Codes and Standards program

Reach Code Support

The Reach Code Support sub-element will be implemented primarily through the Codes and Standards program PIPs. IP's that choose to include Reach Code Support in their program will be encouraged to optimize compliance of existing codes before developing new reach

codes. Some individual Partnerships may choose to include Reach Code activities to promote codes that exceed Title 24 requirements. Again, all reach code support activity will be coordinated with the Codes and Standards program to ensure government input and support for Codes and Standards development of model reach codes that align with Title 24 and achieve measurable energy savings. Partnerships that include Reach Code activities could perform activities that range from training staff regarding adoption and implementation of model reach codes to establishing expedited permitting processes, fee structures and other incentives for green buildings and other above-code developments. IP's may attend training and/or market the training to relevant trades, in coordination with utility and statewide marketing activities.

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 Institutional Partners (IPs) will take action related to code compliance by engaging in a range of activities that will be coordinated with the Codes and Standards program.

IP's who 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 governments to conduct code compliance.

Because optimization of existing compliance is the most effective approach to code compliance, IP's will be encouraged to start with this goal before tackling additional LEED certification requirements. IP Code Compliance activities may include referral to SoCalGas's Codes and Standards program for training staff that are charged with code compliance. IP activity may also include referral to SoCalGas's Codes and Standards program to access certification programs for inspectors and contractors. IP's may assist with marketing in coordination with SoCalGas and statewide marketing activities, including advertising training opportunities to relevant trades, raising awareness of current codes among business and residential customers and encouraging compliance by accessing a suite of resources described in the Codes and Standards PIP.

Please refer to the Codes and Standards PIP for further information.

- *iii) WE&T efforts*Referenced above in Master PIP Section 4. 3a.
- *iv)* Program-specific marketing and outreach efforts (provide budget)

Outreach, Education and Training Element

The various partnerships will seek opportunities to increase awareness and understanding of energy efficiency as appropriate. In all cases this involves reaching upper management and/or elected officials to gain the support of decision makers for energy efficiency projects. It also involves reaching out to other departments within the customer organizations so that

mid-level management of these departments will be responsive to and supportive of energy efficiency within the buildings in their jurisdictions. Likewise, it is important to train the day-to-day operating staff within the various facilities management organizations so that the designers, planners, and technicians are aware both of the importance of energy efficiency and the means by which it can be achieved. For institutional partnerships, education and training will be extended to elected officials, managers, and operations staff. Partnerships with educational institutions, it will involve educating faculty on energy efficiency so that they in turn may pass on the knowledge to their students.

The partnerships' education and training will also leverage existing utility training programs provided through the various training centers such as Southern California Gas' Energy Resource Center (ERC). In some cases, multiple partnerships may work together to provide education and training that is available to all of their constituents and thereby increase the availability and flexibility of the training programs. Specialized training sessions may be held at venues within the customer's facilities in order to minimize hardship on customer personnel and maximize attendance.

The education and training component also includes partnerships' outreach. Outreach is typically internal to the customer's organization, as the large and complex institutions that make up the partners have thousands of employees and many different departments. In many cases communication between the various departments of the organization is not well organized and information flow is slow or non-existent. The partnership will assist in the outreach to these ancillary departments in order to increase the awareness and understanding of energy efficiency. Partnerships will also reach out to similar but independent government agencies within their geographic regions; in particular, the county partnerships will reach out to cities, school districts, and other local agencies in order to bring them aboard. Partnerships will utilize existing infrastructures to accomplish outreach activities and others will rely more heavily on assistance from the utility partner and/or partnership consultants.

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.

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 SoCalGas's Energy Resource Center, Southern California Edison's Customer Technology Application Center (CTAC) and Agricultural Technology Application Center (AgTAC), San Diego Gas & Electric's Energy Innovation Center, and PG&E's Pacific Energy Center and Energy Training Center to deliver various technical training courses to improve the skills and knowledge of facility staff.

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 players from all departments within the organization.

The primary objectives of the education and training programs are to produce cost-effective energy savings. This will help the partners to comply with the requirement of Executive Order S-20-04 and their goals to reduce energy consumption. This will be achieved by:

- Increasing transfer of energy efficiency knowledge and implementation experience.
- Increasing awareness and knowledge of the benefits of energy efficiency initiatives.
- Integrating efforts between partnership activities and utility programs offerings.
- Reducing the number of projects that are implemented without attention to energy efficiency.
- Increasing the number of institutional departments and/or local government agencies that use energy efficiency as a key decision-making parameter.
- Increasing communication between and building camaraderie among various key personnel in the facilities management groups of many departments, agencies, and organizations.

Sub-program specific activities are referenced in each sub-program PIP Section 6, iv.

v) Rationale for selection of sub-contractors;

Subcontractor Activities

Subcontractors may be used to assist in program administration and management, and will provide professional and technical support for the implementation of each of the program elements. A program consultant will assist in day-to-day coordination and communication among the Institutional 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 CPUC reporting and regulatory communications.
- 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

Program Management Structure

Partnerships will continue to be administered by management teams consisting of representatives from IOUs and partnership management. A program administrator and management subcontractor for the CDCR, CCC, and UC/CSU partnerships will track project

progress and keep the lines of communication and information consistent. The management structure of the partnership has allowed for a more streamlined approach and flexibility in overall program administration.

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. 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 a retrofit team, MBCx Express Team, an outreach team, and/or 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.

Key Activities of Management Teams include:

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 costeffectiveness 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.
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.

Key Activity	Description
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.

Partnerships can also hire energy efficiency retrofit subcontractors to install the energy efficiency measures for the retrofit component, and commissioning agents to assist in the performance of MBCx projects. Partnerships may also hire engineering subcontractors to assist with project development, as needed.

vi) Non-energy activities of program

If applicable specific non-energy activities will be listed in sub-program PIPs Section 6, vi.

Guiding Document Support

Guiding document support will be provided by IOUs and will influence the partnerships through collaborative efforts that bring about the adoption of higher standards for energy efficiency. In addition, a tool will be developed for decision makers. This will enable customers to utilize this tool for guiding future decision making process and energy policy development that will align with the CLTEESP.

Technical Assistance

The Partnership will focus on technical assistance and help the Partner to identify 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 Partners 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. Some technical assistance may include:

- 1. Training and Education
- 2. Energy Audits
- 3. Design assistance
- 4. Due diligence/Project Review

vii) Non-IOU Programs

If applicable will be detailed in sub-program PIPs, Section 6, vii.

viii) CEC work on PIER

Applicable PIER program coordination will be detailed in sub-program PIPs, Section 6 viii.

ix) CEC work on codes and standards

If applicable will be detailed in sub-program PIPs, Section 6 ix.

- x) *Non-utility market initiatives*If applicable will be detailed in sub-program PIPs Section 6, x.
- c) Best Practices: Describe why program approach constitutes "best practice" or reflects "lessons learned" in market strategies, program design and/or implementation techniques. Provide references where available.

Institutional Partnerships have provided documentation that is valuable and provides lessons learned for a variety of institutional customers. Overarching best practices for institutional partnerships are noted 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 biweekly 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 and the Program Advisor handbook 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.
T Amming	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 partnership program structure calls for a mechanism that closely monitors 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.	SoCalGas Program Advisors have been assigned to each Partnership to assure continuous open communication and implementation success. SoCalGas's resources will be supplemented with pre-qualified technical support to meet the needs of 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 SoCalGas CE, 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,	Frequent meetings between/among SoCalGas, its Partners and their members/constituents are designed to track and report Partnership progress and successes.

Type of Best Practice	Best Practice	Institutional Application(s)
	contractors and evaluators.	

- Specific best practices are referenced for each specific partnership in Sub-Program PIP I, II, III, IV, Section 6, b.
- d) Innovation: Describe any unique or innovative aspects of program not previously discussed. Why is this innovative?

 Innovative aspects of programs will be detailed in sub-program PIPs, Section 6, d, if applicable.
- e) Integrated/coordinated Demand Side Management: Describe in detail how program will achieve integrated or coordinated delivery of all DSM options (energy efficiency, demand response, and onsite generation) where applicable including integrated program design and delivery, shared budgets, program evaluation, and incentive mechanisms that promote greater integration of DSM resources. Provide a complete description for all the technologies, including integration supporting technologies that will be included in the program. If the program does not include all DSM options as noted above, briefly provide an explanation for a more limited subset of DSM technologies. Utilize Attachment 5A to highlight any shared or leveraged budget categories and amounts (admin, incentives, ME&O, and other applicable categories).

SoCalGas supports the loading order in which our partners can achieve the highest level of integrated energy efficiency savings. Some of our partnerships have completed the Analysis (1) and Energy Conservation (2) efforts prior to becoming fully engaged into Partnership programs.

Once engaged into partnership programs, customers and partnerships focus on the Energy Efficiency aspect of integrated programs before moving onto Self Generation (5) or Demand Side Management (6). Moving partnerships into Self Generation or Demand Side Management at a premature time may act to mitigate energy savings and not realize energy savings.

Most partnerships remain focused on the Energy Efficiency aspect of integrated energy efficiency programs to maximize energy efficient efforts. The partnerships continue to focus on the ever demanding requests of Self Generation and Demand Side Management. Many institutional partners are under significant pressure from government mandates to implement Self Generation and Demand Side Management technologies. Partnerships have included Self Generation and Demand Side Management into implementation plans to meet these demands but also focus on the importance of appropriate energy efficiency management.

Integration of programs such as Self Generation and Demand Side Management require partnerships to develop innovative ways to share allocated budgets and developed goals. When plausible and cost-effective, partnerships will leverage

off existing program delivery channels and budgets to provide Self Generation and Demand Side Management.

f) Integration across resource types (energy, water, air quality, etc): If program aims to integrate across resources types, please provide rationale and general approach.

If applicable this item will be detailed in the sub-program PIPs, Section 6, f.

g) Pilots: Please describe any pilot projects that are part of this program

If applicable this item will be detailed in the sub-program PIPs, Section 6 g.

h) EM&V: Describe any process evaluation or other evaluation efforts that will be undertaken by the utility to determine if the program is meeting its goals and objectives. Include the evaluation timeframe and brief description of scope, as well as a summary of specific methodologies, if already developed. If not developed, indicate the process for developing them. Please include, as well, whether there are program-tracking databases that will be needed for evaluation purposes.

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for –2013 - 2014 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.

- 6. Diagram of Program: Please provide a one page diagram of the program including sub-programs. This should visually illustrate the program/sub-program linkages to areas such as:
 - a. Statewide and individual IOU marketing and outreach
 - b. WE&T programs
 - c. Emerging Technologies and Codes and Standards
 - d. Coordinated approaches across IOUs
 - e. Integrated efforts across DSM programs
- 7. Program Logic Model:

1. **Program Name:** California Department of Corrections and Rehabilitation/Investor

Owned Utility Statewide Energy Efficiency Partnership

Program ID: SCG 3738

Program Type: Institutional Partnership

2. Projected Program Budget Table

Program #	Main/Sub Program Name	Administrative Amount	Marketing Amount	Direct Implementation Amount	Incentive Amount	Total Program Budget Amount
	Local Institutional Partnership Programs					
3738	LinstP-CA Department of Corrections Partnership	\$148,361	\$120,908	\$249,124	\$0	\$518,394
	TOTAL:	\$148,361	\$120,908	\$249,124	\$0	\$518,394

3. Program Description

a) Describe Program

SoCalGas and the California Department of Corrections and Rehabilitation (CDCR) are collaborating to continue the Department of Corrections and Rehabilitation/Investor-Owned Utility (IOU) Partnership for the 2013 - 2014 cycle. The CDCR/IOU 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 utilizes 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 is comprised of Adult Institutions, Parole Offices, Community Conservation Camps, and Juvenile Facilities which encompass an estimated 47,714,415 square feet of occupied space.

In the 2006-2008 and 2010 - 2012 program cycles SoCalGas 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 2012-2014 program extension.

CDCR initiated a Request for Proposal (RFP) to procure contractors, engineering subcontractors, and Energy Services Companies (ESCOs) 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 been 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 initiated a RFP to procure an energy engineering and consulting firm devoted exclusively to the CDCR/IOU 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. SoCalGas, 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.

b) List Measures

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 core
System Approach - Light Power Density	\$ 0.10 above core
System Approach - Chillers	\$ 0.10 above core
System Approach - Daylighting	\$ 0.10 above core
System Approach - HVAC Energy Reduction	\$ 0.10 above core

c) List non-incentive customer services

The partnership shall provide the following non-incentive services:

- 1. Training and Education
- 2. Energy Audits
- 3. Technical Assistance
- 4. Design assistance
- 5. Due diligence/Project Review
- 6. Marketing/Outreach
- 7. Support of Assembly Bill 32, 900, Senate Bill 20-04

4. Program Rationale and Expected Outcome

d) Quantitative Baseline and Market Transformation Information:

	Baseline Metric			
	Metric A Metric B Metric C			
Program/Element	N/A	N/A	N/A	

Refer to the overarching PIP section.

e) Market Transformation Information:

	Market Transformation Planning Estimates		
Program/Element	2013	2014	
Metric A	N/A	N/A	
Metric B	N/A	N/A	
Metric C	N/A	N/A	
Etc.	N/A	N/A	

Refer to the overarching PIP section.

f) Program Design to Overcome Barriers:

The CDCR/IOU is a mature program that has a repeatable process for creating a project pipeline, seeking project approval, procuring project funding, implementing the project, monitoring the project, and inspecting. That does not mean the program does not have its challenges that affects implementation. These challenges/barriers are:

 <u>Barrier:</u> Project Funding Constraints – With the challenges the state is facing with their budgetary constraints, great opportunities for energy efficiency projects are not easily addressed.

o Solutions:

- AB 1392 has allocated remaining federal American Recovery and Reinvestment Act (ARRA) money to finance energy projects through the Department of General Services.
- The IOUs On-Bill Financing Programs are either being implemented or developed as a way of financing smaller retrofit and modernization upgrades.
- Increase the purview of CEC loans to include other State facilities.
- IOUs to develop other innovative financing options.
- <u>Barrier:</u> High cost for project overhead: CDCR is unique in that not only must the department account for traditional project costs it must also account for additional labor and facility access. ESCOs have limited timeframes and access to facilities. Additionally, guards must be assigned at each location for additional security. Solution: The partnership will continue to offer high incentive rates to adjust for additional costs and to make projects viable.
- g) Quantitative Program Targets.

See Master PIP Section 2

h) Advancing Strategic Plan goals and objectives

See Master PIP Section

5. Program Implementation

- a) Statewide IOU Coordination:
 - i) Program Name

California Department of Corrections and Rehabilitation/Investor Owned Utility Statewide Energy Efficiency Partnership

ii) Program Delivery Mechanisms

Delivery mechanisms, program elements, and subcontractor activities are detailed above in Master PIP Section 4, a and Section 6, a, ii.

CDCR does not utilize additional delivery mechanisms at this time. A detailed table of management activities for project delivery is provided below.

- iii) Incentive Levels
- Lighting projects- \$0.24/ kWh
- Motors/ VFDs/ Compressors/ Controls/ Others- \$0.24/ kWh
- HVAC projects with electric savings- \$0.24/kWh
- Projects with gas savings- \$1.00/ Therm

- Savings By Design/ Commercial New Construction Projects- \$0.10/ kWh above core SBD incentive rate
 - 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. This combined with the partnership management team structure will facilitate marketing activities through pre-established channels.

Key Activity	Description
Outreach	The partnership management team and program administrator will use preexisting 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.
Facility Audits	SCG will provide integrated audits to government partners where cost effective and reasonable, ensuring coordination between programs and utilities for information sharing.

v) IOU program interactions with CEC, ARB, 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 there is constant observation on air pollution policies to help 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 practicable to make the transactional experience for the state agencies seamless and transparent. Where the IOUs differ in their implementation strategies, the state agencies are educated and 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) Program delivery and coordination:

The CDCR/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

Referenced above in the Master PIP

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

The outreach efforts for the partnership involves 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 do no 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

N/A

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

ix. Non-utility market initiatives:

c) Best Practices:

Reference Master PIP

d) Innovation:

N/A

- e) Integrated/coordinated Demand Side Management:
- f) Integration across resource types (energy, water, air quality, etc):

SoCalGas is exploring the option of including CDCR in a pilot water research program. Initial discoveries show that similarities exist between pilot facilities and CDCR's unique facilities.

g) Pilots:

No pilots are proposed at this time.

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 –2013 - 2014 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.

1. **Program Name:** California Community College/Investor Owned Utility (CCC/IOU)

Partnership Program

Program ID: SCG 3739

Program Type: Institutional Partnership

2. Projected Program Budget Table

Program #	Main/Sub Program Name	Administrative Amount	Marketing Amount	Direct Implementation Amount	Incentive Amount	Total Program Budget Amount
	Local Institutional Partnership Programs					
3739	LinstP-California Community College Partnership	\$195,763	\$142,864	\$364,808	\$0	\$703,435
	TOTAL:	\$195,763	\$142,864	\$364,808	\$0	\$703,435

3. Program Description

a) Describe Program

The CCC/IOU Energy Efficiency Partnership has been a successful collaboration between the California Community Colleges (CCC) and the four Investor-Owned Utilities (IOUs). The CCC is a two-year public institution of higher education that is composed of 112 colleges statewide and organized into 72 self-governing Districts. It serves more than 2.6 million students coming from a wide range of cultural and economic backgrounds, and represents the largest system of higher education in the world. SoCalGas alongside the other IOUs (PG&E, SDG&E and SCE), will continue this collaboration, which started with the 2006-08 CCC/IOU Energy Efficiency Partnership, to share best practices and implement energy efficiency programs and 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 2013 – 2014 CCC/IOU 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 (RCx), 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 –2013 - 2014 CCC/IOU 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 CCC's 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
- Training & education program, which will provide training to facility maintenance and operations staff in best practices on energy efficient technology implementation and energy management.
- 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
Controls and other Equipment	Includes fans, motors, VFDs, air compressors, EMS systems and other
	equipment not covered under the HVAC categories.
HVAC, Air Conditioning and	Includes system and major subsystem replacements
Refrigeration	
Other	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 \$.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. All gas savings will be at \$1.00 per therm.

Incentive rates for the Partnership will be as follows:

- Lighting- \$0.24/kWh
- Controls and other Equipment- \$0.24/kWh
- HVAC, Air Conditioning and Refrigeration- \$0.24/kWh
- All gas savings will be at \$1.00/Therm
- Savings by Design/ Commercial New Construction Projects- \$0.10/ kWh above core SBD incentive rate
 - c) List non-incentive customer services

The California Community College/ Investor Owned Utility 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 said conferences as well as training sessions.

A training and education component for campus design staff, project managers, energy managers and others will also be provided in using best energy practices in the construction, retrofit, and monitoring based commissioning of campus buildings and central plant infrastructures.

Subcontractor Activities

Subcontractors will be used to assist in program administration and management, and will provide professional and technical support for the implementation of each of the program elements. A program consultant will assist in day-to-day coordination and communication among the partners (the colleges, System office, and four utilities) as follows:

- Provide staffing to the management team and program specific subcommittees and implementation teams
- Assist in program planning and design areas such as:
 - o Program narrative preparation for filings
 - o Organization of financial budgets
 - Preparation of program energy savings estimates and E3 cost-effectiveness calculators
 - o Providing assistance in the development of marketing and outreach plans
- Coordinate, schedule, and document results and action items from program team meetings
- Provide technical engineering assistance to develop projects and ensure that project documentation complies with CPUC energy efficiency policy and supports EM&V assessments.
- 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 CCCs in CPUC reporting and regulatory communications
- 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

The campuses will hire:

- Energy efficiency subcontractors to install the energy efficiency measures for the retrofit component
- Consultants and contractors to assist in the performance of MBCx projects
- Engineers and architects to assist with the New Construction Design Assistance element. Campuses may also hire engineering consultants to assist with project development as needed.

As seen in the 2010-2012 partnership, the campus facilities management staff will play a major role in this program component while enlisting the assistance of subcontractors.

Non Incentive Services	Delivery Mechanism
Education and Training	Delivered through the creation of presentations for industry and
	association conferences, attending various conferences, meetings and

	Ţ
	outreach events, and distributing marketing materials through education programs. 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 coordination with SoCalGas's Emerging Technologies group. The CCC/ IOU Partnership Program will work with the ETP group to develop potential pilots for emerging technologies development.
Funding Sources	Federal grants, state financing, local bonds, and IOU incentives. Further coordination and integration of SoCalGas's On-Bill Financing Program to assist in the funding of energy efficiency projects.
Subcontractor Activities	Subcontractors may be used to assist in program administration and state wide coordination among partners.
Program Administration and Management	Utility program managers will: Identify project tasks and establish schedule of deliverables and responsibilities to ensure the deliverance of successful program implementation, obtain inputs from the partners, facilitate the decision-making on key program elements while coordinating partnership team communications, provide analytical assistance as needed, and submit accurate program information for reporting to the CPUC.
Quality Assurance and Evaluation	The New Energy Efficiency Partnerships team will establish and oversee quality assurance measures for the partnership program, including oversight and verification of subcontractor activities. These procedures and the associated reporting will be developed in more detail as a part of program implementation. In general, 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 (installation of energy efficient equipment, facility retrofits, and building commissioning and new construction projects).
Codes and Standards	The other key element will be the refinement and further adoption of voluntary policies and requirements 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.

4. Program Rationale and Expected Outcome

a. Quantitative Baseline and Market Transformation Information:

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section.

b. Market Transformation Information:

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section.

c. Program Design to Overcome Barriers:

SoCalGas 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. However, due to the decentralized and self-governing structure of the CCCs, as well as the lack of funding and resources at these campuses, it has been an extremely challenging process to assist these districts in implementing energy efficient measures and practices.

The existing partnerships have worked diligently to overcome these barriers, though many still exist. The effort to resolve them is on-going, and significant progress has been made. 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:

Primary Barriers	Strategies to Overcome Barriers
Funding Levels- Project Funding Constraints. Energy efficiency is costly and budgets are limited. The actual decision-makers approving the details of a project often choose not to implement the higher-costing more-efficient systems, equipment, or technologies. Incentive dollars are most often allocated to the general fund which makes for an inability to ensure incentives are allocated toward the participating department budget.	Incentives help relieve budgetary constraints and assist the economic evaluations of the customers by making energy efficiency more cost-effective. In addition to their purely economic role, the incentives play an important part in promoting the importance and visibility of energy efficiency. When a partnership can bring an incentive to the decision-making body and make a public announcement, it not only improves the economics, but it demonstrates the importance of the project and increases public awareness of both the utility's and the customer's commitment to energy efficiency and environmental quality. The Energy \$Mart Loan program has been created to finance energy projects through the Department of General Services. SoCalGas's On-Bill Financing Programs is currently being implemented as a way of financing retrofit and modernization upgrades.
Short-sightedness- Economic decisions are often	Education and training brings energy efficiency awareness

Primary Barriers	Strategies to Overcome Barriers
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.	to decision-makers at all levels. Many of the partnerships have specific plans to incorporate education and training for a variety of people including elected officials, key department managers, facilities staff, personnel from other local governments (such as cities and school districts within the counties), and, in the case of the college partnerships, training within the general population. This component will enhance the awareness of energy efficiency, which in turn will subdue some of the barriers caused by lack of information or erroneous economic analysis.
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 many customer barriers to participation in multiple programs. This integration is innovatively being collaborated with internal utility departments in order to fulfill this strategy. Future strategic plans are being developed to include new construction, emerging technologies, education and training, demand response, California Solar Initiative (CSI), selfgeneration, on-bill financing, and other utility programs within the scope of partnership activities.
Staffing- 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 immediately urgent problems. Community College campuses tend to have inadequate staffing due to the current staff being overextended; additional technical assistance desired.	Professional assistance from utility staff and partnership consultants allows potential projects to be identified and evaluated. Many institutional customers 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 selected projects, modify the scope of others, and rely on strategic energy planning, rather than simple maintenance schedules for energy efficiency enhancements.
Information Dissemination- Some of the agencies lack the technical expertise to develop or manage projects. Therefore they lose out on opportunities to improve efficiency when staff is unaware of available technology and measures. Lack of funding and management support also causes the removal of such measures from a project.	The management team is currently developing an information tool for some agencies that will help reveal the savings potential of implementing projects with likely energy efficiency measures that may appear in agencies' typical facilities. This is meant to appeal to the facilities managers or decision makers and allow the IOU to perform detailed energy audits that eventually lends itself to a project proposal.
Gap in ESCO Process and Small Projects— The prior program cycle revealed to the management team that while the ESCO process and Energy\$mart project financing mechanism works for the larger projects, smaller projects cannot pass the Life-Cycle Cost Analysis and the ESCOs do not find the projects attractive. 95% of the	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 the On-Bill Financing program. 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

Primary Barriers	Strategies to Overcome Barriers
state's building inventory is under 25,000 sq. ft. which indicates the majority of the projects are smaller.	pilot concepts that may fill gaps in the program.

We anticipate the partnership will continue to work through the various obstacles that inhibit the full implementation of energy efficiency within their institution. This is a gradual and evolving process. Nonetheless, the partnership model has shown to be extremely effective, and leads to considerable energy savings and demand reduction both in new construction and in existing buildings. For the California Community Colleges, budget requirements are becoming even tighter. The continuation of the partnerships will help assure that these barriers do not become even more significant as budgets are reduced.

d. Quantitative Program Targets:

Program Name	Program Target by 2013	Program Target by 2014
New Construction	Communicate Integration and incentive structure. Identify a minimum of 2 new projects.	Develop project agreement plan to ensure penetration of all existing and future potential projects. Identify a minimum of 2 new projects.
On-Bill Financing	Development of On-Bill Financing documentation package for partners. Develop project agreement plan and determine whether partners will participate. Identify 2 new projects	Identify a minimum of 3 new projects.
CSI	Establish communication plan for ensuring partners have been educated regarding solar potential	Develop project agreement plan and determine necessary stakeholders.
RCx and MBCx	Benchmark at least 2 facilities to determine for RCx or MBCx.	Complete project agreement packages for a minimum of 2 facilities.
Education and Outreach	A minimum of 4 Partner Presentations.	A minimum of 4 Partner Presentations.
EE/DR Audits	Ensure 100% of all audits are coordinated EE/DR efforts if applicable	Ensure 100% of all audits are coordinated EE/DR efforts if applicable

e. Advancing Strategic Plan goals and objectives:

Institutional partnerships are a natural fit with the goals, objectives, and strategies articulated in the California Energy Efficiency Strategic Plan. The partnerships have demonstrated that the three *Pillars* of the Strategic Plan -- Innovation, Integration, and Collaboration -- are indeed the key to achieving the next generation of cost-effective energy efficiency and the resulting reduction in greenhouse gas emissions.

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 navigate 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 their own partnerships.
- Firmly align goals: saving energy, improving the environment, and saving money for the institutional customers.
- Embrace Monitoring Based Commissioning (MBCx) and Retro-commissioning (RCx) at their facilities as a result of the 2010-2012 partnership.
- Some of the partnerships have also worked with the PIER SPEED program, which has resulted in the installation of several pilot projects in 2007.
- Work with the PIER and IOU ET teams to leverage the pilot projects into larger scale emerging technology programs and projects in –2013 2014.
- 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 −2013 − 2014 transition period.
- Lead the deployment of many information technology energy efficiency measures. Retrofit measures have included server virtualization, PC power management, and high-efficiency UPS systems.
- Been innovative in setting policy for energy efficiency and sustainability.
- Ramp up 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.

5. Program Implementation

- f. Statewide IOU Coordination::
 - i. Program Name

California Community College/ Investor Owned Utility (CCC/ IOU) Partnership Program

ii. Program Delivery Mechanisms

The 2013 - 2014 CCC/ IOU Energy Efficiency Partnership Program will utilize and build upon the implementation strategies employed in the partnership from the 2010-2012program cycle. The implementation plan for this cycle will be refined to account for progress already made which will include:

Program Management Structure

The management structure of the partnership will be further streamlined from the 2010-2012 cycle to allow for more flexibility in overall program administration, outreach, project identification and development, and project implementation and verification. The program will continue to be administered by a management team, consisting of representatives from the California Community Chancellor's office, representatives from the local community college 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. The management team will set overall program policy and ensure that the program stays on plan throughout its life cycle. One of the biggest changes from 2006-2008is to streamline implementation to combine the various responsibilities for project evaluation and implementation into a single team which will oversee retrofit, MBCx, new construction, and innovative projects. The team will be providing a more coordinated and *integrated approach* and will increase the penetration of energy efficiency to avoid lost opportunities.

Program Elements

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 its sustainability and best practices.

Energy Efficiency Retrofits

The partnership outreach and/or project team will identify and develop potential retrofit projects using the project portfolio described above as a starting point, with follow up campus audits and performance of savings calculations. SoCalGas will provide integrated audits to government partners where cost effective and reasonable, ensuring coordination between programs and utilities for information sharing. In some cases, campuses will utilize ESCOs or other engineering firms under contract to develop projects. Project applications will be submitted, or when necessary, completed by the IOUs. If approved through the IOU due-diligence review process, the applications will be executed by the campus and the IOU, and project implementation will, at that time, commence. The projects will be implemented by the CCC campus staff or their engineering and construction contractors, and the IOUs will perform verification inspection prior to payment of incentives.

The energy efficiency retrofit projects that will be performed for the program will be electric and gas saving measures including: lighting retrofits, building wide lighting controls, boiler replacements, installation of water heaters, HVAC and chiller upgrades, VFDs, and central plant projects, amongst others.

Retro-Commissioning (RCx) / Monitoring-Based Commissioning (MBCx)

This element of the program is a unique approach to obtaining savings that combines the expertise of the state facility management staff, utility and subcontractor expertise. Through these resources, a systematic, comprehensive RCx/MBCx program will be implemented in existing buildings. It will provide a cost effective approach to achieving optimized operating facilities, save both electric and gas energy, reduce operating cost and improve occupancy comfort.

New Construction and New Construction Design Assistance

New Construction is a significant opportunity to achieve a breakthrough in energy savings at the Community Colleges. This program will be managed towards meeting the strategic energy plan goals of zero net energy for commercial buildings by 2030. The goal of the 2013 - 2014 partnership is to fully integrate the new construction design assistance program under the partnership umbrella to capture those opportunities. In addition, the partnership will consider additional incentive dollars to implement those measures that show persistent energy savings and capture the lost opportunities by those projects that have been value-engineered out of the project scope due to budget and time constraints.

Quality Assurance

The CCC/IOU team will establish and oversee quality assurance measures for the partnership program, including oversight and verification of subcontractor activities. These procedures and the associated reporting will be developed in more detail as a part of a program implementation. In general, however, the partnership will continue the level of due diligence and quality assurance of the present IOU energy efficiency offerings. This will include a representative percentage of pre/post installation confirmation inspections for small hardware projects and pre/post inspections on all large or specialized projects hardware projects (installation of energy efficient equipment, facility retrofits, and building commissioning and new construction projects).

iii. Incentive Levels

- Lighting projects- \$0.24/ kWh
- Motors/ VFDs/ Compressors/ Controls/ Others- \$0.24/ kWh
- HVAC projects with electric savings- \$0.24/kWh
- Projects with gas savings- \$1.00/ Therm
- Savings by Design/ Commercial New Construction Projects- \$0.10/ kWh above core SBD incentive rate
 - iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.

A change for the upcoming 2013 - 2014 program cycle is the refinement of the Outreach Team, which tried several models in 2010-2012, 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/ IOU 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 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 retrocommissioning, 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, ARB, Air Quality Management Districts, local government programs, other government programs as applicable

IOUs are continuously monitoring their respective 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 CCC facilities. In regards to the ARB there is constant observation on air pollution policies to help CCC meet the mandate of AB 32.

- vi. Similar IOU and POU programs
 - g. Program delivery and coordination:
- Foundation building, including preparing a needs assessment, evaluating cost-benefit analysis tools for investments in WE&T, creating a WE&T web portal, establishing ongoing dialogue with key players, and forming a WE&T task force.

- Focus specific strategies on community colleges and technical training.
- Transform HVAC—including its products, companies, employees and even its customers—to develop, install and maintain highly efficient and peak-friendly systems.

The partners will provide education and training for students and facility personnel through workshops and other training strategies in collaboration with other partnerships. It will be a venue for those individuals responsible for managing energy use on campuses to share information and experiences related to facility operations, to gain knowledge of industry best practices in energy efficiency management, and for successful energy efficiency project implementation, among other issues. The other strategy for the education and training element is the development of an energy efficiency vocational curriculum that will be offered to campus students to equip them with energy efficiency knowledge which they can apply in the industry. Lastly, this partnership will seek opportunities to improve project coordination and communication to strengthen the relationships amongst the Partners.

The primary vehicles for training and dissemination of information will be a series of training sessions and workshops (covering new construction, building operator training, retrofits, retrocommissioning, and monitoring based commissioning) to be held in Northern and Southern California. The partners will collaborate with the IOUs' technology centers to assist with course offerings and curriculum and content development and will utilize the existing material and best-practices documentation developed by other partnership programs during 2004-05 and 2006-08 program cycles.

Major Activities:

Key Activity	Description
Identify key stakeholders to participate	The management team will identify key stakeholders in each agency to participate in the project team.
Conduct solicitation for potential projects from participating agencies	The retrofit project team will coordinate with customer to generate a pool of projects for evaluation.
Compile and evaluate projects based on project criteria and cost effectiveness requirements.	The retrofit project team will perform due diligence on proposed projects to ensure that each project meets the criteria and cost-effectiveness requirements. Project team will provide a list of recommended projects to proceed with implementation.
Approve projects for funding	The management team will review project team recommendations for potential projects.
Coordinate project implementation with Partners and contractors.	The project team will have oversight of project implementation and will coordinate with customer and contractors to ensure successful and timely implementation of the project.
Verify project installation and provide incentive payments.	The project team will conduct 100% inspection. 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.

Key Activity	Description
Coordinate with EM&V contractor where applicable.	If required, there will be management team coordination with the project teams and key stakeholders to support any requests from the CPUC approved EM&V contractors.

Non-Energy Activities

The CCC/IOU 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. 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.

Subcontractor Activities

Subcontractors will be used to assist in program administration and management as well as in each of the three program elements. This approach was used successfully in the previous program cycle.

An administrative consultant will assist in day-to-day coordination and communication among the partners (the CCC and four IOUs) as follows:

- Provide staffing to the management and executive team and program specific implementation teams.
- Assist in the three program elements, especially in the coordination and facilitation of partnership meetings providing timely and accurate meeting minutes. The consultant will provide communications between the partnership and the campuses, as well as providing analytical assistance to the IOUs, CCC as needed.
 - Assist the CCC/IOU partners in providing timely and accurate program information for reporting to the CPUC.
 - Assist in development of workshop agendas and materials, and facilitation of workshops and training sessions.

The campuses will hire energy efficiency retrofit subcontractors to install the energy efficiency measures for the retrofit component, and commissioning agents to assist in the performance of MBCx projects. Campuses may also hire engineering consultants to assist with project development, as needed.

h. Best Practices:

Type of Best Practice	Best Practice	Institutional Application(s)
Goals & Objectives	Develop and use clearly articulated objectives that are internally consistent, actionable and measurable. Develop tools to track the portfolio's performance on a continuous basis	Share clearly defined and obtainable goals that are developed with partner input. Track goals through biweekly management team meetings to ensure they are achieved. The detailed program plan and Program Manager handbook is a living document that will facilitate continuous tracking
	and report progress. Design programs within the portfolio based on sound program plans; where appropriate, utilize clearly but concisely articulated program theories.	and reporting. The plan & program structure are based on sound program plans & theories.
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 partnership program structure calls for a mechanism to closely monitor progress and make 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.	SoCalGas Program Advisors have been assigned to each Partnership to assure continuous open communication and implementation success. SoCalGas's resources will be supplemented with pre-qualified technical support to meet the needs of 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 SoCalGas, 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.	Frequent meetings between/among SoCalGas, its Partners and their members/constituents is designed to track and report Partnership progress and successes.

i. Innovation:

The CCC's made significant progress in adopting innovative projects during the 2010-2012 program cycle. Projects and technologies in the high technology (IT systems) areas such as Server Virtualization, PC Power Management, and high efficiency UPS systems were a focus. Pilot Projects were established with PIER for emerging technologies such as: Integrated Classroom Lighting Systems (ICLS), Bi-Level Stairway Lighting systems, and Kitchen Demand Controlled Exhaust Hood ventilation controls. Additionally in 2008, the Partnership began collaboration with IOU Food Service Technology groups to expand energy efficiency in campus cafeterias. The plan for the 2013 - 2014 Partnership is to leverage these innovative pilot projects to a fully focused and large scale offering for the California Community Colleges.

j. Integrated/coordinated Demand Side Management.

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 SoCalGas business customers, a plan will be developed to provide a financial incentive for energy savings resulting from the equipment supplied through the partnership program.

This 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 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.

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.

- k. <u>Integration across resource types</u> (energy, water, air quality, etc): N/A
- l. <u>Pilots:</u> N/A
- *m. EM&V*:

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 - 2014 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.

6. Diagram of Program:

7. Program Logic Model:

1. **Program Name:** University of California (UC)/California State University (CSU)

Program ID: SCG 3740

Program Type: Institutional Partnership

2. Projected Program Budget Table

Program #	Main/Sub Program Name	Administrative Amount	Marketing Amount	Direct Implementation Amount	Incentive Amount	Total Program Budget Amount
	Local Institutional Partnership Programs					
3740	LInstP-UC/CSU/IOU Partnership	\$258,098	\$191,564	\$496,399	\$0	\$946,060
	TOTAL:	\$258,098	\$191,564	\$496,399	\$0	\$946,060

3. Program Description

a) Describe Program

The University of California, California State University (UC/CSU), SoCalGas and the three other Investor-Owned Utilities (IOUs) are collaborating to continue the 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.

The UC/CSU/IOU Partnership is a natural fit with the goals, objectives and strategies articulated in the CLTEESP. 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 – 2014 - 2014 program cycle. It will continue to offer incentives for retrofit projects, monitoring-based commissioning, and training for campus energy managers.

SoCalGas 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. SoCalGas 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 -2013 - 2014 program cycle. Projects will adopt a comprehensive approach by including retrofits and DSM alternatives to include: demand-response, distributed generation (renewable self-generation), solar hot water and water efficiency.

b) List Measures

Measure Categories	Technologies
Lighting	Includes indoor and outdoor fluorescent, HID, LED replacements,
	lighting controls, and other lighting projects.
Controls and other Equipment	Includes fans, motors, VFDs, air compressors, EMS 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, IT Projects and others

Incentives

Incentives will be paid on projects based on a cents per kWh saved. These rates are an average of \$.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. All gas savings will be at \$1.00 per therm.

Incentive rates for the New Partnership will be as follows:

- Lighting projects- \$0.24/ kWh
- Motors/ VFDs/ Compressors/ Controls/ Others- \$0.24/ kWh
- HVAC projects with electric savings- \$0.24/ kWh
- Projects with gas savings- \$1.00/ Therm
- Savings by Design/ Commercial New Construction Projects- \$0.10/ kWh above core SBD incentive rate

c) List non-incentive customer services

The partnership shall provide the following non-incentive services:

- a. Audit services
- b. Technical assistance
- c. Training and education
- d. Design assistance
- e. Due diligence project review
- f. Outreach activities

4. Program Rationale and Expected Outcome

Quantitative Baseline and Market Transformation Information:

	Baseline Metric				
	Metric A Metric B Metric C				
Program/Element	N/A	N/A	N/A		

Refer to the overarching PIP section.

e) Market Transformation Information:

	Market Transformation Planning Estimates		
Program/Element	2013	2014	
Metric A	N/A	N/A	
Metric B	N/A	N/A	
Metric C	N/A	N/A	
Etc.	N/A	N/A	

Refer to the overarching PIP section.

- f) Program Design to Overcome Barriers:
- g) Quantitative Program Targets
 See Master Section PIP
- *h)* Advancing Strategic Plan goals and objectives:

The California Long-Term Energy Efficiency Strategic Plan (Strategic Plan) sets forth a statewide roadmap to maximized achievement of cost—effective energy efficiency in California's electricity and natural gas sectors between 2009 and 2020, and beyond. **See Appendix:** summarizes how the Institutional Objectives and Strategies during the 2013 - 2014 program cycle contribute to the fulfillment of the Strategic Plan near-term action and steps toward the plan's longer term goals.

5. Program Implementation

- *i)* Statewide IOU Coordination:
 - i) Program Name
 University of California (UC)/California State University (CSU) / Investor-Owned
 Utility (IOU) Energy Efficiency Partnership
- ii) Program Delivery Mechanisms

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

iii) Incentive Levels

- a. Lighting projects- \$0.24/kWh
- b. Motors/VFDs/Compressors/Others \$0.24/kWh
- c. HVAC projects with electrical savings \$0.24/kWh
- d. All gas savings \$1.00/Therm
- e. New construction projects \$0.10/kWh 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 between 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 and 2010-2012 programs, this will facilitate marketing activities through pre-established channels for 2013 - 2014. 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 CA Higher Education Sustainability Conference and the CSU Facilities Manager Meetings. As such, marketing efforts are minimal and cost effective.

Key Activity	Description
Outreach	The partnership management team begins outreach efforts by contacting

Key Activity	Description
	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 retrocommissioning, 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.
Facility Audits	SCG will provide integrated audits to government partners where cost effective and reasonable, ensuring coordination between programs and utilities for information sharing.

v) IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable

Reference Master PIP

- vi) Similar IOU and POU programs
 - *j)* Program delivery and coordination:
 - k) Best Practices:

Reference Master PIP

l) Innovation:

The UC/CSU campuses have made significant progress in adopting innovative projects during the 2006-08 and 2010-2012 program cycles. Pilot projects were established with PIER for emerging technologies such as: Integrated Classroom Lighting Systems (ICLS), bi-level stairway lighting systems, and kitchen demand controlled exhaust hood ventilation controls. Additionally in 2008, the partnership began collaboration with IOU food service technology groups to expand energy efficiency in campus cafeterias. This effort was expanded in the 2010-2012 program cycle extensively with UC campuses. The plan for the 2013 - 2014 partnership is to expand the successes at the UC campuses to the CSU campuses.

- m) Integrated/coordinated Demand Side Management.
- n) <u>Integration across resource types</u> (energy, water, air quality, etc): .
- o) Pilots:

No pilots proposed at this time.

p) EM&V:

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 - 2014 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.

1. **Program Name:** State of California/IOU Statewide Energy Efficiency Partnership

Program ID: SCG 3741

Program Type: Institutional Partnership

2. Projected Program Budget Table

Program #	Main/Sub Program Name	Administrative Amount	Marketing Amount	Direct Implementation Amount	Incentive Amount	Total Program Budget Amount
	Local Institutional Partnership Programs					
3741	LinstP-State of CA/IOU Partnership	\$158,983	\$122,433	\$264,301	\$0	\$545,717
	TO	AL: \$158,983	\$122,433	\$264,301	\$0	\$545,717

3. Program Description

a) Describe Program

SoCalGas and the State of California are collaborating to continue the State of California/Investor-Owned Utilities (IOU) Energy Efficiency Partnership program for the 2013 - 2014 program cycle. This program's goals include sharing energy efficiency (EE) best practices and implementing projects to capture immediate and long-term energy savings.

The program will assist the state's agencies to reduce the amount of energy they purchase from the grid by 20 percent by the year 2015, as required by the governor's Executive Order S-20-04 (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 environmental agenda.

Accompanying the GBI is the Green Building Action Plan (GBAP), which contains detailed instructions on how to achieve the mandated energy savings and reduction in demand. In addition to requiring all new construction and large renovations to meet Leadership in Energy and Environmental Design (LEED) silver certification requirements, the GBAP directs the state to benchmark, retro-commission, and retrofit its existing building stock.

The objective of the State of California/IOU Partnership program 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 retro-commissioning and retrofits by leveraging IOU incentive programs. In addition to financial benefits, the partnership provides a mechanism for the State to receive technical assistance from IOU staff and consultants. The partnership assists state agencies to comply with Executive Order S-20-04, the California Public Utilities Commission (CPUC) Decision 05-09-043, and the IOUs' CPUC-approved energy efficiency and demand response programs.

Program activities will operate on a statewide, integrated basis, focusing on the development and implementation of projects that will provide immediate energy savings and set the foundation for a long-term partnership that focuses on sustainability and best practices. SCG will provide integrated audits to government partners where cost effective and reasonable, ensuring coordination between programs and utilities for information sharing.

This partnership will seek opportunities to coordinate and integrate projects with other demand side management (DSM) programs and will provide a comprehensive approach by including retrofits and DSM alternatives that include demand-response, distributed generation (renewable self-generation), solar hot water, and the energy efficiency related elements of water conservation.

b) List Measures

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
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 core
System Approach - Light Power Density	\$ 0.10 above core
System Approach - Chillers	\$ 0.10 above core
System Approach - Daylighting	\$ 0.10 above core
System Approach - HVAC Energy Reduction	\$ 0.10 above core

c) List non-incentive customer services

The partnership shall provide the following non-incentive services:

- g. Audit services
- h. Technical assistance
- i. Training and education
- j. Design assistance
- k. Due diligence project review
- 1. Outreach activities

4. Program Rationale and Expected Outcome

d) Quantitative Baseline and Market Transformation Information:

	Baseline Metric			
	Metric A Metric B Metric C			
Program/Element	N/A	N/A	N/A	

Refer to the overarching PIP section.

e) Market Transformation Information:

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section.

f) Program Design to Overcome Barriers:

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. With this size and diversity comes an opportunity to save energy and energy costs on a scale that is significant to the IOUs and to California taxpayers. In the 2006-08 and 2010-2012 program cycles, the partnership allowed the State and IOUs to remove many barriers and achieve some milestones that include:

- Barrier: 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 allowed the partnership to have the proper sponsorship that provides enablement for the Department of General Services (as the state's primary procurement agency) and cooperation from each of the 36 agencies.
- Barrier: Project Delivery 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: A model contract between the state and an Energy Service Company (ESCO) was developed and approved.
- Solution: A list of qualified ESCOs is being used during the selection process.
- Solution: An ESCO Request for Proposals has been developed and the first round of projects is out for bid. A list of projects has been created for the project approval process.
- Barrier: Project Funding Constraints With the challenges the state is facing with their budgetary constraints, great opportunities for energy efficiency projects are not easily addressed.
 - Solution: The IOUs On-Bill Financing Programs are either being implemented or developed as a way of financing smaller retrofit and modernization upgrades.
 - o Increase purview of CEC loans to incorporate "other" State facilities.
 - o Performance contracting with ESCOs
 - o On-Bill Financing program
 - o Additional innovative financing options
- Barrier: Information Dissemination Some of the agencies lack the technical
 expertise to develop or manage projects. Therefore the state loses out on
 opportunities to improve efficiency when staff is unaware of available technology
 and measures or a lack of funds, or lack of management support causes the
 removal of such measures from a project.
 - Solution: The management team is currently developing an information tool for agencies that helps reveal the savings potential of implementing projects with likely energy efficiency measures that may appear in agencies' typical facilities. This is meant to appeal to the facilities managers or decision makers and allow the IOU to perform detailed energy audits that eventually lends itself to a project proposal.
- Barrier: Gap in ESCO Process and Small Projects The prior program cycle revealed to the management team that while the ESCO process works for the larger projects, smaller projects cannot pass the Life-Cycle Cost Analysis and the ESCOs do not find the projects attractive. 95% of the state's building inventory is under 25,000 sq. ft. which indicates the majority of the projects are smaller.
 - 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 the On-Bill Financing program. 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: Specific agencies who partake in EE projects are unable to delegate utility incentives to their internal budgets

- Solution: Work with 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: The State of CA and unfunded mandates Solution:
 - o State of CA to assign funding for specific energy efficiency projects.
 - o Increase purview of state agencies under CEC loans.
- g) Quantitative Program Targets: .

See Master Section

h) Advancing Strategic Plan goals and objectives:

The California Long-Term Energy Efficiency Strategic Plan (Strategic Plan) sets forth a statewide roadmap to maximized achievement of cost—effective energy efficiency in California's electricity and natural gas sectors between 2009 and 2020, and beyond.

5. Program Implementation

- a) Statewide IOU Coordination:
 - i) Program Name

The State of California/IOU Energy Efficiency Partnership Program

ii) Program Delivery Mechanisms

Delivery mechanisms, program elements and subcontractor activities are detailed above in Master PIP Section 4, a.

The State of CA is unique in the fact that it utilizes benchmarking systems for project identification.

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.

• 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.

iii) Incentive Levels

- a. Lighting projects-\$0.15/kWh
- b. Motors/VFDs/Compressors/Others \$0.18/kWh
- c. HVAC projects with electrical savings \$0.24/kWh
- d. All gas savings \$1.00/Therm
- e. New construction projects \$0.10/kWh above core SBD rates.
- 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,

Key Activity	Description	
	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 retrocommissioning, 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, ARB, 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 to make the transactional experience for the state agencies seamless and transparent. Where the IOUs differ in their implementation strategies, the state agencies are educated and 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) Program delivery and coordination:

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

See Master PIP Section

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 working with individual state agencies that may have the resources or commitment to implement energy efficiency projects.

v. Non-energy activities of program

Non energy activities include the technical assistance the partner may need but do no 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.

vi. Non-IOU Programs

The partnership understands that some third-party programs serve the purpose of filling program gaps. The IOUs sees this as an added value to the program offering and makes the effort of augmenting the program's offering with these non-IOU programs.

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

N/A

ix. Non-utility market initiatives

N/A

c) Best Practices

See Master Section PIP

d) <u>Innovation</u>:

There are several innovative models currently being developed. They include:

• 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.

e) Integrated/coordinated Demand Side Management:

See Master Section PIP

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

N/A

g) Pilots:

The State of California Partnership program is exploring different options for program delivery models that may fill gaps in program design. While the Retro-commissioning and ESCO process may work for larger projects, a solutions package for the small retrofit and modernization project is needed for the majority of the projects. The partnership program is currently underway with pilot projects that address the project development and financial barriers. These pilot projects are as follows:

• 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.

h) EM&V:

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 - 2014 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.

- 6. Diagram of Program:
- 7. Program Logic Model

CCC Program Diagram Table A1 – CCC Outreach Process

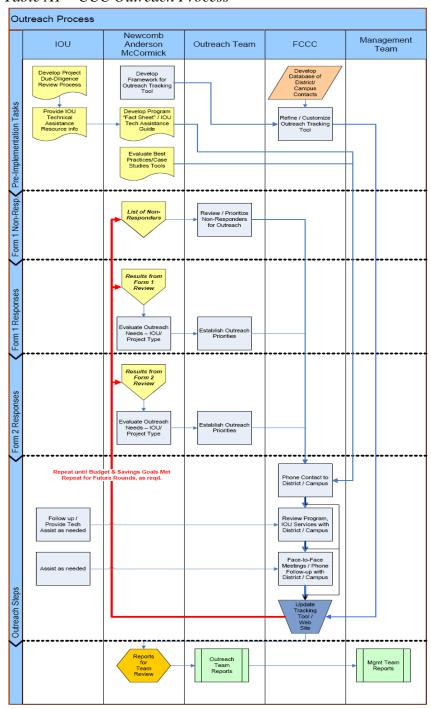


Table A2 – CCC EE Project Proposal and Approval Process

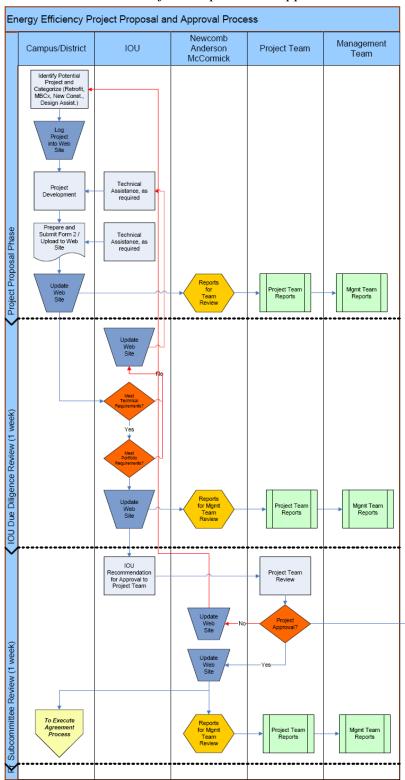


Table A3 – CCC Execution of Project Agreement

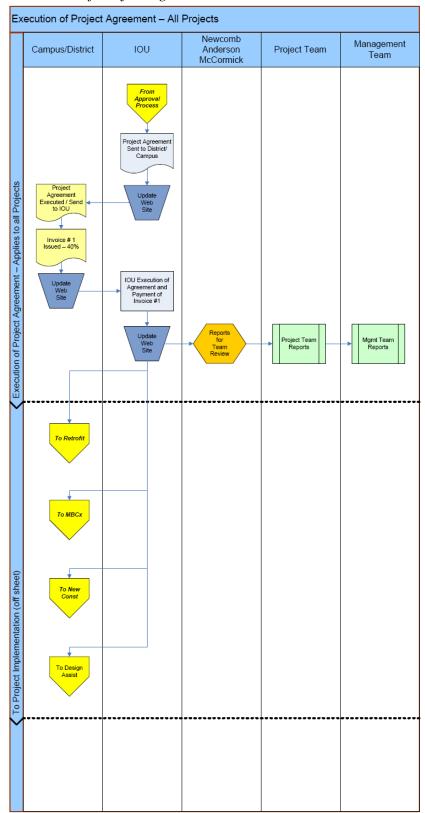


Table A4 – Retrofit Program Implementation Process

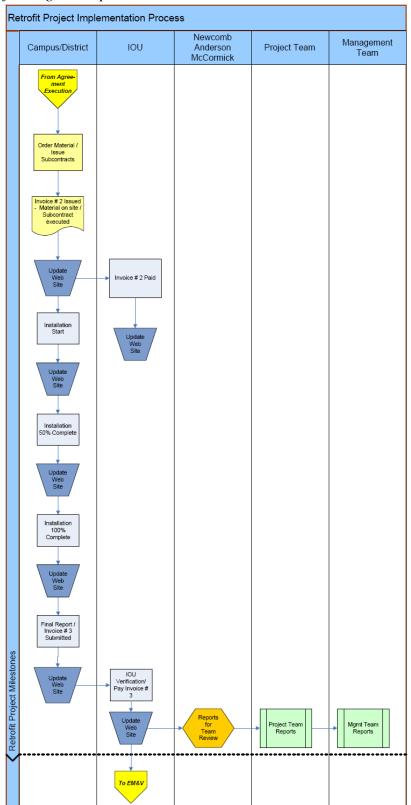
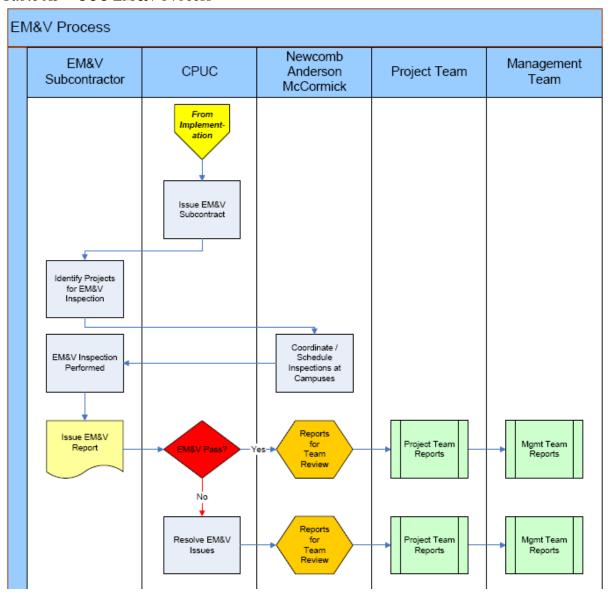


Table A5 – CCC EM&V Process



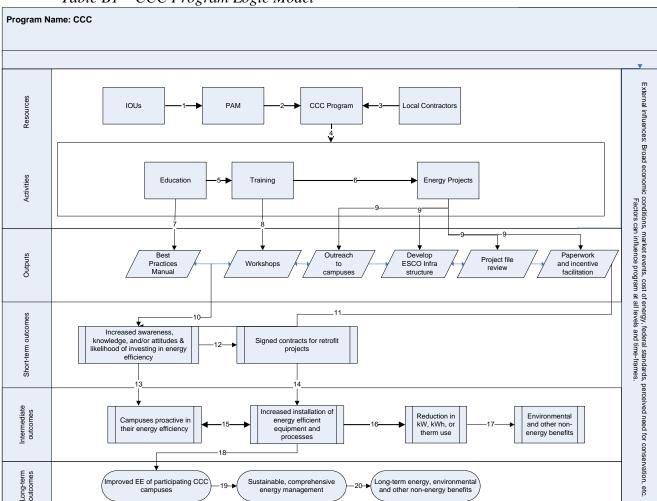


Table B1 – CCC Program Logic Model

Table B2 – CCC Logic Model

Review / Prioritize Non-Responders for Outreach



Outreach Team Review / Approve



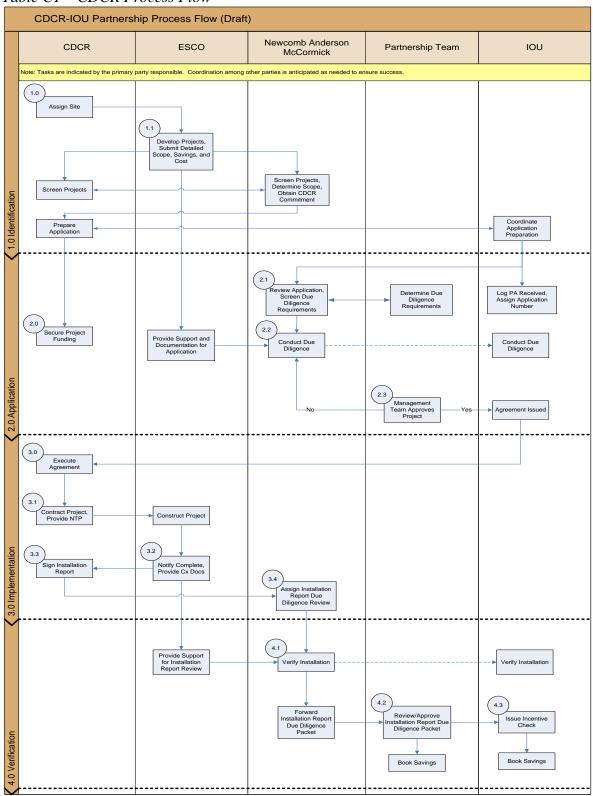
Results from Form 2 Review





Legend			
Symbol	Description		
	Process		
	Document		
	Team Review Report		
0	Report Preparation		
\bigcirc	Off-page reference		
	Update Web Site		
\langle	Decision		

Table C1 – CDCR Process Flow





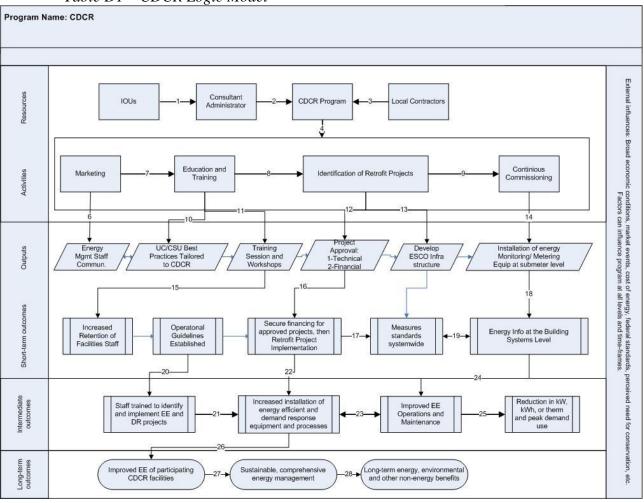
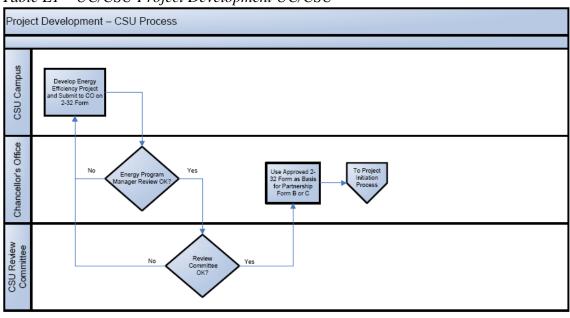
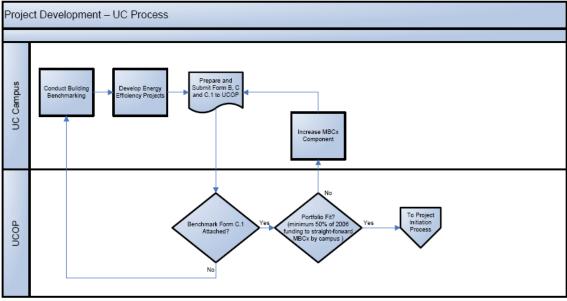
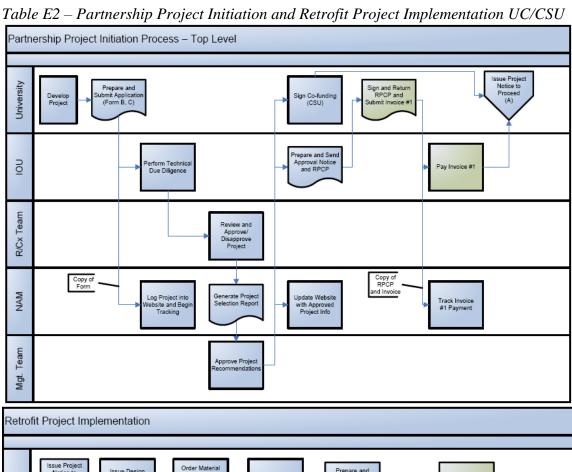
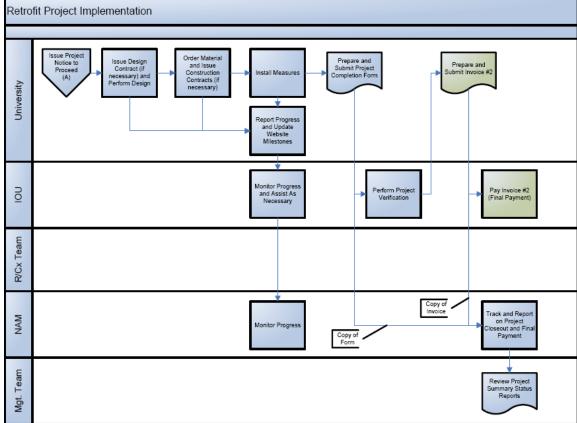


Table E1 – UC/CSU Project Development UC/CSU









MBCx Project Implementation UC/CSU

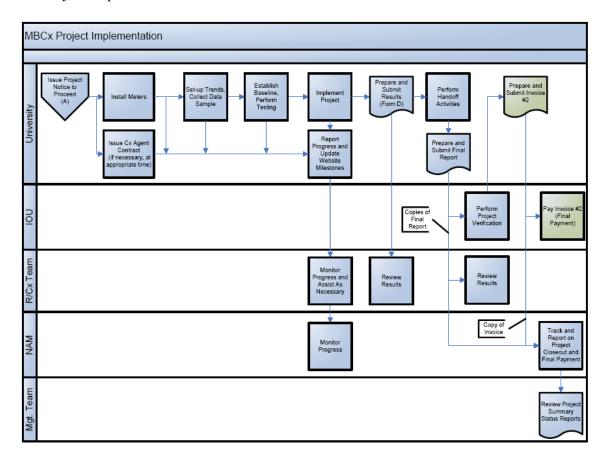


Table F1 – UC/CSU Program Logic Model

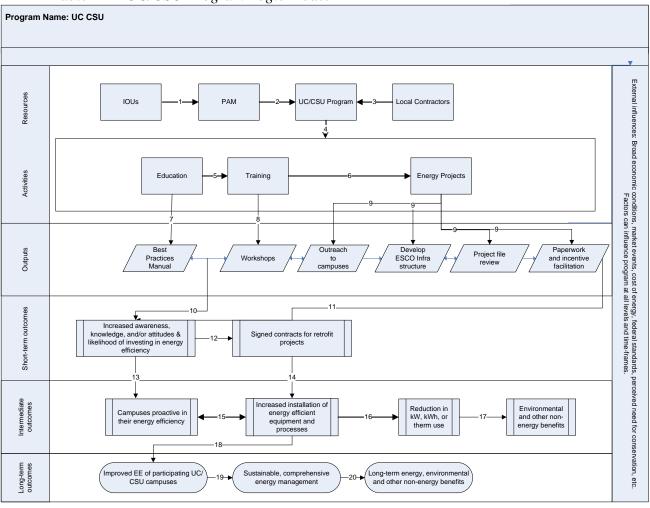


Table G1 – State of California Roadmap

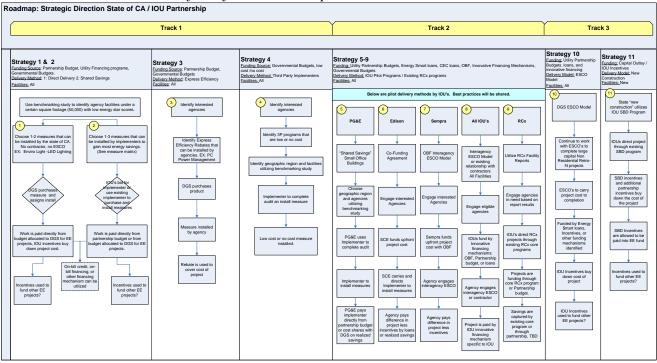
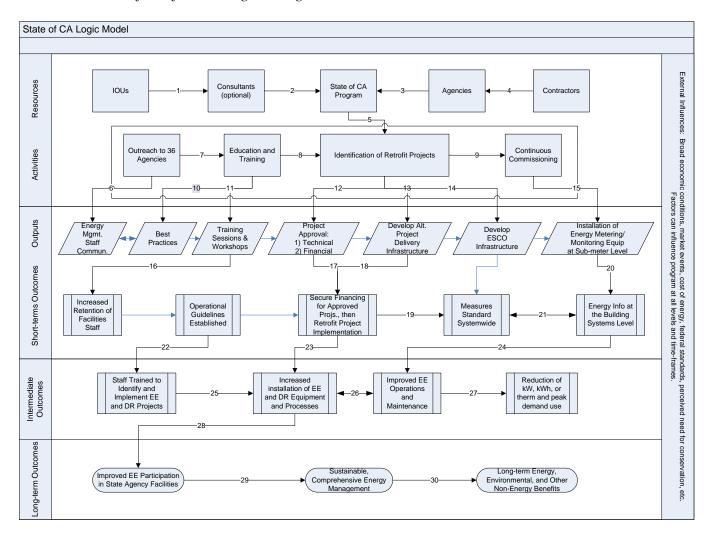


Table G2 – State of California Measure Matrix

State of CA Measure Matrix and Timeline			
Ű.	3 Months	3-6 Months	
IOU's would contract directly with the Manufacturer for Installation - incentive would offset cost of product and installation		IOU's would contract directly with the Manufactur would offset cost of product and	
Technology	Estimated Length of Installation	Technology	Estimated Installation Time
Vending Machine Controls	2-3 Months	Occupancy Sensors	4 Months
PC Network Software	1-3 Months	CFL replacement	4-5 Months
LED Exit Signs	3 Months	Steam Traps	5-6 Months
Storage Water Heaters	1-3 Months	Server Virtualization	4-5 Months
Examples of A	gencies to Participate	Domestic Hot Water Boilers	5-6 Months
	DHS	Fume Hood Occupancy Sensors	3-6 Months
DOM		Furnaces	3-6 Months
DDS		Building Envelope (Insulation, Window Treatmetns	3-6 Months
DMH		Food Service Equipment Replacement	3-6 Months
Fairs and Expos		Examples of Agencies to Participate	
	Cal Trans	DMV	
	BOE	СНР	
DGS		DMH	
State Compensenation Ins. Fund		DDS	
		Cal Trans	
		DHS	
		Fairs and Expos	
		DGS	
		Courts	

State of California Program Logic Model



1. Program Name: Local Government Partnerships

Program ID: Various

Program Type: Local Government Partnership

Southern California Gas Company's (SoCalGas) Local Government Partnership Programs for the 2013-2014 Transition Period is complex and multi-dimensional in various ways that SoCalGas initiated with the work in its 2010 - 2012 portfolio. First, local governments are a distinct customer segment that operates with their own unique challenges and needs related to energy efficiency. Second, local governments also serve as a delivery channel for specific products and services when they serve as Local Government Partnerships. Finally, local governments have a unique role as leaders of their communities. Increasingly, local governments are interpreting their moral responsibility for community well-being to include reducing greenhouse gas (GHG) emissions, increasing renewable energy usage, protecting air quality, creating green jobs, and making the community more livable and sustainable.

In response to the Commissions directive to continue "successful" government partnerships, SoCalGas hosted a public external stakeholder meeting with labor groups, environmentalists, academics, LGP's and others to seek input on our programs. A follow-up webinar with participants was conducted to share the results from the meeting. SoCalGas has partnered with SCE to further engage with their LGP's through meetings to seek partner feedback on their accomplishments, municipal and community needs as well as discuss success criteria. Through this open and collaborative process, SoCalGas and SCE were able to share feedback and conclusions through a webinar with their partners, and members of LGSEC. After completing a critical and comprehensive review of all the programmatic activities each local government partner engaged in, SoCalGas and SCE developed the following list of success criteria that was applied across each partnership concentrating on Government Facilities, Core Program

Coordination/Implementation and Strategic Plan Menu Support:

- 1. Did the Partnership complete audits and other project opportunity identification initiatives to plan municipal retrofits?
- 2. Did the Partnership complete retrofits and substantially achieve cost-effective energy savings goals for municipal facilities?
- 3. Did the Partnership conduct community events that increased community awareness of EE/DR/DG opportunities and participation in EE programs/
- 4. Did the Partnership leverage the local government relationships and communications with the community to increase participation for core programs?
- 5. Did the Partnership leverage local government authority in advancing strategic plan goals including, but not limited to the following:
 - a. Codes and Standard training
 - b. Reach codes
 - c. Climate Action Plans and Energy Action Plans
 - d. Energy Management Systems/Enterprise Energy Management
 - e. Energy policies

Ensuring Continued Partnerships Meet Success Criteria

The five (5) identified success criteria represent what SoCalGas and SCE felt were the core components that should be present in any Partnership. In the course of critically evaluating each partnerships programmatic activities, it also became apparent that not only do these criteria represent what a successful partnership looks like, but that these criteria are the progeny of the unique collaborative relationship present in our service territory, as such, the aggregate value of these criteria applied across the scope of the LGP program is greater than the sum of each individual partners contribution. To that end, the following provides details on how the LGP program and its individual partners will continue to meet the criteria identified above.

Looking across the Program, each Partnership is anticipated to complete the targeted goals set forth in the 2010-2012 program cycle, and has thus been identified as a "successful" Partnership to continue in the 2013-2014 Transition Period. Moving forward, the LGP program will be working toward meeting the mid-term goals identified in the Energy Efficiency Strategic Plan, building off the success and momentum established during the 2010-2012 cycle.

SCE and SoCalGas have identified separate set of criteria to address our interest in expanding local government programs. The IOU's developed the following list of expansion criteria that will be applied across each partnership that is included into the program in 2013-14. Partnerships will address the following priority areas:

- 1. Deeper retrofits within
- 2. Workforce education and training
- 3. Codes and Standards enforcement and training
- 4. Emerging technologies deployment
- 5. Water/Energy Nexus

Further consideration will be taken on what additional resources will the Partnerships leverage to implement the expansion and address how the expanded Partnership complements existing Partnership efforts. SoCalGas has also been collaborating with PG&E, and will share the same criteria for those partnerships that are shared with PG&E.

The Government Partnership program is designed to reach local governments in all of their roles. Depending upon the activity, SoCalGas may play a different role with the local government, ranging from service provider to supporter to equal partner. Local governments increasingly engage in strategic planning for GHG reduction not only in their facilities (represented in the municipal GHG inventory) but also in the community (analyzed in the community GHG emissions inventory). Opportunities increase for partnerships with utilities to meet mutual goals of energy reduction. Some of the key programs which LGPs will support in 2013-14 include EUC workforce Education and Training, and Business Improvement Districts. These governments can not only coordinate and integrate demand-side management (DSM) opportunities in each sector or market they influence, but also effectively leverage and promulgate low-income offerings.

SoCalGas will develop a marketing plan and marketing collateral based on customer segmentation work and research to support outreach efforts. This customer segmentation will help SoCalGas develop an understanding of customers' needs and respond accordingly with products and services that customer's want. The segmentation analysis looks at what the customer requires and how the customer is engaged with SoCalGas. SoCalGas will use many delivery channels and marketing and outreach approaches to effectively reach customers. This will include a team of SoCalGas experts and industry professionals, varying by market subsegment, to deliver integrated offerings to the customer.

Expansion of Local Government Partnerships

In the effort to expand on SoCalGas' success of their local government partnerships the LGP's will concentrate on several areas deemed necessary. LGP's will continue to promote EUC, a one-stop-shop for home improvement projects that lower energy use, conserve water and natural resources, and makes residences healthier and more comfortable. Deep energy retrofits will be a priority in the 2013-2014 program cycle. A deep energy retrofit is a whole-building analysis and construction process that uses integrative design to achieve much larger energy savings than conventional energy retrofits. Deep energy retrofits can be applied to both residential and non-residential ("commercial") buildings.

Other Expansion Opportunities will include closing the gap between partnerships that currently have partnerships with SCE and adopting those partners into SoCalGas LGP program in 2013-14 transition period. SoCalGas has initiated discussions with several potential new partners which are currently in partnerships with SCE. Our goal is to complete the first round of discussions by the end of January, and to have draft agreements to new partners by the end of February 2013. Upon reaching firm agreements with new partners, SoCalGas will submit an advice filing specifying details of the new partnerships including their PIPs. Design for new PIPs will be consistent with CPUC guidance including comprehensive and deep retrofits.

SoCalGas has listened to feedback received from LGPs on needs which they face for being able to move forward with projects. The majority of local governments struggle with securing energy/sustainability resources, and current budget conditions make the availability of such resources unlikely for the foreseeable future. Limited staff, specific skills and geographical constraints limit local government's ability to engage in hands on energy efficiency.

SoCalGas intends to start building resources to fill the noted gaps through a "virtual center" approach as an expansion to our current Local Government Partnership program offerings. The Program will commence in one region initially with the intent to roll out service territory wide in 2013-14 program cycle. The program will support local governments (both partners and non-partners) and intends to drive increased comprehensive energy efficiency and will create deep energy savings by local governments by complimenting and leveraging resources as well as filling gaps that currently exist within local government organizations, CEC, PUC and SoCalGas energy efficiency programs. These gaps prevent local government from successfully implementing higher value energy efficiency projects that demonstrate energy efficiency leadership to the community and increase community wide energy efficiency participation.

Lessons learned from past partnership initiatives have identified the need for improvement in resources that provide cost-effective, on demand energy management services, and expertise to enable local governments to create responsive, sustainable, and widespread public sector energy management results.

The "virtual center" approach will provide turnkey resources through hands on support, results oriented energy management, and augmenting existing Local Government Partnerships. A suite of resources shall include project management support, engineering and analytical support, library of boiler plate agreements and templates that can support local government with the RFP process as well as assistance securing financing from various sources. Providing these resources will result in improved energy management activity and increased program participation through energy efficiency and financing programs.

2. Projected Program Budget Table

Table 1

Program #	Main/Sub Program Name		Administrative Amount	Marketing Amount	Direct Implementation Amount	Incentive Amount	Total Program Budget Amount
	Local Government Partnership Programs	S					
3742	LGP-LA Co Partnership		\$74,419	\$43,431	\$316,096	\$0	\$433,946
3743	LGP-Kern Co Partnership		\$55,609	\$30,446	\$122,408	\$0	\$208,464
3744	LGP-Riverside Co Partnership		\$54,022	\$39,305	\$200,790	\$0	\$294,117
3745	LGP-San Bernardino Co Partnership		\$60,799	\$38,305	\$190,613	\$0	\$289,717
3746	LGP-Santa Barbara Co Partnership		\$90,384	\$54,461	\$84,449	\$0	\$229,294
3747	LGP-South Bay Cities Partnership		\$73,335	\$26,866	\$207,731	\$0	\$307,932
3748	LGP-San Luis Obispo Co Partnership		\$81,878	\$47,594	\$85,091	\$0	\$214,563
3749	LGP-San Joaquin Valley Partnership		\$64,732	\$32,033	\$97,524	\$0	\$194,289
3750	LGP-Orange Co Partnership		\$67,438	\$32,999	\$171,500	\$0	\$271,938
3751	LGP-SEEC Partnership		\$46,659	\$24,200	\$224,535	\$0	\$295,394
3752	LGP-Community Energy Partnership		\$78,632	\$41,305	\$132,710	\$0	\$252,647
3753	LGP-Desert Cities Partnership		\$10,634	\$12,328	\$27,638	\$0	\$50,600
3754	LGP-Ventura County Partnership		\$99,378	\$33,058	\$203,725	\$0	\$336,161
3755	LGP-Regional Energy Efficiency Pilots		\$0	\$0	\$0	\$0	\$0
3773	LGP-New Partnership Programs		\$1,006,498	\$534,364	\$1,247,037	\$0	\$2,787,899
3774	LGP-LG Regional Resource Placeholder		\$93,194	\$40,000	\$511,673	\$0	\$644,867
		TOTAL:	\$1,957,612	\$1,030,695	\$3,823,522	\$0	\$6,811,829

Note: SoCalGas LGP programs are non-resource; therefore, the above table indicates \$0 for the incentive. LGPs will funnel projects to Incentive and Rebate Programs.

3. Program Element Description and Implementation Plan

This LGP Master PIP describes each of the program elements listed below. The Master PIP discusses the major program elements of Government Facilities, California Long Term Energy Efficiency Strategic Plan (Strategic Plan) Support, and Core Program Coordination in an overarching context in sections 4 - 6. Following the Master PIP discussion are sub-PIPs (which also cover sections 4 - 6) for the additional unique program elements for each of the individual Local Government Partnerships. The sub-PIPs also discuss the three major program elements (Government Facilities, Strategic Plan Support, and Core Program Coordination). The sub-PIPs

for individual LGPs provide details regarding any targeted or distinct aspects of the three main elements as they relate to that particular LGP.

Program Element			
A. Governn	nent Facilities		
	A1 – Deep Retrofit of County and Municipal		
	Buildings		
	A2 - Retro-commissioning		
	A3 - Integrating Demand Response		
	A4 - Technical Assistance		
	A5 - On-Bill Financing		
B. Strategic	Plan Support		
	B1 - Code Compliance		
	B2 - Reach Code Support		
	B3 - Guiding Document Support		
	B4 - Financing for the Community		
B5 - Peer to Peer Support			
C. Core Pro	gram Coordination		
	C1- Outreach Education		
	C2 - Third Party Program Coordination		
	C3- Technical Assistance		
D. Local Go	D. Local Government Regional Resource Program-		
(Unique Program Element)			
E. Individual Local Government Partnerships			

Element A - Government Facilities

4 – Program Element Description and Implementation Plan – Element A - Government Facilities

A. Government Facilities		
	A1 – Deep Retrofit	
	A2 - Retro-commissioning	
	A3 - Integrating Demand Response	
	A4 - Technical Assistance	
	A5 - On-Bill Financing	

Overview

The Government Facilities element will be implemented by most of the unique individual Local Government Partners (LGPs). This section (4A-6A) describes the standard overview, rationale, outcomes, and barriers associated with the Government Facilities element by an LGP. If an individual LGP has a distinctive or targeted approach to Government Facilities, that LGP's individual PIP will contain additional information. The individual LGPs will primarily target

local government facilities/sites that are owned or leased by public agencies including city halls, administrative offices, recreation centers, fire stations, libraries.

Individual LGPs play an important role in assisting local governments (cities, counties and special districts) with retrofitting the facilities that they own and operate to achieve short and long term energy savings. While all local governments have access to SoCalGas programs and incentives to save energy, SoCalGas Government Partnership Program will work closely with the LGPs to build local capacities to achieve deep retrofits in government facilities' energy savings and to place these projects in the context of sustainability and climate change initiatives.

Approaching efficiency through deep retrofits in government facilities in this way not only achieves short and long term energy savings, it also demonstrates a commitment to energy efficiency to the local government's constituents and the community at large. This, in turn, enables government partnerships to become champions for energy efficiency programs and other utility programs to further reduce usage in their communities. Additionally, a comprehensive approach to government facilities will be an important step to addressing Assembly Bill 32 (AB32) and other statewide or local GHG reduction requirements.

This program element will include five sub-elements: Deep retrofits for Government Facilities, Government Facilities Retro-commissioning, support Integrated Demand Response, provide Technical Assistance, and On-Bill Financing.

A1 - Retrofits: Local Government Partnerships which choose to include a Government Facilities Retrofit element in their programs will achieve energy savings by providing technical, financial, managerial and administrative support to the government actor (usually a facilities manager) who initiates and implements deep energy-efficiency retrofit projects. Sometimes this entity is the same as the Partner, and other times it is a different entity. The degree of assistance provided will be tailored to each agency's needs, taking into account for energy savings potential, cost effectiveness, level of commitment, available funds and in-house technical expertise. This program element will be leveraged by and integrated with other programs such as retro-commissioning, supporting demand response and self-generation as appropriate to achieve comprehensive impacts while minimizing lost opportunities.

Energy savings will be based on measures installed, e.g., retrofitted. Measures include, but are not limited to, the following:

Measure End Use Types Planned
Boiler System Retrofits, Boiler
Control
HVAC, Economizer
Water Heating, Solar Thermal
Natural Gas Water Pumps
Other

A2 - Retro-commissioning (RCx): Local Government Partnerships which choose to include a Government Facilities Retro-commissioning element in their programs will provide similar services as those described above for retrofits. RCx is a systematic process for identifying less-than-optimal performance in an existing building's equipment, lighting, and control systems and making necessary adjustments. Whereas retrofitting involves replacing outdated equipment, RCx focuses on improving the efficiency of what is already in place. RCx will serve as a process for identifying opportunities for deep retrofits. As mentioned in A1, by bundling RCx with retrofits and other comprehensive options, the customer will optimize their efficiency and get the best bang for the buck.

Measures include but are not limited to the following:

Measure End Use Types Planned		
Boilers		
HVAC controls and tune up		
Water Heating		
Other		

A3 – Integrating Demand Response: LGPs will determine demand response (DR) potential in the course of comprehensively evaluating sites for energy efficiency retrofit and retrocommissioning opportunities. DR will be integrated with energy efficiency and referrals to DR programs will be made as appropriate. In addition to DR programs, partnerships will continue to identify self-generation opportunities. SoCalGas will work with the Partnerships to ensure that comprehensive packages are made available to the local governments within that Partnership, including, for example a menu of DR options. The LGP will promote offerings through an integrated marketing collateral and sales approach. With additional market segmentation and feedback from customers, the utilities will adjust approaches in order to offer the combination of programs to best meet the varied needs of customers. The goal is to integrate offerings through building auditing and assessment, marketing materials and the strategic sales approach.

A4 - Technical Assistance:

While SoCalGas makes technical assistance available to all governments, the LGPs will have targeted resources to provide technical assistance to the agencies within each LGP's geographic area. This assistance is an integral component of LGP administered energy efficiency programs and may take the form of engineering audits, equipment specifications, engineering and cost-effectiveness calculations, field inspections, and equipment testing and analysis, and is an integral component of LGP-administered energy efficiency programs. Partnerships will provide technical support for developing, packaging and completing energy-efficient retrofit projects. Additionally, SoCalGas will provide partnerships with training and access to benchmarking technology such as the USEPA/Energy Star Benchmarking tool to identify the government facilities with the highest potential. Partnerships will also provide resources for city staff training and certification in the following; Building Operator Certification, Certified Energy Management, LEED accreditation, Green Point rated and other applicable trainings. This training will serve to build knowledge of energy management and resource conservation within the LGP.

A5 - On-Bill Financing

On-Bill Financing (OBF) will be offered to local governments for the qualified energy efficiency projects. In addition to OBF, LGPs may utilize other financing options such as CEC loans or municipal bonds as well as other state/federal grant programs.

Target Audience

A1 – Retrofit

The target audience is Government Facilities, which can include municipal administration buildings as defined by NAICS 3 such as:

City Libraries

Fire Stations

County Medical Hospitals

County Correctional Facilities

Police Stations

Municipal Teen Centers

Municipal Recreation Centers

City/ County Museums

Municipal Animal Shelters

Public Works Department Facilities

Municipal Water Agencies

Municipal Transit Agencies

A2 – Retro-commissioning

Same as A1

A3- Integrating Demand Response

Same as A1

A4 – Technical Assistance

Technical assistance associated with government facility retrofits will be targeted at the appropriate city staff including Department of Public Works, Energy Office, Department of Building Inspection, Department of the Environment, etc. While each partnership might vary slightly, the key target audience will be energy managers.

A5 – On-Bill Financing

SoCalGas offers zero percent financing to eligible customers with up to \$250,000 per meter for taxpayer-funded institutional customers (e.g., cities, counties, other public agencies, etc.) and \$100,000 per meter for non-institutional customers.

Implementation

A1 – Retrofit

The LGPs will offer a comprehensive portfolio of energy efficiency programs that target deep retrofits in municipal facilities. By partnering with local governments, Partnerships are well positioned to promote energy efficiency in their communities. Retrofit program offerings will include energy audits, calculated and prescriptive rebates, and direct installation of a comprehensive portfolio of measures. To promote this program element, Partnerships will distribute throughout their networks marketing materials and information that is well coordinated with utility and statewide marketing plans. The Partnerships will also leverage their community relationships as well as community based organizations and associations. Partnerships may also directly market to municipal and special district staffs and engage key stake holders within the local government and the community. Partnerships will work to achieve both immediate and comprehensive, long-term energy savings. Energy efficiency strategies and measures will be coordinated throughout municipal departments to streamline implementation. Partnerships will implement energy efficiency by providing comprehensive assessments, conservation measures and training and education to the local governments.

A2 – Retro-commissioning (RCx)

LGPs with a Government Facilities Retrofit element may choose to include a Government Facilities RCx program element. Such LGPs will perform field-based functional tests at the building system and/or building subsystem level to identify RCx opportunities that will deliver energy and demand savings. Each Partnership will tailor minimum criteria (as developed by SoCalGas) to identify RCx projects that will deliver the most savings. Each potential project will be assessed by technical feasibility and cost effectiveness. Preliminary investigation of a site's potential will include on-site equipment testing, monitoring, and/or verifying proper operation and calibration of a sample of the building systems and/or building sub-systems to be included in the proposed RCx projects.

A3- Integrating Demand Response

In evaluating opportunities in government facilities, Government Partnerships will also determine demand response potential. LGPs will make referrals to demand response programs as appropriate. In addition to demand response programs, partnerships will continue to identify self-generation. Refer to the Integration PIP for more detailed information.

A4 – Technical Assistance

Assistance will be tailored to each agency's needs, scaled to the potential energy savings and level of commitment of the participating agency, and strategically applied to leverage the most savings from available resources. Technical assistance may also include education and training, support for peer networking to support best practices, team building and staff training.

A5 – On-Bill Financing

Refer to the On-Bill Financing section included in Testimony Chapter 3

- 5 Program Element Rationale and Expected Outcome Element A Government Facilities
 - a) Quantitative Baseline and Market Transformation Information

Market Transformation (MT) metrics proposed in Tables 2 and 3 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." 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 technologies².

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 structures³. Markets are social institutions⁴, 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 chains⁵ 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 progress⁶. According to York⁷, "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

¹ California Public Utilities Commission Decision, D.98-04-063, Appendix A.

² California Public Utilities Commission (2008) *California Long Term Energy Efficiency Strategic Plan*, p. 5. Available at http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf

³ 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

⁴ 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/

⁵ 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.

⁶ 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 Ruildings*

⁷ York, D., (1999). "A Discussion and Critique of Market Transformation", Energy Center of Wisconsin. Available at http://www.ecw.org/ecwresults/186-1.pdf.

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 transformation⁸. 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 theory⁹, with the state of a market usually characterized by adoption rate plotted against time on the well-known Sshaped diffusion curve. In practice, however, the diffusion curve of products may span decades¹⁰. Market share tracking studies conducted 3, 5 or even 10 years after the start of an MT program may reveal only small market transformation effects¹¹. 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.)¹²" The Strategic Plan recognizes that regulatory policies are not yet in place to support the success of market transformation efforts ¹³, 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.

⁸ 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

⁹ Rogers (1995) Diffusion of Innovations, 5th Ed.

¹⁰ Example in bottom chart of this graphic from NYTimes:

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

¹¹ Sebold et al (2001) p. 6-5,

¹² 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.

¹³ CPUC (2008) Strategic Plan, p. 5.

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 interventions¹⁴. 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 developers¹⁵ 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 2 and 3 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 Local Government Partnerships 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

_

¹⁴ Nadel, Thorne, Saches, Prindle & Elliot (2003).

¹⁵ Peloza & York, (1999).

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	
Energy Efficiency Action Plans	Baseline inventory of cities, counties and government institutions within the IOU territory 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	

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 3

	Internal Market Transformation Planning Estimates		
	2013	2014	
Baseline inventory of cities, counties and government institutions within the IOU territory 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.	Improvement over baseline, over time	Improvement over baseline, over time	
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	

- c) <u>Program Design to Overcome Barriers</u>: Refer to individual partnership PIP section.
- d) Quantitative Program Objectives:

Table 4

	Program Target by	Program Target by
Program/Element	2013	2014
Target #1	N/A	N/A
Target #2	N/A	N/A
Target #3	N/A	N/A
Target #4	N/A	N/A

Refer to individual partnership PIP section.

6 - Other Program Element Attributes- Element A - Government Facilities

Other Program Element Attributes	Government Facilities
a) Best Practices: Describe why program element approach constitutes "best practice" or reflects "lessons learned" in market strategies, program design and/or implementation techniques, or past experience. Provide references where available.	The approach to Local Government Facilities constitutes a best practice because it incorporates the lessons learned from past program cycles. SoCalGas has seen that, as local governments become champions for energy efficiency in their communities, there is an increased focus on leading by reducing energy use in municipal facilities. In line with the Strategic Plan, the 2013 - 2014program cycle will pave the path for a 20% reduction below 2003 levels by 2015 and 20% below levels by 2020.
b) Innovation: Describe any unique or innovative aspects of program element not previously discussed. Why is this innovative?	The Government Facilities program element incorporates innovative aspects of program design, as discussed above. These include benchmarking, community finance, and framing the facilities work within a climate action framework. Government Partnerships have used innovative solutions to address barriers. In using benchmarking technology and other technical assistance, Government Partnerships plan to prioritize the facilities that are best suited for retrofits. Additionally, each partnership will work to address potential barriers by sharing solutions and best practices. The Partnerships program will explore options for addressing financial barriers (e.g., support for California Energy Commission (CEC) loans and other funding opportunities) and support individual Partners that want to pilot new approaches, such earmarking energy savings in a separate fund to ensure that savings do not go back into the general fund.

Other Program Element Attributes	Government Facilities
c) Interagency Coordination: Describe any interagency coordination with the ARB, CEC on PIER or Codes and Standards; non-utility market initiatives; energy efficiency market forces, opportunities and trends; and timeline by which market segment will be "transformed" or other aspects of the program.	The Government Partnerships program will foster coordination in relation to government facilities efficiency, encouraging LGPs to make use of coordination resources including: O Participate in the CEC loan program for governments. CEC's Public Interest Energy Research (PIER) program "EPA Energy Star Low Carbon IT Campaign Ally" with their power management savings program. O Work with the ARB as well as other agencies to co-market materials, co-brand programs, etc.
d) Integrated/coordinated Demand Side Management: Describe how program will achieve integrated or coordinated delivery of all DSM options, as well as ESAP and WET. (If this is an integral part of the program element and fully covered under #4 note that here.) Describe in detail how program will achieve integrated or coordinated delivery of all DSM options (energy efficiency, demand response, and onsite generation) where applicable including integrated program design and delivery, shared budgets, program evaluation, and incentive mechanisms that promote greater integration of DSM resources. Provide a complete description for all the technologies, including integration supporting technologies that will be included in the program. If the program does not include all DSM options as noted above, briefly provide an explanation for a more limited subset of DSM technologies. Utilize Attachment 5A to highlight any shared or leveraged budget categories and amounts (admin, incentives, ME&O, and other applicable categories).	Partnerships will achieve coordinated delivery of DSM options. Some LGPs will achieve integration of all elements, while others will only integrate a few. The integrated elements will include: • Integrated energy audits will be offered to government facilities that show savings potential and are willing to commit to the additional time and financial investments. Standard energy efficiency audits will be offered to most 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 be continued to segment customers. • Demand response opportunities will be targeted in the larger facilities, particularly as part of monitoring-based retro-commissioning efforts where the controls to facilitate demand response

Other Program Element Attributes	Government Facilities
	efforts would be installed. • Coordination with ESAP to provide services to middle-income ("just above ESAP") customers.
e) Integration across resource types (energy, water, air quality, etc): If program aims to integrate across resources types, provide rationale and general approach. (If this is an integral part of the program element and fully covered under #4 note that here.) f) Pilots: Describe any pilot projects that are part of this program (If this was fully covered under #4, note that here.)	Government Partnerships will encourage conversations with other resource agencies including water, air quality and transportation authorities. The partnerships will enable individual LGPs to coordinate with other resource programs, such as water, waste, in achieving efficiencies in government facilities. Some of the Pilots may address government facility efficiency. Smaller pilots may be implemented by individual LGPs as part of their partnership activity. The Government partnership team intends to do an assessment of
g) EM&V: Describe any process evaluation or other evaluation efforts that will be undertaken by the utility to determine if the program is meeting its goals and objectives. Include the evaluation timeframe and brief description of scope, as well as a summary of specific methodologies, if already developed. If not developed, indicate the process for developing them. Include reference to tracking databases that will be used for evaluation purposes.	government facilities and may pilot new approaches as a result of this assessment. A process evaluation will be conducted by a third party evaluator. The evaluation will assess communication and coordination effectiveness between partners as well as satisfaction with the service and increased awareness of energy efficiency opportunities. A combination of interviews and focus groups will likely be used to collect data. The evaluation is expected to build upon results found in the recently completed process evaluation for PY2006 to 2008.

Element B - Strategic Plan Support

4 - Program Element Description and Implementation - Element B - Strategic Plan Support

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

Overview

The Strategic Plan Support element will be implemented primarily through various strategies described in the Menu of Local Government Strategies for the California Long-Term Energy Efficiency Strategic Plan. The ultimate goal for local governments in the Strategic Plan is to embed and institutionalize energy efficiency in their policies, programs and processes. Individual LGPs will also play an important role in furthering the strategic plan. This section (4B – 6B) describes the standard overview, rationale, outcomes, and barriers associated with an individual LGPs implementation of the Strategic Plan support element. If an individual LGP has a different or targeted approach to Government Facilities, that LGP's individual PIP will contain additional information.

It is important to note that individual Partners vary widely in terms of how appropriate and/or ready each Partner is to undertake activities related to supporting the Strategic Plan. The functions for Strategic Plan support are quite distinct (from codes to policy to finance). Given the diversity of entities serving as the individual LGP, some Partners can accommodate all of the distinct roles required for Strategic Plan support while others cannot.

The partners that directly represent a government entity will have different responsibilities and capabilities than those partners that represent a regional group. For example, governments are appropriate entities to enact policies including reach codes, GHG targets, and general plan updates, but regional groups are better positioned to perform broader functions such as developing regional plans. In cases where the individual Partner does not function as a leader for some or all of the Strategic Plan initiatives (codes, climate plans, financing, and peer support), the Partner can often still play a supporting role.

Partners exhibit varying readiness to engage in Strategic Plan activity. Some partners have very limited staff and budgets and may be engaging in energy efficiency and sustainability issues for the first time. Other partners have been working on these issues for several years and are among the leading municipalities in the country in their sustainability efforts. Therefore, the approach to achieve Strategic Plan initiatives will need to be tailored to suit the individual needs and capabilities of each Partner.

Local Government Partnerships will also implement, to varying degrees, aspects of the Strategic Plan Support element. The degree will depend on how far along the energy efficiency learning curve the partnership is. The Strategic Plan activities focus on long term change that will result in permanent, sustainable energy savings, and that draw on the unique capabilities of local governments, otherwise cannot be performed by other entities. This work should occur across departments so that energy efficiency practices become business as usual in planning, building, finance departments, public policy development and other functions of the local government agency.

The following section catalogs approaches and techniques that LGPs may choose to utilize to make constructive use of local government policies and services to promote community sustainability.

B1 - Code Compliance

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. LGP Code Compliance activities may include training local government staff that is charged with code compliance in coordination with SoCalGas Codes and Standards program or through training and education classes. LGP activity may also include developing and implementing certification programs for local inspectors and contractors. LGPs may assist with marketing in coordination with SoCalGas and statewide marketing activities, including advertising training opportunities to relevant trades, raising awareness of current codes among business and residential customers and encouraging compliance. Local Governments often have access to constituents through existing relationships and can use those routes to enhance or complement other energy efficiency marketing activities.

Please refer to the Codes and Standards PIP for further information.

B2 - Reach Code Support

The Reach Code Support sub-element will be implemented primarily through the Codes and Standards program. Some individual Partnerships may choose to include Reach Code activities to promote local codes that exceed Title 24 requirements. Again, all reach code support activity will be coordinated with the Codes and Standards program. Partnerships that include Reach Code activities could perform activities that range from training local government staff regarding adoption and implementation of model reach codes to establishing expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments. Examples could include green building standards for new construction and retrofits/retro-commissioning or carbon offset reduction programs that exceed Title 24. SoCalGas will provide training through its Education and Training program. LGPs may attend training and/or market the training to relevant trades, in coordination with utility and statewide marketing activities.

Please refer to the Codes and Standards PIP for further information.

B3- Guiding Document Support: This program element will help government's complete GHG emissions inventories and climate action plans in accordance with the process developed by ICLEI and help develop guiding documents that effectively and methodically reduce community energy consumption and GHG emissions. Those partnerships that include this program element could perform activities that range from quantifying a municipality's baseline energy use, to developing a climate action plan to reduce energy use to developing policies to be incorporated into a general plan.

Those partners who have not yet developed their baseline energy use could include activities to inventory their municipal operations and community GHG emissions that would support strategic planning to increase use of SoCalGas energy efficiency, demand response, renewables, and other applicable programs. Advanced Partnerships and the individual Partners with a more regional focus could develop local policy documents that could include energy elements in general plans, energy efficiency recommendations for new developments, energy-efficient equipment purchasing guidelines, community climate action plans, and analyses for energy conservation codes and ordinances targeting the private sector.

Advanced Partnerships and the individual Partners with a more regional focus may assist municipalities within their jurisdictions with energy policies. For example, they may develop Community Energy Policy Packages for adopting and implementing a local energy initiative. This package may include draft policy language, a recommendation for legal authority (ordinance versus policy document versus administrative mandate); guidance and checklist for successful implementation (including assigning policy implementation to a sympathetic city department); staff report guidelines and discussion on implementations issues (e.g., how to frame objectives, scope, triggering mechanisms, requirements, and enforcement strategies). These services may also include technical assistance for agencies pursuing adoption of local policies, and may include estimating local savings impacts, providing supporting calculations or analysis of staff reports, etc.

B4 - Financing for the Community

Some individual LGPs will implement some aspect of financing as part of their activity. A new program element will be offered to Partners to help governments explore financing opportunities such as low-interest loans through the California Energy Commission (CEC). The CEC's Energy Efficiency Financing Program provides financing for schools, hospitals and local governments through low-interest loans for feasibility studies and the installation of energy-saving measures. For those partners who include this program element, the Partnership could provide project financial analysis assistance to quantify energy efficiency project economics in terms understood by local government decision makers, and could assist facility engineering staff in presenting projects for approval. Assistance may include providing life cycle cost analysis and illustrating how energy efficiency investments can be structured to pay for themselves, while also freeing up resources through lower future facility operating costs.

B5 – Peer to Peer Support

Individual LGPs may participate in peer sharing forums and the quarterly partner networking events set up by SoCalGas. Individual LGPs may also set up their own networks for the

governments within their area. LGPs provide an opportunity to raise awareness among local government staff and create connections across departments to lay the groundwork for the long-term change that is laid out in the strategic plan. Peer to peer exchange is one method for building local government energy efficiency knowledge and capability. LGP peer to peer exchange also may benefit utility and third party implementation staff where local government staff provides information about their local community needs and the inner workings of their local government.

Information sharing can occur within each Partnership (across Partnership members), across local government staff and across Partnerships. Peer to peer support will help local governments develop energy efficiency policy and program initiatives to promote energy efficiency within the local government community. Those Partners who choose to include this element in their program could utilize a combination of peer forums, local government-focused workshops, and a web based clearinghouse that will provide specific energy efficiency information and resources. Support networks would encompass those already working in energy efficiency or related areas such as environment, climate or sustainability and those whose primary function is not directly related to energy efficiency such as building inspectors, maintenance staff and city council members.

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 elements of the strategic plan and includes:

- Increased knowledge and awareness of energy efficiency,
- Changes in local government behaviors related to energy efficiency,
- Increased ability to implement energy efficiency within local government, and
- Creation of linkages across local government staff and added resources that maximize the government's ability to develop goals and implement strategies around energy efficiency and carbon reduction.

Non-Incentive Services

The functions and activities discussed in this section are all non-incentive services.

Target Audience

The Partnership program will assist local governments, quasi-governments, nonprofits focused on the public sector, and their agents in achieving objectives of the Strategic Plan. 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.

Implementation

For each of the five Strategic Plan Support elements described, implementation will vary across the LGPs. For detailed information about implementation, please see the Individual LGP PIPs and Supplemental Filing –Local Government Partnership Strategic Plan Proposals in Compliance with D.09-09-047 (Advice Letter 2445-E-A). In general, each Partnership contract will identify

which strategic plan program elements will be included in the partnership program and the associated budget. The utility and partner responsibilities will be defined for each program element included in the partnership.

5 - Program Element Rationale and Expected Outcome – Element B - Strategic Plan Support

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." 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 technologies 17.

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 structures¹⁸. Markets are social institutions¹⁹, 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 chains²⁰ 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 progress²¹. According to York²², "Market transformation is not likely to be achieved without

¹⁶ California Public Utilities Commission Decision, D.98-04-063, Appendix A.

¹⁷ California Public Utilities Commission (2008) *California Long Term Energy Efficiency Strategic Plan*, p. 5. Available at http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf

¹⁸ 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

¹⁹ 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/

²⁰ 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.

²¹ 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*.

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 selfsustaining, 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 transformation²³. 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 theory²⁴, 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 decades²⁵. Market share tracking studies conducted 3, 5 or even 10 years after the start of an MT program may reveal only small market transformation effects²⁶. 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

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

Sebola et al (2001) p.

²² York, D., (1999). "A Discussion and Critique of Market Transformation", Energy Center of Wisconsin. Available at http://www.ecw.org/ecwresults/186-1.pdf.

²³ 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

²⁴ Rogers (1995) Diffusion of Innovations, 5th Ed.

²⁵ Example in bottom chart of this graphic from NYTimes:

²⁶ Sebold et al (2001) p. 6-5,

to program designers.)²⁷" The Strategic Plan recognizes that regulatory policies are not yet in place to support the success of market transformation efforts²⁸, 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 interventions²⁹. 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 developers³⁰ 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 2 and 3 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 Local Government Partnerships the following approach to quantitative baseline and market transformation information is presented as follows.

²⁷ 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.

²⁸ CPUC (2008) Strategic Plan, p. 5.

²⁹ Nadel, Thorne, Saches, Prindle & Elliot (2003).

³⁰ Peloza & York, (1999).

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
Energy Efficiency Action Plans	Baseline inventory of cities, counties and government institutions within the IOU territory 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.	N/A
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

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	
	2013	2014
Baseline inventory of cities, counties and government institutions within the IOU territory 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.	Improvement over baseline, over time	Improvement over baseline, over time
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

c) Program Design to Overcome Barriers:

Refer to individual partnership PIP section.

d) Quantitative Program Objectives:

Program/Element	Program Target by 2013	Program Target by 2014
Target #1	N/A	N/A
Target #2	N/A	N/A
Target #3	N/A	N/A
Target #4	N/A	N/A

Refer to individual partnership PIP section.

6 - Other Program Element Attributes – Element B - Strategic Plan Support

a) Best Practices

SoCalGas approach to Strategic Plan Support is innovative and reflects lessons learned because SoCalGas has observed that multiple actors provide governments with long-term GHG reduction and energy reduction strategies. SoCalGas has learned from previous programs that it is more important for governments to have access to tools and technical assistance to become informed energy actors rather than directly performing all functions themselves.

b) Innovation

The Strategic Plan Support element is inherently innovative since these elements have not been a part of previous Government Partnership program.

c) Interagency Coordination

The Strategic Plan Support element affords many opportunities for CEC, ARB and PIER coordination especially as communities look towards AB32 implementation and Title 24 compliance and development of climate action plans. Government Partnerships who include Strategic Plan Support elements in their program will look to align the goals of their respective communities around the goals of the Strategic Plan through education and outreach campaigns, peer-to-peer support and by providing technical assistance around compliance issues with these agencies.

d) Integrated/coordinated Demand Side Management

The Strategic Plan Support program element will achieve coordination of demand side management, low income efficiency, and workforce training. Peer to peer support will serve as a catalyst for integration by providing a platform for knowledge sharing. In this way, there is an opportunity to expose all peer to peer participants to all utility program offerings in an integrated fashion.

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

This program element integrates other resources, especially regarding guiding documents, which necessarily should include resource types such as waste, land use, water. While

government Partnerships are designed to focus on energy efficiency, SoCalGas can encourage partnerships to access other resources and can also emphasize when energy programs have incidental benefits to other resources. See individual PIPs for more specific information.

f) Pilots

Individual LGPs may choose to implement pilots related to this element. See individual PIPs for more specific information.

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

A process evaluation will be conducted by a third party evaluator. The evaluation will assess communication and coordination effectiveness between partners as well as satisfaction with the service and increased awareness of energy efficiency opportunities. A combination of interviews and focus groups will likely be used to collect data. The evaluation is expected to build upon results found in the recently completed process evaluation for PY2006 to 2008.

Element C - Core Program Coordination

4 – Program Element Description and Implementation – Element C - Core Program Coordination

C. Core Program Coordination	
	C1- Outreach Education
	C2 - Third Party Program Coordination
	C3 - Technical Assistance

Overview

The Core Program Coordination element will be implemented to some degree by all of the unique individual Local Government Partners (LGPs). This section (4C – 6C) describes the standard overview, rationale, outcomes, and barriers associated with the Core Program Coordination element by an LGP. If an individual LGP has a distinctive approach to Core Program Coordination, that LGPs individual PIP will contain additional information. Coordination with Core programs is important to the effectiveness of each individual LGP. A key to SoCalGas coordination effort is its market segment planning approach. This means that LGPs will be coordinated with all other energy efficiency portfolio efforts to reach agricultural, commercial, industrial, residential and small business customers.

In addition, LPGs will promote the EUC in 2013-14 through collaboration with local EUC stakeholders to support marketing and outreach. LGPs will continue to coordinate with local regional efforts such as the County of Santa Barbara, County of Los Angeles, and other local governments engaged in regional efforts that support EUC. LGPs will continue work which has been in progress during 2010-12 doing public workshops to promote EUC to the community as well as supporting recruitment of contractors.

In addition, LGPs coordinate with each other, with SoCalGas, and with other implementers to support energy efficiency programs across the SoCalGas portfolio, and particularly with respect to outreach education for residential and small business customers, third party programs, and technical assistance. By utilizing the outreach channels of the local government, these programs target customers and fully canvas neighborhoods that may not be targeted by Core Programs. LGP's that have close ties to Business Improvement Districts (BID's) will coordinate marketing outreach and education of Core Commercial Programs by:

- 1. Engaging BIDs through leveraging and working with LG Partners
- 2. Working with BIDs to reach out to small and medium businesses to deliver relevant Training & Education and to funnel Core Program and/or Third Party Program offerings.
- 3. Collaborating and leveraging all local and utility resources to deliver cost effective and targeted EE measures

In a continued effort to insure that customers and energy efficiency opportunities are not overlooked, LGPs will also have the opportunity to participate in a program to provide energy efficiency to moderate income customers slightly above the ESAP guideline or to customers who are unable to produce the necessary ESAP documentation.

Because of their close ties to the community, individual LGPs may identify opportunities to serve customer energy needs through integrated demand side management products including energy efficiency, demand response, low income programs, and codes and standards assistance as well as other utility programs including distributed generation. Such coordination provides customers with comprehensive solutions and minimizes overlap of effort and service. Where the LGP identifies a need that they do not currently service, they can refer participants to programs. The Partnership will provide the participant with contact information for the relevant programs and assistance as required. If program overlap is determined to exist, the Partnership will notify SoCalGas of the program(s) involved and discuss and coordinate efforts so as not to duplicate services and compete for customers.

In addition, LGPs can coordinate with and leverage other sources of funding to increase the impact of SoCalGas offerings and include programs provided by other agencies such as the CEC, ARB and other state and federal agencies.

In addition to outreach for energy efficiency opportunities, LGPs are an important delivery channel for integrated approaches and emerging technologies. As new approaches of integration and emerging technologies are available, the LGPs will serve as a channel for providing the appropriate outreach and education to the community.

C1 - Outreach and Education

LGPs will provide education and outreach to inform their customers about comprehensive energy saving opportunities and best practices. A key focus for support from LGPs will be EUC. All of the outreach will be coordinated with SoCalGas marketing efforts and statewide marketing energy efficiency marketing initiatives.

As part of the coordination of Training and Education, the LGPs will leverage trainings at SoCalGas Energy Resource Center, SCE's CTAC and other resources.

C2 - Third Party Program Coordination

LGPs will coordinate with Third Party direct install contractors and/or other core programs to implement retrofits of existing government buildings and municipal facilities. The contracts will be coordinated with the LGPs by establishing agreements between the contractors and the GPs that specify which customers and in which geographic areas each contractor is eligible to serve. Contractors will be selected to provide focus on targeted customers as well as specialization in strategic technologies such as HVAC tune-ups and replacement projects.

C3 – Technical Assistance

Technical assistance is available to LGPs. Assistance many include but is not limited to audits, engineering calculations, reports and inspections.

Target Audience

Community level data will be analyzed to determine the areas with the largest potential based on market potential studies and looking at previously served customers.

C1 - Outreach and Education

The primary audience for outreach and education includes the following:

- Local Government Partners
- Government and agency employees
- Community based organizations
- Energy Upgrade California Whole Home Upgrade California Contractors
- SoCalGas customers
- Building engineers

C2 - Third Party Program Coordination

Individual LGPs will coordinate closely with the third parties providing the direct install implementation. In addition, each individual LGP will be trained in the programs offered by the third parties so that they may coordinate and/or refer customers to these programs. For example, third party coordination may be appropriate for more specialized technologies or specific target segments.

C3 – Technical Assistance

The target audience for technical assistance includes local government partners, SoCalGas customers, and contractors.

Implementation

C1 - Outreach and Education

Objectives of the LGPs include leveraging marketing from existing core and statewide programs to provide a consistent and cost effective approach. Because LGPs best understand the needs of their community, the LGPs will tailor offerings to the community and implement programs through community outreach.

LGPs will also work with local governments and quasi-governments to develop an education curriculum and schedule that will engage their communities to advance energy efficiency and sustainability. LGPs will coordinate and support efforts to promote EUC throughout territory shared with SCE, and PG&E. Partnerships will leverage the resources of the SoCalGas Energy Resource Center.

Some individual LGPs may develop training materials for adopting and implementing local energy initiatives or may utilize such materials developed under the SEEC Program. Partnerships will also develop workshop topics, schedule workshops in key locations, arrange for workshop presenters, coordinate workshop materials, market workshops to local governments, and facilitate workshops

C2 - Third Party Program Coordination

LGPs using third party direct install programs will coordinate with third party direct install contractors to determine which areas of the community should be the focus of the direct install contractors marketing efforts. The direct install contracts will be coordinated with the LGPs by establishing agreements between the contractors and the LGPs that specify which customers and geographic areas each contractor is eligible to serve. This method provides a more orderly approach to using the limited number of contractors to reach the widest population in the state in a consistent manner. Each direct installation implementer will work with their assigned LGP to develop a marketing strategy for their assigned LGP territory. Each LGP with Direct Install element in their program will have a direct install budget that will augment the third party contract funds. Each project implemented and coordinated within a LGP community will be funded by the GP program and the associated savings will be allocated to the GP.

C3 – Technical Assistance

Technical assistance is available to LGPs to provide audits, engineering calculations, reports and inspections. Additionally, partnerships will take a strategic market plan approach to address the customers with the largest potential or the biggest need. These efforts will be conducted with other third party and Core programs.

5 - Program Element Rationale and Expected Outcome – Element C Core Program Coordination

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." 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 technologies³².

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 structures³³. Markets are social institutions³⁴, 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 chains³⁵ 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 progress³⁶. According to York³⁷, "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

³¹ California Public Utilities Commission Decision, D.98-04-063, Appendix A.

³² California Public Utilities Commission (2008) *California Long Term Energy Efficiency Strategic Plan*, p. 5. Available at http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf

³³ 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

³⁴ 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/

³⁵ 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.

³⁶ 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*

³⁷ York, D., (1999). "A Discussion and Critique of Market Transformation", Energy Center of Wisconsin. Available at http://www.ecw.org/ecwresults/186-1.pdf.

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 transformation³⁸. 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 theory³⁹, 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 decades⁴⁰. Market share tracking studies conducted 3, 5 or even 10 years after the start of an MT program may reveal only small market transformation effects⁴¹. 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.)⁴²" The Strategic Plan recognizes that regulatory policies are not yet in place to support the success of market transformation efforts⁴³, 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 interventions⁴⁴. 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

³⁸ 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

³⁹ Rogers (1995) Diffusion of Innovations, 5th Ed.

⁴⁰ Example in bottom chart of this graphic from NYTimes:

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

⁴¹ Sebold et al (2001) p. 6-5,

⁴² 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.

⁴³ CPUC (2008) Strategic Plan, p. 5.

⁴⁴ Nadel, Thorne, Saches, Prindle & Elliot (2003).

for MT program developers⁴⁵ 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 2 and 3 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 Local Government Partnerships 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

_

⁴⁵ Peloza & York, (1999).

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
Energy Efficiency Action Plans	Baseline inventory of cities, counties and government institutions within the IOU territory 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.	N/A
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

e) 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	
	2013	2014
Baseline inventory of cities, counties and government institutions within the IOU territory 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.	Improvement over baseline, over time	Improvement over baseline, over time
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

a) Program Design to Overcome Barriers:

Refer to individual partnership PIP section.

b) Quantitative Program Objectives:

Program/Element	Program Target by 2013	Program Target by 2014
Target #1	N/A	N/A
Target #2	N/A	N/A
Target #3	N/A	N/A
Target #4	N/A	N/A

Refer to individual partnership PIP section.

6 - Other Program Element Attributes – Element C Core Program Coordination

Other Program Element Attributes	CORE Program Coordination
a) Best Practices: Describe why program element approach constitutes "best practice" or reflects "lessons learned" in market strategies, program design and/or implementation techniques, or past experience. Provide references where available.	This program element incorporates lessons learned from previous partnerships. Close coordination with Core and 3rd Party programs is integral for success. See EM&V section for future documentation of best practices.
b) Innovation: Describe any unique or innovative aspects of program element not previously discussed. Why is this innovative?	This program element is unique because it takes coordination to a new level from the 2006-2008 cycle. Government Partnerships will work with Core programs, 3rd Party programs to develop a strategic market segment plan. This plan will identify largest opportunities for cost-effective energy savings, address barriers, share best practices and efficiently allocate resources. Partnerships will use education and outreach channels to inform their customers about energy savings opportunities and share best practices within partnerships.
c) Interagency Coordination: Describe any interagency coordination with the ARB, CEC on PIER or Codes and Standards; non-utility market initiatives; energy efficiency market forces, opportunities and trends; and timeline by which market segment will be "transformed" or other aspects of the program.	Core program integration will require strong coordination with outside agencies. As communities look to retrofit buildings and perform education and outreach, coordination with other governmental agencies will be a priority. A strategy will be to identify partnership opportunities with the various agencies and beginning to align our goals. On the community level, as local governments begin to think about AB32 implementation, GHG emission reduction opportunities will be indentified by modeling usage, past program participation and other trends.

Other Program Element Attributes	CORE Program Coordination
d) Integrated/coordinated Demand Side Management: Describe how program will achieve integrated or coordinated delivery of all DSM options, as well as ESAP and WET. (If this is an integral part of the program element and fully covered under #4 note that here.) Describe in detail how program will achieve integrated or coordinated delivery of all DSM options (energy efficiency, demand response, and onsite generation) where applicable including integrated program design and delivery, shared budgets, program evaluation, and incentive mechanisms that promote greater integration of DSM resources. Provide a complete description for all the technologies, including integration supporting technologies that will be included in the program. If the program does not include all DSM options as noted above, briefly provide an explanation for a more limited subset of DSM technologies. Utilize Attachment 5A to highlight any shared or leveraged budget categories and amounts (admin, incentives,	In line with the Integration chapter of the Strategic Plan, partnerships will begin to adopt an integrated strategy for delivering demand response and self-generation programs. Partnerships will work to develop working groups to enable the most effective delivery method of the various programs. Workforce education and training initiatives will build capacity at the community level.
e) Integration across resource types (energy, water, air quality, etc): If program aims to integrate across resources types, provide rationale and general approach. (If this is an integral part of the program element and fully covered under #4 note that here.)	Several partnerships have worked with various water, air quality and transportation agencies to provide integrated offerings. By coordinating with ESAP programs and other agency programs, certain partnerships plan to work closely with other agencies and look for further opportunities.
f) Pilots: Describe any pilot projects that are part of this program (If this was fully covered under #4, note that here.)	Partnerships will look at their government facilities in a strategic and prioritized manner.

Other Program Element Attributes	CORE Program Coordination
g) EM&V: Describe any process evaluation or other evaluation efforts that will be undertaken by the utility to determine if the program is meeting its goals and objectives. Include the evaluation timeframe and brief description of scope, as well as a summary of specific methodologies, if already developed. If not developed, indicate the process for developing them. Include reference to tracking databases that will be used for evaluation purposes.	A process evaluation will be conducted by a third party evaluator. The evaluation will assess communication and coordination effectiveness between partners as well as satisfaction with the service and increased awareness of energy efficiency opportunities. A combination of interviews and focus groups will likely be used to collect data. The evaluation is expected to build upon results found in the recently completed process evaluation for PY2006 to 2008.

Element D – Unique Program Element-Local Government Regional Resource Program:

$4-Program\ Element\ Description\ and\ Implementation\ -Element\ D-Local\ Government\ Regional\ Resource\ Program$

D. Unique Program Element	
	D1-Government Facilities
	D2-Technical Assistance
	D3-Financing
	D4-Peer to Peer Support

123

Overview

Local government struggle with securing energy/sustainability resources, and current budget conditions make the availability of such resources unlikely in the foreseeable future. The Local Government Regional Resource Program is a "virtual center" approach which is an expansion to our current Local Government Partnership program offerings. The Program will commence in one region initially with the intent to roll out service territory wide in 2013-14 program cycle. The program will support local governments (both partners and non-partners) and intends to drive increased comprehensive energy efficiency and will create deep energy savings by local governments by complimenting and leveraging resources as well as filling gaps that currently exist within local government organizations, CEC, PUC and SoCalGas energy efficiency programs. These gaps prevent local government from successfully implementing higher value energy efficiency projects that demonstrate energy efficiency leadership to the community and increase community wide energy efficiency participation. Lessons learned from past partnership initiatives have identified the need for improvement in resources that provide cost-effective, on demand energy management services, and expertise to enable local governments to create responsive, sustainable, and widespread public sector energy management results.

The "virtual center" approach will provide turnkey resources through hands on support, results oriented energy management, and augmenting existing Local Government Partnerships. A suite of resources shall include resources such as, but not limited to:

- Project management support
- Engineering and analytical support
- Library of boiler plate agreements and templates that can support local government with the RFP process as well as assistance securing financing from various sources

Providing these resources will result in improved energy management activity and increased program participation through energy efficiency and financing programs.

D1-Government Facilities

The Local Government Regional Resource Program supports the Government Facilities element by helping to provide technical resources for energy action for local governments augmenting existing partnership resources that will result in improved energy management activity and increased program participation through energy efficiency and financing programs.

D2-Technical Assistance

Resources such as engineering and analytical support, project development and management will be provided through a turnkey approach.

D3-Financing

Local governments often have limited funding and technical resources to secure financing for energy efficiency projects. The Local Government Regional Resource Program intends to

provide support to establish resources for securing financing for energy projects from various sources.

D4-Peer-to-Peer Support

• The Local Government Regional Resource Program offering will include information sharing through peer-to-peer learning.

Partnership Program Advancement of Strategic Plan Goals and Objectives

The table below shows which partner is addressing each strategic planning goal. Please refer to individual local government sub PIP's for more detail of each individual partner's advancement of the strategic goal.

Strategic Planning	Los Angeles County	Kern Energy Watch	Riverside County Partnership	San Bernardino Partnership	Santa Barbara Partnership	SBCCOG Partnership	San Luis Obispo Partnership	Tulare County Partnership	Orange Cities Partnership	SEEC Partnership	Community Energy Partnership	Desert Cities Partnership	VCREA Partnership
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.	Yes				Yes		Yes		Yes		No		No
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	Yes				Yes		Yes		Yes		No		No
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	No				No		No		No		No		No
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes;	Yes				Yes		Yes		No		No		No

Strategic Planning	Los Angeles County	Kern Energy Watch	Riverside County Partnership	San Bernardino Partnership	Santa Barbara Partnership	SBCCOG Partnership	San Luis Obispo Partnership	Tulare County Partnership	Orange Cities Partnership	SEEC Partnership	Community Energy Partnership	Desert Cities Partnership	VCREA Partnership
develop other EE financing tools.													
1-5: Develop broad education program and peer-to-peer support to local govt's to adopt and implement model reach codes	Yes				Yes		Yes		Yes		No		No
1-6:Link emission reductions from "reach" codes and programs to ARB's AB 32 program	Yes				Yes		No		Yes		No		No
1-7: Develop energy efficiency-related "carrots and sticks" using local zoning and development authority.	Yes				Yes	No	Yes		Yes		No		No
2-1: Statewide assessment of local government code enforcement and recommendation for change.	Yes				Yes	No	No		No		No		No
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).	Yes				Yes		Yes		No		No		No
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).	No				No		No		No		No		No
3-1: Adopt specific goals for efficiency of local government buildings.	Yes				Yes		Yes		Yes		Yes		No

Strategic Planning	Los Angeles County	Kern Energy Watch	Riverside County Partnership	San Bernardino Partnership	Santa Barbara Partnership	SBCCOG Partnership	San Luis Obispo Partnership	Tulare County Partnership	Orange Cities Partnership	SEEC Partnership	Community Energy Partnership	Desert Cities Partnership	VCREA Partnership
3-2: Require commissioning for new buildings, and recommissioning and retrocommissioning of existing buildings.	Yes				Yes	No	Yes		No		No		No
3-3: Improve access to favorable financing terms that create positive cash flow from energy efficiency/DSM savings	Yes				Yes		Yes		Yes		Yes		Yes
3-4: Explore creation of line item in LG 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.	No				No	No	No		No		No		No
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in LG pilot projects.	No				No	No	No		No		No		No
4-1: LGs commit to clean energy/climate change leadership.	Yes				Yes	Yes	Yes		Yes		Yes		Yes
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Yes				Yes	Yes	Yes		Yes		Yes		Yes
4-3: Statewide liaison to assist local governments in energy efficiency, sustainability, and climate change.	No	No	No	No	No	No	No		No	Yes	No		No
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	Yes				No		No		No	No	No		No
4-5: Develop EE-related "carrots" and "sticks" using	Yes				Yes		Yes		Yes		Yes		Yes

Strategic Planning	Los Angeles County	Kern Energy Watch	Riverside County Partnership	San Bernardino Partnership	Santa Barbara Partnership	SBCCOG Partnership	San Luis Obispo Partnership	Tulare County Partnership	Orange Cities Partnership	SEEC Partnership	Community Energy Partnership	Desert Cities Partnership	VCREA Partnership
local zoning and development authority													

Element D – Individual Local Government Partnerships

The Individual Local Government Partnerships are listed below:

- 1. County of Los Angeles Partnership
- 2. Kern County Energy Watch Partnership
- 3. Riverside County Partnership
- 4. County of San Bernardino Partnership
- 5. Santa Barbara County Energy Watch (North Santa Barbara) and (South County Santa Barbara)
- 6. South Bay Partnership
- 7. San Luis Obispo County Energy Watch Partnership
- 8. San Joaquin Valley Partnership
- 9. Orange County Cities Partnership
- 10. Statewide Energy Efficiency Collaborative (SEEC Partnership)
- 11. Community Energy Partnership (CEP)
- 12. Desert Cities Partnership
- 13 Ventura County Regional Energy Alliance

1. **Program Name:** County of Los Angeles Partnership

Program ID: SCG3742

Program Type: Local Government Partnership

Program Element Description and Implementation Plan

The 2013- 2014 SCE/ SoCalGas /County of Los Angeles Partnership is a continuation of the existing, successful 2004 - 05, and 2006 -08 and 2010-2012 programs with SCE and SoCalGas. The 2013 - 2014 Partnership will continue to build on the lessons learned and will focus on identifying and implementing energy efficiency activities in county facilities in support of the Los Angeles County's 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.

1. List of program elements:

- 1 <u>Retrofits/Deep Energy Retrofits (HVAC, lighting, Emerging Technology, others)</u>
- 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: e.g. On-Bill Financing, Grants etc
- 8 <u>Coordination with other IOU Program Offerings (core programs, solar, water renewable-portfolio, and others)</u>
- 9 Policy Assistance: Energy Policy

2. Overview:

1. Retrofit Program/Deep Energy Retrofits

The Retrofit Program will continue to implement energy efficiency projects identified by the Partnership. The t projects will be managed 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.

The 2013-2014 program will also pursue opportunities to promote more deep energy retrofit processes to include a whole building analysis. Rather than look at isolated systems (lighting, HVAC), multiple systems will be assessed to provide a comprehensive approach to energy efficiency to maximize long term savings. The Partnership will develop strategies to evaluate and implement potential deep retrofit projects to be included in the program.

- 2. 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 continue to be implemented in existing County 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.
- 3. Energy Efficiency Education and Best Practices Development and Training
 The Partnership will continue to 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 continue to 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.
- 4. New Construction and New Construction Design Assistance

For the 2013-2014 program, the Partnership will continue to provide guidance and coordinate the implementation of more efficient and sustainable measures in new construction projects. The Partnership will continue to 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.

5. 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.

6. 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 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.

7. 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 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.

8. 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.

9. 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.

3. Non-Incentive Services:

Non-incentive services for the 2013 - 2014 LA County/ SoCalGas /SCE Partnership 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 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.

4. 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.

5. <u>Implementation:</u>

The implementation plan for this program cycle will include the continuation of activities implemented in the 2010-12 SCE/ SoCalGas /County of LA Partnership program. The Partnership will apply the 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.

The current approach will be employed to contract for construction and engineering work. All project decisions will continue to be made by the management team on a Partnership level though discussions at our regularly scheduled Partnership meetings.

Program Management Structure

The program will continue to be administered by a management team, consisting of representatives from the County of Los Angeles, SCE, and SoCalGas, 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 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.

2. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric						
	Metric A	Metric B	Metric C				
Program/Element	N/A	N/A	N/A				

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation	Planning Estimates
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

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 2010-2012 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 2013-2014 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.

LA COUNTY PARTNERSHIP: County Facilities						
Program						
Name	Program Target by 2013	Program Target by 2014				
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.				
Lighting and HVAC Retrofits/Deep Retrofit Strategies	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. vending misers, software controls, etc). Retrofits will account for energy savings of 1,000,000 kWh and 80 kW energy savings.	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. vending misers, software controls, etc). Retrofits will account for energy savings of 1,000,000 kWh and 80 kW energy savings.				
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 will account for energy savings of 1,300,000 kWh and 280 kW	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 will account for energy savings of 1,300,000 kWh and 280 kW				
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	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				

	LA COUNTY PARTNERSHIP: County Facilities					
Program						
Name	Program Target by 2013	Program Target by 2014				
	and some new buildings anticipated within the cycle (libraries, data center, etc). Energy savings from New Construction will account for 96,032 kWh and 20 kW	(libraries, data center, etc). Energy savings from New Construction will account for 96,032 kWh and 20 kW				
	Core Program Integ					
Education and Outreach Financial Solutions Program: On-Bill Financing Element	Utilize CTAC and other existing resources for training and education of County staff, specifically on RCx sustainability, EE and DR integration. Continue work with IOU and County council to broker an acceptable Agreement to take advantage of On-Bill Financing, if at Financing, 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.	Utilize CTAC and other existing resources for training and education of County staff, specifically on RCx sustainability, EE and DR integration. Continue work with IOU and County council to broker an acceptable Agreement to take advantage of On-Bill Financing, if at Financing 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	Work through the Partnership team to continue education, and look for opportunities for solar installation within the County. Possibly target new construction projects for solar technology. Continue any progress on County initiated Solar Website.	Complete documentation of participation potential and what is necessary for partners to participate, if any potential projects were identified.				

3. 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/SoCalGas/SCE Partnership has been a strong leader in this area and has successfully implemented RCx projects in more than 30 buildings over the previous 3 Partnership cycles (2004-2012) 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) Innovation: For the 2013 2014 program, 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" County-affiliated 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 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 Green House 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 10,000 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) <u>Interagency Coordination</u>: Coordination with the ARB, CEC and 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:</u> This is an integral part of the program element and fully covered under #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>: The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2010 - 2012 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.

4. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 5⁴⁶ California Long-Term Energy Efficiency Strategic Plan Implementation:

44 5 1 1 1 1 1 1 1	
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.	
1-2: Establish expedited permitting and	Not expected to be influenced by Partnership
entitlement approval processes, fee	activities; however the Partnership is
structures and other incentives for green	supportive of the County's role in any
buildings and other above-code	permitting or expedited approval policy for
developments.	green building.
1-3: Develop, adopt and implement model	Not expected to be influenced by Partnership
point-of-sale and other point-of	activities; however the Partnership is
transactions relying on building ratings.	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 LA
mechanisms so property owners can fund	County/ SoCalGas /SCE Partnership.
EE through city bonds and pay off on	_
property taxes; develop other EE	
financing tools.	
1-5: Develop broad education program	Develop a program for outreach and
and peer-to-peer support to local govt's to	communication to local governments and their
adopt and implement model reach codes	energy management organizations. Develop a
	plan for funding common platforms which can
	be used by a variety of local governments (e.g.
	EEMIS expansion above) to include: common
	consulting resources, best practices for energy

⁴⁶ This table includes a subset of CEESP local government chapter strategies that pertain especially to local government actors. 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.

	efficiency and energy management, education and updates on legislative and regulatory issues, analytical tools, procurement and contracting programs, sharing resources and enhancing/developing energy expertise where none exists.
1-6:Link emission reductions from "reach" codes and programs to ARB's AB 32 program	CARB adopts regulation providing local gov't 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
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	Implement local policies for LEED new construction and existing buildings.
buildings, and re-commissioning and retro-commissioning of existing buildings.	Benchmark existing 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 LG 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	Coordinate this approach with Research & Technology
inclusion in LG pilot projects.	activities; • Develop and begin first projects by 12/2010.
4-1: LGs commit to clean energy/climate change leadership.	Assist initial set of local governments in commitments;

4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	develop and communicate appropriate messages. Develop model General Plan (Energy Plan already adopted by the County of LA) amendments.
	 Leaders among local governments adopt policies in General Plan elements. Publicize to other local governments.
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	Not expected to be influenced in the LA County/ SoCalGas /SCE Partnership.

1. **Program Name:** Kern County Energy Watch Partnership

Program ID: SCG3743

Program Type: Local Government Partnership

NOTE: Kern Council of Governments has reached out to the Ridgecrest City Manager to determine if there is interest in having Ridgecrest join the Kern Energy Watch Partnership. Both utilities, Southern California Edison and Pacific Gas & Electric have indicated their support for merging the two partnerships to create one unified partnership in Kern County. As of the close of business on May 24, 2012, Kern COG had not yet had a conversation with the City Manager.

2. Program Element Description and Implementation Plan

a) List of program elements:

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

Core Program Element - Government Facilities

The Partnership 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 County of Kern has the opportunity to expand on the 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 delivery installation components. Potential opportunities include but are not limited to: lighting, lighting controls, air conditioning, and other measures. Direct delivery (partnership delivered equipment upgrades installed by munis) includes but is not limited to: CFLs, hardwire fixtures, lighting controls, T8's, occupancy sensors, LED exit signs, vending machine controllers, weatherstrip, window film, 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 Master Partnership Implementation Plan.

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 Master Partnership Implementation Plan.

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's Building Codes Work Group will continue to develop and expand 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 build on the International Code Council's Building Safety Month campaigns held in ten cities and the County of Kern in May 2011 and May 2012. 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. The Partnership will continue Plug-in Electric Vehicle Readiness education, training, and outreach efforts begun in 2012 with regards to building codes, zoning, signage and American Disabilities Act ordinances.

B.2) Reach Code Support:

The Partnership will seek to establish meaningful reach codes as part of its effort to add value to energy efficiency in alignment with the strategies described in the Master Partnership Implementation Plan.

B.3) Guiding Document(s) Support:

In addition to establishing documentation in alignment with the strategies described in the Master Partnership Implementation Plan, the Kern County Partnership 2010-2012 objectives included the 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. In 2013-2014, 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 Partnership communities in alignment with the strategies described in the Master Partnership Implementation Plan.

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 Master Partnership Implementation Plan.

B.6) Energy Analysis (Goal 4):

The Partnership will continue to provide education, encouragement, and recognition to the County of Kern and the ten cities to implement the EPA Energy Star Portfolio Manager program to benchmark qualifying facilities, both to update data annually and to expand the effort to additional facilities.

Core Program Element - 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 program through a variety of media channels including mailers, press releases, and quarterly e-newsletters; and providing a minimum of 16 special workshops throughout the county and five 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 Master Partnership Implementation Plan.

C.4) Retrofits for just-above ESAP-qualified customers:

The Kern County Partnership will support this program in alignment with the strategies described in the Master Partnership Implementation Plan.

• 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 programs to its communities: SCE & PG&E 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) Overview:

The Kern County Energy Watch Partnership (the Partnership) is a continuation of the Partnership between the City of Bakersfield, Kern County, Southern California Edison (SCE), Southern California Gas, and Pacific Gas & Electric (PG&E) and the cities of California City, Delano, McFarland and Tehachapi which will be expanded to include the city of Ridgecrest, and the implementing partner: Kern Council of Governments (Kern COG).

The Partnership builds upon the success of the Kern County Energy Watch Partnership. The 2013 - 2014 partnership improves SCE's current 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 Partnership will merge the Kern County and Ridgecrest Partnerships and continue to extend the program's reach into the unincorporated communities and the multiple-service Community Service Districts within 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) Non-incentive services:

In addition to the strategies described in the Master Partnership Implementation Plan the Kern County Partnership will include a Portfolio of partnership ME&O activities to increase community enrollment in energy programs, and other SCE services, resources and assets brought to support the ME&O Plan (e.g., mobile education unit; account manager support; training at the Agricultural Technology Application Center (AGTAC); speakers bureau; limited giveaways such as opportunity drawings and free CFLs; marketing, design & printing of brochures and other collateral materials; media/press/publicity support, etc.).

d) Target audience, etc.:

The target audience includes:

- City and county staff, management and policymakers (elected officials);
- Residential and business customers;
- Students of Kern County Community Colleges; and,
- Residents and business customers of the unincorporated communities

e) Implementation:

In addition to the strategies and coordination described in the Master Partnership Implementation Plan:

- 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 workshops as well as community exhibits most with an attendance of 500-3,000 people.
- The Partnership program 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.

3. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

The Cities and unincorporated communities that form the Kern County Partnership will have barriers consistent with and will employ those strategies to overcome them as described in the Master Partnership Implementation Plan to overcome them.

4. Other Program Element Attributes

a. Best Practices:

As well as those strategies described in the Master Partnership Implementation Plan, the Kern County Partnership will embody the following best practices:

- Leverage the strong member municipal relationships developed by the Partnership in the 2006-08 and expanded in the 2009 bridge period and 2010-2012 cycle to further develop and capture energy efficiency opportunities in facilities within the county and cities
- Expand the existing Kern County Partnership education programs to identify, develop and capture energy efficiency opportunities within the region's communities.

b. Innovation:

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 nine training workshops and 22 exhibits over the course of the 24 months of the 2013 - 2014 cycle at community events to demonstrate: energy efficiency

activities and practices, energy code training to target the needs of Kern County, 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. <u>Interagency Coordination:</u>

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, SoCalGas, and PG&E.

d. <u>Integrated/coordinated Demand Side Management:</u>

The Kern County Partnership program plans include identifying and enrolling service accounts from each participating county and city in demand response programs in alignment with the Master Implementation Plan.

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

The Partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

f. Pilots:

No pilots are planned through this Partnership.

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 2010 - 2012 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.

5. Partnership Program Advancement of Strategic Plan Goals and Objectives

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 Delano will consider adoption of Reach Codes in the 4th Quarter 2012. Results of this activity and lessons learned will be shared with all members of the Kern Energy Watch Partnership in 2013 (and 2014 to note continued progress, if Delano adopts Reach Codes).

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.	The City of Delano will consider adoption of point-of-sale measures in the 4 th Quarter of 2012. Results of this activity and lessons learned will be shared with all members of the Kern Energy Watch Partnership in 2013 (and 2014 to note continued progress, if Delano adopts point-of-sale measures).
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.	Within the Partnership and through other Partnerships, the local agencies of the Partnership, and Kern COG, will participate in 3 or 4 comprehensive peer to peer educational & outreach forums on a semi-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.	Each local agency of the Partnership will evaluate and adopt, through the Partnership, the nexus of energy DSM programs and the larger AB 32 / SB 375 compliance requirements will be integrated as appropriate, provided a sustained funding source is provided 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).	
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.	The Partnership will continue and expand the use of the EPA Portfolio Manager software to benchmark local government facilities.
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.	N/A
4-1: Local governments commit to clean energy/climate change leadership.	In 2012, five cities and the County of Kern considered adopting an Energy or Climate Action Plan for municipal operations. The plans could include setting energy efficiency standards for new and existing facilities, developing a revolving loan fund for energy efficiency projects, and so on. The Energy Action Plan template was shared with six other incorporated cities in Kern County, three Community Service Districts, and the City of Visalia in Tulare County. In 2013-2014, this work within Kern County and the Community Service Districts should continue and be expanded to other areas as funding allows. Create and/or implement energy plans for Kern County, the cities and special districts within SCE/SoCalGas jurisdiction. Adopt the energy plans and make templates available to other Kern Energy Watch partners.

4-2: Use local governments' general plan	Adopt a Climate Action Plan (CAP),
energy and other elements to promote	Energy Action Plan (EAP) or adopt
energy efficiency, sustainability and	energy efficiency language into another
climate change.	policy document, such as a General Plan,
_	to reduce community greenhouse gas
	emissions with a focus on energy
	efficiency.
4-4: Develop local projects that integrate	The Partnership will influence
EE/DSM/water/wastewater end use	wastewater, storm water and potable
	water capital projects, with SCE,
	SoCalGas, and PG&E to ensure that they
	are as energy efficient as possible.
4-5: Develop EE-related "carrots" and	Each local agency of the Partnership will
"sticks" using local zoning and	evaluate, develop, and adopt as required,
development authority	zoning and development authority
	changes to comply with AB 32 / SB 375.

1) **Program Name:** Riverside County Partnership

Program ID Number: SCG3744

Program Type: Local Government Partnership

2) Program Element Description and Implementation Plan

Southern California Edison (SCE) and the County of Riverside continue to implement the Riverside County/SCE/SoCalGas Energy Efficiency Partnership Program for the 2013 - 2014 program years. Southern California Gas Company (SoCalGas) is committed to participating in the program. This new partner 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 CLTEESP.

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. The partnership's commitment to success during the 2006-08 program cycle was demonstrated by the implementation of major projects that exceeded title 24 standards.

Projects will adopt a comprehensive approach by including retrofits and three DSM alternatives to include: demand-response, distributed generation (renewable self-generation), solar hot water and water efficiency as applicable.

a) List of program elements

- 1 <u>Deep retro-fit (HVAC, lighting, Emerging Technology, boilers, water heaters, others)</u>
- 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: 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

b) Overview:

1) Deep Retrofit Program

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.

- 2). 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, utilities and subcontractors. 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, saving both electric and gas energy, reducing operating cost and improving occupant comfort.
- 3). 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 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,
 this partnership will seek opportunities to improve project coordination and
 communication to strengthen the relationships amongst the partners.

4). 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. 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 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.

5). Emerging Technologies

The partnerships may also pursue opportunities to facilitate the installation of emerging technologies. The partnerships 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.

6). 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 will endeavor to identify facilities or 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.

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.

7). Funding Source

The utilities will work with the County of Riverside 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. County's legal staff has denied the use of On Bill Financing. County has developed a revolving energy fund which will be used to fund qualified projects.

8). 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.

9). Policy Assistance: Energy Policy

Support the County in drafting a formal Energy Policy/Plan for County facilities. Plan may include adopted procedures for implementation, maintenance, purchasing, Codes & Standards, information about AB811, and AB32 and others. 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. (Note: County has a formal Energy Policy, as well as a Sustainable

Building Policy and Environmental Purchasing Policy. The County's Climate Action Plan and GHG Inventory will be sent to the Board for approval on 6/5/12.)

c) Non-Incentive Services:

Non-incentive services for the 2010 - 2012 Riverside County /SoCalGas/SCE Partnership will include integrated audits not only for County operated buildings, but also for the different county departments that Energy Management serves, or may have influence on. Examples include: , Sheriff, Fire, Regional Medical Center, Department of Public and Social Services, Community Health Agency, Economic Development Agency, Animal Services Department, Public Housing, (not part of the County of Riverside). These audits will be identified through the partnership and will include RCx, retro-fit, 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 CTAC facility, and on-site training as appropriate.

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. County has implemented a revolving energy fund that will be used to fund energy efficiency projects.

d) Target audience:

The Partnership will primarily target Riverside 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 Energy Management. 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 Counsel, 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 20010 - 12 SCE /County of Riverside Partnership program. The partnership will apply the 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 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.

Program Management Structure

The program will continue to be administered by a management team, consisting of representatives from the County of Riverside, SCE, and SoCalGas, 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 3management 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.

3. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

One of the main barriers to participation is getting a proven executable process in place for identification, purchasing and implementation of 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 2010-12 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 the construction costs are able to be offset by Partnership incentives, which will be used to fund additional County projects, via the recently-implemented revolving energy fund.

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.

d) Quantitative Program Objectives:

RIVERSIDE COUNTY PARTNERSHIP: County Facilities		
Program Name	Program Target by 2013	Program Target by 2014
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.
Lighting, Boiler, Water Heater 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% would be "other" (e.g. vending misers, software controls, etc). Retrofits will account for energy savings of 680,859 kWh and 20 kW. 25% of therm savings will come from space heating boiler, and domestic hot water 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% would be "other" (e.g. vending misers, software controls, etc). Retrofits will account for energy savings of 680,859 kWh and 20 kW. 25% of therm savings will come from space heating boiler, and domestic hot water retrofits.
RCx and MBCx	Identify County buildings for possible RCx/MBCx/PBx	Identify County buildings for possible RCx/MBCx/PBx opportunities, secure

RIVERSIDE COUNTY PARTNERSHIP: County Facilities		
Program Name	Program Target by 2013	Program Target by 2014
	opportunities, secure RCx/MBCx/PBx vendors and being Investigation process for implementation. RCx has not yet been implemented in County buildings, however, as opportunities are identified, the Partnership will pursue this energy savings approach. RCx/MBCx/PBx will account for energy savings of 200,000 kWh and 5 kW	RCx/MBCx/PBx vendors and being Investigation process for implementation. RCx has not yet been implemented in County buildings, however, as opportunities are identified, the Partnership will pursue this energy savings approach. RCx/MBCx/PBx will account for energy savings of 200,000 kWh and 5 kW
New Construction	Communicate Integration Strategy between internal departments, offerings and incentive structure. Riverside County has many New Construction projects identified for potential completion within the 2010 - 2012 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 projects and some new buildings anticipated within the cycle (libraries, Sheriff's Stations, etc). Energy savings from New Construction will account for 1,800,000 kWh and 450 kW	Communicate Integration Strategy between internal departments, offerings and incentive structure. Riverside County has many New Construction projects identified for potential completion within the 2010 - 2012 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 projects and some new buildings anticipated within the cycle (libraries, Sheriff's Stations, etc). Energy savings from New Construction will account for 1,800,000 kWh and 450 kW
Education and Outreach	Utilize CTAC and other existing resources for training and education of County staff, specifically on EE and DR integration and benefits of RCx.	Utilize CTAC and other existing resources for training and education of County staff, specifically on EE and DR integration and benefits of RCx.
California Solar Initiative: CSI	Implement communication plan for ensuring partners have been educated on solar potential of County buildings. Possibly target new construction projects for solar technology	Implement communication plan for ensuring partners have been educated on solar potential of County buildings. Possibly target new construction projects for solar technology

e) Other Program Element Attributes

- a) <u>Best Practices</u>: The Partnership will continue lessons learned from previous partnership cycles. 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) Innovation: Referenced in Master PIP 6d.
- c) Interagency Coordination: Referenced in Master PIP 6e.
- 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</u> (energy, water, air quality, etc): 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>: The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 2014 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.

f) Partnership Program Advancement of Strategic Plan Goals and Objectives

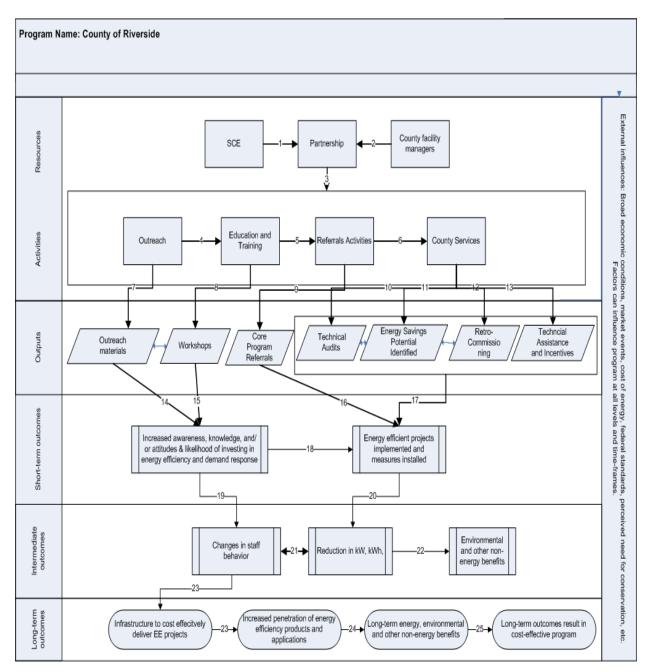
Table 5^{47} California Long-Term Energy Efficiency Strategic Plan Implementation:

1-1: Develop, adopt and implement model building energy codes (and/or other green	Partnership will work with Riverside 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.	(e.g. all new construction in the County
	will be more than X% above T24)
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	Riverside County/SoCalGas/SCE
EE through city bonds and pay off on	Partnership.
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 gov't decision-makers and
	community leaders and Board of
	Supervisors.
1-6: Link emission reductions from "reach"	CARB adopts regulation
codes and programs to ARB's AB 32	providing local gov't emission
program	reduction credit for "reach"
	standards
	State Attorney General and
	Office of Planning &
	Research provide guidance
	on using CEQA authority to

⁴⁷ This table includes a subset of CEESP local government chapter strategies that pertain especially to local government actors. 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.

	target energy and GHG
	savings in LG development
	authority
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).	authority
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	Implement local policies for LEED new
local government buildings, including:	construction and existing buildings.
3-4: Explore creation of line item in LG budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to	Develop a program to track municipal energy usage, such as through energy management software and benchmarking of municipal facilities. Set up a utility manager computer program to track municipal usage. Identify need to submetering to plan, budget and manage bills. Benchmark existing buildings against ratings such as Energy Star and its Portfolio Manger Continue commissioning programs on selected high-use buildings Revolving Energy Fund established August of 2010
and/or projects that provided the savings to fund additional efficiency.	
3-5: Develop innovation Incubator that	
competitively selects initiatives for	
inclusion in LG pilot projects.	
4-1: LGs commit to clean energy/climate change leadership.	Assist initial set of local
Change leadership.	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.	Help County develop Energy Plan, and implement elements of the plan in County buildings. • Leaders among local
	governments adopt policies in
	General Plan elements.
	Publicize to other local
	1 donotes to outer room

4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	Governments. Climate Action Plan and GHG Gas Inventory completed as part of an update to the County's General Plan—June 2012. Initiative.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	Not expected to be influenced in the Riverside County/SoCalGas/SCE Partnership.



1). **Program Name**: County of San Bernardino Partnership

Program ID: SCG3745

Program Type: Local Government Partnership

2). Program Element Description and Implementation Plan

Southern California Edison (SCE), Southern California Gas (SoCalGas) and the County of San Bernardino (County) –formed an energy efficiency Partnership in 2010-2012 that was built upon 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 articulated in the California Long Term Energy Efficiency Strategic Plan (CLTEESP). 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, as well as 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 to build 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, retrocommissioning (RCx) and new construction elements.

a) <u>List of program elements</u>:

- 1 <u>Deep retro-fit (HVAC, lighting, Emerging Technology, boiler, water heaters, others)</u>
- 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 <u>Coordination with other IOU Program Offerings (core programs, solar, water</u> and others)
- 9 Policy Assistance: Energy Policy

b) Overview:

The following elements will be addressed in the 2013 - 2014 SCE/SoCalGas/County of San Bernardino Partnership.

Deep Retrofit Program

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-8's), building wide lighting controls, HVAC and chiller upgrades/replacements, boilers, domestic water heaters, 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, comprehensive RCx program will be developed to implement within existing facilities. The program will provide a cost effective approach by reviewing existing methods of operating the buildings and developing a plan 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 California Long Term Energy Efficiency 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 stated a 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 is continuing to grow in population, and there are many new projects planned.

Emerging Technologies

The Partnerships may also pursue opportunities such as server virtualization and PC power networking to facilitate the installation of emerging technologies. The Partnerships may assist in these ongoing operations by providing applicable incentives and technical aid for installing emerging technologies to county facility.

Integration with Demand Response and other DSM services

The Demand Response 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. Partnership can utilize Demand Response Program as follows:

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 will endeavor to identify facilities or 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.

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 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 feasibility study and develop a method for prioritizing their projects. Partnership can also provide On Bill Financing which will offer zero-interest financing for qualifying energy efficiency projects. If County approves the adoption of On Bill Financing, the Partnership will utilize this additional source to fund more projects which will lead to additional energy saving for the County.

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 both engaged 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

Support the County in drafting a formal Energy Policy/Plan for County facilities. Plan may include adopted procedures for implementation, maintenance, purchasing, Codes & Standards, information about AB811, and AB32 and others. 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.

c) Non-incentive services:

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) Target audience:

The Partnership will primarily target 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 Facilities Management Department. 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. The Partnership will assist the 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) Implementation:

The 2013 - 2014 San Bernardino County /SCE/SoCalGas Partnership will utilize and build upon the implementation strategies employed in other Partnerships from the current and previous program cycle.

The program will be administered by a management team, consisting of representatives from the County of San Bernardino, SCE, and SoCalGas 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 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.

3. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

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 retro-commissioning, 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:

Program Name	Program Target by 2013	Program Target by 2014
EE/DR Audits	Ensure 100% of all audits are	Ensure 100% of all audits are
	coordinated EE/DR efforts if	coordinated EE/DR efforts if
	applicable. Promote EE	applicable. Promote EE
	opportunities first, in order to	opportunities first, in order to
	correctly assess and implement	correctly assess and implement
	DR reduction potential.	DR reduction potential.
Lighting, Boiler, Water Heater and HVAC Retrofits	Utilize Partnership activities and completed audits to identify and implement retrofit measures. Lighting retrofits may account for 50% of all retrofit opportunities, and HVAC may account for 40% and the remaining 10% would be "other" (e.g. vending misers, software controls, etc). Retrofits will account for energy savings of 1,522,112 kWh and 212 kW. 25% of therm savings will come from space heating boiler, and domestic hot water retrofits.	Utilize Partnership activities and completed audits to identify and implement retrofit measures. Lighting retrofits may account for 50% of all retrofit opportunities, and HVAC may account for 40% and the remaining 10% would be "other" (e.g. vending misers, software controls, etc). Retrofits will account for energy savings of 1,422,112 kWh and 192 kW. 25% of therm savings will come from space heating boiler, and domestic hot water retrofits.
RCx and MBCx	Identify County buildings for possible RCx/MBCx opportunities, secure RCx/MBCx vendors and begin Investigation process for implementation. RCx has not yet been implemented in County buildings; however, as opportunities are identified, the Partnership will pursue this energy savings approach.	Identify County buildings for possible RCx/MBCx opportunities, secure RCx/MBCx vendors and begin Investigation process for implementation. RCx has not yet been implemented in County buildings; however, as opportunities are identified, the Partnership will pursue this energy savings approach.
New Construction	Communicate Integration Strategy between internal departments, offerings and incentive structure. Identify potential projects to complete within the 2013- 2014 Partnership cycle. The Partnership has earmarked	Communicate Integration Strategy between internal departments, offerings and incentive structure. Identify potential projects to complete within the 2013 - 2014 Partnership cycle. The Partnership has earmarked

Program Name	Program Target by 2013	Program Target by 2014
	budget and expected kWh/kW	budget and expected kWh/kW
	savings for remodeling projects	savings for remodeling projects
	and some new buildings	and some new buildings
	anticipated within the cycle.	anticipated within the cycle.
	Energy savings from New	Energy savings from New
	Construction will account for	Construction will account for
	300,000 kWh and 80 kW	400,000 kWh and 100 kW
	Utilize CTAC and other existing	Utilize CTAC and other existing
Education and	resources for training and	resources for training and
Outreach	education of County staff,	education of County staff,
Outreach	specifically on EE and DR	specifically on EE and DR
	integration and benefits of RCx.	integration and benefits of RCx.
	Continue work with IOU and	Continue work with IOU and
	County council to broker an	County council to broker an
Financial	acceptable Agreement to take	acceptable Agreement to take
Solutions	advantage of On-Bill Financing,	advantage of On-Bill Financing,
Program:	if at all possible. If County is not	if at all possible. If County is not
On-Bill	able to participate, this will not	able to participate, this will not
Financing	be an element of the Partnership.	be an element of the Partnership.
Element	If agreement is reached, then the	If agreement is reached, then the
	Partnership will identify qualified	Partnership will identify qualified
	projects and implement energy	projects and implement energy
	efficiency measures offset by	efficiency measures offset by
	OBF.	OBF.
	Implement communication plan	Implement communication plan
	for ensuring partners have been	for ensuring partners have been
	educated on solar potential of	educated on solar potential of
California	County buildings. Possibly target	County buildings. Possibly target
Solar	new construction projects for	new construction projects for
Initiative: CSI	solar technology	solar technology.

4. Other Program Element Attributes

a) Best Practices:

The Partnership will focus on lessons learned from other Partnerships to gain knowledge of industry best practices in energy efficiency management and successful project implementation. The Partnership will seek opportunities to improve project coordination and communication by increasing awareness and acceptance of energy efficiency practices which will strengthen the relationships among the Partners.

b) Innovation:

Referenced in Master PIP 6d.

c) <u>Interagency Coordination:</u>

Referenced in Master 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 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. 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) <u>Integration across resource types:</u>

The Partnership will continue to look for collaborative ways to integrate state-wide pilots or CPUC approved programs for air-quality water, etc., into the County projects as appropriate.

f) Pilots:

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) EM&V:

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 - 2014 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.

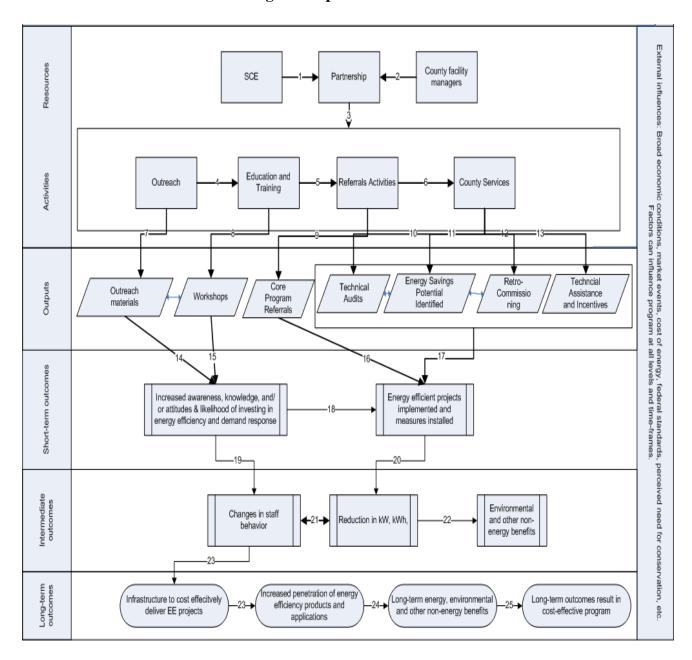
5. Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 5⁴⁸

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	cheesa Thie 2 Trequirements.
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 San
mechanisms so property owners can fund	Bernardino County/ SoCalGas/SCE
EE through city bonds and pay off on	Partnership.
property taxes; develop other EE financing	- m.
tools.	
1-5: Develop broad education program and	Develop educational programs for local
peer-to-peer support to local governments	elected officials, building officials,
to adopt and implement model reach codes	commissioners, and stakeholders to
1 1	improve adoption of energy efficiency
	codes, ordinances, standards, guidelines
	and programs targeting local government
	decision-makers and community leaders
	and Board of Supervisors.
1-6: Link emission reductions from "reach"	CARB adopts regulation
codes and programs to ARB's AB 32	providing local government emission
program	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.

⁴⁸ This table includes a subset of CLTEESP local government chapter strategies that pertain especially to local government actors. 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.

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	Not expected to be influenced in the San
by local governments shall meet the	Bernardino County/SoCalGas/SCE
requirements of the energy component of	Partnership
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	Develop a program to track municipal
buildings, and re-commissioning and retro- commissioning of existing buildings.	energy usage, such as through energy
commissioning of omstring containes.	management software and benchmarking of
	municipal facilities. Set up a 'utility
	manager' computer program to track
	municipal usage. Identify need for sub-
	metering to plan, budget and manage bills.
3-4: Explore creation of line item in LG 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 LG pilot projects.	
4-1: LGs commit to clean energy/climate change leadership.	
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Develop educational programs for local elected officials, building officials, jurisdiction staff, commissioners, residents, businesses and stakeholders to lay the groundwork for adoption of a Climate/Energy Action Plan, to reduce community greenhouse gas emissions with a focus on energy efficiency.
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	Not expected to be influenced in the San Bernardino County/ SoCalGas /SCE Partnership.



1. **Program Name**: Santa Barbara County Energy Watch Partnership

Program ID: SCG3746

Program Type: Local Government Partnership

2. Program Element Description and Implementation Plan

a) List of program elements:

The core program elements are similar to those identified in the Master Program Implementation Plan: Government Facilities, Strategic Plan Activities and Core Program Coordination.

b) Overview

The Southern California Gas Company (SoCalGas) Santa Barbara Partnership is unique effort with SCE in the Southern region of the County, the Cities of Santa Barbara, Goleta and Carpentaria, and the Northern region with PG&E and the County of Santa Barbara the Santa Maria Valley Chamber of Commerce.

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.

4.A.1. Retrofit of County and Municipal facilities

The Partnership will provide opportunity for a comprehensive retrofit of municipal facilities. Incentives will be administered through Pacific Gas & Electric (PG&E), Southern California Edison (SCE), and Southern California Gas (SoCalGas) 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.

Over the course of the 2010-2012 program cycle, the Partnership contributed to significant direct-install retrofit projects involving the County and partnering cities. During the new program cycle, the Partnership will be concentrating on deep retrofit opportunities. The County of Santa Barbara has numerous facilities in the Partnership area of northern Santa Barbara County, mostly located in and near Santa Maria. The City of Santa Maria is the largest city in northern Santa Barbara County and has the most potential for deep retrofit opportunities. The cities of Buellton, Solvang and Guadalupe, though significantly smaller, also have potential for deep retrofit opportunities. 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, space heating boilers, domestic water heaters, and controls. Opportunities will be identified through comprehensive Energy Efficiency Demand Response (EEDR) 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 comprehensive approach to sustainable practices will be recommended. A minimum threshold of "Partner Level" of participation is expected for participants.

While many projects have been identified as having the potential to participate, further review is required to forecast the energy savings impact.

4.A.2 RetroCommissioning (of buildings or clusters of buildings)

The Partnership will offer RetroCommissioning (RCx) as part of their portfolio. Ideal projects will be at least 100,000 sq.ft. and not have had a major retrofit within the past five years. There are a very limited number of buildings in the Partnership area that qualify, therefore smaller projects will also be considered and opportunity evaluated on a case-by-case basis.

4.A.3 Integrating Demand Response into the audits

Essential program service element includes combining comprehensive energy audits, and energy efficiency with demand response. Participants will be encouraged to apply for additional incentives that are available.

4.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.

4.A.5 On-Bill Financing

The Partnership will participate in the PG&E, SCE and SoCalGas On-Bill Financing for municipal facilities that install energy-efficient equipment or implement energy-efficient 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 California Long Term Energy Efficiency Strategic Plan (CLTEESP).

4.B.1 Code compliance support

The partnership will work with PG&E, SCE, and SoCalGas 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.

We 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.

4.B.2. Reach code support

Partners will consider establishing reach codes that require exceeding Title 24 standards by at least 20%, either through regulatory means or through incentives. Alternatively, new facilities may be required to be LEED certified.

The Partnership will work with and urge with municipalities to be proactive in incorporating energy efficiency opportunities. For example, working with new projects to incorporate Electrical Charging Stations for electric cars, to help meet the State's requirements of reducing greenhouse gas emissions.

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.

4.B.3. Guiding document(s) support

The Partnership will support Local Government integration of 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.

4.B.5 Financing for the community

The Partnership will coordinate with Pacific Gas & Electric (PG&E), SCE and Southern California Gas (SoCalGas) to initiate and offer On-Bill Financing for 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.

4.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

4.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. The Partnership will coordinate with, assist, and collaborate with other area programs including emPowerSBC, EUC – ,and the Santa Barbara County Green Business program that provides "green certification" for businesses.

4.C.2. Residential and small business Direct Install

The Partnership will continue to support the PG&E to offer and encourage participation in the Direct Install retrofit program 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.

The Partnership will collaborate and provide information with other participating programs that provide opportunities and incentives for business and residential.

4.C.3. Third-party program coordination

Third party vendors are being solicited to assist with delivering specific elements of the program. One is that third party vendors will play a significant role in the implementation of the Direct Install program.

4.B.4. Retrofits for just-above ESAP-qualified customers

Not expected to be part of this Partnership's offering.

4.B.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.

The Santa Maria Valley Chamber of Commerce will leverage its local infrastructure to "spread the word" about energy efficiency, sustainability, green businesses practices, and provide opportunities to raise awareness 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 and the Chamber of Commerce is the annual "Green Business and Technology Forum", which provides an opportunity for businesses, community members and government officials to be aware of programs, energy efficiency opportunities, innovation from businesses toward sustainability, and to share ideas about green business practices and energy efficiency.

c) Non-incentive services

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.

d) <u>Target Audience</u>

The Partnership will also target municipalities, businesses, residential, and place special emphasis on reaching low income residents and hard to reach areas.

e) <u>Implementation</u>

Cost Effectiveness

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.

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 implementation. This includes tried and tested implementation strategies, approved marketing and outreach materials, coordination with appropriate officials, planning templates, contractor and engineering relationships as well as other resources that can be carried over.

Implementation processes are discussed in the Master PIP in the respective core program elements.

Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation Planning Estimates		
Program/Element	2013	2014	
Metric A	N/A	N/A	
Metric B	N/A	N/A	
Metric C	N/A	N/A	

Etc.	N/A	N/A
		,

Refer to the overarching PIP section.

c) Program Design to Overcome Barriers:

The principal barrier to energy efficiency is the state local economy. The increased initial capital outlay 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. It is realized 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.

The Partnership will offer workshop to identify ways to fund energy efficiency. Utility's 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.

3. 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) Innovation:

In Marketing and Outreach, the Partnership will leverage other agencies and services and collaborate to reach various targeted sectors of the community in promoting energy efficiency measures. This includes continued work with the Foodbank of Santa Barbara County, where information, and other forms of program awareness is distributed to families and community members that ordinarily are not reached. Working with non-profit organizations 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 and programs like emPowerSBC, Santa Barbara County Green Business Program and EUC. 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) <u>Inter-agency Coordination</u>

The Partnership plans to coordinate its program with existing Santa Barbara County programs and support energy efficiency programs by municipalities in the Partnership area.

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). The partnership will monitor the progress of the statewide IDSM efforts and work closely with the utilities 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 ESAP, renewables, and self-generation.

e) <u>Integration across resource types (energy, water, air quality, etc.)</u> One of Partnership's strategies is to coordinate energy and water efficiency messages to leverage both.

f) Pilots

None have been identified at this time.

4. Partnership Program Advancement of Strategic Plan Goals and Objectives

California Energy Efficiency Strategic Plan	SBCEP's Approach to Achieving CEESP Goal
(CEESP) Strategy	
1-1: Develop, adopt and implement model building energy	The Partnership will assist and urge Partners to be proactive
codes (and/or other green codes) more stringent than Title	with strategies affecting codes, standards and incentives;
24's requirements, on both a mandatory and voluntary	review best practices for exceeding Title 24; and provide
basis; adopt one or two additional tiers of increasing	consultants where possible to assist cities with their own
stringency.	planning and implementation.
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 bonds and pay off on	
property taxes; develop other EE financing tools.	

California Energy Efficiency Strategic Plan (CEESP) Strategy	SBCEP's Approach to Achieving CEESP Goal
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 with, and provide resources to, the County of Santa Barbara and partner municipalities 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.
1-6: Link emission reductions from "reach" codes and programs to ARB's AB32 program.	The Partnership cities will collect data on energy-efficient projects and evaluate the effect of potential reach codes. 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).	
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 3-2: Require commissioning for new buildings, and recommissioning and retro-commissioning of existing buildings.	Partnership cities will consider requiring municipal retrofit projects to participate at least at the Valued Partner level.
3-3: Improve access to financing to support LG EE/DSM, such as lowering interest rate of Energy Commission's loan fund, and utility on-bill financing. 3-4: Explore creation of line item in LG 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 LG pilot projects.	
4-1: LGs 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 Green Business and Technology Forum and other programs that allow for collaboration and sharing information
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.	Municipalities and the County of Santa Barbara will be urged to update 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 and incentives to provide Electric Charging Stations on commercial projects.

1. Program Name: South Bay Partnership

Program ID: SCG3747

Program Type: Local Government Partnership

2. Program Element Description and Implementation Plan

a) List of program elements:

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

b) Overview:

The South Bay Energy Efficiency Partnership (the Partnership) consists of the City of Carson, the City of El Segundo, the City of Gardena, the City of Hawthorne, the City of Hermosa Beach, the City of Inglewood, the City of Lawndale, the City of Lomita, the City of Manhattan Beach, the City of Palos Verdes Estates, the City of Rancho Palos Verdes, the City of Redondo Beach, the City of Rolling Hills, the City of Rolling Hills Estates, the City of Torrance, 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 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.

This 2013-20144 South Bay Partnership builds upon the already successful South Bay Environmental Services Center partnership. The South Bay'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 message that "saving energy is good for the environment and saves money too" will be 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.

Core Program Element A - Government Facilities

This area will deliver energy savings during the next two-year program transition period. 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 within the South Bay Cities Council of Governments maintain over 500 municipal buildings. The Partnership intends to continue the retrofit of candidate facilities identified during the 2010-2012 timeframe and will continue to identify others through additional assessments for school facilities and special districts . The assessments are intended to be an ongoing process throughout 2013-2014transition period.. 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 commission has specified the conduct of deep retrofits during 2013 – 2014. The South Bay Cities Council of Governments intends to achieve this via a greater emphasis on Retro-Commissioning. 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 plans to continue its concerted efforts 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 Master Partnership Implementation.

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 Master Partnership Implementation Plan. For 2013 – 2014, the South Bay Cities Council of Governments will explore the viability of having an Energy Manager On Call program. Most of the cities cannot afford to have professional energy management personnel on staff, yet we have found that the availability of such support greatly increases the chances the city will fully integrate energy efficiency into its operations. The South Bay Cities Council of Governments already has professional technical support under contract and will explore the opportunities of extending this support to its 15 member cities. It is intended that this technical support will include the review of EEMIS reports and Energy Action plans, the interpretation of monthly EEMIS reports, and the encouragement to act on the findings of these reports.

A.5) On-Bill Financing

Each city in the partnership has indicated a keen interest in using On-Bill Financing. Cities in the partnership will be encouraged to maximize the use of on bill financing to the extent that funding is available by the utility.

Core Program Element B: Strategic Plan Support

B.1) Code Compliance Support

The South Bay Partnership will continue to encourage a culture of energy code compliance improvement and will develop 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 South Bay Partnership will continue to establish meaningful reach codes as part of its effort to add value to energy efficiency in alignment with the strategies as expressed in the Master Partnership Implementation Plan.

B.3) Guiding Document(s) Support

As well as establishing documentation in alignment with the strategies as expressed in the Master Partnership Implementation Plan, the South Bay 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 plans will be used to develop a regional energy savings plan.

B.4) Financing for the community

The South Bay Partnership will develop an education and outreach program for the Partnership communities in alignment with the strategies as expressed in the Master Partnership Implementation Plan. It intends to make contacts and develop leads for any and all programs that may be launched as a result of the commission's guidance to the utilities for 2013 - 2014.

B.5) Peer to Peer Support

The South Bay Partnership will actively participate and support in the peer to peer program in forums for the partnering cities and through the strategies as expressed in the Master Partnership Implementation Plan.

Core Program Element C: Core Program Coordination

C.1) Outreach & Education

The Partnership established a comprehensive Marketing Education & Outreach (ME&O) Plan that will be expanded to incorporate: deep retrofit strategies among the 15 member cities and their business communities including but not limited to Retro-Commissioning, EUC, 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 11 special workshops throughout the 15 cities.

C.2) Residential and Small Business Direct Install

The Partnership will continue its outreach efforts to support and coordinate with the SoCalGas 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 party programs through the strategies as expressed in the Master Partnership Implementation Plan.

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

The South Bay Partnership will support this program in alignment with the strategies as expressed in the Master Partnership Implementation Plan.

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 and SoCalGas 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.

c) Non-Incentive Services:

In addition to the strategies as expressed in the Master Partnership Implementation Plan, the South Bay Partnership will include a Portfolio of partnership ME&O activities to increase community enrollment in energy programs, and other SoCalGas services, resources and assets brought to support the ME&O Plan (e.g., account manager support; training at the Energy Resource Center (ERC); speakers bureau; marketing, design & printing of brochures and other collateral materials; media/press/publicity support, etc.).

d) Target Audience, etc.:

City and county staff, management and policymakers (elected officials). Residential and business customers in the South Bay region.

e) <u>Implementation</u>

In addition to the strategies and coordination as expressed in the Master Partnership Implementation Plan:

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 workshops as well as community exhibits most with an attendance of 1,500-3,000 people.

The Partnership programs 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

	Baseline Metric			
	Metric A Metric B Metric C			
Program/Element	N/A	N/A	N/A	

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation Planning Estimates		
Program/Element	2013	2014	
Metric A	N/A	N/A	
Metric B	N/A	N/A	
Metric C	N/A	N/A	
Etc.	N/A	N/A	

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

The Cities that form the South Bay Partnership will have barriers consistent with and will employ those strategies as expressed in the Master Partnership Implementation Plan to overcome them.

6. Other Program Element Attributes

a. Best Practices

As well as those strategies as expressed in the Master Partnership Implementation Plan, the South Bay Partnership will embody the following best practices:

Leverage the strong member municipal relationships developed by the Partnership in the 06-08 and 2009 Bridge Funding cycle to further develop and capture energy efficiency opportunities within the county and cities facilities.

Expand the existing South Bay Partnership education programs to identify, develop and capture energy efficiency opportunities within the region's communities.

b. Innovation

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. Of particular interest to the South Bay Cities Council of Governments is the development of a meaningful role in the commission's stated desire to explore Water-Energy Nexus. The partnership has already initiated discussions with its member water districts (building on the experience gained with SoCalGas and the water districts during 2010 – 2012 in which joint water-energy audits were conducted) to determine meaningful goals to jointly pursue with SoCalGas, assess the existing research already conducted on the subject of Water-Energy Nexus, develop a technical methodology with quantitative rigor and rationale, provide training on how to apply this methodology, and conduct a pilot and report on its findings. Broad categories identified to date as possibilities include: 1) infrastructure repair and operational improvement, including leak detection, pressure management, source water management, and water/wastewater systems 2) technology assessment and deployment, including on-site water treatment and evaporative cooling 3) targeted end-use water conservation, including pump efficiency, sustainable landscape design and combined water-energy audits, and 4) integration of renewable energy in water systems including biogas generation from wastewater treatment. These tasks will complement the existing partnership that the South Bay Cities Council of Governments has with West Basin Municipal Water District and Torrance Water. UC Davis would also support these efforts.

The South Bay Cities Council of Governments intends to conduct additional training on for its member cities including: Water-Energy Nexus, financing options for residential, commercial, and municipal entities, how to use EEMIS data, and how to pursue deep retrofits. The partnership will identify and conform to the criteria for this type of expansion and will participate in available solicitations to identify funding.

The Partnership will also hold 11 training workshops and 24 exhibits over the course of the 24 months of 2013-2014 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 EUC, Retro-Commissioning; 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

The South Bay 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 and SoCalGas, and the South Bay region water agencies and sanitation district.

d. Integrated/coordinated Demand Side Management:

The South Bay Partnership program plans include identifying and enrolling municipal service accounts from each city in demand response programs in alignment with the Master Implementation Plan.

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. Pilots

The Partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

g. EM&V

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 - 2014 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. Partnership Program Advancement of Strategic Plan Goals and Objectives

The SBCCOG will continue to 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 2014, if a sustained funding
source is provided to support the activities.
Each local agency of the SBCCOG, through
the Partnership will continue to evaluate and
adopt expedited permitting and entitlement
approval processes, fee structures and other
incentives for green buildings and other above-
code developments as appropriate, following
the lead set by El Segundo.
The SBCCOG will continue to evaluate and
adopt as appropriate, a point of sale energy
disclosure dependent upon availability of
standardized energy star benchmarked data (per
recent legislation) on each meter at the point of
sale.
Within the Partnership and through other
Partnerships, the local agencies of the
Partnership, and the SBCCOG, 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"	Each local agency of the SBCCOG will
codes and programs to ARB's AB 32 program	evaluate and adopt, through the Partnership, the
codes and programs to ARD's AD'52 program	nexus of energy DSM programs and the larger
	AB 32/SB 375 compliance requirements will
	be integrated as appropriate, provided a
	sustained funding source is provided to support
	the activities.
2-2: Dramatically improve compliance with	The Partnership will support each agency in
and enforcement of Title 24 building code, and	developing and implementing Training &
of HVAC permitting and inspection	Education programs to achieve additional T-24
requirements (including focus on peak load	compliance, provided a sustained funding
reductions in inland areas).	source is provided to support the activities.
2-3: Local inspectors and contractors hired by	Each local agency of the SBCCOG will
local governments shall meet the requirements	evaluate and adopt as appropriate, policies
of the energy component of their professional	regarding energy components of the
licensing (as such energy components are	professional licensing of local inspectors and
adopted).	contractors hired.
3-1: Adopt specific goals for efficiency of	N/A
local government buildings	
3-2: Require commissioning for new buildings,	Each local agency of the SBCCOG will
and re-commissioning and retro-	evaluate and adopt as appropriate,
commissioning of existing buildings.	commissioning, performance measurement,
	and verification as a core part of their energy
	action plan.
3-4: Explore creation of line item in LG	Each local agency of the SBCCOG will
budgets or other options that allow EE cost	evaluate and adopt as appropriate, creation of a
savings to be returned to the department and/or	line item in their budgets or other options that
projects that provided the savings to fund	allow EE cost savings to be returned to the
additional efficiency.	department and/or projects that provided the
	savings to fund additional efficiency.
3-5: Develop innovation Incubator that	n/a
competitively selects initiatives for inclusion in	
LG pilot projects.	
4-1: LGs commit to clean energy/climate	Each local agency of the SBCCOG will
change leadership.	evaluate and adopt as appropriate, a Strategic
	Energy Action Plan that includes long and
	short term energy & sustainability objectives in
	line with the adopted California Long Term
4.2. Use lead covernments?1 ::1-	Energy Efficiency Strategic Plan.
4-2: Use local governments' general plan	Each local agency of the SBCCOG will
energy and other elements to promote energy	evaluate and adopt as appropriate, development
efficiency, sustainability and climate change.	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	Through the addition of SoCalGas, the West
EE/DSM/water/wastewater end use	Basin Water District, and the Los Angeles
LL DOM Water waste water end use	County Sanitation District to the Partnership,
	water efficiency projects, including low flow
	water efficiency projects, including low flow

	aerators and shower heads will be added. Additionally, as funding allows wastewater, stormwater and potable water capital projects will be contemplated with 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	Each local agency of the SBCCOG will evaluate, develop, and adopt as required, zoning and development authority changes to comply with AB32/SB375.

1) **Program Name**: San Luis Obispo County Energy Watch Partnership

Program ID: SCG3748

Program Type: Local Government Partnership

2) Program Element Description and Implementation Plan

a) List of program elements:

The following elements are fully described in the LGP Master PIP. The table below indicates those elements applicable to the LGP:

Available	Implemented	Targeted	Program Element	
to Local	by LGP as	Implementation		
Gov't via	described in	by LGP?		
GC or IP	Master PIP?	-		
			A. Government Facilities	
		X	A1 – Retrofit of County and Municipal Buildings	
	X		A2 - Retro-Commissioning	
	X		A3 - Integrating Demand Response	
		X	A4 - Technical Assistance	
	X		A5 - On-Bill Financing	
			B. Strategic Plan Support	
X		X	B1 - Code Compliance	
X	X		B2 - Reach Code Support	
X		X	B3 - Guiding Document Support	
X	X		B4 - Financing for the Community	
X		X	B5 – Peer to Peer Support	
			C. Core Program Coordination	
	X		C1- Outreach Education	
		X	C2 - Residential and Small Business Direct Install	
		X	C3 – Third Party Program Coordination	
	X		C4 – Retrofits for Just Above ESAP	
	X		C5 - Technical Assistance	

4A – Program Element Description and Implementation - Government Facilities

Overview

San Luis Obispo County Energy Watch (SLOCEW) is a joint partnership between the County of San Luis Obispo and Pacific Gas and Electric Company, and SoCalGas. The Partnership will manage the administration, marketing, integration and implementation components of this Partnership program. Through the SLOCEW Partnership, emphasis will be placed on the outreach to the Cities and Special Districts within San Luis Obispo County to assist them in improving the energy efficiency of their facilities and integrating energy efficiency throughout the local communities.

A1 – Retrofits: In addition to the retrofit of government facilities for the County of San Luis Obispo and the City of San Luis Obispo, emphasis will be placed on the outreach to and involvement of the smaller cities within the County. These efforts will be coordinated with the California Energy Commission (CEC) in order to use their audit and financial services to facilitate retrofit projects being completed in what may prove to be a difficult financial environment for many municipalities. With the coordinated effort of the San Luis Obispo County Energy Watch, IOUs and the CEC, it is anticipated that the retrofit projects completed will be more comprehensive, achieve greater short-term and long-term energy savings and assist the municipalities in saving energy dollars that can be used to support other essential services.

A2 – Retro-Commissioning: Although the Partnership focus will be on assisting the local governments with retrofit projects, opportunities to include retro-commissioning will also be presented in order achieve greater comprehensive savings.

Non-Incentive Services

A3 – Integrating Demand Response: In the course of assisting the local governments with a comprehensive evaluation of their facilities, demand response opportunities will be addressed and evaluated for cost effective implementation.

A4 – Technical Assistance: The Partnership will work with the utilities and CEC to assist in providing a comprehensive energy evaluation of all County and City owned facilities. Technical assistance will also be provided to assist the local governments in moving projects forward to completion.

A5 – On-Bill Financing: When On-Bill-Financing becomes available, the Partnership will work with the local governments to utilize this program, where feasible, to advance and complete projects.

Target Audience

The target audience for this partnership is the government facilities owned by the County of San Luis Obispo and all of the incorporated cities located within the County. These facilities include but are not limited to:

- Administration Buildings
- Correctional Facilities
- Police Stations
- Fire Stations
- Libraries
- Hospitals
- Recreation and Park Facilities
- Streetlights and Traffic Signals
- Waste Water Treatment Plants
- Arts and Entertainment Facilities

Implementation

Through working with County and City Managers, a comprehensive audit will be performed for all government owned facilities. Once the viable measures have been identified, financing and incentive options will be discussed. Assistance will be provided in developing a package to be presented to the elected officials for approval. Additional assistance will be provided by the partnership along each step through project completion.

5A – Program Element Rationale and Expected Outcome – Government Facilities

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric			
	Metric A Metric B Metric C			
Program/Element	N/A	N/A	N/A	

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

Table 4

Overcoming	Barrier	Solution
Barriers to		
Retrofitting		
Government		
Facilities		
1	Lack of information about	Meet with City Managers and other City
	programs available to assist local	Administrators to provide them with basic
	governments with improving the	information about program and assistance
	energy efficiency of their	availability.
	facilities.	

2	Lack of information/data on	Through the use of utility and CEC
	municipal facility usage and	resources, provide Cities with a
	energy savings opportunities.	comprehensive audit for all of their
		facilities to identify viable retrofit projects.
		Work with community leaders to obtain a
		commitment to pursue viable retrofit
		projects and identify financing/assistance
		sources.
3	Lack of aligned goals from	Work with community leaders to obtain a
	community leaders and lack of	commitment to pursue viable retrofit
	financial and human resources to	projects and identify financing/assistance
	pursue retrofit projects.	sources. Obtain a resolution from
		individual Cities to demonstrate a
		commitment to energy efficiency and pave
		the path for retrofits.

6A - Other Program Element Attributes- Government Facilities

- a) <u>Best Practices</u>: As individual Cities begin completing retrofit projects, they become champions for energy efficiency in their own communities and an example and resource for other communities. Partnership successes will also be shared with the Santa Barbara and Kern County partnerships through quarterly joint partnership meetings.
- b) <u>Innovation</u>: Funding retrofit projects may be the single most difficult obstacle facing cities. These financial challenges will be addressed by the Partnership creating a working relationship with the CEC to use their financing program and other energy efficiency grants and opportunities that may become available. The Partnership will also research other financing and funding opportunities and share the information within the Partnership and with other partnerships.
- c) <u>Interagency Coordination</u>: The Partnership will assist the County and Cities to ensure that all County/City Departments are aware of the partnership opportunities. The partnership will also work with the CEC to assist with project financing and energy audits and to utilize their expertise and technical assistance to overcome funding and project obstacles.
- d) <u>Integrated/coordinated Demand Side Management</u>: All retrofit projects will be assessed for opportunities to reduce peak demand. Where feasible and where financing opportunities exist, solar and other alternative energy projects will be considered for project inclusion.
- e) <u>Integration across resource types</u> (energy, water, air quality, etc): Regular meetings will be established with various applicable agencies to discuss how they might be able to assist in achieving energy efficiency within their own agencies and communities, and how the Partnership might be able to assist these agencies in distributing their information to applicable business and residential constituents.

- f) Pilots: Specific pilot projects have not been identified for the Partnership, however, with the Partnership's relationship with entities such as Cal Poly San Luis Obispo, Diablo Canyon Nuclear Power Plant and Morro Bay Power Plant, every opportunity will be explored to assist with the energy efficiency education of the communities and opportunities to incorporate new technologies in retrofit projects. In addition, where feasible, specific pilot opportunities will be explored to establish demonstration projects for new and emerging technologies to showcase their potential and opportunities.
- 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 2013 2014 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.

4B – Program Element Description and Implementation – Strategic Plan Support

Overview

The San Luis Obispo County Energy Watch program will assist the County and Cities in the enforcement of existing energy building codes and the development of reach codes that may reduce peak energy demand and greenhouse gases. The Partnership will utilize the Green Communities and other utility programs and training that may be available to assist in this effort. It is the objective of the Partnership to have individual city and countywide energy and greenhouse gas reduction plans in place by the end of this program cycle.

Non-Incentive Services

- B1 Code Compliance: The Partnership's objective is to work with the County and various City Building/Planning Departments to determine where the enforcement of existing energy codes may be lacking. Once areas of non-enforcement have been identified, a plan will be developed to encourage enforcement including providing information on the cost of non-enforcement in terms of energy savings and dollars lost due to non-compliance resulting from non-enforcement.
- B2 Reach Code Support: Once it has been determined that existing energy codes are being enforced then reach codes will be evaluated for their applicability in assisting the County and Cities in meeting their energy and greenhouse gas reduction objectives.
- B3 Guiding Document Support: The Partnership will coordinate a meeting with the County and Cities to begin discussions about developing both individual City- and County-wide energy and greenhouse gas reduction plans. From this initial meeting, the Partnership will work to bring utility and other resources together to assist in the development of these plans. The Partnership's objective is to have individual City and County energy and greenhouse gas reduction plans in place by the end of 2011.

B4 – Financing for the Community: As opportunities become available through utility or other programs, the Partnership will research these opportunities and make recommendations to and provide assistance to the local governments.

B5 – Peer to Peer Support: For all its aspects, the Partnership will work to share information and gain new ideas from the Santa Barbara, Kern County and other local government partnerships. This will take place through quarterly meetings with the Santa Barbara and Kern County Partnerships and attendance via phone at their monthly meetings. Information will also be shared and gathered through the meetings with other City/County agencies especially the quarterly meetings that the County Planning Department conducts with the City Planning Departments. Through this effort, best practices can be gleaned and shared to overcome obstacles and optimize achievements.

Target Audience

The Partnership will provide assistance to the Planning/Building/Permitting Departments in San Luis Obispo County and the incorporated Cities within the County.

Implementation

The Partnership will assist the target audience with benchmarking their existing compliance of energy codes and assist, where needed, with training and developing a plan for code enforcement.

5B – Program Element Rationale and Expected Outcome – Strategic Plan Support

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric			
	Metric A Metric B Metric C			
Program/Element	N/A	N/A	N/A	

Refer to the overarching PIP section

b) Market Transformation Information

Market Transformation Planning Estimates		
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

Table 4

Overcoming	Barrier	Solution
Barriers to	Bullet	Solution
Strategic Plan		
Support		
1	Understanding the degree to which the non-enforcement of energy codes is an issue.	Meet with building inspectors and other City/County officials to determine if non-enforcement is an issue or if there is a specific area or reason for non-enforcement. Once this has been completed, establish a cost ratio between enforcement/non-enforcement and compliance/non-compliance. This information will then be shared with the City/County officials and the Partnership will work with the Cities/County to address the potential of enforcement/compliance.
2	Lack of funding for training and technical assistance.	Develop a list of utility, local and other resources that can be used to assist Cities/County with training, to provide technical assistance and to act as an ongoing resource.
3	Existing codes are complicated and may be inconsistent or inconsistently enforced based on locality.	Through Planning Department meetings and discussion of code enforcement issues, peer to peer support will be developed and will facilitate the information exchange necessary to bring consistency across municipalities.

6B - Other Program Element Attributes- Strategic Plan Support

- a) <u>Best Practices</u>: As individual Cities begin improving code enforcement, they become a resource for other communities. Compliance successes will be shared with other Cities in their quarterly County Planning Department meetings and will also be shared with the Santa Barbara and Kern County partnerships through quarterly joint partnership meetings.
- b) Innovation: Resources may be an issue for the County and individual Cities. Utilization of utility and local resources may assist in the education and compliance with energy codes. Organizations such as architect associations and the Home Builders Council may be valuable resources in improving compliance and assisting the local municipality's enforcement. The Partnership will work with the County Planning Department to add code enforcement as a regular agenda item as part of their quarterly meeting with the City

Planning Departments. The Partnership will also seek to provide some type of code enforcement and/or compliance training or information at each of these meetings.

- c) <u>Interagency Coordination</u>: The Partnership will assist the County and Cities with the coordination of meetings, training and the research of local and other resources such as utility programs and other information that may be available to assist County/City Departments with enforcement. The Partnership will also assist with organizing meetings with other organizations such as builder and architect associations that may be able to assist with compliance.
- d) Integrated/Coordinated Demand Side Management: Through the enforcement of existing codes, it is anticipated that not only will energy consumption and GHG output be reduced, but that peak demand may also be influenced. Once the enforcement of existing codes and their potential savings has been addressed then reach codes can begin to be established emphasizing demand response measures and other demand response activities.
- e) <u>Integration across resource types</u> (energy, water, air quality, etc): Regular meetings will be established to meet with various applicable agencies such as Water Departments and Air Pollution Control Districts on how they might be able to assist in achieving energy efficiency. Code enforcement will also be discussed to determine if there are best practices for code compliance and enforcement that can be shared and used.
- f) <u>Pilots:</u> Education regarding the relationship of energy use to air quality and green house gas emissions will be emphasized. A pilot project will be developed to showcase how energy efficiency can be used to address these issues. GHG reduction information can be provided to the County and each City on an annual basis showcasing the impact of the Partnership's energy efficiency activities.
- g) EM&V: The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 2014 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.

4C – Program Element Description and Implementation – Core Program Coordination

Overview

San Luis Obispo County Energy Watch intends to take an integrated approach to distributing information about resources available to utility customers. Integrated information will include programs such as low-income, demand response and third party programs in addition to other local programs that may be applicable such as water conservation, waste management, recycling and others. The Partnership will also provide education, training and workshops on a variety of

energy efficiency and energy related subjects to individual business segments and communitywide.

- C1 Outreach and Education: The Partnership will assist the local governments in providing energy education and outreach within the communities. These activities will be coordinated with the utilities.
- C2 Residential and Small Business Direct Install: The Partnership will offer direct installation activities and will coordinate these activities with utility and other programs. The direct install activities will be discussed in monthly partnership meetings and will be directed to areas designated by the partnership with input from the local governments. The focus of the small business direct installation efforts will be to those businesses primarily operating in low to low-middle income areas and who employ local residents. The residential direct installation efforts will also be focused in these areas through the ESAP contractor. Employees of the businesses operating in these areas will be targeted for program inclusion.
- C3 Third Party Program Coordination: The Partnership will coordinate with Third Party contractors and programs so that there is a coordinated effort with direct installation activities to provide the best opportunities and most applicable energy savings solutions to the customer.
- C4 Retrofits for Just-Above ESAP: The Partnership plans on utilizing this program as its only residential program. The ESAP contractor will be invited to participate in the monthly partnership meeting so that their efforts can be coordinated with the other programs and so that they can receive input from the local governments.
- C5 Technical Assistance: Technical assistance will be made available to the local governments through the Partnership. Assistance may include audits, reports and inspections.

Target Audience

Programs will be targeted to residential and business customers as appropriate. The residential program will be utilized in the lower income areas of the communities to address the needs of those who may not qualify for the ESAP program but may not be able to afford making energy efficient improvements on their own. The Third Party programs will be utilized for those customers who would be better served by an expanded list of measures than those offered through direct installation.

Implementation

The Partnership will assemble a list of all energy efficiency programs available within the communities. The programs will be categorized by individual market sectors and this information will be made available to customers through business, trade and other community organizations and through the Partnership website.

- 5C Program Element Rationale and Expected Outcome Core Program Coordination
- a) Ouantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A Metric B Metric C		
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section

b) Market Transformation Information

Market Transformation Planning Estimates		
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section.

c) Program Design to Overcome Barriers:

Overcoming Barriers to Core Program Coordination	Barrier	Solution
1	Constrained customer participation due to poor economic conditions.	Through trade, business and other organizations, provide information on the variety of energy efficiency programs and program elements that can assist especially in the area of financing energy efficiency projects
2	Customers not knowing where to begin in becoming more energy efficient.	Through utility, Partnership and/or other programs, assist the customer with obtaining an assessment of the greatest energy savings potential.
3	Program overlap or customer not knowing program applicability.	Provide customers with a list of available utility, Partnership and other programs. This list will include information about the area and/or business segment where the program is applicable, a description about the program and program contact information.

6C - Other Program Element Attributes- Core Program Coordination

- a) Best Practices: Through communications with local organizations, other local government partnerships, utility personnel, local government agencies and others, establish a list of programs that are applicable to individual customer segments. This information will then be shared with the customer through trade, business and other local organizations. As businesses participate in the programs, use the same organizations that distributed the program information to share information about the businesses including type of projects, project costs, energy savings, how the project was financed, etc.
- b) <u>Innovation</u>: Financial resources may be an obstacle to projects moving forward. As a result, the Partnership will establish a check list of conservation practices (low or no cost recommendations) for each customer segment. Assistance will be provided to the customer in the implementation of these recommendations through a partnership with the Community College and/or other workforce resources. Once the customer has implemented the low cost/no cost measures then the Partnership will assist the customer in researching financial options so that other more costly and aggressive measures can be implemented.
- c) <u>Interagency Coordination</u>: The Partnership will assist customers with obtaining information about programs and services that may be available through local, state or federal agencies that can assist residential and business customers with their energy efficiency efforts.
- d) <u>Integrated/Coordinated Demand Side Management</u>: Peak demand reduction programs will be promoted where applicable. These types of programs will be highlighted on the program list that will be distributed through direct install and third party contractors, through local government departments such as water, recycling, waste management, air quality, etc.
- e) <u>Integration across resource types</u> (energy, water, air quality, etc): Partnership, third party, other utility and other energy efficiency program information will be distributed through the assistance of other agencies such as water, air quality and waste management. In turn, information about applicable local agency programs will be distributed through Partnership activities.
- f) <u>Pilots:</u> The Partnership will work with third party program contractors to showcase third party program benefits. This may include business or business segment tours of facilities that have participated in a third party program.
- 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 2013 2014 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.

1. **Program Name:** San Joaquin Valley County Energy Watch Partnership

Program ID: SCG3749

Program Type: Local Government Partnership

2. Program Element Description and Implementation Plan

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

The three core program elements are those identified in the Partnership Program Master Implementation of 2013-2014:

- Element A—Government Facilities
- Element B—Strategic Plan Activities
- Element C—Core Program Coordination

b. Overview

The SJV Energy Partnership consists of eight local governments including: County of Kings, City of Hanford, County of Tulare, City of Lindsay, City of Porterville, City of Tulare, City of Visalia, and City of Woodlake; the investor owned utilities Southern California Edison (SCE) and Southern California Gas (SoCalGas) and potentially Pacific Gas and Electric (PG&E); and the implementing partner, the San Joaquin Valley Clean Energy Organization (SJVCEO).

To better serve the needs of the two-county region the SJV Energy Partnership should include interagency coordination with the county Workforce Investment Boards, the county Economic Development Corporations, the Central California Community Colleges Consortium and the San Joaquin Valley Air Pollution Control District (Further described in #6c.).

Because of the geographic location of the Partnership, it is a case study in hard-to-reach residential and non-residential market. SJVP will target traditional hard-to-reach markets through collaborative effort with the local government leaders and the various IOU departments (i.e. Energy Efficiency, Demand Response, Business Customer Development, and Public Affairs).

The partnership's comprehensive portfolio of activities is designed to:

- Seek innovative approaches to energy efficiency in California's San Joaquin Valley
- Increase adoption of deep energy savings measures and best practices within municipalities and communities by continuing a "culture" of energy efficiency through focused resource and non-resource activities
- Increase the effective delivery of technical and financial energy services to residents and businesses

Core Program Element A – Government Facilities

While 2010-2012 was a focus on municipal savings, the common opinion is that the "low hanging fruit" of energy efficiency has been picked, and the focus now must shift to deeper energy savings. However, this area still holds potential to deliver energy savings during the transition period. Every local government that participates in the 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 the serving utilities. The participating local governments will work with the partnership to leverage additional funds to maximize the funding opportunities for energy related projects.

A.1) Retrofit of County and Municipal Facilities

The partnership will provide opportunities for our Partner cities and counties to "lead by doing" by identifying opportunities for local governments to participate in comprehensive retrofits and deep energy savings projects of municipal facilities.

These governments can leverage incentives offered through Southern California Edison (SCE) and Southern California Gas Company (SoCalGas) core programs. Local governments can also leverage funding opportunities available through grants, low-interest loans, and utility On-Bill Financing to maximize project dollars.

The partnership will support city and county planning efforts throughout this process by:

- Identifying energy efficiency in municipal facility retrofit projects. A preliminary list of potential opportunities include but are not limited to exterior lighting, pumps improvements, water treatment plant upgrades, HVAC and other various measures identified through SCE and SoCalGas audits;
- Targeting special districts (for example, water districts, school districts, libraries, community centers, senior centers, and national parks facilities), for additional energy efficiency facility retrofit projects;
- Providing workforce education and training to city and county personnel to provide for long-term energy efficiency maintenance and upgrades;
- Enroll municipal facilities into existing utility programs;
- Coordinating advanced engineering audits to identify further opportunities for savings; and
- Providing continuing support to partner local governments whose energy accounts were enrolled in ENERGY STAR's benchmarking Portfolio Manager System.

A.2) Retro-Commissioning (of Buildings or Cluster of Buildings)

Most of the "low hanging fruit" in municipal facilities has been "picked" and there is a definite need to pursue deeper retrofits, identified in the process of Retro-Commissioning (RCx) municipal buildings.

The partnership will identify the potential for energy-savings opportunities through the RCx of municipal facilities within the partnership's partner jurisdictions. 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 can help partner jurisdictions with RCx project development, including performing a complex study and assisting partners in promoting the program to decision makers.

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 has provided Integrated Demand Side Management audits of eligible demand response (DR) facilities for each partner jurisdiction. All retrofit projects will be assessed for opportunities to reduce peak demand. Where feasible and where financing opportunities exist, solar and other alternative energy projects will be considered for project inclusion.

A.4) Technical Assistance for Project Management, Training, Audits, Etc.

The partnership will assist city and county government officials and staff in understanding, managing, and reducing their energy use and costs, and position partner cities and counties 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 partner jurisdictions feel strongly that a preference should be given and emphasis placed on hiring locally in order to support the San Joaquin Valley and build capacity for the region. The partnership understands the need to build local energy efficient expertise. A key role of the partnership in the 2013-2014 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, or shared 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 designated energy leader to be able to address and respond to energy efficiency opportunities within the city or county.
- Educate employees though local government workshops/information sessions.

A.5) On-Bill Financing

Through SCE and SoCalGas On-Bill Financing, the partnership will encourage partner jurisdictions to take advantage of this opportunity for municipal facilities that install energy-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 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

In 2010-12 the partnership undertook work to address five areas in support of the Strategic Plan: 1.1.6 (define), 2.1.1 (define), 3.1.1 (define), 4.1.1 (define) and 4.1.3 (define). The Partnership, in 2013-14 proposes to tend to the actions set in motion in 2010-12, build on successes, as well as address new opportunities for alignment with the Strategic Plan. The Partnership believes that the Strategic Plan initiatives provide a roadmap for energy efforts, and will use the guidance to shape the partnership work within municipalities and the communities. On all strategic plan efforts, actions of the partnership will be on a regional approach for the two counties, as well as parallel to the greater eight county region of the San Joaquin Valley that already operates in an existing regional structure through the California Partnership for the San Joaquin Valley. Individual city and county efforts will reflect the regional approach, but as in 2010-12, will be customized to address the specific needs of each local government.

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 jurisdictions 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, SoCalGas, and other organizations to assist municipal building officials to 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 efforts to add value to energy in alignment with the strategies stated in the Master PIP. This activity will follow the proposed path described in the Codes and 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 State code requirements.

The partner local governments have been very clear that reduced staff's made it challenging to enforce existing codes, let alone propose more stringent codes. Additionally, local industry groups presented a challenge by vehemently opposing

requirements exceeding Title 24. During the 2010-2012 period the partnership researched ways in which a middle ground could be reached. Through sharing of best practices made available by the Local Government Commission, education sessions presented by the Statewide Energy Commission, conversations with the Kern Energy Watch and the San Luis Obispo Energy Watch, and a strategic alliance with industry groups in the northern San Joaquin Valley, an understanding of how to approach reach codes was discovered.

Through the partnership local governments will commit to begin engaging in a good faith effort to develop Reach codes and standards through community wide education sessions and work groups with the local stakeholders to build consensus on how the region might grow to support more stringent--both voluntary and mandatory--codes. They will also commit to coordinating with neighboring jurisdictions on the development and implementation of 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 implementation of Energy Action Plans developed in the previous program cycle. These documents, addressing some high-level community, but mainly municipal-focused energy efficiency, demand response, and GHG reductions were designed to be living documents that would grow with the capacity of a local government. As technology advances and existing measures retire the documents must be tended to and cared for in order to provide valuable and actionable guidance for the local governments. The partnership will continue to support local government partners in their municipal-focused actions and encourage partners to strive for deeper, more substantial efforts.

The partnership will help facilitate local government energy leadership and Action Plans that will address community-focused efforts to reach deep energy savings. Participating local governments will leverage their existing programs, interactions, and relationships in support of community-focused programs with a particular focus on socio-economically diverse populations and "hard-to-reach" markets. 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:

• Expansion of commercial PACE programs across the region;

- Outreach to local lenders--such as the Educational Employees Credit Union which offers low-interest energy efficiency loans--and collaborative promotion of financing opportunities to residents;
- Support and promotion of EUC;
- Assessment district loans; and
- Third party financing (PPAs)

The partnership will also coordinate with Southern California Edison (SCE) and Southern California Gas (SoCalGas) to initiate and offer On-Bill Financing for both municipal and community facilities choosing to install high efficiency equipment for strategies. Financing and installation of equipment will be considered for partial or full-extended repayments in the amount 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 jurisdictions in the exploration of tax-exempt equipment lease financing, clean renewable energy bonds, and other innovative financing approaches. The partnership will also serve as a clearinghouse to disseminate information to our partner jurisdictions on federal energy efficiency block development grants which are traditionally 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 two years, but it is likely that the bulk of 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 though which participants from partner jurisdictions can have access to information, exchange information, and attend training workshops, all in effort to increase in-house energy efficiency 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 members 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 jurisdictions are able to leverage the experience and expertise of fellow peer jurisdictions to increase awareness and participation levels and positively influence their own local government. Through regular partnership meetings, participants 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 continue to connect with other partnerships and local governments participating in other cutting-edge IOU partnership programs across the state. The partnership will leverage opportunities for sharing and advancing local government leadership though mentorship and sharing of best practices and

models with new or expanding partnership programs

Core Program Element C—Core Program Coordination

The partnership has been deployed 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 collaboration between local governments and utilities that support the development of long-term, sustainable energy and GHG reduction programs in support of the 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

For services directed at local governments, 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 savings measurement and savings verification services.

The partnership will support community educational efforts to residential customers through continued support of statewide efforts to promote EUC to eligible homeowners. The partnership will support education in the communities through public demonstration projects and community. In addition the program will act as a clearinghouse for public facing offerings, delivering information on demand response, self-generation, EUC, and low income programs, California Alternative Rate for Energy (CARE) and the California Solar Initiative.

The partnership will provide marketing and outreach, education and training, community sweeps, and participate in community events relevant to the message of energy efficiency and sustainability to connect the community with opportunities to take action to save energy, money and the environment and increase the viability of small businesses. The partnership will tell the story of local government as energy leaders in an effort to engage the commercial business sector and encourage deep energy retrofits in the commercial customer market.

The partnership will leverage existing resources offered by the jurisdiction or utility for an efficient and effective campaign. The partnership will continue to make use of offerings from the Southern California Edison Energy Education Center Tulare to provide quality education and instruction. Energy efficiency will be framed within the context of dollars savings for end users, as well as the local government's goals to reduce greenhouse gases as outlined in AB32.

C.2) Residential and Small Business Direct Install

The partnership will continue its support of the core programs and will encourage participation through leveraging county and city Chambers of Commerce, community groups, religious institutions, and elected official endorsements. The partnership will

work to ensure that the outreach is tailored to meet the needs of the individual communities and market segment.

C.3) Third Party 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 business and trade professionals and organizations and other green business and sustainability organizations to develop an integrated, comprehensive message.

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

The partnership will promote retrofits as an integrated approach to energy consumption and reduction, increasing awareness of energy efficiency and demand response qualified Low-Income Energy Efficiency (ESAP) customers. Coordinating with the Multi-Family Energy Efficiency Program will provide energy efficiency retrofits for just-above low income customers. The implementation of demand side management (DSM) strategies will also be coordinated with the ESAP Program and will support progress towards local and statewide sustainability goals.

C.5) Technical Assistance for Program Management, Training, Audits, Etc.

The partnership will assist our partner jurisdiction staff, residents, and businesses in understanding, managing, and reducing their energy use and costs, and position partner jurisdictions as regional leaders in energy management practice by providing comprehensive technical, planning, marketing and implementation assistance.

The partnership will use utility resources to support the partner jurisdictions capacity for smart energy management. This includes encouraging and enlisting local government staff to leverage utility resources.

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, SoCalGas and PG&E Energy Center offerings; Energy Star qualified rebate programs; and utility rebate programs.

c.) Non-incentive services:

The partnership will develop an "Energy Champion Recognition" program which will publicly recognize local government employees and facilities, individuals, residents and businesses for their contribution to deep energy savings. Additionally, the partnership will continue to participate in community events and EUC.

The partnership will build a ME&O portfolio of activities to increase community enrollment in energy core program and encourage deep energy savings with all market customers. The portfolio will include other SCE and SoCalGas services, resources, and assets brought to support the ME&O plan, including:

• SCE's Mobile Energy Unity

- Account Manager/Executive Support
- SCE's Energy Education Center Tulare training
- SCE's Speakers Bureau
- Providing limited giveaways
- 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 cost savings through deep energy retrofits.

The partnership intends to enhance the resources of SCE and SoCalGas with concentrated outreach to residential and commercial customers in the two counties. This target audience has been identified as "hard to reach" and the partnership endeavors to create replicable methodologies to successfully reach this market.

Additionally, given the disproportionate number of agriculture customers (growing, processing and distribution), the partnership endeavors to create replicable methodologies to successfully reach this market.

e) Implementation

In addition to the strategies and coordination as expressed in the Master Partnership Implementation Plan:

- The Partnership will develop 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 workshops as well as community exhibits most with an attendance of 1,500-3,000 people.
- The Partnership programs 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.

Program cost efficiency will be captured throughout our partner jurisdictions by maximizing replicable program elements, leveraging resources and support, and implementing initiatives that create demonstrated permanent and persistent deep energy savings.

3. 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.

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 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 quantitative baseline 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 ratepayer funds precisely directed to deep 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 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 deep energy savings, 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 public 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 backbone to private sector, commercial and business applications that may further power the shared political and physical environment.

Some of the specific barriers the partnership design must overcome include, but are not limited to:

Economy. The San Joaquin Valley partnership jurisdictions have some of the highest poverty rates in the nation, and nearly half of the population lives in a non-English speaking household. These residential and commercial customers are paying a greater percentage of their income--14 percent by some estimates (Association of California Community and Energy Services) compared with 3.5 percent for the nation as a whole – to heat and cool their homes.

Commercial and residential developers were devastated in the Great Recession. Many builders went out of business, and those that remained most likely downsized and

retrenched, just trying to survive. Any kind of investment beyond what is crucial to their operation is difficult for them to rationalize – even though energy-efficiency measures typically have a relative quick payoff.

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 commercial Property Assessed Clean Energy programs, and encourage other communities 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 by our partner jurisdictions. 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 energy leaders from each partner jurisdiction. Through this vehicle, the San Joaquin Valley partnership is able to provide a forum for partnership energy leaders to facilitate this sharing of best practices and information processing strategies.

4. Other Program Element Attributes

a) Best Practices

Primary Barriers/Program Challenges	Program Best Practices
Insufficient technical and financial	One-stop Shopping-Provides
resources	comprehensive bundle of technical,
	economic marketing and implementation
	assistance.
First cost of energy efficiency investments	Financing- On-Bill Financing, other low
	interest energy loans, possible
	establishment of self-replenishing energy
	efficiency/savings funds.
Incomplete implementation (due to	Course Corrections – Mechanism for
adoption of policies and goals without a	constant tracking, monitoring and review
sound implementation and financing plan)	of program results vs. challenges, allowing
	sufficient time for course correction.
Insufficient motivation	Comprehensive Benefits - 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 government entities.
Lost opportunities	Comprehensive Strategies – Comprehensive whole portfolio, building and facility approaches minimize lost energy efficiency and demand response opportunities by municipal facilities, while the companion ME&O strategy leverages participating local governments' best efforts to encourage residents and businesses to also become energy efficient.

b) Innovation

The partnership's unique combination of partner cities strengthens the ability to test strategies and share best practices across every corner of SCE and SoCalGas' 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.

The partnership proposes to leverage advancements in consumer technology to educate and share energy use information to develop a more aware and proactive customer. New companion apps for smart phones and IOU customer use access has improved over the last funding cycle and the partnership believes that utilizing these advancements will make the process of delivering information more efficient and cost effective, resulting in deeper energy savings across the board.

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 deeper energy savings, 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 San Joaquin Valley Air Pollution Control District. In 2010 the APCD with the San Joaquin Valley Clean Energy Organization initiated a coordinated delivery model to form the Clean Energy Partnership to create economies of scale for CEC funded EECBG projects in 36 communities, including four partnership jurisdictions. The San Joaquin Valley partnership proposes to integrate air quality reductions and APCD funded planning support services to by incorporating programs and opportunities through the APCD. For example, the APCD is working with Kings County to conduct municipal and community green house gas emission survey at no cost to the County. Additionally, the APCD is actively involved with the electric IOUs in preparing municipalities for Electric Vehicle Readiness. The partnership proposes to leverage education and outreach through

the APCD to educate local government partners, elected officials and other decision makers, as well as leverage grant funding opportunities to ensure the partnership jurisdictions are prepared and electric vehicle ready.

The partnership will work collaboratively with the region office of the United States Department of Agriculture rural development office as well as the California Partnership for the San Joaquin Valley--a private/public partnership formed under Executive Order of Governor Schwarzenegger to address and improve quality of life issues in the San Joaquin Valley—and their Rural Development Center to develop better ways to serve the rural partnership communities and increase information sharing opportunities across the region.

The partnership also plans to continue enhancing our marketing efforts by leveraging the materials produced by Flex Your Power, EUC, the Department of Energy and ENERGY STAR.

d) Integrated/coordinated Demand Side Management

The partnership will address the integration and coordination of delivering programs within the peer-to-peer network and with the IOUs. In 2011 the partnership, with SCE, SoCalGas, the Community Energy Partnership, the San Gabriel Valley Partnership, the South Bay Partnership and the Western Riverside Partnership began regular meetings to addresses challenges, share best practices and meet in concert with representatives and managers from Energy Efficiency programs, Demand Response, and Business Customer Development. These meetings began the process for better coordination between parties, and has allowed for more effective integration of combined programs into the local government partnership model. The partnership will continue to participate in these meetings, as well as hold regular conference calls with combined EE, DR, and BCD to ensure that the programs are being connectively deployed; to address challenges as they occur and correct course in a timely manner based on feedback from local governments; and to use these demand side energy resources to affect deeper retrofits at the municipal and community level.

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

The partnership promotes comprehensive sustainability, including water conservation, solid waste management, and alternative mobility.

The partnership will work with the largest industry in the two counties, which is farming and agriculture (including the value added services chain of processing, productions, and distribution). The San Joaquin Valley (a combined eight counties) form the nation's largest food producing region, producing some \$25 billion worth of food and fiber. More than 250 commodities are grown here, and opportunities for deep energy savings in operations and plants exist.

f) <u>Pilots</u>

Two pilot program opportunities will be pursued in conjunction with the partnership implementation plan.

Hard to Reach

The partnership territory is a case study for "hard to reach' markets. More than 41 percent of the residents speak Spanish as their primary language; 80 percent of households in the partnership live below 400% of the federal poverty guidelines; 43 percent of all residences are renters; and 71 percent of all businesses in the partner jurisdictions are classified as "very small", employing less than 10 employees.

The partnership proposes to develop replicable program delivery methods to reach these residential and non-residential customers, exposing energy savings opportunities and providing education on deep energy retrofits to very small businesses, multifamily homes, business leasees, and renters.

Commercial Benchmarking

In 2010-12 the partnership jurisdictions used the ENERGY STAR Portfolio Manager system as an introductory Energy Management System and benchmarked not only facilities, but all energy accounts. This effort made the partners leaders in energy benchmarking. Based on this success, the partnership will promote the partner local governments as success cases to the commercial sector and work with the local Chambers of Commerce, Economic Development Corporations for the counties, and Commercial Real Estate professional associations to educate and encourage commercial and industrial businesses to benchmark their facilities, as well as educate on the benefits of deep energy retrofits.

g) <u>EM&V</u> See master PIP.

5. Partnership Program Advancement of Strategic Plan Goals and Objectives

California Long Term Energy Efficiency	The Partnership's 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.	
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	
energy efficiency through city bonds and pay	
off on property taxes; develop other energy	
efficiency 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.	
2.2: 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	
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	
government budgets or other options that allow	
energy efficiency 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 selectee's initiatives for	
inclusion in local government pilot projects.	
4.1: Local governments commit to clean	
energy/climate change leadership	
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	
energy efficiency/demand side	
management/wastewater end use	
4.5: Develop energy efficiency related	
"carrots" and "sticks" using local zoning and	
development authority.	

1. **Program Name:** Orange County Cities Partnership

Program ID: SCG3750

Program Type: Local Government Partnership

2. Program Element Description and Implementation Plan

a) List of program elements:

Program elements are described below.

b) Overview:

Core Program Element A - Government Facilities

A.1. Retrofit of county and municipal facilities

The five cities in the Orange County Partnership are implementing an Enterprise Energy Management Information system and are developing measures from the intelligence gathered from this effort. Gas savings opportunities are pretty much limited to RCx and gas fired water pumping measures as integrated into each city's Capital Improvement Programs (CIP) Other buildings have been audited by the CEC, and the Partnership is awaiting the CEC's reports.

Municipal facilities energy efficiency is a big component of Huntington Beach's local government partnership.

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

The 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

SoCalGas will help promote participation in demand response programs. Each 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 partnership has a specific budget for each of these activities.

A.5) .On-Bill Financing

Each city in the partnership has indicated a keen interest in using On-Bill Financing (OBF). The extent of participation in OBF will be limited only by the according to OBF guidelines approved by the CPUC.

Core Program Element B - Strategic Plan Support

B.1 Code Compliance Support

The Partnership will support the individual cities as they examine ways to increase compliance with existing codes. Each partner is aware that this is an area where increased

enforcement can result in substantial energy savings and greenhouse gas emissions. The partnership will provide training, technical assistance and additional support from SCE's, and SoCalGas' Codes and Standards program to help build capacity in local government to address code compliance issues.

B.2). Reach Code

The cities in this Partnership are also interested in establishing meaningful reach codes as part of its effort secure long term energy savings and greenhouse gas emissions in support of the CLTEESP. The Partners will consider what other cities have done and will benefit from process, templates and other best practices. However, in OC a reward based code for exceeding minimum code performance is the only feasible Reach Code solution. The cities would look to the Partnership to make them whole from waiving fees for exemplary energy performance. See Table 6 for more details.

B.3). Guiding Document(s) Support

At least one of the cities offers information at the city's building permit office on best practices and energy efficiency opportunities through the utility's programs. Significant enhancements to this practice are planned for the 2010 - 2012 program cycle. The Partnership intends to make available training, documents and templates to help cities develop their climate and energy action plans, especially as it relates to utility energy elements.

B.5) Financing for the community

The Partners are aware of the Commissions desire for financing solutions for energy efficiency. As SoCalGas rolls out the various OBR programs the partners will consider and promote these new opportunities for financing.

B.5) Peer to Peer Support

IOUs intend 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 as well as conferences will be conducted on a routine basis. We should do a much better job but relying on cities to donate staff time in this budget environment constrains this activity.

Core Program Element C - Core Program Coordination

C.1) . Outreach and Education

The partnership has a portion of its budget specifically allocated to outreach and education to demonstrate local government leadership and to provide the community with opportunities to provide energy actions and reduce the community's environmental footprint. ME&O activities will consist of staff training, Huntington Beach's Annual Green Expo, Stipends for Sustainable Surf City program volunteers through the Chamber of Commerce., Support for Huntington Beach's annual environmental awards, publishing of Huntington Beach's case studies and strategic sustainability and energy plans.

C.2) Residential and Small Business Direct Install

There are no activities planned for direct install in homes and business at this time. However, outreach will be done in the communication to create awareness of energy services and programs as mentioned in C.1.

C.3.) Third-party program coordination

The Partnership will execute community events appropriate for a third party contractor to execute, such as light exchange events.

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

Only coordination activities contemplated.

C.5 Technical Assistance for program management, training, audits, etc.

A specific portion of the partnership budget is allocated specifically for this activity. See Table 6 for more details.

c) Non-Incentive Services:

- Train Sustainable Surf City volunteers to provide energy efficiency support for residential, small commercial and low-income citizens of Huntington Beach, provide stipends to offset background checks and expenses.
- Study & consider voluntary "reach" green codes.
- Support for the annual Environmental Award
- Publishing case studies and sustainability and energy/climate plans with support from available programs and funding sources.
- Strategic plan support. The city of Costa Mesa would like to extend its existing green building permit waiver program.

d) Target audience

- 1. All Municipal Facilities: City Halls, Civic Center, Police Departments, Libraries, Social Services, Community Centers, Sports Fields, Medical Facilities, Parks, and water infrastructure.
- 2. Additionally, citizens and businesses and city staff are the target audience for partner cities.

e) Implementation

The program will be cost-effectively implemented with customized incentives for the retro-commissioning and retrofitting of partner cities' municipal facilities based on SoCalGas enhanced incentives for LGPs.

3. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation Planning Estimates		
Program/Element	2013	2014	
Metric A	N/A	N/A	
Metric B	N/A	N/A	
Metric C	N/A	N/A	
Etc.	N/A	N/A	

Refer to the overarching PIP section

c) Program Design to Overcome Barriers

In this Partnership, the barriers and strategies to overcome them are the traditional resource barriers of expertise and funding as outlined in the Master PIP.

Other

4. Other Program Element Attributes

a) Best Practices

Same as outlined in the Master PIP.

b) Innovation

Demonstrate environmental stewardship and community leadership in support of the CLTEESP by developing an EEMIS based dashboard to simplify sustainability reporting including energy efficiency and renewable energy.

c) Interagency Coordination

The partnership will provide technical assistance and other support though the Codes and Standards program as well as facilitate support from other programs and organizations through its network of consultants, engaged for this purpose.

d) Integrated/coordinated Demand Side Management:

Orange County cities will pursue necessary & cost-effective DSM opportunities as identified in the Master PIP and have identified at least 5 accounts that are eligible for participation in Demand Response programs. The partnerships will facilitate the provision of technical support for renewable energy-related activities being planned by the City of Huntington Beach and other cities wishing to pursue similar opportunities.

e) <u>Integration across resource types</u> (energy, water, air quality, etc) Water-Energy Nexus .

f) Pilots

Water-Energy Nexus pilots such as the HB Navigant study of on-site purple pipe water reclamation, rainwater harvesting and end-use water efficiency based on the embodied energy in city's water systems.

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 2013 - 2014 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

5. Partnership Program Advancement of Strategic Plan Goals and Objectives

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.	OC Cities have studied reach codes and found that in the current budget environment the only feasible model would be a reward based code with the city waiving fees for exemplary energy performance. OC Cities would consider pursuing adoption of reward based reach codes if the lost revenues were replaced with another fund source.
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	In the current budget environment this is not feasible.
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	In the current budget environment this is not feasible.
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.	OC Cities would support OBF/OBR programs as they are rolled out if they provide value to the end user.
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"	In the current budget environment this is difficult, there are no travel, training or mileage budgets.
codes and programs to ARB'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	

	T
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	In the current budget and political
buildings, and re-commissioning and retro- commissioning of existing buildings.	environment energy policy activities are not feasible.
3-4: Explore creation of line item in LG	Huntington Beach has devoted a portion of
budgets or other options that allow EE cost savings to be returned to the department	its annual capital improvement plan to
and/or projects that provided the savings to	energy efficiency and the savings accrue to
fund additional efficiency.	the general fund. HB has a voter approved
	initiative that 15% of the General Fund
	shall be spent on infrastructure. There is no
	interest in a second version of this mandate.
3-5: Develop innovation Incubator that	
competitively selects initiatives for	
inclusion in LG pilot projects.	
4-1: LGs commit to clean energy/climate	Both the City of Costa Mesa and
change leadership.	Huntington Beach have installed large scale
	solar systems
4-2: Use local governments' general plan	Huntington Beach has deferred investment
energy and other elements to promote energy efficiency, sustainability and	in general plan updates to include
climate change.	energy/climate concerns
4-4: Develop local projects that integrate	HB has worked closely with SoCalGas to
EE/DSM/water/wastewater end use	pilot several innovative water-energy nexus
	studies and projects. HB will support other
	cities that wish to implement
4-5. Develop FF-related "carrots" and	comprehensive efficiency.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and	Huntington Beach has approved two
development authority	specific plans that incorporate SCS
	strategies.

1. **Program Name:** Statewide Energy Efficiency Collaborative (SEEC) Partnership

Program ID: SCG3751

Program Type: Local Government Partnership

2. Program Element Description and Implementation Plan

a) List of program elements

Program elements are listed and explained in the next section.

b) Overview

The Statewide Energy Efficiency Collaborative (SEEC) a collaboration between ICLEI – Local Governments for Sustainability, U.S.A., Inc. (ICLEI), the Institute for Local Government (ILG), the Local Government Commission (LGC) and the four investor owned utilities is the statewide vehicle to provide coordinated resources including: workshops, technical assistance, a recognition program, and other means to allow local governments to share best practices associated with energy management and reducing greenhouse gas emissions. Work performed in this program is coordinated with the statewide local government energy efficiency best practices coordinator. SEEC will provide a consistent process for all local governments to develop GHG inventories, learn about relevant energy management issues, exchange lessons learned, and track their actions. This collaborative effort is structured to leverage the unique resources, assets, relationships, communications channels, programs, training, models and tools brought by each non-profit organization. The work of SEEC and the statewide coordinator is closely tied to the California Long-term Energy Efficiency Strategic Plan (Strategic Plan).

ICLEI will continue to help local government (LG) participants understand the linkages between energy efficiency and greenhouse gas (GHG) reduction/AB32 compliance. with an increased focus on implementation. .ICLEI will continue to deliver in-person and online trainings to facilitate LG understanding of requirements under AB32, learn about principles and methodologies for conducting GHG inventories, updating inventories and setting GHG reduction targets, as well as developing and implementing climate action plans (CAPs). ICLEI 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 operations and community-scale activities and facilities. Building on the existing SEEC tools and templates, ICLEI will assist local governments with the re-inventory and implementation process.

The LGC will conduct conferences, workshops and webinars to provide information about energy efficiency, demand response and renewable energy (EE/DR/RE), AB32 implementation, CEESP and other timely and important energy and climate policies, rules, regulations and legislation. These venues will increase opportunities for LGs to network and share information and experiences about best practices and lessons learned. LGC will continue to convene annual local government best practices forums. In advance of the forum LGC will convene advisory committee meetings with the utilities, ICLEI, ILG, the Coordinator, CEC and ARB to make sure

the forum provides information on the most recent regulations that affect local governments and the best case studies statewide that can serve as models for other local governments to follow.

To encourage LGs to share and implement best practices and work towards reducing energy use and greenhouse gas emissions, the ILG will continue to promote and administer a recognition program. for LGs The Beacon Award: Local Leadership toward Solving Climate Change recognizes cities and counties that achieve measurable energy savings and greenhouse gas emissions and adopt policies and programs that promote sustainability in ten best practice areas. It includes silver, gold and platinum award levels, as well as opportunities to spotlight interim accomplishments as participants work toward achieving an award level.

SDG&E will co-fund with the other Utilities a non-utility position for a Statewide Local Government Energy Efficiency Best Practices Coordinator Coordinator at \$200,000/year. This Coordinator will report to ICLEI, ILG, and LGC supporting local government Strategic Plan activities. The Coordinator will identify best practices on Strategic Plan strategies such as revolving loan funds, residential energy conservation ordinances, green building codes, general plan vision for energy efficiency, building retrofits and energy savings. The Utilities will provide the Coordinator with information on local government partnership program work and progress in an easily accessible format, to facilitate the tracking and creation of best practices case studies. The Coordinator will share these best practice case stories broadly. The Coordinator will also track progress toward meeting the goals in the local government chapter of the Strategic Plan. The Coordinator will also be an advisor to the SEEC program.

Continuation of Successful Partnerships:

1. Did the partner work collaboratively among regional partners and stakeholders?	
2. Did the Partnership accomplish/meet all the goals outlined in the Scope	
of Work/PIP?	
3. Did the partner utilize/leverage their unique authority throughout the	
partnership activities?	
4. Was there a professional development and/or education program focused	
on the long term strategic plan elements?	
5. Did the partnership activities help implement specific elements of an	
adopted energy efficiency, climate change or sustainability plan to foster	
market transformation?	

In addition to continuing this existing partnership, SEEC; in collaboration with the non-governmental organizations (NGO's) and the statewide IOU's; seeks to expand its existing partnership to address deep energy retrofits as identified in the CPUC decision for expanding programs.

Expansion of a Successful Partnership:

1. Must focus on EUC and deep retrofits	
2. Must have or develop a plan to engage the community	
3. Appropriate financing mechanism for targeted market segment	

Element A- Government Facilities:

Master PIP sub elements partnership addresses		
A-1	Retro-fit of County and Municipal Buildings	No
A-2	Retro-commissioning	No
A-3	Integrating Demand Response	No
A-4	Technical Assistance	Yes
A-5	On-Bill Financing or CEC Loans	Yes

This partnership will support element A in the following ways:

By 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.

By providing 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.

By quantifying 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.

By sharing best practices and lessons learned among local officials statewide through workshops, webinars, stories and other peer to peer learning opportunities.

Element B- Strategic Plan Support:

Master PIP sub elements partnership addresses		
B-1	Code Compliance	No
B-2	Reach Code Support	No
B-3	Guiding Document Support	No
B-4	Financing for the Community	No
B-5	Peer to Peer Support	Yes

The 3 non-profit organizations will combine their respective membership bases and communication and networking infrastructure to bring broad peer networks for sharing information, lessons learned, best practices, models and tools. They will also coordinate their

respective resource libraries and databases and compile comprehensive web-based resources related to best practices, tools and techniques that will be accessible by all cities and counties statewide.

ICLEI will focus on providing local governments' tools and resources needed to develop their GHG inventories, climate action plans and implement reduction measures. ICLEI will offer trainings for LGPs that explain the methodology for computing the GHG impacts of their Government Facilities energy projects. and using that information to make real reductions in energy output.. ICLEI 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, ICLEI will train participants on how to update inventories and develop and update Climate Action Plans (CAPs) that include GHG reduction strategies that reflect best environmental responsibility policies, plans, programs and practices.

The LGC will utilize its networks and relationships with local elected officials and staff to provide a number of educational forums venues highlighting resources, models and peer learning opportunities related to California's energy and climate policies and programs. The venues will include: ongoing annual Statewide Energy Efficiency Best Practices Forums (attracting over 150-200 local government participants) webinars (drawing 50-150 participants), workshops and regional local government partner networking meetings (drawing 30-100 participants). These forums help nourish peer networking and sharing of best practices among LGs that are implementing similar types of energy efficiency programs. Information about financing strategies and options will be included.

The ILG will then-recognize the achievements of LG Beacon Award program participants as they progress along the achievement scale. ILG will leverage its extensive network with California cities and counties as the non-profit research affiliate of the League of California Cities and the California State Association of Counties to reach all city and county officials through its sustainability and climate change programs. Building upon the solid foundation established during the 2010-2012 program cycle, ILG will continue to expand and manage its awards and recognition program (the Beacon Award: Local Leadership toward Solving Climate Change) for local governments that achieve specified levels of energy savings, GHG reductions and sustainability policies and programs.

The Coordinator and the three organizations will continue to work closely together to leverage their individual scopes of work, and toward the State goal of implementing the Strategic Plan.

The Coordinator will continue to produce best practices case stories, share information through email alerts and a web site (www.EECoordinator.info), connect local government energy staff with others working on similar energy efficiency issues, and track progress toward local government Strategic Plan goals.

Element C- Core Program Coordination:

Master PIP sub elements partnership addresses		
---	--	--

C-1	Outreach and Education	Yes
C-2	Third Party Program Coordination	No
C-3	Technical Assistance	Yes

The SEEC partnership supports core program coordination by providing a key channel for disseminating information about community energy programs and opportunities, and for coordinating those outreach and education activities.

c) Non-Incentive services

This is a non-resource government partnership program. All of the services delivered are non-incentive.

d) Target audience

California cities and counties,-staff and management, including facilities managers, budget and finance staff, department heads and energy and sustainability staff, elected officials, and/or community leaders whose support is needed to move ahead with LG facilities retrofits and are involved in efforts to reduce greenhouse gas emissions in agency facilities and the community.

State agencies and policymakers that are depending on local governments to help achieve California's aggressive energy and climate action goals, including the Air Resources Board, the Governor's Office of Planning and Research, CalRecycle, the California Energy Commission, CalEMA and the California Public Utilities Commission.

A wide variety of stakeholders that are needed to support local government efforts to "lead by example" in energy efficiency, demand response, renewable energy, sustainability, and climate action.

e) Implementation

The focus is to provide education, outreach and general strategic planning assistance to 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 [ICLEI]
- 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 & ordinances [ICLEI]
- Providing local governments with the guidance and tools to quickly and efficiently update existing GHG inventories and climate action plans. Creating real implementation routes to effective energy expenditure reduction through effective analysis of specific measures and their respective impacts [ICLEI]

- 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, etc. [LGC]
- Participating in conferences, workshops, webinars, peer support network groups, to provide peer support, training and education about best policies, practices, etc. [LGC, ICLEI, ILG and Coordinator]
- Developing and managing an awards and recognition program that recognizes local
 governments that achieve targeted levels of energy efficiency, with special recognition of
 local governments that adopt policies and programs to reduce energy and greenhouse gas
 emissions, including opportunities to share best practices through workshops, webinars, and peer
 to peer networks as they work toward achieving one or more of the award levels. [ILG]
- Collecting best practices and lessons learned from cities and counties and sharing with other cities
 and counties through peer learning networks, communication channels of the Local Government
 Commission, League of California Cities and the California State Association of Counties and
 other mechanisms to help promote energy efficiency and other activities to reduce greenhouse gas
 emissions. [ILG and Coordinator]

3. Program Element Rationale and Expected Outcome:

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section.

b) <u>Market Transformation Information</u>

	Market Transformation Planning Estimates	Market Transformation Planning Estimates
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section.

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

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 3 statewide non-profits with specific local government expertise and relationships that have information, tools and peer networks that can help LGs collaborate on how to overcome these barriers.

LGs are committed to help California achieve its aggressive energy and climate goals. Presently, however, many California's LGs are not clear about the immediate direction they are to 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. In addition, local governments are faced with increasingly limited budgets and reduced staffing resources.

To overcome the staffing and knowledge gap that prevents many LGs from moving forward easily, the SEEC partnership will provide targeted information and training that helps clarify the maze of new and emerging policies, rules, regulation and legislation and LGs' role in implementing these so that LGs can take decisive action, thereby supporting the goals of the Strategic Plan.

Primary Barriers

Many local governments do not have sufficient staff resources to stay abreast of all the current issues (e.g., new policies, rules & regulations; AB32 & Title 24 compliance; most current and "best" policies, practices, programs, etc. for EE/DR/RE, climate action/GHG reductions, water efficiency, etc.).

Many local governments also do not have staff that are knowledgeable in energy, climate & other sustainability issues and options.

Many local governments are confused about the different types of carbon policies, programs, goals (especially mandatory vs. voluntary), and protocols.

Strategies to Overcome Barriers

Establish Baseline Understanding. The 3 nonprofit organizations will collaborate in compiling a comprehensive repository of information for local governments about best-in-class energy, climate & other sustainability policies, programs, codes, ordinances, standards, practices, etc. This will build upon the existing resources of each of organizations and integrate new information from many other sources, including local government partners and other programs & stakeholders. These resources will help shortcut the amount of time needed by LGs 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 understand what needs to be done. Provide Regular Updates. California leads the nation in energy, climate and other environmental sustainability goals and initiatives. Each is progressing along its own track and few are fully integrated or coordinated with other initiatives. As a result, it is very

difficult for any one person or organization to stay abreast of all of these issues. The need to understand this information is burdensome to LGs who have barely enough staff and funds to cover their current mission-critical responsibilities. The SEEC partnership will deliver a comprehensive portfolio of education and training through conferences, workshops, webinars, etc. that help LGs stay current on evolving policies, rules, regulation & legislation so that they can free up staff time to address other essential priorities.

Provide Access to Continuous Peer Support. As California's LGs struggle to keep up with all of

California's LGs 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 LGs that are facing the same challenges. The partnership will facilitate access to a wide variety of peer-to-peer networks and other strategies to share best practices and lessons learned so that LGs can participate in the topics that are of greatest interest, need and priority to them and identify other LGs that can share in the development and implementation of policies, programs, strategies, etc.

4. Other Program Element Attributes:

a) Best Practices:

Type of Best Practice	Best Practice	
Planning	Build feedback loops into program design and logic.	The portfolio of activities to be developed and managed by the 3 nonprofit organizations will be reviewed a minimum of quarterly throughout the program period.
	Maintain the flexibility to rebalance portfolio initiatives, as needed, to achieve the portfolio's goals and objectives.	

Staffing	Clearly define portfolio implementation responsibilities and clarify roles to minimize confusion.	The roles of the 3 nonprofit organizations have been clearly defined.
Integration	Leverage relationships from complementary organizations such as utilities, trade allies, and industry specialists.	The partnership is structured to leverage all resources, assets and relationships of the three non-profit partners, the 4 IOUs, and other organizations that also 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.	Monthly coordination meetings coupled with quarterly portfolio reviews and adjustments.
	Design tracking systems to support the requirements of all major users: program administrators, managers, contractors and evaluators.	

b) Innovation:

These 3 nonprofit organizations all work now with LGs. Through the SEEC partnership they will combine and leverage their joint resources, assets, relationships, communications channels 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 all California local governments. This close collaboration is expected to improve both effectiveness and cost-effectiveness of their education and outreach activities.

c) Interagency Coordination:

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 may occur will be needed include but are not limited to: California Air Resources Board (CARB); California Climate Action Registry (CCAR); California Department of Conservation's "Emerald Cities" and "Innovative Recycling" Programs; the California Department of Resources Recovery and Recycling (CalRecycle), 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); California Emergency Management Agency (CalEMA); 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) <u>Integrated/coordinated Demand Side Management:</u>

This Partnership is designed primarily to provide strategic planning support for local governments and will include EE, DR and RE.

e) <u>Integration across resource types:</u>

Consistent with the CEESP, this program will include energy (EE, DR & RE) in combination with GHG reduction. Although not a direct goal of the partnership, 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, transportation management, smart planning and growth.

f) Pilots:

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) EM&V:

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 - 2014 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.

5. Partnership Program Advancement of Strategic Plan Goals and Objectives $N\!/\!A$

1) **Program Name:** Community Energy Partnership (CEP)

Program ID: SCG3752

Program Type: Local Government Partnership

2) Program Element Description and Implementation Plan

a) List of program elements:

The core program elements are consistent with those identified in the Master Program Implementation Plan: Government Facilities, Strategic Plan Activities and Core Program Coordination.

b) Overview

The Community Energy Partnership's 2013 - 2014 program builds upon its successful, award-winning model originated in 1992 by enhancing the leadership role of cities in energy management. The partnership has evolved from the Irvine Energy Efficiency Initiative to a 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.

This approach pursued will allow the CEP to be flexible in the customization of solutions to overcome challenges and exploit opportunities faced by local governments. In doing so, local governments will be able to develop individualized action plans for achieving both local and statewide goals and targets. Through this framework, the CEP program supports local governments who 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 CLTEESP.

During 2013-14 the Transition Period, the partnership will place greater emphasis on deeper retrofits through customized technical assistance offerings, a coordinated approach to Retrocommissioning and city staff training.

Core Program Element A - Government Facilities

This area continues to have the greatest potential to deliver energy savings during 2013-14. Local governments that participate in the CEP program will collectively 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 utility 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

CEP 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 and leveraging incentives that are offered through Southern California Edison (SCE) and Southern

California Gas Company's (SoCalGas) core programs. Whole facility approaches will be accorded top priority.

CEP will support city planning efforts throughout this process by:

- Identifying energy efficiency municipal facility retrofit projects. Building on the success from 2010-12, the Partnership will continue to build a comprehensive list of municipal retrofit projects from ongoing communication, training and technical assistance. Electric retrofits to municipal facilities will consist primarily of pump optimization (40%), lighting (40%), with the remaining 20% balance spread among various measures identified through SCE, SoCalGas and partnership audits; Gas retrofits to municipal facilities will be primarily in areas of water heating system, HVAC system, control optimization/upgrade and pool heating.
- Encouraging stricter EE standards for municipal new construction;
- Targeting special districts for additional energy efficiency facility retrofit projects. Special districts may include water districts, school districts, county facilities, libraries, community centers and senior centers.
- 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 with the utilities' Emerging Technologies departments to offer test sites within city facilities;
- Coordinating advanced engineering audits to identify further opportunities for savings
- Enrolling remaining municipal facilities in our Partner Cities in ENERGY STAR's Benchmarking Portfolio Manager program;
- Supporting continued efforts to proper energy use and tracking, including sub-metering, building automation systems and utility management software
- Encouraging city staff to participate in Building Operator Certification (BOC) or similar trainings and stay engaged throughout the retrofit process..
- Continued optimized operations and maintenance would be supported through the development of facility guidebooks. These operations and maintenance tools and practices provide city staff the ability to sustain proper commissioning of the facility to ensure long lasting savings.

A.2) RetroCommissioning (of buildings or clusters of buildings) for deeper retrofits and ongoing operations & maintenance

CEP will identify the potential for energy-savings opportunities through the Retro-Commissioning (RCx) of municipal facilities within CEP's Partner Cities. CEP 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.

CEP 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, demand response (DR), where applicable.

CEP 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.

A key piece in encouraging deeper retrofits is offering technical assistance. In 2010-12, the partnership proved successful in leveraging technical assistance to identify and initiate EE projects within municipal operations. Over the Transition Period, the partnership plans to continue to improve upon these offerings by assisting in more customized requests and expanded services.

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 program understands the need to build local energy efficiency expertise. A key role of the partnership program in 2013-14 Transition Period 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 utilities' 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 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.

Core Program Element B - Strategic Plan Support

The Partnership will pursue the following strategies in support of the California Long Term Energy Efficiency Strategic Plan (CLTEESP):

B.1) Code compliance support

The CLTEESP concludes that significant attention must be focused on enforcing and strengthening local on-the-ground compliance with energy codes and standards. The partnership program 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 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, SoCalGas 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 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 CLTESP 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 program, 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 CLTEESP 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 Energy 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 greenhouse gas reduction programs with particular focus on socioeconomically 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 greenhouse gas reduction projects is the difficulty in obtaining up-front financing to cover the project costs. The CLTEESP recognizes the need for new and innovative financing solutions to accelerate investments in energy efficiency and clean energy technologies for both residential and commercial properties. The partnership program will work closely with its participants and leverage other local, state and federal resources to foster a larger local government role in the development and implementation of innovative financing tools. This will be achieved by embracing approaches with local governments such as:

- Local PACE programs
- Assessment district loans
- Third party financing (PPAs, ESCo).

The Partnership will also coordinate with Southern California Edison (SCE) and Southern California Gas (SoCalGas) 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.

Partnership will support establishing municipal revolving energy funds that provide a secure, sustainable, long-term funding source for municipal energy efficiency projects.

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 and state energy efficiency grant opportunities. 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 CLTEESP 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 CEP. 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 and webinars, 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.

• Partner-to-Partner Sharing

Cities have expressed interest in sharing details about municipal projects and successes. The Partnership can facilitate easy sharing of information through a searchable webpage that lists municipal Partnership energy efficiency project details and summary and kWh savings totals across the region. The project will leverage free programs (i.e. GoogleMaps) to provide more flexibility for updating information.

• Community Energy Efficiency Project Management System (CEEPMS)

The cities of Santa Monica and Brea are in the process of implementing CEEPMS utilizing SCE Solicitation Flight 5.6 funding. This program is built into a city's existing on-line permitting system to identify projects with energy efficiency

potential and educate the consumer about the potential energy efficiency opportunity. In 2013, the partnership would like to continue to sustain the pilot system with tracking, evaluation and potential enhancement. Later in 2014, the partnership would market the system for potential expansion into additional partner cities at a minimal cost.

• 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 as well as statewide programs such as ICLEI and ILG. The partnership will leverage opportunities for sharing and advancing city leadership through and sharing of best practices and models other Partnership cities and implementers through Peer-to-Peer meetings.

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 objective is to develop effective partnerships between local governments and utilities that support the development of long-term, sustainable energy and greenhouse gas 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 CLTEESP that helps local governments define individualized energy reduction goals and Action Plans through very practical, flexible and straightforward steps.

C.1) Outreach & Education

The partnership will utilize existing resources offered by the cities 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) Energy Upgrade California – (EUC)

The partnership aims to promote the EUC program in 2013-14 through extensive collaboration with all state-wide and local EUC stakeholders to deliver comprehensive marketing and outreach. Modeling the successes of

local regional efforts like LA County, the partnership will host workforce trainings within partner cities, host homeowner workshops, and promote this resource and process as the portal to EE for partner communities. The goal is to increase the number of local contractors trained within partner cities where there is a demand and to increase the number of community members participating in EUC.

The partnership will promote financing programs like Western Riverside COG's successful HERO program along-side EUC.

C-3) Residential and small business Direct Install

No Direct Install activity planned in 2013 - 2014 program cycle besides the customized promotion of existing utility core programs. However, the partnership plans to work closely with Partner cities to engage relevant Business Improvement Districts to improve energy efficiency participation for small businesses.

C-4) 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 (i.e. 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 Master PIP regarding activities that provide access to energy offerings.

C-5) Retrofits for just-above ESAP-qualified customers

CEP will promote retrofits as an integrated approach to energy consumption and reduction, increasing awareness of energy efficiency and demand response for qualified Energy Savings Assistance (ESAP) 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 ESAP Program and will support progress towards local and statewide sustainability goals.

C.6) Technical assistance/Workforce Education & Training for program management, training, audits, etc.

CEP 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) Non-Incentive Services:

The CEP will provide numerous non-incentive services which include:

- Municipal Energy Action support
- Peer-to-Peer Leadership
- Energy Efficiency Trainings and Workshops
- Energy Efficiency Programming for city marketing and outreach efforts
- Marketing, Education and Outreach
- Sharing of Community Success Stories
- Information, Education and Funneling or core and third-party programs
- Community Energy Champion Recognition

d) Target Audience

See Master PIP. CEP 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.

As an evolving Partnership, the CEP 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 2010 - 2012 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 Master PIP in the respective core program elements.

3. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

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

Please refer to the baseline and market transformation discussion presented in the overarching PIP section.

b) Market Transformation Information

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

<u>Economy</u>. The principal barrier we anticipate which could result in reduced participation is the state of the economy both at the state and local level. The commercial and residential development is stagnant in recent years. With the economy working slowly to recover from the recession, it will continue to be 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 show long-term benefits and pay-back. 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. The partnership will also encourage Partner Cities to leverage the enhanced utility incentive structure being offered to local governments participating in SCE's partnerships program.

<u>Lack of Access to Financing/Resources</u>. The partnership will work with local governments to access On-Bill Financing, leverage the local, state and federal resources for financing solutions, and encourage other community financing options to ease the adoption of energy efficiency in communities.

End User Attitudes Towards 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. 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 to achieve behavioral modifications that will ultimately lead to a positive change in end user attitudes.

<u>Cost of Obtaining and Processing Information.</u> 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 partnership is able to provide a forum for partnership Team Leaders to facilitate the sharing of best practices and information processing strategies.

r

4. Other Program Element Attributes

a. Best Practices

Primary Barriers/Program Challenges	Program Best Practices
Insufficient technical & financial resources	<i>One- stop Shopping</i> - Provides comprehensive bundle of technical, economic, marketing and implementation assistance through implementing partner.
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, PACE
Incomplete implementation (due to adoption of aggressive policies & goals without a sound implementation & financing plan)	Course Corrections - Mechanism for constant tracking, monitoring and review of program results vs. challenges, allowing sufficient time for course corrections
Insufficient motivation	Comprehensive Benefits – 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	Comprehensive Strategies – Comprehensive whole portfolio, building & 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 & business to also become energy efficient.

b. Innovation

The partnership's unique combination of Partner Cities mixed with a regional approach strengthens the ability to test strategies and share best practices across every corner of SCE and SoCalGas 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 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 on continuing to enhance our marketing efforts by leveraging the materials produced by 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). The partnership will monitor the progress of the statewide IDSM efforts and work closely with the utilities 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 ESAP, renewables, and self-generation.

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/AB32. The Partnership will pursue opportunity for joint marketing and promotion initiatives with water and sewer districts, solid waste management agencies, regional air quality districts, and other relevant resource management entities. These effort will include but will not be limited to coordinated customer financial incentives for program participation, one-stop shopping for program information and applications, joint measurement and evaluation methodologies for calculation of greenhouse gas reductions, and development of a collaborative public information campaign that will link all of the desired customer actions within each of the various resource areas into one unified marketing message. This approach will increase the cumulative cost-effectiveness and customer participation of the previously fragmented programs.

f. Pilots

Two pilot program opportunities will be pursued in conjunction with the CEP implementation plan.

2013 Solar Decathlon outreach

In preparation for the 2013 Solar Decathlon at the City of Irvine's Great Park, and each year during National Energy Action Month, partner and coordinate with utility's CSI Group, along with local and national groups, local businesses and schools to produce events, programs and demonstration projects featuring solar and renewable technology.

Curiosity Quest Episode on Energy Efficiency

Curiosity Quest is an educational PBS show that answers a question posed by a viewer. Because of the popularity of the show, they have expended their repertoire to include a category specifically about the environment. Here's a link to Curiosity Quest's "green" webpage: http://www.curiosityquest.org/cqgoesgreen.html.

The Community Energy Partnership (CEP) to underwrite an episode that would benefit all participating cities with regard to energy efficiency or education. Curiosity Quest is proposing some new episodes that include bio-energy, alternative energy, CFL disposal,

solar farm, refrigerator recycling, to name a few. The partnership would underwrite an episode and propose a theme. Each city would have the copyright to the episode and air it on their respective local cable channels. The City of Irvine underwrote a Curiosity Quest episode promoting its food rescue program a few years ago and won an American Public Works Award for project of the year.

g. EM&V

Refer to SoCalGas Local Government Partnership Program Master PIP.

5. Partnership Program Advancement of Strategic Plan Goals and Objectives

California Energy Efficiency Strategic Plan (CEESP) Strategy	CEP's Approach to Achieving CEESP 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 with 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.	The partnership will assist in the adoption of PACE programs along with adoption of other appropriate innovative EE financing approaches.
1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model reach codes.	Local government staff and contract staff attend code compliance workshops offered by the California Energy Commission, utility codes & standards staff, or other local governments with strong compliance records. Coordinate with Partner Cities, IOU's, CEC, and other stakeholders to deliver workshops in energy code compliance locally to interested Cities. Educate city staff on importance of training. Assist with workshop marketing and delivery.
1-6: Link emission reductions from "reach" codes and programs to ARB's AB32 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 Partner City that has not already done so will develop and adopt an Energy and Climate Action Plan that will link policy
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).	and program actions being taken within their community to specific AB 32 goals and targets. 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.

California Energy Efficiency Strategic Plan (CEESP) Strategy	CEP's Approach to Achieving CEESP 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).	
3-1: Adopt specific goals for efficiency of local new and existing government buildings	Develop a program to track municipal energy usage, such as through energy management software and benchmarking of municipal facilities. Set up a 'utility manager' computer program to track municipal usage. Identify need for submetering to plan, budget and manage bills. The goal is to have 60% Partner Cities with ability to manage energy usage in municipal facilities.
3-2: Require commissioning for new buildings, and recommissioning 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.
3-3: Improve access to financing to support LG EE/DSM, such as lowering interest rate of Energy Commission's loan fund, and utility on-bill financing.	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.
3-4: Explore creation of line item in LG 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 LG pilot projects.	
4-1: LGs commit to clean energy/climate change leadership.	The partnership will work with Partner City that has not already had an Energy Action Plan to develop and adopt an Energy 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.
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 redrafting 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.
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.

1. **Program Name:** Desert Cities Energy Partnership (DCEP)

Program ID: SCG3753

Program Type: Local Government Partnership

2. Program Element Description and Implementation Plan

a) List of program elements:

The core program elements are similar to those identified in the Master Program Implementation Plan: Government Facilities, Strategic Plan Activities and Core Program Coordination.

b) Overview

The Desert Cities Partnership Program is a new local government partnership in SCE's, and SoCalGas' partnership portfolio. The Desert Cities Energy Partnership (DCEP) includes the Coachella Valley Association of Governments (CVAG), Southern California Edison (SCE), and Southern California Gas Company (SoCalGas) with cooperation from Imperial Irrigation District, a local public utility. CVAG is a local government agency, including 10 cities, Riverside County, and three tribal governments (collectively referred to as Jurisdictions) as its members. CVAG will partner with Southern California Edison (SCE) and SoCalGas for this partnership. 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 and SoCalGas will provide energy information, technical assistance, and assist the jurisdictions with implementation of municipal facilities retrofits and energy efficiency upgrades. The IOUs 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. The Committee meets monthly (no meetings in March, July, August, October, December) and will provide a forum for coordination of partnership activities. The Committee can assist with potential projects, outreach opportunities, and possible events and training. The Committee has coordinated a CVAG Energy Fair in April 2007, and Energy Summits since 2009.

A unique element of the DCEP 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. IID cooperates with CVAG, SCE and The Gas Company to promote this regional partnership. They provide an IID energy professional as a resource to the three cities to work on joint program promotion, evaluation of city facilities for energy efficiency, and coordination of project implementation. These cooperative efforts accomplish economies of scale and efficient utilization of resources. They participate with SCE and SoCalGas to maximize the resources necessary to meet our

energy use reduction goal. Imperial Irrigation District is a member of the CVAG Energy and Environmental Resources Committee.

In addition, CVAG has two tribal governments as member agencies – the Agua Caliente Band of Cahuilla Indians and Cabazon Band of Mission Indians. The tribal governments are involved with energy management plans and cooperate with regional efforts to promote energy efficiency. CVAG's Energy and Environmental Resources Committee 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 and link water and energy savings.

Two cities in the Coachella Valley, Cathedral City and Palm Desert, were involved in community energy partnerships with SCE and SoCalGas. DCEP will build on the leadership efforts of Cathedral City and Palm Desert. Palm Desert has completed the activities of the Palm Desert Energy Partnership and will officially join the Desert Cities Energy Partnership. DCEP has a Working Group including representatives of all the participating jurisdictions which promotes information sharing and lessons learned that are beneficial to all Coachella Valley cities and their efforts to build their own energy efficiency programs.

Through the Desert Cities Energy Partnership, all participating jurisdictions will strive to become a model for environmental excellence and a prevailing force in environmental protection. To accomplish these goals, jurisdictions will endeavor to establish policies that incorporate environmental responsibility into its daily management of urban residential, commercial, and industrial growth, education, energy and water use, air quality, transportation, waste reduction, recycling, economic development, and open space and natural habitats.

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.

Additionally, in 2008 most of the cities approved the Coachella Valley Association of Government's (CVAG) model Resolution on Energy Conservation and Resource Sustainability. This resolution set a valley-wide goal to reduce energy use by 10% by 2012.

Core Program Element A - Government Facilities

A.1 Retrofit of county and municipal facilities

The partnership will continue to work with jurisdictions to encourage them to lead by example to become models of energy efficiency in their municipal facilities. CVAG, SCE, SoCalGas, and IID will meet with each participating city/tribe to identify their municipal facilities and to establish when upgrades may have been made to those facilities. An initial

evaluation or audit of all municipal facilities was completed during 2010-2012. The CVAG member jurisdictions within IOU territory that are active participants in the partnership include Blythe, Desert Hot Springs, Cathedral City, Indian Wells, Palm Springs, Rancho Mirage and the Agua Caliente Band of Cahuilla Indians. We anticipate that Palm Desert will join the partnership in 2013 – 2014.

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

Each city will have the opportunity to evaluate potential retro-commissioning and financing options to accomplish these projects. Through the SCE Strategic Plan funding, SCE jurisdictions will adopt Commissioning/Retro-commissioning policies in 2012. The partnership will explore funding sources, which could include partnership funding, to support implementation of retro-commissioning projects by participating jurisdictions.

A.3 Integrating Demand Response into the audits

All retrofit projects will be assessed for opportunities to reduce peak demand. Where feasible and where financing opportunities exist, solar and other alternative energy projects will be considered for project inclusion.

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

Through the partnership, each participating city 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 Financing Options/On-Bill Financing

Each city in the partnership has indicated an interest in using On-Bill Financing but concerns about long-term "loan" commitments have inhibited participation. Showcasing successful OBF programs by other jurisdictions would likely help encourage participation. Available funding to support energy efficiency projects is the biggest impediment for jurisdictions. The Partnership will explore and possibly pilot other financing options being used by local governments.

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. Jurisdictions have reduced code enforcement staff significantly during the economic downturn and funding for enforcement is not likely to increase during the 2013-2014 period. The Partnership will place increased emphasis on coordination with local contractor groups to improve contractor and installer/technician training to support code compliance. Our jurisdictions are interested in working with contractors to ensure that proper permitting occurs with energy efficiency and renewable energy projects. We will explore options to develop a meaningful, cost responsible approach to increase knowledge of codes and standards and code compliance.

See Table 6 for more details.

B.2 Reach Code Support

The Partnership continues to promote education to build support for meaningful reach codes as part of its effort to add value to energy efficiency. The establishment and implementation of such new code requirements poses similar cost considerations to item 1 above, Code Compliance Support. The Partnership has developed a voluntary green building program/15% reach code which SCE jurisdictions are expected to adopt by September 2012. Workshops related to this program will train jurisdiction staff, contractors, and other stakeholders on energy codes and opportunities for energy efficiency. Information on ways to achieve 15% above Title 24 savings will be provided a city counters and on websites. Jurisdictions staff will help promote "going beyond" with residents and contractors who visit city hall to obtain permits, information. See Table 6 for more details.

B.3 Guiding Document(s) Support

CVAG and our Energy and Environmental Resources Committee continue to develop and share information about best practices for energy efficiency, sustainability and related topics during 2010-2012. This information is available to participating jurisdictions, through a website related to the partnership. The IOUs make available documents and best practices to help cities develop their energy efficiency practices. We expect to continue and expand.

B.4 Financing for the community

The partnership will also 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 on an AB 811/PACE funding program that would provide a source of funds for energy efficiency upgrades and retrofits for municipal, business, and residential customers.

B.5 Peer to Peer Support

The Partnership has established a Working Group of city/tribe staff members that meets every other month to share best practices information, current projects, and coordinate regional energy and sustainability efforts. 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 Master PIP.

C.2 Residential and Small Business Direct Install

The Partnership will continue and expand direct install programs for residential and small business customers. Coordination with cities/tribe on outreach to business community during previous direct install programs has helped to increase participation.

C.3 Small Business Coordination

The Partnership will emphasize outreach to and support for small businesses. Our efforts will include coordination with Business Improvement Districts and other business groups (e.g. chambers of commerce, real estate groups, service clubs) to engage small businesses and promote energy efficiency. We will explore potential for cost-effective rebate/incentive programs to encourage energy efficiency actions for small businesses.

C.4 Third-party program coordination

The Partnership will execute community events to promote energy efficiency, such as an energy fair, light exchange events, and other outreach, with assistance from third party contractors as needed. A successful pool pump program was completed in 2010-2011.

The Comprehensive Mobile Home retrofit program has been very successful in early implementation in 2012. The Partnership will identify options for programs using this model, including programs for low-income customers.

C.5 Outreach to low-income Residents/Hard-to-reach Customers

The Partnership will hold a minimum of two outreach programs for low and moderate income residents to put them in touch with utility core programs for income-qualified customers. Coordination with food banks, senior centers, and other support groups has been developed; a meeting to identify the most effective outreach tools will be held with these groups to develop a successful strategy.

C.5 Retrofits for just-above ESAP-qualified customers

See Master PIP

C.6 Technical assistance for program management, training, audits, etc.

See Master PIP and Table 6.

Core Program Element D – Energy Upgrade California – (EUC)

D.1 Outreach & Education

We will work with EUC implementation staff from SCE, SoCalGas, and the California Center for Sustainable Energy (CCSE) to coordinate efforts and promote the program.

D.2 Workforce Education and Training

The Partnership will identify and implement trainings for local government staff and officials, as well as workforce training programs in support of EUC will also support an increased emphasis on improving contractor and technician/installer training programs on Title 24, upcoming codes and standards, HVAC systems, as well as EUC.

Core Program Element E – Water/Energy Nexus

E.1 Coordination with Water Agencies

CVAG works closely with local water agencies on water conservation. In 2010-2011, CVAG and our member jurisdictions collaborated with our local water districts to develop and pass a water-efficient landscape ordinance. Several local water agencies are working with cities to implement reduction in water waste in the home and in the yard. The Partnership will work

with our water districts to identify opportunities to promote water conservation and energy efficiency.

3. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section

b) Market Transformation Information

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

c) Program Design to Overcome Barriers:

See Master PIP

Other

4. Other Program Element Attributes

a) Best Practices

Offer best practices information via website and other outreach, including annual Energy Summit.

b) Innovation

Develop municipal sustainability dashboard to simplify sustainability reporting including energy efficiency and renewable energy.

c) Interagency Coordination

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:
- e) <u>Integration across resource types</u> (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 Establish localized pool pump program pilot for climate zone 15. A highly successful pool pump program was completed in 2010-2011. Opportunities for another pool pump program will be explored.</u>

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 2013 - 2014 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.

5. Partnership Program Advancement of Strategic Plan Goals and Objectives

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 Coachella Valley cities have adopted the California Green Builder program on a voluntary basis. We plan 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. 1-3: Develop, adopt and implement model point-of-sale and other point-of 	Through SCE Strategic Plan funding, CVAG is working with jurisdictions to identify/adopt incentives for energy efficiency through a voluntary green building program. We will evaluate the potential opportunities for this kind of program.
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.	CVAG is working on a regional PACE/AB 811 program for energy efficiency we are also interested in other potential funding sources for jurisdictions to implement programs for energy efficiency.
1-5: Develop broad education program and peer-to-peer support to local govt's to adopt and implement model reach codes	Develop educational programs for local elected officials, building officials, commissioners, and stakeholders to educate them about Energy and Climate Action Plans, what is involved, and how these plans could be developed for their municipal operations and activities, and to provide a foundation of knowledge and pave the way for adoption of energy efficiency codes, green building ordinances, and associated standards, guidelines, and programs. We will work with SCE, and SoCalGas and other partners to enhance education and peer-to-peer support for local governments.
1-6: Link emission reductions from "reach"	We are coordinating energy efficiency

1 1 4 ADD2 AD 22	
codes and programs to ARB's AB 32 program	programs with GHG reduction and climate action initiatives. We plan 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).	We are coordinating with local contractor groups and city staff to offer workshops and educational programs to support code 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).	We will encourage local government partners to ensure that energy training and licensing is consistent with requirements.
3-1: Adopt specific goals for efficiency of local government buildings, including:	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 retrocommissioning of existing buildings.	Commissioning and Retro-commissioning policies are expected to be adopted by September 2012 which provide guidance for Cx/RCx actions.
3-4: Explore creation of line item in LG 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 examples from other local governments for those who are interested.
3-5: Develop innovation Incubator that	The Coachella Valley has significant
competitively selects initiatives for	potential for renewable energy
inclusion in LG pilot projects.	development and energy efficiency incubators, including universities with sustainability goals.
4-1: LGs commit to clean energy/climate change leadership.	A goal of the Desert Cities 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 clean energy.
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	Local cities 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 and promote water/energy nexus.	CVAG's Energy and Environmental Resources Committee 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 Committee and will be included in partnership outreach.
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	Not expected to be influenced by Partnership activities.

1. **Program Name:** Ventura County Energy Efficiency Partnership

Program ID: SCG3754

Program Type: Local Government Partnership

2. Program Element Description and Implementation Plan

a) List of program elements:

The core program elements are similar to those identified in the Master Program Implementation plan: Government facilities, Strategic Plan Activities and Core Program Coordination.

b) Overview

The Ventura County Regional Energy Alliance (VCREA) consists of 10 public agencies: the County of Ventura, the cities of Camarillo, Fillmore, Oxnard , Santa Paula, Thousand Oaks, and Ventura; and Ventura County Community College District, Ventura Unified School District and Ventura Regional Sanitation District. The Alliance implements the partnership program of comprehensive energy savings organized through a single energy office for public agencies as well as non-profit service providers with strong community service connections.

VCREA Board of Directors is composed of elected officials from the participating public agencies, who provides the policy and leadership for the program that is open to all local public agencies. 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. VCREA is not a mandated public agency, but rather an outcome of collaboration among regional leaders concerned specifically with energy issues.

VCREA provides a local government face that remains consistent to promote greater coordination and integration of efforts that leverage energy efficiency to self generation, demand reduction, green building, recycling, cogeneration, conversion energy, electric vehicle and other new approaches to building a network of reliable resources, reduce greenhouse gases and support sustainable implementation practices.

The Board has placed emphasis on project retrofit implementation, leveraging ratepayer and taxpayer funds to maximize return on investment. Based on work in the prior cycles, the organization has placed emphasis on strategic planning, energy finance options, support for energy education and job creation in the energy/utility sector. As the local partner and based on past experiences, VCREA developed an innovative regional process and program methodology which generated significant energy savings and demand reduction, in prior cycles and will continue in the 2013 - 2014 IOU funding cycle.

Core Program Element A - Government Facilities

A.1 Retrofit of county and municipal facilities

The Partnership 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 RetroCommissioning (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 RetroCommissioning (RCx). 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 will evaluate each project and determine if 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 centers (i.e., CTAC and ERC) but located in the region. Additional workshops will be offered to elected and public officials with guidelines on how to meet and exceed minimum building standards and help support the broader state goals of energy efficiency. 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

VCREA will promote SCE and SoCalGas On-Bill Financing for facilities that install energy-efficient equipment.

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", reduced maintenance costs and leverage with useful lifecycle costs.

B.2 Reach code support

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', Cal Green codes, LEED standards and 'best practices' that coordinate with greenhouse gas reduction plans and result in showcasing the ability of energy efficiency to yield lower operating costs.

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/SoCalGas to provide support in the preparation of guiding documents and templates, especially as it relates to energy action plans and/or specific general plan support 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. Financing energy efficiency in an extraordinary economic period that coincides with the 2013 - 2014 funding cycle through enhanced public sector incentives, rebates, loans, and tax credits; developing innovative approaches with non-profits to ensure EE and DR projects are funded and given the value and recognition associated with charitable/donor funded projects.

B.5 Peer-to-Peer support

The Partnership seeks to keep member Partners "in the loop" and share knowledge and Best Practices amongst themselves and with other Partnerships, through expanded marketing efforts, greater use of email and web-based 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 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 Alliance 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 Partnership 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 the 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 California Long Term Energy Efficiency Strategic Plan (CLTEESP) and IOU energy savings goals. See Master PIP for other outreach efforts.

C.2 Residential and small business Direct Install

VCREA does not have any plans to conduct Direct Install initiatives for this Partnership. However, the Partnership will support utility direct installation programs and promote events throughout the region.

C.3 Third-party program coordination

VCREA 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 Master PIP.

C.4 Retrofits for just above LIFE-qualified customers

VCREA will work with low-income and non-profit housing developers to integrate energy efficiency for just above LIFE-qualified customers. SCE's The Multi-Family Energy Efficiency Program will be leveraged as appropriate.

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

In addition to the Partnership offering to local governments, 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. VCERA 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) Non-incentive Services

See Master PIP.

d) Target Audience

See Master PIP. VCREA will also target special districts and nonprofit organizations.

e) Implementation

The Ventura Partnership will support the implementation of the Master PIP for each of the core program elements.

3. Program Element Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element	N/A	N/A	N/A

Refer to the overarching PIP section

a) Market Transformation Information

	Market Transformation Planning Estimates	
Program/Element	2013	2014
Metric A	N/A	N/A
Metric B	N/A	N/A
Metric C	N/A	N/A
Etc.	N/A	N/A

Refer to the overarching PIP section

b) 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 the taxpayers who benefit from installations of new efficiencies that are in part funded with ratepayer funds for technical support and incentives that 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.

Recognition 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 CTEESP. 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 everyday (24/7) and provide a backbone to private sector, commercial and business applications that may further power the shared political and physical environment.

4. Other Program Element Attributes

a) Best practices:

VCREA will promote Best Practices by building economies of scale through a 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) Innovation: Describe any unique or innovative aspects of program element not previously discussed.

Public Swimming Pool Initiative is proposed with the goal of improving the efficiency of the many large public swimming pools within Ventura County and encourages 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 green house gas reductions, and support growing trends to couple efficiencies and economies to maximize sustainability. VCREA will focus interagency coordination at the local/regional level, working with the Ventura County Air Pollution Control District (ARB), and Ventura County Transportation Commission/Ventura County Council of Governments

d) Integrated/coordinated Demand Side Management:

VCREA 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 Master PIP.

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

VCREA is working with low-income and non-profit housing developers to integrate energy efficiency in new design. VCREA 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 (i.e. carrot/stick approach).

f) Pilots:

No pilots are planned at this time.

g) EM&V:

The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2013 - 2014 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.

5. Partnership Program Advancement of Strategic Plan Goals and Objectives

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 expected to be influenced by Partnership activities, although Ventura County Government exploring AB 811 opportunities; may extend to cities; success will be dependent upon statewide economy and related public agency budgets and funding crisis.
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; although Ventura County and various cities in 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.	Not expected to be influenced by Partnership activities.
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.	Local Partner (VCREA) working with County of Ventura and several cities in the research of AB 811 and other appropriate district/bonds or other mechanisms; success limited by current economic conditions, bonding options and related public agency budget and funding crisis.
1-5: Develop broad education program and peer-to-peer support to local govt's to adopt and implement model reach codes	Develop educational programs for local elected officials, building officials, commissioners, and stakeholders to improve adoption of energy efficiency codes, ordinances, standards, guidelines and programs. VCREA tracks IOU training opportunities, as well as CEC, PIER, and other agencies; VCREA will host and/or participate along with Partner cities in events in SoCal Region to advance Commission adopted State EE Plan.
1-6:Link emission reductions from "reach" codes and programs to ARB's AB 32 program	Local Partner (VCREA) will build on existing link and collaboration with Ventura County Air Pollution Control District (VCAPCD) to determine where energy efficiency can support reduction in emissions. VCREA will report emission reductions with each public agency and non-profit organization's retrofit project.
2-2: Dramatically improve compliance with and	Not expected to be influenced by Partnership

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	activities. Partnership will host regular training events for building inspectors; VCREA expected to participate with Ventura County Building Department in joint presentations to further leverage opportunities. Not expected to be influenced by Partnership activities. Local Partner (VCREA) will meet with Ventura
government buildings, including:	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.	Not expected to be influenced by Partnership activities, although VCREA 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 LG EE/DSM, such as lowering interest rate of Energy Commission's loan fund, and utility on-bill financing.	Local Partner (VCREA) 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 LG 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.	VCREA 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 LG pilot projects.	
4-1: LGs commit to clean energy/climate change leadership.	VCREA is 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.	Update General Plan/Conservation Element with Climate policies. Provide energy efficiency framework and data for other people doing planning. VCREA 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.
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	VCREA staff/consultants works 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	Not expected to be influenced by Partnership activities. VCREA lacks direct authority over any public agencies, but will provide the technical support to local governments that consider using "carrot/stick" approaches.