Application of Southern California Gas Company (U-904-G) for Approval of Natural Gas Energy Efficiency Programs and Budgets for Years 2009 through 2011

Application 08-07- 022

Exhibit No.: _____
Witness: Athena M. Besa

AMENDED

PREPARED DIRECT TESTIMONY

OF

SOUTHERN CALIFORNIA GAS COMPANY

CHAPTER II

Appendix B: Program Implementation Plans

Volume 4 of 4

Third Party Programs

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

MARCH 2, 2009

Third Party Programs

Third Party Programs

Third Party

Programs

2009-2011 Energy Efficiency Programs
California Sustainability Alliance
Program Implementation Plan

1) Program Name: California Sustainability Alliance
   Program ID Number: TBD
   Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

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3) Projected Program Gross Impact Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The California Sustainability Alliance is an innovative cross-cutting market transformation program designed to increase and accelerate adoption of cost-effective energy efficiency. Key strategies are to:

- increase demand for energy efficiency by increasing understanding of the costs and benefits of energy efficiency and sustainability;
- increase voluntary adoption by creating value for market leaders and early adopters through a comprehensive program of awards, rewards and recognition;
- increase effectiveness and cost-effectiveness of energy efficiency programs by packaging them with complementary "sustainability" measures (e.g. climate action, water efficiency, renewable energy, smart land use, waste management, transportation management) to leverage complementary program delivery channels, and use existing marketing, education and outreach channels to increase the frequency and strength of energy efficiency and sustainability messages;
- increase and accelerate adoption of energy efficiency by engaging the assistance of expert advisors to overcome major barriers in high potential undersubscribed sectors;
- provide comprehensive approaches such as whole building, portfolio and system approaches that achieve energy savings faster and more cost effectively while minimizing lost opportunities, and
- simplify and streamline energy efficiency adoption through one-stop shopping for technical and financial assistance.

b) List measures

This is not applicable as this is a non-resource program that focuses on accelerating voluntary adoption of energy efficiency and other complementary sustainability best practices.

c) List non-incentive customer services

The Alliance assists targeted market leaders in increasing sustainability through pilot programs in which strategies for overcoming barriers to sustainability are developed and tested. During the course of these pilots, the Alliance provides a wide variety of assistance to pilot participants. In order to effectively support market leaders' efforts to adopt very aggressive sustainability goals, the Alliance helps them understand the myriad of choices and brands (e.g. 'shades of green') to select the suite of programs and practices that best meet their organizational objectives. The Alliance also provides ready access to significant support networks both for the participant, and for its markets, customers and stakeholders.

Non-incentive customer services range from sustainability audits and assessments of new and planned systems and facilities, to helping pilot participants identify best sustainability development, planning and operations practices. The Alliance then creates web-based databases, models and tools that package the technical assistance provided to pilot participants into forms usable by other California organizations. In addition, experience gained through the pilots is documented in the form of case studies that are also made available on the Alliance's website. While Alliance technical services are provided for the purpose of developing knowledge and tools for overcoming barriers to sustainability, pilot participants gain valuable technical assistance.

The Alliance's robust support infrastructure is supplemented with a heavy dose of widespread public recognition of notable successes. It is essential that market leaders are recognized for stepping forward as early adopters, setting the sustainability bar for their peers and competitors. The program costs for recognizing successes are very modest while the returns are substantial.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers

In seeking to transform markets, the program follows a process to identify and qualify market barriers specifically related to the targeted sustainability objective. The program will conduct market research and interview key stakeholders to identify and qualify the primary barriers to sustainability in each of the targeted sectors. Expert advisors are invited to join the Alliance in addressing these barriers. These seasoned advisors provide technical review and, when needed, assistance breaking logjams created by resistant policies, rules, regulations and practices.

The table below provides a summary of specific barriers targeted by the Program and strategies to overcome these barriers.

Targeted Market	Barrier(s) Targeted	Primary Strategy(s)	Targeted Participants
Multi-Family Housing	Although owners/operators benefit from life cycle cost reductions, ad hoc responses to retrofits and lack of knowledgeable personnel result in missed opportunities	Sustainability policies and plans that target more effective & cost-effective greening of entire portfolios of multi-family housing on a whole-portfolio and complex basis (i.e., retrofitting an entire complex of multi-family housing at one time, rather than upgrading units one at a time, when they fail or are on the verge of failing).	Owners of multiple multi-family properties, both affordable housing (e.g., LINC Housing) and for-profit property owners (e.g., BRE Properties).
Sustainable Communities	Uncoordinated development & permitting processes miss important early stage design opportunities	Facilitate partnering among developers, local government and utilities to integrate sustainable design elements into new developments at the earliest possible stages.	Large mixed use developments planned to be completed in SoCalGas's service area within the next 10 years.
Commercial Office Buildings	Since owners & landlords typically pass energy, water & other operating costs on to tenants, incentives are misaligned (owners need to make investments in building improvements while tenants realize benefits through reduced energy & other operating costs)	Assist owners and tenants of leased commercial office space in realigning investments and benefits to accelerate the greening of leased office space.	Owners of multiple commercial office buildings in California and very large tenants that collectively hold sufficient market power to influence design and operations decisions made by real estate investors and property management companies.

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Targeted Market	Barrier(s) Targeted	Primary Strategy(s)	Targeted Participants
Water and Wastewater	Water & wastewater agencies, significant users of energy, face a number of threats that are likely to result in substantial increases in energy requirements.	Help water and wastewater agencies develop strategic resource plans that optimize their water and energy resources on a fully integrated basis with the dual goals of (1) increasing energy efficiency of water and wastewater systems, and (b) meeting remaining energy requirements through development of local renewable resources.	California water and wastewater agencies.
Local Government	Most local governments are willing and interested in "leading by example" but often lack sufficient resources & expertise.	Assist California cities and counties in formulating sustainability policies and goals in which energy efficiency is an integral and essential element, and then developing and implementing the action plans needed to achieve these policies and goals. The Alliance's assistance includes visioning, strategic planning, and development and deployment of a wide variety of planning guidelines, tools, techniques, checklists, and benchmarks.	California cities and counties.

d) Quantitative Program Targets

The below table of program targets are indicative of the vigorous level of planned activity during the 2009-2011 program period.

Table 3

California Sustainability Alliance	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1: Network of Expert Advisors	60	80	100
Target #2: Showcased Entities	4	8	12
Target #3: Awards Ceremonies	1	2	3
Target #4: Participants in Sustainability Forum	50	100	200
Target #5: Workshops conducted:			
• Sustainable Utility of the Future	1	2	3
• Utility Customer Focus Groups	3	6	9
Target #6: Pilot Projects conducted:			
• Local Government	2	3	4
• Green Leasing	2	4	6
• Multi-Family Housing	0	1	2
• Water & Wastewater	0	1	2

e) Advancing Strategic Plan Goals and Objectives

The Alliance is a comprehensive, cross cutting program that meets the California Energy Efficiency Strategic Plan (EE Strategic Plan) in multiple ways. In particular, as specifically acknowledged in the EE Strategic Plan, California's ambitious energy efficiency goals cannot be achieved through "business as usual" ("BAU"). An aggressive program that includes radical changes to existing codes, standards and practices, combined with market transformation, is needed to achieve these aggressive goals. The Alliance program helps to meet the EE Strategic Plan goals by (a) developing and encouraging widespread adoption of existing and emerging best practices and technologies, and (b) by precipitating market transformation in targeted sectors to radically accelerate the voluntary adoption of energy efficiency.

The following table identifies specific EE Strategic Plan strategies that are being deployed through the Alliance.

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
The Alliance encourages sustainable design, construction & operations in existing and new multi-family housing and collaborates with PIER to test new concepts, such as micro-grids.	Residential	Deliver Zero Net Energy New Homes By 2020.	1-1: Drive continual advances in technologies in the building envelope, including building materials and systems, construction methods, distributed generation, and building design.
The Alliance is assisting local government in incorporating		Deliver Zero Net Energy New Homes By 2020.	1-3: Coordinate and Support "Reach" Building Standards

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
sustainable community goals and objectives into local plans, including building codes and general plans; also in developing and implementing builders' entitlements for developers that meet goals for sustainable communities.			
The Program has developed and is deploying comprehensive portfolio approaches to greening existing multi-family complexes.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-1: Deploy full-scale Whole-House programs.
The Alliance Program is partnering with the Department of Conservation to build demand for sustainable communities statewide, and with the Housing & Community Development (HCD) to integrate green points into state financing for affordable housing developments).	Residential	Transform home improvement markets to apply whole	2-1: Deploy full-scale Whole-House programs.
The Alliance Program is assisting HUD and HCD in integrating green points into financing for affordable housing and local government with respect to green points for local sources of funding assistance.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-1: Deploy full-scale Whole-House programs.
The Alliance develops and disseminates information about the total benefits of sustainability (the "sustainability value proposition") that builds demand for sustainable communities.	Residential	Transform home improvement markets to apply whole	2-2: Promote effective decisionmaking to create widespread demand for energy efficiency measures.
The Alliance is assisting local governments in establishing & adopting green building standards, and in incorporating these into their General Plans.	Commercial	New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.	1-1: Establish a long-term progressive path of higher minimum codes and standards ending with ZNE codes and standards for all new buildings by 2030.
The Alliance Program is helping to document the value of green buildings to build demand by both large owners and large tenants.	Commercial	New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.	1-3: Establish a "Path to Zero" Campaign to create demand for high-efficiency buildings.
The Alliance Program is assisting owners, tenants, real estate investors and financial institutions develop green leasing instruments and tools.	Commercial	New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.	1-5: Create additional investment incentives and leverage other funding.
The Alliance Program is assisting both large owners and large tenants in California understand the different types of benchmarking and certification that are available, and adopting the level and types of "green" that are appropriate to their goals and objectives.	Commercial	New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.	1-6: Develop a multipronged approach to advance the practice of integrated design.

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Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
The Alliance is helping to document the value of green buildings to build demand by both large owners and large tenants.	Commercial	50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.	2-1: Lead by Example: State/local governments and major corporations commit to achieve energy efficiency, EE, (or green) targets in existing buildings.
The Program is developing "green leasing" pilots aimed at integrating the tenant and landlord's sustainability objectives within the framework of the entire leasing process: service provider selection; needs analysis and communication; request for proposal (RFP) and letter of intent (LOI) drafting; site due diligence; site selection; and then the actual negotiation and drafting of realistic and enforceable lease language.	Commercial	50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.	2-5: Develop tools and strategies to use information and behavioral strategies, commissioning, and training to reduce energy consumption in commercial buildings.
In addition, the Alliance is helping owners and tenants realign the costs and benefits of greening existing commercial office space through its Green Leases Toolkit.	Commercial	50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.	2-6: Develop effective financial tools for EE improvements to existing buildings.
The Alliance Program is developing whole building incentive programs and portfolio approaches for very large owners to green all of their properties.	Commercial	50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation. New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.	2-7 Develop business models and supplier infrastructure to deliver integrated and comprehensive "one-stop" energy management solutions
The Alliance is working with California water and wastewater agencies to develop strategies for optimizing their water and energy resources on a fully integrated basis.	Industrial	Support California industry's adoption of energy efficiency by integrating energy efficiency savings with achievement of GHG goals and other resource goals.	1-1: Develop coordinated energy and resource management program for CA's industrial sector, to enhance use of energy efficiency
Through this process, the Alliance is also educating water and wastewater agencies about energy efficiency and distributed clean energy opportunities.	Industrial	Build market value and demand for continuous improvement in industrial efficiency through branding and certification.	2-5: Implement ME&O program to educate industry and consumers
The Program targets delivery of comprehensive solutions in multiple targeted market sectors.	DSM Coordination and Delivery	Deliver integrated DSM options that include efficiency, demand response, energy management and self generation measures, through coordinated marketing and regulatory integration.	1-2: Conduct integrated DSM delivery pilots in the Residential, Commercial, Industrial and Agricultural sectors.
The Program targets delivery of comprehensive solutions in multiple targeted market sectors.	DSM Coordination and Delivery	Deliver integrated DSM options that include efficiency, demand response, energy management and self generation measures, through coordinated marketing and regulatory integration.	1-3: Develop integrated DSM programs across resources, including energy, water, and transportation.
The Alliance's Intern Program hires university students and recent	Workforce Education and Training	Establish energy efficiency education and training at all levels	1-4: Create or expand college and university programs with

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
graduates to assist in conducting research, compiling data, writing white papers, and developing web-based tools and content for its website. In this manner, the Alliance is helping to build the sustainability value proposition in the next generation.		of California's educational system.	energy efficiency focus and foster green campus efforts to apply this knowledge in clear view of students and faculty.
In addition, in 2009-11, the Program will launch a new K-12 education program designed to increase awareness in the link between energy and GHG reduction.	Workforce Education and Training	Establish energy efficiency education and training at all levels of California's educational system.	1-5: Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields.
In its communications, the Program leverages energy efficiency to achieve broader sustainability goals, including GHG reduction, water use efficiency, smart land use, renewable energy, waste management and transportation management. In addition, as noted previously, the Alliance is expanding its program to include outreach and education for grades K-12.	Marketing, Education and Outreach	Create and launch an integrated, statewide Marketing, Education and Outreach effort for energy efficiency, including an energy efficiency brand.	1-4: Develop a California Energy Efficiency web portal with statewide Information on GHG reductions, efficiency and DSM awareness and options.
The Program has developed and is preparing to launch its "Sustainability Forum" that brings together sophisticated implementers to share information about implementation challenges and things that have worked. It will also provide access to the Alliance's growing network of expert advisors.	Marketing, Education and Outreach	Create and launch an integrated, statewide Marketing, Education and Outreach effort for energy efficiency, including an energy efficiency brand.	1-5: Conduct public communications campaigns, alongside longer-term supporting school education initiatives to deliver the efficiency message.
The Program is working with local governments to help them identify key points of leverage in which governmental policies and plans can significantly impact the level and timing of EE and sustainability adoption by their constituents. These include sustainability policies and greening General Plans and builder entitlements	Local Governments	Local governments are leaders in adopting and implementing "reach" codes.	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 Program is working with local governments to help them identify key points of leverage in which governmental policies and plans can significantly impact the level and timing of EE and sustainability adoption by their constituents. These include sustainability policies and greening General Plans.	Local Governments	Local governments are leaders in adopting and implementing "reach" codes.	1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.
A pilot project is being conducted with the California Dept. of Conservation for a model "Sustainable Cities" program that will provide successful models for statewide deployment.	Local Governments	Local governments are leaders in adopting and implementing "reach" codes.	1-4: Create assessment districts or other mechanisms so property owners can fund EE through local bonds and pay back on property taxes;

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Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
			develop other local EE financing tools.
The Alliance is also helping local governments leverage their considerable influence by leading their constituents by example, and then encouraging their constituents to also adopt EE and sustainability.	Local Governments	Local governments are leaders in adopting and implementing "reach" codes.	1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model "reach" codes and/or point of sale policies.
The Program is helping local governments understand how to apply the new Local Government Operations Protocols (LGOP) for carbon footprinting that were recently adopted by the California Air Resources Board, the California Climate Action Registry, and ICLEI Local Governments for Sustainability.	Local Governments	Local governments are leaders in adopting and implementing "reach" codes.	1-6: Link emission reductions from "reach" codes and similar programs to CARB's AB 32 program and to local government CEQA responsibilities.
Further, the Program is working with the California Dept. of Conservation, the U.S. Department of Energy, the Public Technology Institute, and the Public Sustainability Partnership to develop a best-practices oriented sustainability benchmarking tool for local governments to self-evaluate their current level of sustainability adoption and quickly identify paths to improvement.	Local Governments	Local governments are leaders in adopting and implementing "reach" codes.	1-5: Develop broad education program and peer-to-peer support to local governments to adopt and implement model "reach" codes and/or point of sale policies.
The Alliance is helping local governments conduct sustainability visioning and develop action plans for energy efficiency, renewable energy, climate action (greenhouse gas reduction), and other types of sustainability initiatives.	Local Governments	Local governments lead their communities with innovative programs for energy efficiency, sustainability, and climate change.	4-1: Local governments commit to clean energy/climate change leadership.
The Program has developed a comprehensive inventory of "best practices" and model language for green general plans that it is disseminating to California local governments via a web-based tool.	Local Governments	Local governments lead their communities with innovative programs for energy efficiency, sustainability, and climate change.	4-2: Use local governments' general plan to promote energy efficiency, sustainability and climate change.
The Alliance is preparing a case study illustration that teaches local governments how to benchmark their GHG through the Climate Action Registry's LGOP.	Local Governments	Local governments lead their communities with innovative programs for energy efficiency, sustainability, and climate change.	4-3: Statewide liaison to assist local governments in energy efficiency, sustainability, and climate change programs
The Program is developing checklists and tools for local governments to identify energy efficiency opportunities.	Local Governments	Local government energy efficiency expertise becomes widespread and typical.	5-1: Create a menu of products, services, approved technologies and implementation channels to guide local governments that currently lack deep expertise in energy efficiency.
The Program is developing model approaches for regional collaboration.	Local Governments	Local government energy efficiency expertise becomes widespread and typical.	5-2: Develop model approaches to assist local governments participating in regional coordinated efforts for energy efficiency, DSM,

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
			renewables, green buildings, and zoning.
The Alliance is supporting the Dept. of Conservation's Sustainable Cities pilot program to recognize notable local government leaders.	Local Governments	Local government energy efficiency expertise becomes widespread and typical.	5-3: Establish a statewide effort to facilitate peer-to-peer learning, such as a "local champions" program or a governor's invitation only local government leaders' summit.

6) Program Implementation

a) Statewide IOU Coordination

i. Program Name
ii. Program Delivery Mechanisms
iii. Incentive Levels
iv. Marketing and Outreach Plans
v. IOU Program Interactions
vi. Similar IOU and POU programs

The primary mechanism for delivering the Alliance program is through pilot programs that are designed to develop, test and implement strategies for overcoming barriers to sustainability in targeted market and customer sectors. The Alliance selects the targeted market and customer sectors in conjunction with SoCalGas Program Management. The Alliance then confers with its network of expert advisors to develop pilot program concepts.

Synergies with other IOUs are considered throughout the course of the pilot program. For example, the Alliance assisted a real estate investment trust in developing a portfolio strategy for greening all of its properties. The strategy includes accessing utility programs throughout California (SoCalGas, SCE, SDG&E and PG&E) to help green its properties.

The ultimate point of coordination and sharing of information among the IOUs will be through the Alliance's annual Sustainable Utility Forum in which the Alliance will present findings and recommendations from pilot programs and customer focus groups with respect to potential modifications to utility programs to more effective support market transformation based on its pilot programs.

The Alliance is a non-resource program. No incentives are paid under this program for energy savings, although pilot participants receive valuable technical and other special advisory assistance. Depending on the nature of the pilot or market research activities, other IOUs may be requested to share in the costs. For example, discussions are presently occurring with SDG&E about supporting the implementation of the multi-family housing pilot program that developed a strategy for a real estate investment trust for greening its entire portfolio of multi-family housing units throughout California.

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The Alliance program has several different levels of marketing and outreach. Each requires some degree of coordination with IOU programs, especially with respect to providing information about IOU programs to Alliance participants.

- Recruitment. The Alliance actively recruits expert advisors for various aspects of its program. The Alliance also recruits pilot participants comprised of a diverse set of stakeholders needed to effect market transformation in targeted market and customer sectors. The Alliance relies upon SoCalGas, other IOUs, and other energy and sustainability organizations and individuals to help identify and recruit influential and knowledgeable advisors.
- Awards and Recognition. Through its web-based Sustainability Showcase awards program, the Alliance rewards California sustainability leaders by documenting and showcasing their accomplishments. The Showcase serves another purpose – it documents "best" sustainability practices and their benefits. Showcase award recipients are selected on the basis of the portfolio of sustainability best practices that they embody, and may be served by any IOU or POU within California.
- Building Demand for Sustainability. Through case studies and white papers, the Alliance documents the costs and benefits of sustainability to build the value proposition. This approach creates demand pull. In designing its pilot programs, the Alliance constantly seeks to leverage complementary efforts being conducted by SoCalGas, other IOUs and POUs, and other (e.g., CEC, DOE, non-profits, etc.) organizations.
- Identifying and Communicating Sources of Sustainability Assistance. The Alliance relies heavily on the IOUs' databases of energy efficiency assistance programs to help pilot participants maximize their adoption of sustainability. These databases are supplemented by other sources, such as CEC and DOE. Links to information about sustainability assistance are provided on the Alliance's website.
- Providing Sustainability Information, Tools and Techniques. During the course of its pilot programs, the Alliance provides information about sustainability options to pilot participants. Energy efficiency leads the discussions, since it typically is the sustainability measure that can produce economic benefits and can thus provide the impetus for achieving other sustainability goals and objectives. Again, the Alliance provides information about IOU programs to pilot participants and provides appropriate links on its website.

Consistent with the Alliance's strategy of leveraging existing resources, assets and relationships, the Alliance leverages existing programs and communications channels such as Flex Your Power, for delivering its sustainability messages.

The Alliance's scope is comprehensive sustainability, including energy and water efficiency, renewable energy, smart planning and growth, waste management,

transportation management, and climate action/reduction of greenhouse gas emissions. Throughout the course of its program, the Alliance continually reaches out to complementary IOU and other programs that support and advance the above types of sustainability measures and initiatives. For example, the Alliance helps pilot participants identify IOU energy efficiency programs that can help achieve the pilot sustainability goals. During 2009-2011, the Alliance will also assist local government participants in its pilot programs adopt green policies, goals, codes, ordinances, General Plans, climate action plans, and other important upstream initiatives. These activities are consistent with the EE Strategic Plan and the IOUs' focus for 2009-2011.

The Alliance program confers actively with SoCalGas on selection of targeted markets and pilot projects to assure that the Alliance's efforts complement SoCalGas's priorities. In addition, since the Alliance is a market transformation program and market transformation does not occur in a single IOU's service area, the Alliance's activities often involve other utilities. For example:

- Pilots conducted in SoCalGas's service area often involve customers of SCE. The Alliance includes information about SCE programs in its pilot activities and encourages its diverse pilot participants to consider accessing SCE financial and technical assistance programs. Examples include the City of Ontario (local government), the Inland Empire Utilities Agency (a regional water and wastewater agency), the California Department of General Services (DGS, a state agency), Thomas Properties Group (a private property owner and management company), BRE Properties (a real estate investment trust), and LINC Housing (an affordable housing developer, owner and operator).
- In some cases, Alliance program partners and participants may involve municipal utilities that are also customers of SoCalGas. For example, the Los Angeles Department of Water and Power (LADWP) participated in the Alliance's study of the role of recycled water in energy efficiency and greenhouse gas reduction. In addition, the City of Roseville is participating in the Dept. of Conservation's "Sustainable Cities" pilot program.
- The Sacramento Municipal Utilities District (SMUD) and PG&E participated in the Alliance's roundtable about the role of utilities in sustainability.
- SDG&E is providing assistance in helping one of the Alliance's pilot participants, BRE Properties, develop and launch a portfolio energy efficiency approach to its multi-family properties in San Diego County.
- The recycled water study also included participation of the San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (MWD).

b) Program delivery and coordination

i. Emerging Technologies program

The Alliance supports the IOUs' Emerging Technologies Program in several distinct ways:

- The Alliance's *Technology Showcase* highlights high potential technologies that are expected to have a major near-term impact (i.e., within 3-5 years) on energy consumption in California. The Technology Showcase provides information about the costs and benefits of these emerging technologies, encouraging end users to investigate these options before making design and procurement decisions. Information is also provided about utility programs that can help end users make the decision to adopt these emerging technologies.
- The Alliance also assists its sister program, the Portfolio of the Future (PoF), in identifying market leaders who might be interested in being early adopters of emerging technologies being evaluated through the PoF; recruiting pilot participants and partners for its technology pilots and market research studies; and providing information about technologies being evaluated by PoF to targeted markets and customer groups.
- During the provision of technical assistance to pilot program participants, the Alliance identifies and evaluates the costs and benefits of promising emerging technologies and new business models so that pilot participants can make informed decisions about sustainability options.
- Also, through the Alliance's process of continually seeking and leveraging complementary resources, assets, relationships, and activities, the Alliance is in constant contact with all key stakeholders, including the IOUs, POUs, and the CEC, to identify opportunities for synergistic partnering on both conventional and emerging technologies and practices. This has led to discussions with CEC PIER about the possibility of requesting Alliance pilot participants to host micro-grid pilot demonstration projects, and with the City of Riverside about helping to recruit City residents and businesses for participation in demonstrations of new technologies.

ii. Codes and Standards program

The Alliance encourages market leaders in a variety of sectors to adopt upstream policies, goals, codes and standards that can have significant long term, cost effective impacts. Green policies, codes, standards, ordinances and practices are included in the Alliance's inventory of best sustainable practices that are brought to every Alliance pilot participant. For example, all participants in the Alliance's "Green Local Government" pilot program and the Alliance's partner, Department of Conservation's "California Emerald Cities" pilot, are encouraged to adopt aggressive Green Building Ordinances and to train their permitting and inspection staff in compliance with these ordinances. Local government participants that have their own building codes are encouraged to integrate measures that will meet or exceed the equivalent of U.S. Green Building Council's LEED™ Silver and Energy Star 75 for all new and major retrofit construction. In addition, the Alliance developed a database of model green language to help California cities and counties green their General Plans. The database is presently being converted to a web-based tool that can be accessed through the Alliance's website.

iii. WE&T efforts

The Alliance program's scope includes education and training about sustainability options. For example, an energy efficiency and sustainable operations manual was prepared for a real estate investment trust to help manage its multi-family housing portfolio. In addition, local government participants are encouraged to access IOU training in Title 24 compliance. One of the activities planned for 2009-2011 is to help local governments evaluate the economic benefits achievable by supporting the creation of green jobs, both within the governmental entities themselves and in their communities. WE&T is integral to achieving those objectives.

iv. Program-specific marketing and outreach efforts (provide budget)

The Alliance provides an innovative marketing and outreach channel through which market transformation initiatives and proactive enrollment of targeted participants will be facilitated. An important aspect of the market transformation strategy entails engaging market leaders, policymakers and industry thought leaders to collaboratively develop, pilot-test and implement market transformation initiatives designed specifically to overcome primary barriers to sustainability in high potential markets. Targeted market and customer sectors are identified in conjunction with SoCalGas Program Management to fill program gaps.

The Alliance program provides a comprehensive communications and outreach infrastructure that includes a robust website [www.sustainca.org] and a diverse portfolio of activities designed to work in concert to build the sustainability value proposition and to encourage voluntary adoption of sustainability best practices throughout California.

The Alliance's 3 year budget for marketing, education and outreach is $370,000.

v. Non-energy activities of program

Below is a listing of the wide variety of outreach activities that have been conducted during the current program cycle and will continue during 2009-2011.

Type of Venue	Topics	Targeted Participants
Workshops	Alliance Program Updates	Steering Committee and Technical Program Team
	Pilot Program Updates	Pilot Program Advisory Committees (one for each targeted market sector)
	Green Affordable Housing	Joint workshops planned with HUD &/or HCD to inform affordable housing stakeholders about green points for affordable housing financing
	Sustainable Communities	Workshops planned to bring local government and builders/developers together to discuss workarounds to barriers to sustainable development of new mixed use communities
	Green Leases	Workshops planned to bring together brokers, real estate investors, large owners and landlords, and large tenants to collaborate on greening leased office space

Type of Venue	Topics	Targeted Participants
	Recycled Water	Workshops planned to bring together energy utilities, water agencies, policymakers, regulators and legislators to discuss the energy values embedded in water and strategies for accessing those energy values
	Green Local Government	Joint workshops planned with local government, and planning professionals to develop and implement strategies for greening General Plans
Program Marketing	Industry Association Meetings	A variety of venues at which targeted market participants can be cost-effectively engaged; e.g., ACEEE Annual Conference, GreenBuild, League of California Cities
Sustainability Roundtables	Green Pension Funds	Large pension funds and other green investors
	Green Real Estate	Developers, real estate brokers, leasing agents, large tenants
	Corporate Social Responsibility	Large utility customers who have adopted corporate social responsibility policies & programs

vi. Non-IOU Programs

The Alliance actively seeks new partnerships that will further leverage the scope and breadth of services that it brings to California participants. Existing partners include the following:

- ***California Climate Action Registry*** – web-based illustration of the methodology for computing a local government's carbon footprint using the "Local Government Operations Protocol" (LGOP) that was jointly developed and recently adopted by the California Air Resources Board, the California Climate Action Registry, and ICLEI Local Governments for Sustainability

- ***California Department of Conservation*** – pilot "California Emerald/Sustainable Cities" program

- ***California State and Consumer Services Agency (SCSA)*** – green leasing for state agencies

- ***U.S. Department of Energy (DOE) and the Public Technology Institute (PTI)*** – joint development of a best-practices oriented sustainability benchmarking tool for local government

- ***U.S. Department of Housing and Urban Development (HUD)*** – development of a green points system for financing of its "Mark-to-Market" portfolio of affordable housing

- ***U.S. Green Building Council (USGBC)*** – joint conduct of Green Leasing outreach and education

During the 2009-2011 program cycle the Alliance will continue to recruit new partners to collaborate on market transformational activities and to share knowledge, costs, relationships and communications channels.

vii. CEC work on PIER

The Alliance program is coordinating with CEC PIER to identify opportunities for supporting RD&D activities that are related to sustainability. These include:

- New technologies, materials and design techniques, construction methods, benchmarking and other tools for new and retrofit green buildings and sustainable communities
- Systems approaches to reducing energy used by water and wastewater agencies for conveyance, treatment, distribution, and wastewater treatment
- Renewable energy resources and technologies

viii. CEC work on codes and standards

The Alliance supports CEC's work on codes and standards by encouraging pilot program participants to adopt maximum cost-effective energy efficiency design and measures, and to identify opportunities for integrating sustainable design elements early in new mixed use communities and other new development projects. The Alliance's evaluations of costs vs. benefits and barriers to adoption by pilot participants of various types of measures are documented and provided to SoCalGas, CEC and others so that policymakers and regulators have the ability to consider stakeholder input in their decision making.

ix. Non-utility market initiatives

See information provided for non-IOU programs.

c) Best Practices

The Alliance program design incorporates various best practice elements. Specific items include[2]:

Program Theory and Design

- The Alliance program has developed a sound program plan and links its strategic approach to policy objectives and constraints.
- The Alliance program emphasizes non-energy benefits to expand the market share for energy efficiency.

Program Planning Process

- The Alliance program targets knowledgeable and influential stakeholders to participate in pilot program design and development of strategies for overcoming sustainability barriers.
- The Alliance program also incorporates feedback loops into its planning processes so that it can adapt its program plans and strategies to changes in policies, markets, regulations and technologies, maintaining the flexibility to rebalance its

[2] The best practices listed below are identified in the *National Energy Efficiency Best Practices Study, Volume S – Crosscutting Best Practices and Project Summary*, Quantum Consulting, Inc., December 2004.

pilot programs and initiatives as needed to achieve the overarching program goals and objectives.

Adaptation to Changes in Technologies and Market Conditions

- The Alliance keeps abreast of changes in policies, markets, regulations and technologies to (a) adapt its programs and strategies as deemed necessary to maximize adoption of energy efficiency and complementary sustainability measures, and (b) to identify opportunities that can be leveraged to achieve the Alliance's overarching goals and objectives.
- The Alliance also proactively seeks new technologies and emerging best practices, encouraging its pilot participants to become early adopters of promising new technologies while balancing the potential incremental benefits against possible risks and costs.
- The Alliance establishes robust networks for sharing information and lessons learned with industry leaders and peers, is alert to market developments, and has very strong relationships with market leaders and key stakeholders.

Staffing Approach

- Consistent with its philosophy of matching the best resources to the appropriate purposes, the Alliance has assembled a team of experienced technical, marketing and program management professionals that collectively bring the diverse skills needed to cost-effectively implement the Alliance's robust multi-faceted projects.

Program Integration

- The Alliance program is designed to deliver energy efficiency cost effectively by bundling it with multiple complementary sustainability measures.
- The Alliance assists pilot program participants in developing and implementing whole portfolio, system, facility, building approaches to more cost-effectively and comprehensively achieve sustainability.
- The Alliance proactively seeks partner organizations to leverage their individual and collective resources, assets and relationships.

Program Implementation – Marketing and Outreach

- The Alliance program develops and disseminates successes of market leaders and early adopters and through case studies.

d) Innovation

The Alliance is unique in its structured, highly inclusive and collaborative approach to overcoming barriers to adoption of energy efficiency and sustainability. The Alliance's over-arching goal is 'market transformation' –the voluntary adoption of sustainability principles and practices by all types of public and private organizations into all facets of California's policies, programs and businesses. Market transformation is achieved by providing a dynamic forum for unprecedented cooperation among diverse public and private organizations in the joint development and implementation of strategies for overcoming sustainability barriers. By working hard to find alignment among the diverse

needs and interests of these organizations, the Alliance is able to leverage their collective resources, assets and relationships to make sustainability both the right choice and the only choice. It is through this broad portfolio of collaborative action that California's visionary energy and environmental goals have the highest likelihood of success.

In addition to providing a comprehensive infrastructure for supporting early adopters, the Alliance recruits thought leaders to share their ideas about the most important things that need to happen to overcome the primary barriers to sustainability in each sector targeted for sustainability.

e) Integrated/Coordinated Demand Side Management

The Alliance's cross-cutting program was designed to complement SoCalGas's own programs. A robust portfolio of strategic advisory services and technical assistance is complemented by extensive networks of advisors, partners and information.

- The Alliance will work closely with SoCalGas's New Construction and Sustainable Communities Programs to recruit partners and participants, and to identify and implement innovative strategies in all market sectors – residential, commercial, industrial and agricultural – to engage their participation in achieving SoCalGas's energy efficiency goals. The comprehensive cross-cutting nature of the Alliance program will have significant benefits for other energy efficiency programs within SoCalGas's portfolio, such as retrofits of affordable housing and commercial buildings.
- The Alliance will also work closely with SoCalGas to select activities and participants that complement and leverage SoCalGas's portfolio of energy efficiency programs. Some direct energy savings will accrue from implementing portfolio approaches to greening market leaders' inventories of buildings, facilities and systems. Many other long-lived energy savings will be enabled by tackling upstream barriers, such as greening of many diverse organizations' policies, programs and practices (e.g., assisting local government in greening their general plans; encouraging large commercial real estate players to adopt minimum green criteria and green portfolio commitments, and helping state and federal agencies incorporate green points into their funding assistance programs).

f) Integration Across Resource Types (energy, water, air quality, etc)

The Program leverages multiple environmental sustainability initiatives to deliver energy efficiency programs and services more effectively and cost-effectively. Complementary initiatives include climate action (greenhouse gas reduction), water efficiency, renewable energy, smart land use and growth, waste management and transportation management.

g) Pilots

Pilot projects are presently being conducted in each of the five market segments targeted during the current program cycle (2006-2008): affordable housing, "smart" new mixed use communities, green commercial buildings, recycled water, and green local government. Each pilot project includes one or more pilot "hosts" – i.e., organizations

that agree to provide a testing ground for transformational strategies. In addition, key stakeholders identified as essential to successful deployment of the methods, tools and techniques that are developed through these pilot projects were also engaged. Engagement of pilot participants occurred through a variety of venues and required meetings and discussions about their respective roles and responsibilities. This same process will be employed for new pilot programs to be implemented during the 2009-2011 program cycle.

In addition, the Alliance is launching a new pilot activity in 2009-11: Sustainability education for grades K-12 through a campaign called "Making Carbon Visible".

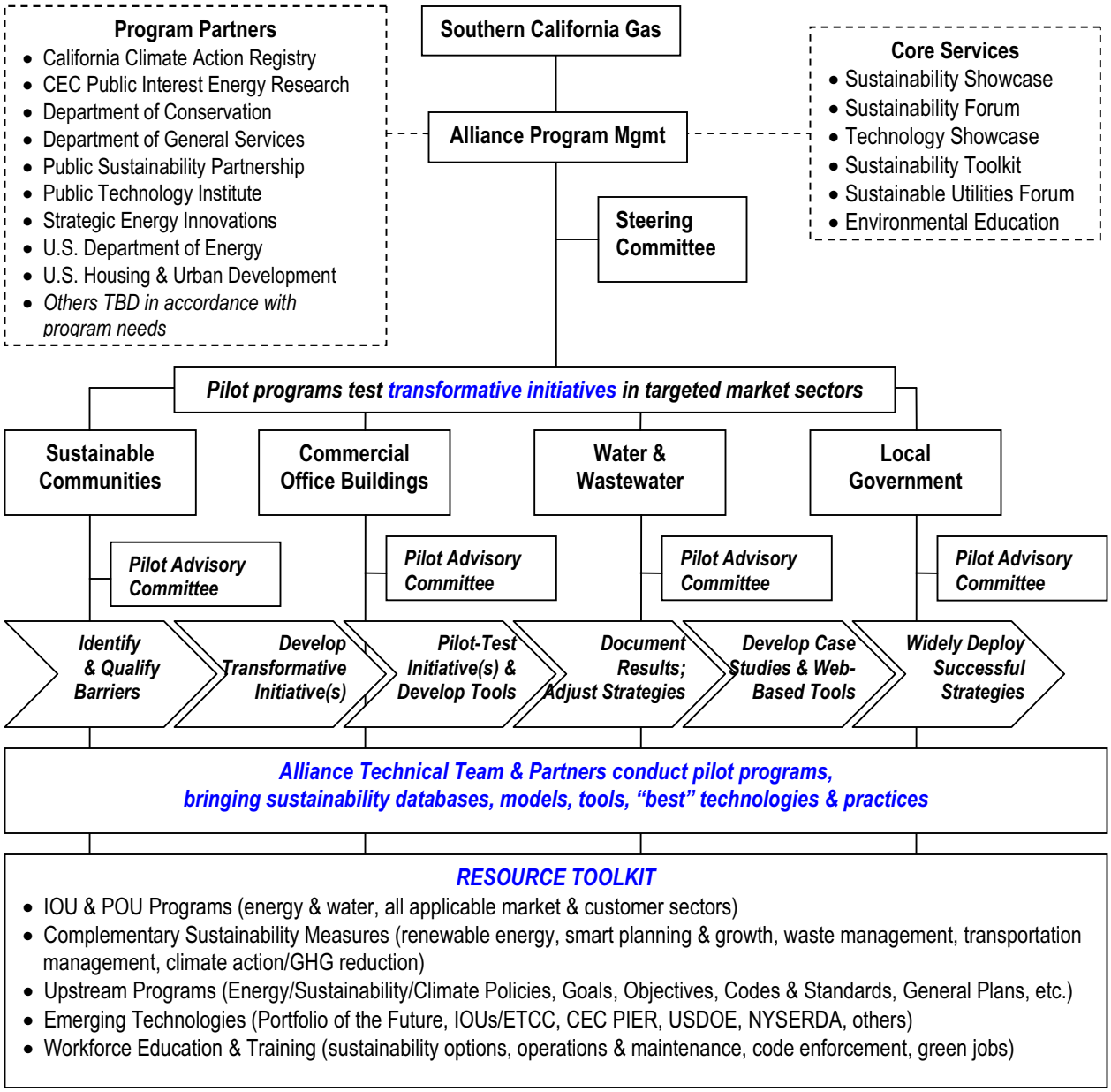
h) EM&V

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

2009-2011 Energy Efficiency Programs
California Sustainability Alliance
Program Implementation Plan

7) Diagram of Program

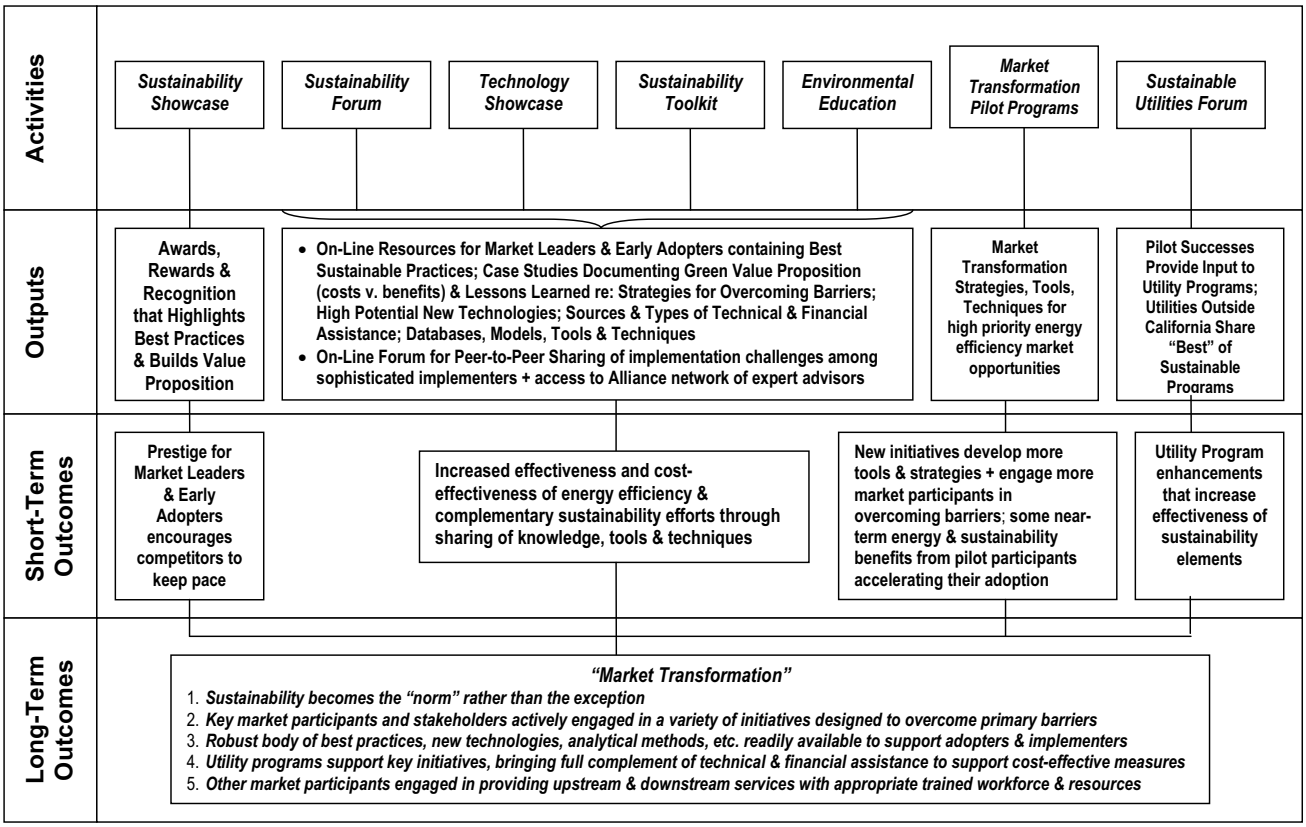
California Sustainability Alliance Program – Collaboration & Coordination



Note: Targeted market sectors may change over the duration of the Alliance program, but the above 4 sectors are targeted for 2009-201

2009-2011 Energy Efficiency Programs
California Sustainability Alliance
Program Implementation Plan

8) Program Logic Model



2009-2011 Energy Efficiency Programs
Community Language Efficiency Outreach
Program Implementation Plan

1) Program Name: Community Language Efficiency Outreach (CLEO)
Program ID Number: TBD
Program type: Third Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Community Language Efficiency Outreach Program (CLEO) is a highly targeted residential energy efficiency marketing, outreach, education and training program specifically targeted to the Vietnamese, Indian, Chinese and Korean (VICK) speaking customers of Southern California Edison (SCE) and SoCalGas. The Program strategy is unique in that it is a 100% in-language strategy, which serves a key role in overcoming the English as a second language market barrier and targets hard-to-reach, low and medium income customers. In 2009-2011 the program will continue to target the Vietnamese, Indian, Chinese and Korean and will also expand the Program to target the Hispanic (Spanish speaking) and the hard-to-reach, low and medium income customers in the African American Communities.

The Program will market SoCalGas efficiency programs and offer energy efficiency education and training using local ethnic media (TV, radio, and newspapers), and community events. The Program's marketing efforts garner interest and lead to participation in CLEO residential seminars and energy audits. CLEO will target SoCalGas customers in the areas of Los Angeles, San Bernardino, and Orange Counties with high concentrations of Asian, Hispanic and African American customers.

Program year 2009 -2011 will usher in significant evolution of the program. CLEO will serve all residential customers in SoCalGas service areas. In previous program cycles CLEO only served the joint SoCalGas/SCE service areas. New additions to the CLEO program will be SoCalGas customers from LADWP, Anaheim, Pasadena, Glendale, Burbank and Riverside service areas.

The implementation process involves a logical sequence of activities that begins with program marketing. To continue the success of the CLEO Program a low cost marketing blitz, including community newspapers, ethnic in-language newspapers, radio ads and television ads in coordination with popular ethnic Community Based Organizations (CBO) and schools, will be initiated. CLEO will also reinforce and leverage existing relationships with local churches, schools and cities to partner with the program outreach and delivery strategies.

This will progress to program implementation which will involve face-to-face classroom style seminars with simple efficiency incentives and energy efficiency information disseminations. These seminars educate customers on common energy, gas and water saving strategies and empower them to implement lasting energy efficiency measures. In addition customers are informed of utility and third party efficiency program offerings and encouraged to take advantage of these programs. These seminars also enroll customers for free Home Energy surveys and audits. CLEO will also set up community booths to disseminate information, sign-up customers for seminars and home energy audits. Customers will be encouraged to participate in other CLEO offerings at these community booths. Community booths provide an excellent platform to building community and customer relationships and the program will continue to provide a toll-free in-language hotline and dedicated website where information can be obtained about the program and its offerings as well as answer questions related to energy efficiency.

In 2009-2011 the CLEO Program will be the primary driver of In-Home In-Language Energy Surveys, a pilot program in 2007. Trained and experienced in-language energy engineers will visit customers who have signed for free home energy audits which also promote gas and water efficiency. During In-Home In-Language Audits, Vietnamese, Chinese, Korean, Hispanic and African American Customers will receive the same benefits afforded by the Home Energy Efficiency Survey Program. These efforts will utilize the same tool but provide face-to-face service to the underserved In-Language Customer. All implementation activities will be gauged and adjusted to ensure effectiveness. Continuous customer feedback mechanisms will be used to ensure implementation methods maintain effectiveness.

b) List measures

This program is non-resource and offers no technologies or incentives.

c) List non-incentive customer services

The Community Language Efficiency Outreach Program will present 100 educational and empowering energy efficiency seminars to customers in the communities it serves (namely Vietnamese, Indian, Chinese, Korean, African American and Hispanic communities). In addition CLEO will complete 5000 short home energy surveys, participate in community events with 50 Booths. CLEO will also implement an aggressive marketing campaign on radio with 375 ads, newspapers with 600 ads, television with 60 ads.

In order to sustain and build upon the trust and brand CLEO will also offer a school program designed with a whole family approach. CLEO will deliver the program to Faith Based Organizations and offer seminars at Churches and Senior Centers and serve elderly senior customers. CLEO will also build upon its existing relationship with cities, consolidating and forming new 'green' partnerships.

CLEO's efforts will be supported by a robust web presence providing customers with a platform to access CLEO's offerings. This web site will offer program information and participation and will be in-language. Marketing brochures and fliers will also facilitate CLEO program information and sustain a community energy efficiency image.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier

Barrier	Solution
Lack of consumer information about energy efficiency benefits	The Program addresses this barrier by seeking to provide Program information in customers' native languages and distributing information very widely.
Lack of financing for energy efficiency improvements.	Program provides customers information about SoCalGas incentive programs, thereby improving their access to these resources.
Lack of a viable and reliable resources to educate and inform	Program holds educational seminars and provides services at schools in target portions of service territory.
Residential	
Language: Primary language spoken is other than English	Program addresses this issue directly by translating energy efficiency materials into non-English languages and providing services with customer service personnel who speak the same language as target customers.
Income: Income levels less than 400% of federal poverty guidelines	Many of the Program's target customers are income qualifying.
Housing Type: Multi-family and mobile home tenants	Many of Program's target customers are in multi-family housing units. The Program establishes mechanisms to ensure that these customers receive its energy efficiency information benefits.
Geographic: Residents of areas other than the San Francisco Bay Area, San Diego area, Los Angeles Basin or Sacramento,	Program targets traditionally underserved portions of SoCalGas's service territory.

d) Quantitative Program Targets

Table 5

Community Language Efficiency Outreach Program (CLEO)	Program Target by 2009	Program Target by 2010	Program Target 2011
1. In-language seminars	30	30	40
2a. Outreach Energy -5 HEES Surveys - In-Language	1500	1500	2000
2b. In-home In-language HEES Audits	1500	1500	2000
3. Booths – Community Events	15	15	20
4. Radio Ads – Marketing	112.5	112.5	150
5. Newspaper ads – Marketing	180	180	240
6. Television ads – Marketing	18	18	24
7. School outreach events	3	3	4
8. Church and Adult Center Outreach Event	3	3	4
9. Community & City Partnership Outreach Events	3	3	4
10. Quarterly Website Updates - Marketing	4	4	4

Targets 1 - 3: Each In-language seminar will reach up to 50 In-language participants or 5,000 or more households during the 2009-2011 Program Cycle. Also, Outreach Energy -5 HEES Surveys – In Language will add additional 5,000 or more households in this

Program Cycle. In addition, each outreach In-home In-language HEES Audits will be filled out by a valid SoCalGas/SCE Customer with the goal of reaching 5,000 in-language households during the 2009-2011 Program Cycle. SoCalGas will install 5,000 Low Flow Showerheads and Sink Aerators Sets during the 2009-2011 Program Cycle. Community Booths and all outreach strategies will reach a wide range of ethnic customers; Customers engage at the booths are provided energy efficiency information and is distributed to customers to promote the goals of the program.

Targets 4 - 6: The CLEO marketing campaign will continue to employ advertising in the Chinese Daily News (Chinese), Sing Tao Newspaper (Chinese), Nguoi Viet Newspaper (Vietnamese), and Viet Bao (Vietnamese) newspapers. Other media will also be implemented in Radio stations include KMRB Radio (Chinese), KAZN-AM (Chinese), and Little Saigon Radio (Vietnamese). Each of these media outlets has a tremendous audience and will contribute greatly to the communities embracing the CLEO program. While quantification of the number of people reached is elusive, the media campaign will effectively reach more than 1.5 million In-language hard-to-reach customers. The advertisers utilized are the mainstream media in targeted communities their advertising is viewed by the community at large. Expected reach also varies. In-language Television ads also generate the necessary awareness which is key to reaching all program goals. Television ads are aired during peak hours to ensure maximum market penetration and will contain useful energy efficiency information to the targeted demographic.

Targets 7-10: In order to sustain and build upon the trust and brand CLEO will also offer a robust school program designed with a whole family approach. CLEO will also deliver the Program to Faith Based Organizations and offer seminars at churches and Senior Centers and serve elderly senior customers. CLEO will also build upon its existing relationship with cities, consolidating and forming new 'green' partnerships. CLEO's efforts will be supported by a robust web presence providing customers with a platform to access CLEO's offerings. This web site will offer program information and participation and will be in-language. Marketing brochures and fliers will also facilitate CLEO program information and sustain a community energy efficiency image and will effectively reach out to hard-to-reach households.

e) Advancing Strategic Plan Goals and Objectives

The CLEO program reflects and reinforces the goals of the California long term Strategic Plan as follow:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
Program functions as a highly-targeted education and information campaign to encourage customer participation in Company's EE programs.	Residential	Develop comprehensive, innovative initiatives to reverse the growth of plug load energy consumption through technological and behavioral solutions.	3-3: Create demand for such products through market transformation activities.
Program targets underserved populations to encourage more	Low Income	By 2020, all eligible customers will be given the	1-1: Strengthen LIEE outreach using segmentation analysis

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
active participation in EE programs.		opportunity to participate in the LIEE program.	and social marketing tools.
Program helps ensure that LIEE participants are aware of energy efficiency and DSM/EE programs through direct marketing, schools outreach, community booths and seminars.	Low Income	The LIEE programs will be an energy resource by delivering increasingly cost-effective and longer-term savings.	2-2: Coordinate and communicate between LIEE, energy efficiency and DSM programs to achieve service offerings that are seamless for the customer.
CLEO will reinforce and leverage existing relationships with local churches, schools and cities to partner with the program outreach and delivery strategies.	Workforce Education & Training	Establish energy efficiency education and training at all levels of California's educational system.	1-2: Support the community college and adult education efforts to support students to develop their education based on visible career paths in energy efficiency and related fields.
Program conducts schools outreach with ethnically diverse schools and implements "Energy-Artist" contest and encourages student assistance with Home Energy Efficiency Surveys.	Workforce Education and Training	Establish energy efficiency education and training at all levels of California's educational system.	1-5: Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields.
By targeting ethnic communities, the program seeks to elicit greater participation from and increase energy awareness in hard-to-reach areas.	Workforce Education and Training	Ensure that minority, low income and disadvantaged communities fully participate in training and education programs at all levels of the DSM and the energy efficiency industry.	2-1: Collaboratively identify appropriate goals and strategies to build California's energy efficiency workforce through 2020, focusing on training that increases participation from within minority, low-income and disadvantaged communities in achieving California's economic energy efficiency potential.
The Program has encouraged significant community participation by social marketing of the Program at community booths. This will integrate well into statewide efforts to create an energy efficiency brand.	Marketing, Education and Outreach	Create and launch an integrated, statewide Marketing, Education and Outreach effort for energy efficiency, including an energy efficiency brand.	1-3: Use social marketing techniques to build awareness and change consumer attitudes and perceptions.
CLEO has created a multi-lingual web-site (www.cleosave.com) that functions as an energy efficiency web portal with blogs, newsletters, request for home surveys, and direct enrollment for seminars. This site can be integrated into statewide California Energy Efficiency web portal.	Marketing, Education and Outreach	Create and launch an integrated, statewide Marketing, Education and Outreach effort for energy efficiency, including an energy efficiency brand.	1-4: Develop a California Energy Efficiency web portal with statewide Information on GHG reductions, efficiency and DSM awareness and options.

6) Program Implementation

a) Statewide IOU Coordination:

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

As the CLEO Program is offered in both SCE and SoCalGas service territories and functions under the same name, the Program will have opportunities to coordinate activities between these two utilities (although not statewide).

The Program will encourage customers to participate in SoCalGas's programs and services, and will coordinate with SCE and the local water agencies and will promote increased awareness for customers to understand the structure and opportunities for energy conservation and efficiency both at home and in their businesses. Synergies will be leveraged to cost effectively disseminate efficiency knowledge and training.

b) Program delivery and coordination:

i. Emerging Technologies program
This is not applicable to this program.

ii. Codes and Standards program
This is not applicable to this program.

iii. WE&T efforts
Where applicable, program will promote the WE&T efforts within the specified regions.

iv. Program-specific marketing and outreach efforts (provide budget)
CLEO's core strategy is to disseminate energy efficiency information, SoCalGas program and rebate information through a series of Media and Community Marketing Strategies as outlined below. The approach is intended to provide a well rounded community approach and will ensure a residential energy efficiency outreach program for the under-served minority market.

Media Marketing Activities:
CLEO Marketing activities are required to generate program awareness and to facilitate program participation. The media campaign will leverage efficiencies

by partnering with cities, local governments and other IOU Programs to ensure an efficient use of the program budget. Marketing efforts will include Newspapers, Radio, and Television outreach campaigns to in-language customers and demographics targeted by the CLEO Program. There will also be an updated web presence at www.cleosave.com, which will provide targeted customers with program information and program sign-ups. The website will also provide an in-language educational platform for energy efficiency and demand-side management. Where available the program will leverage synergies with other programs including Residential and Partnership Programs.

Community Marketing Activities:
CLEO Community activities represent the implementation aspects of the program. These activities seek to enrich the target audience by providing the tangibility and presence to the communities served. As the scope of the CLEO Program continues to expand, community efforts will also provide resource (energy saving) opportunities and will seek to support the goals of the Workforce Education and Training Strategic Plan by developing a workforce to carry out specific activities of the program. Implementation activities include:

In-Language Seminars – The objective of In-language Seminars will be to provide a classroom style form to empower residential customers to conserve resources by teaching them simple ways of savings Gas, Electricity and Water. This strategy will align itself with a goal of the Workforce Education and Training Strategic Plan to ensure that minority, low income and disadvantaged communities fully participate in education programs by providing modules that will seek to encourage interest toward employment in the energy efficiency industry. Seminars will also be used to promote other program offerings such as the HEES Survey Component.

Community Booths - CLEO will continue participating in prominent ethnic cultural booths such as the 'Chinese New Year' and 'Harvest Moon Festivals'. Progression will be made in the 2009-2011 Program Cycle to include participation in African American and Hispanic cultural events to reach this underserved market. This will include coordinating with SoCalGas's Energy Centers and Faith Based Organizations during cultural events. Community Booths will also be used go promote the Home Energy Efficiency Survey Component.

Schools Outreach – In 2009-2011 the CLEO program will expand its schools outreach efforts by providing a comprehensive schools outreach strategy. In addition to the continuing 'Energy-Artist' contest with winners from partnering schools awarded prizes and recognition the program will also introduce the Home Energy Efficiency Survey Program to encourage parental participation. Outreach efforts will also include coordination with SCE and will also target Adult Education (ESL) educational centers. CLEO may also coordinate elementary school efforts with the existing PEAK Program. The PEAK Program is an

educational program of The Energy Coalition designed to teach students and their families to use energy more wisely in their homes, communities and schools.

Faith Based Organizations (FBO's) and Adult Day Care Center Outreach - Local community FBO's and religious forums form the backbone of ethnic community. FBO's also provide a forum for Community events and an excellent platform to market and encourage energy efficiency. CLEO will cultivate and add to the existing relationships with churches and Adult Day Care centers to effectively cultivate program participation and promote energy conservation. This outreach mechanism will allow the CLEO Program to expand outreach to the Hispanic and African American Community in 2009-2011.

Community / City Partnership and Outreach – This outreach strategy will build upon existing relationships with the cities of Monterey Park, San Gabriel, Alhambra, Walnut, Diamond Bar and others to promote energy efficiency in the community. CLEO will place information Kiosks at City community centers and will participate in City Earth Day events to further promote energy efficiency in the community. CLEO will also integrate components of the program with other existing Partnership Programs with higher ethnic populations.

Home Energy Efficiency Surveys (In-language) – Started as a successful pilot program in 2007, CLEO will continue to provide in-home in-language audits to residential customers. The Home Energy Efficiency Survey Program provides customers with a personalized assessment of their natural gas, electricity and water usage along with practical ideas on how to improve their home energy efficiency and will bridge the in-language barrier.

v. Non-energy activities of program
This is not applicable to this program.

vi. Non-IOU programs
This is not applicable to this program.

vii. CEC work on PIER
This is not applicable to this program.

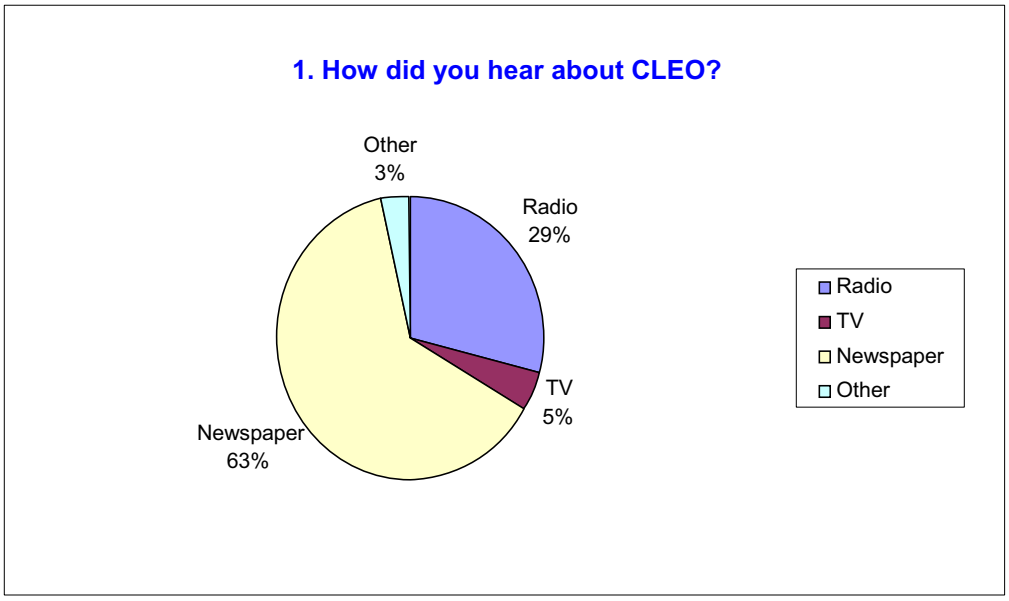
viii.CEC work on codes and standards
This is not applicable to this program.

ix. Non-utility market initiatives
This is not applicable to this program.

c) Best Practices

Media marketing has proven to be the primary mechanism to generate community awareness about the CLEO Program and its offerings. Internal metrics further outlines the importance of the marketing mix as well. Illustrated below are the results of an

internal 2006-2007 CLEO Participant study asking the question; "How did you hear about CLEO?"



The program relies on a dynamic EM&V to gauge the programs success and to listen to the customer for feedback. These are transformed to 'Lessons learned' and incorporated in to the program strategy and offerings. For example, in 2006-2008 costly television spots were swapped for effective newspaper and radio spots as illustrated above.

In addition, CLEO has improved its offering with targeted messages for maximum effectiveness. CLEO program offerings have evolved with the lessons learned as it deals directly with the community through its seminars, community booths, and home surveys.

The CLEO program design incorporates various best practice elements. Specific items include:

- Program Theory and Design: Program understands and incorporates into marketing local market conditions, maintains program flexibility to response to changes in market and other factors and defines and locates hard-to-reach customers and targets programs accordingly.
- Program Implementation – Participation Process: The Program utilizes participation strategies that are multi-pronged and inclusive and keeps participation simple.

d) Innovation

The 100% in-language aspect of CLEO separates it from any other outreach effort, and provides a level of understanding to the target population that is unmatched. Many of the program participants speak only Chinese and cannot be reached through any outreach effort that is delivered in another language.

e) Integrated/Coordinated Demand Side Management

The CLEO Program will seek to integrate information relevant to both SCE and SoCalGas into its program offerings and coordinate messages to maximize educational opportunities.

f) Integration Across Resource Types (energy, water, air quality, etc)

CLEO provides effective integration of energy (electric and gas), water and recycling with its home energy surveys. Promoting energy efficiency effectively to the in-language residential customer presents challenges but provides opportunities to truly interact with this hard-to-reach customer on a personal level. The key barrier to energy efficiency continues to revolve around the lack of information or awareness of specific measures and practices which is compounded when a language barrier exists. The In-Language Home Energy Efficiency Survey (HEES) Program will be expanded within the CLEO Program. In 2007-08 CLEO began In-Home In-Language Surveys as a pilot program. Bi-Lingual Energy Services Representatives (Home Energy Auditors) were recruited and trained and generated over 2000 comprehensive In-Home and Phone Surveys.

g) Pilots

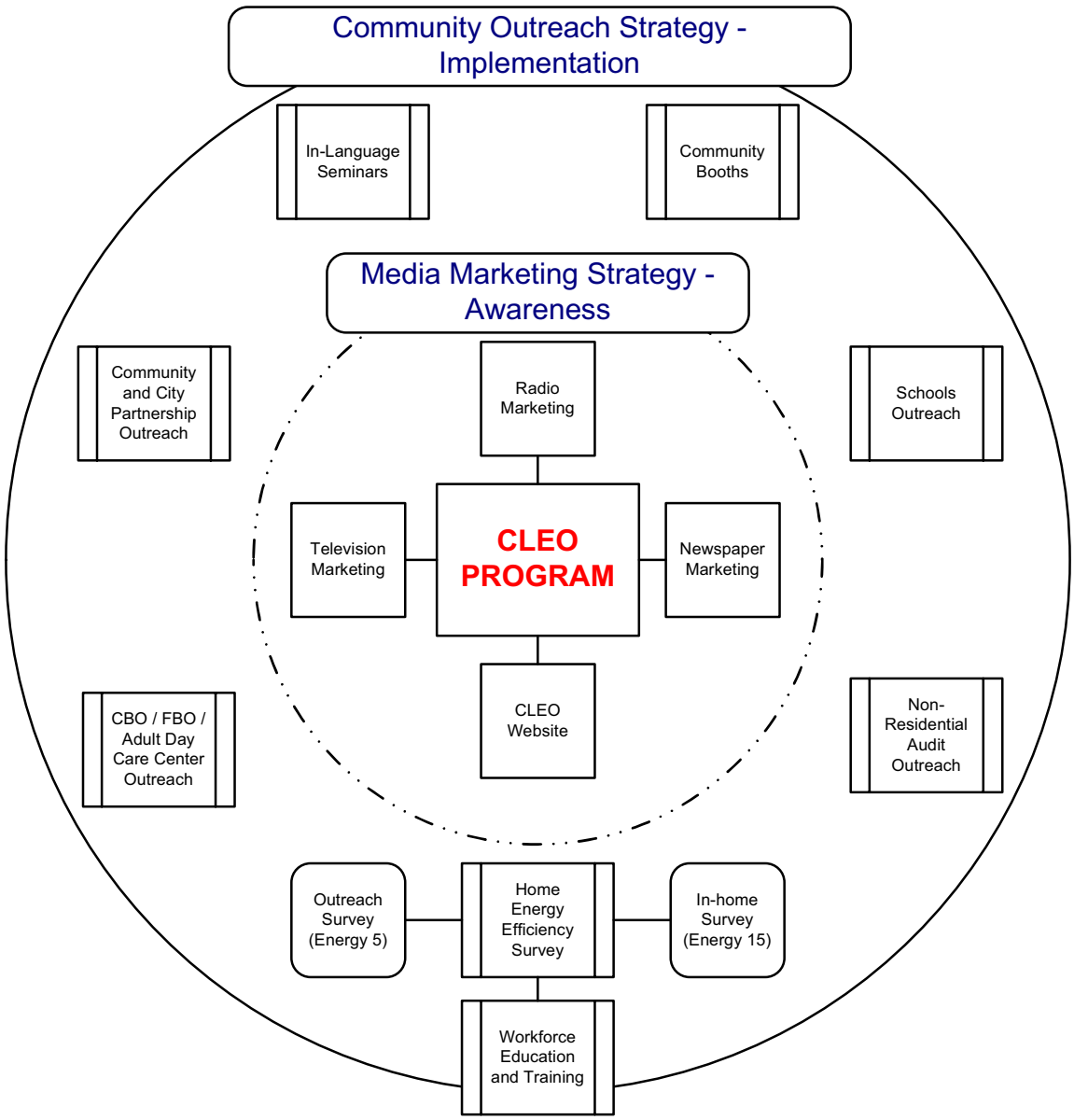
CLEO does not have any Pilots but will expand the program. In 2002-2008 CLEO served the residential customers in the joint areas of SoCalGas/SCE. This limited the program offering only to SoCalGas/SCE joint customers. SoCalGas customers in municipal utility service areas of Los Angeles, Pasadena, Burbank, Glendale, Anaheim and Riverside utility were excluded. In 2009-2011CLEO will extend the program to all residential customers of SoCalGas. New inclusions will be municipal utility service areas of Los Angeles, Pasadena, Burbank, Glendale, Anaheim and Riverside, in addition to the existing SCE service areas. CLEO will leverage local municipal utilities to form partnerships.

h) EM&V

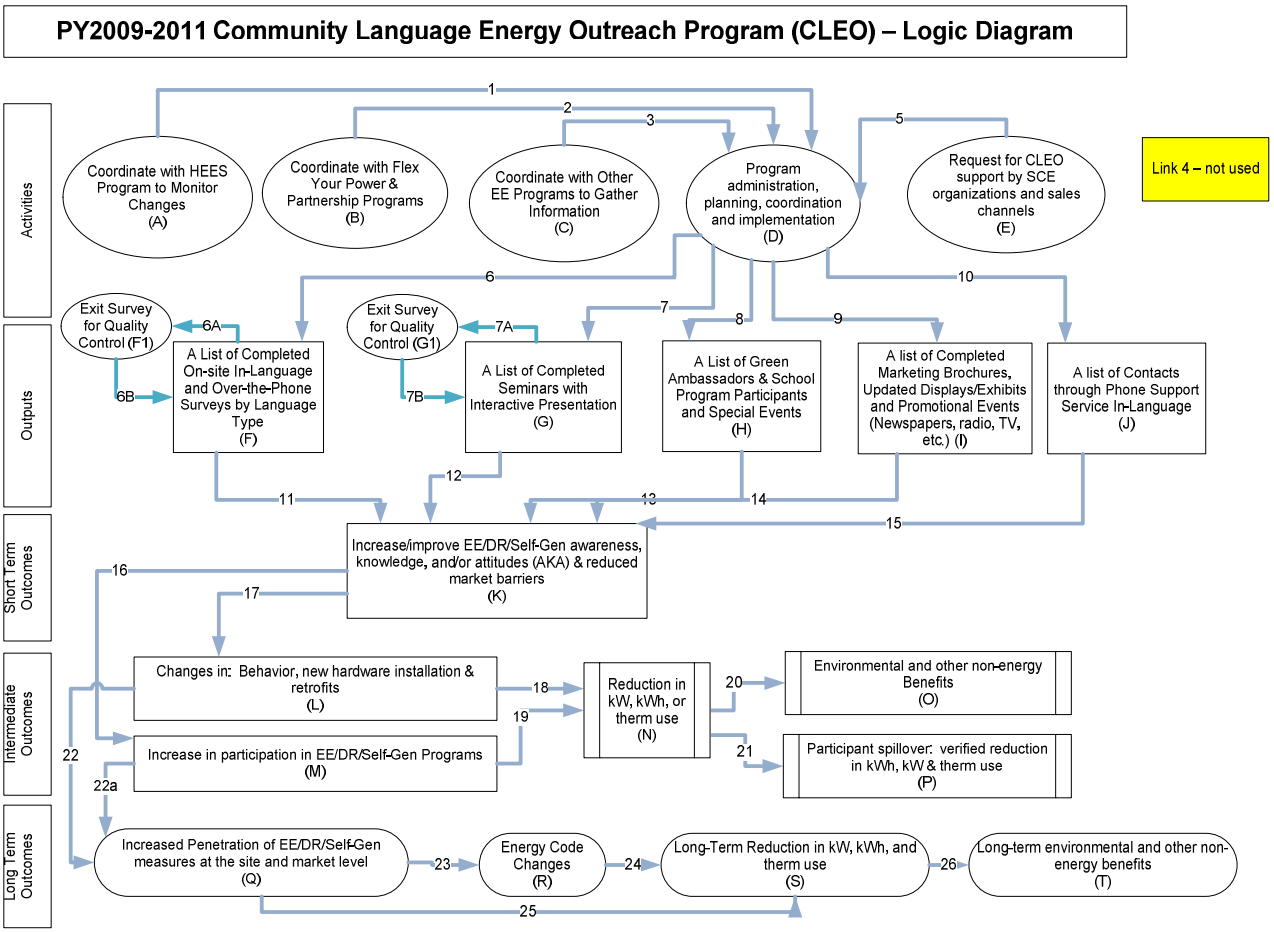
The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2009-2011 after the program implementation plans are filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy Division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

7) Diagram of Program

No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6. However, provided below is a diagram of the Program's implementation approach and marketing strategy.



8) Program Logic Model:



2009-2011 Energy Efficiency Programs
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1) Program Name: Energy Challenger
   Program ID Number: TBD
   Program type: Third Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

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3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The 2009-11 Energy Challenger program will build on the existing 2006-08 Program with a goal to engage 2,000 new small and mid-sized businesses in a web-based energy audit/business assessment (delivered through the SoCalGas website), and provide each business with an immediate action plan containing direct links to SoCalGas rebates and implementation services. The program is designed to support the service territory and is hosted by Contractor.

The program will provide a platform to enable businesses to identify their priority energy management needs and to be directed to the most appropriate services/rebates for their needs.

Energy Challenger will offer a web-based energy assessment tool tailored to stimulate interest in programs, rebates and services. The tool has demonstrated a high success rate (over 80% of businesses that start the assessment, finish and receive an action plan). Features of the tool include:

- Direct access from SoCalGas's website;
- Allows users to quickly assess how well they manage energy;
- Identifies the potential scope of energy savings available;
- Maps user needs to applicable SoCalGas's programs, rebates and services;
- Generates a prioritized action plan for each business within 10 minutes;
- Provides an immediate action plan with 'quick wins' and longer terms strategies for reducing energy cost;
  Action Plan provides:
  - Cost-effective technology improvements,

  - Longer term business strategies for improving energy management practices,
  - Estimate of business savings, and
  - Links to SoCalGas services, self-help information on priority actions and other programs.
- Benchmarks businesses to drive competitive improvement;
- Educates customers on ways to improve energy management & take advantage of available services;

b) List measures

Program is non-resource and as such does not provide incentives. Program does however provide customers with an on-line energy audit that includes identifying priority energy efficiency measures. It also provides links to applicable incentives, programs and services to support customer in implementing measures.

c) List non-incentive customer services

Program provides an immediate action plan with 'quick wins' and longer terms strategies for reducing energy cost. Plan identifies:

- Cost-effective technology improvements;
- Longer term business strategies for improving energy management practices;
- Estimate of business savings, and
- Links to services, self-help information on priority actions and other programs.

Program also:

- Benchmarks businesses to drive competitive improvement;
- Educates customers on ways to improve energy management & take advantage of other services, and

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry

sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers

Typical technical ‘audit’ tools, which attempt to measure energy usage through the counting of motors, lights and other loads can be less popular with customers. They can be seen as time consuming and viewed as ‘audit-processes’ rather than ‘outcome orientated processes’. The end result is that customers rarely implement the recommended solutions.

This was highlighted in the 2005 report on the current statewide non-residential audit commissioned by the four California IOUs "2003 Statewide Nonresidential audit program evaluation" which identified that fewer than 20% of medium businesses and fewer than 30% of small business found the current audit 'very influential' on equipment adoptions (with the exception of lighting).

The Energy Challenger program has been designed to overcome this and other barriers. The solutions to identified barriers are summarized in the table below.

Barrier	Solutions provided by Energy Challenger
Lack of consumer information about energy efficiency benefits	Links to websites services, suppliers and guidelines
Lack of a viable and competitive set of providers of energy efficiency services in the market	Immediately presents the customer with a detailed business orientated action plan
Barriers to the entry of new energy efficiency technologies or systems whose efficiency or system performance levels are uncertain due to lack of experience	Enables decision makers to affect change in the business by providing business assessment/audit outcomes as business directives (i.e. top-down vs. bottom-up approach);
Lack of a viable and reliable resources to educate and inform	Supplies an energy efficiency business assessment solution that educates and empowers business decision makers
Lack of qualified personnel resources to support objectives.	Provides a business focused solution that can be understood and completed by decision makers (site and finance managers) as well as engineers
Customers who do not have easy access to energy efficiency program information or generally do not participate in programs due to:	Provides an easy-to-use business assessment/audit tool for customers that can be conducted by a manager/owner without requiring a high degree of technical competency;
The models developed for assessing usage are often confusing to financiers & managers. Need to be expressed in plain English,	Offers an energy efficiency business assessment that can be completed in ten (10) minutes and, provides meaningful output, which is of immediate value to the customer;

By addressing opportunities to improve business practices, Energy Challenger will remove barriers to the implementation of longer-term energy efficiency measures. The following figure demonstrates graphically how the Program provides continuous improvement.

2009-2011 Energy Efficiency Programs
Energy Challenger
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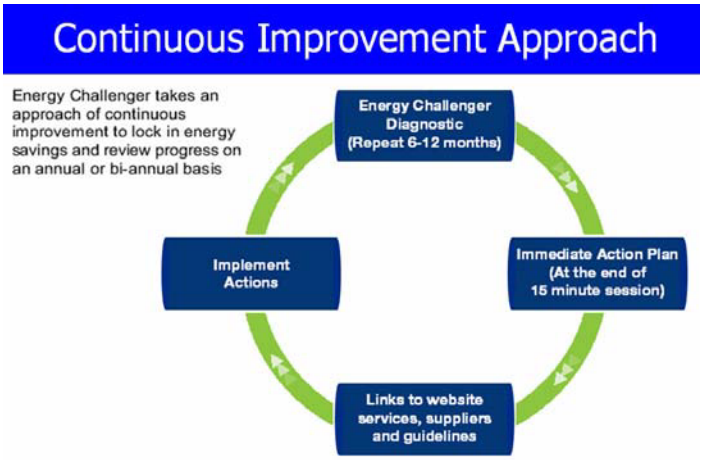


d) Quantitative Program Targets

The goal of the Program is to exceed 2,000 small to medium business customer sessions during 2009-11 program cycle.

The marketing strategies to support program objectives are:

- Direct mail to target SoCalGas customers;
- Marketing messages incorporated into appropriate marketing materials, and
- Marketing to target customers through trade shows and, industry associations.

Table 5

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Number of completed customer assessments	750	750	500

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan Goals and Objectives

This program supports the Strategic Plan in the following manner:

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
By engaging building owners in auditing process, program presents economic and productivity cases for improving building efficiency.	Commercial	50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.	2-5: Develop tools and strategies to use information and behavioral strategies, commissioning, and training to reduce energy consumption in commercial buildings.
Provides an on-line tool (through SoCalGas's website) to evaluate potential financial savings for energy efficiency improvements in existing commercial buildings	Commercial	50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean	2-6: Develop effective financial tools for EE improvements to existing buildings.

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
		distributed generation.	
The Program raises customer awareness about and direct customers to SoCalGas programs and in so doing expands utility efforts to integrate the full range of DSM options into programs	DSM Coordination and Integration	Deliver integrated DSM options that include efficiency, demand response, energy management and self generation measures, through coordinated marketing and regulatory integration.	1-3: Develop integrated DSM programs across resources, including energy, water, and transportation.
Through online provision of sophisticated auditing tool, program helps disseminate knowledge and create market pull for technologies.	Research and Technology	Create demand pull and set the research agenda to pursue both incremental and gamechanging energy efficiency technology innovations.	1-4: Expand activities to create market pull for energy-efficient technologies.
Online tool is continuously updated to ensure that the latest technologies are incorporated and promoted	Research and Technology	Conduct targeted emerging technologies R&D to support the Big, Bold Energy Efficiency Strategies/Programmatic Initiatives and integrated energy solutions goals	2-2: Promote cost-effective near term performance enhancements of existing technologies.

CA Strategies for Commercial Customers (Section 3.4-Commerical Customers)

- Access *to Information*
  - Educates business customers on practical steps to improve energy efficiency within their facility;
  - Provides each business with an action plan to improve energy efficiency including a prioritized list of specific actions for the business;
  - Provides benchmarking of each business against other similar businesses/buildings;
  - Provides a carbon calculator that educates customers on their carbon footprint and helps them to understand their carbon footprint and opportunities to reduce it, in practical terms;
  - Includes practical steps to improve operations and maintenance practices to increase energy efficiency;
  - The assessment can be updated in conjunction with SoCalGas to incorporate new and emerging technologies;
- Financing
  - Provides customers with an action plan incorporating prioritized actions to reduce energy consumption. Incorporates links to utility incentives to implement measures;
  - Educates customers about incentives and financing options;
  - Encourages discussion and interaction between owners and tenants;
  - Includes both an assessment of and recommended actions to improve energy efficiency both through low/no-cost improvements as well as technology upgrades;

- Codes and Standards
    - The program will identify technologies and solutions to provide businesses with a roadmap to implement energy efficiency improvements beyond energy efficiency standards.

California Enabling Strategies for Commercial Customers

- The program conducts a holistic review of facility/ building design and equipment (including not only lighting technologies, but also HVAC, hot water, business processes, operating and maintenance procedures, building components, control systems, office equipment and relevant equipment for specific sectors);
- Provides recommendations to improve energy efficiency, opportunities to include in renovations and education of occupants;
- The program can be modified during the program cycle together with SoCalGas to incorporate new utility/statewide and other non-utility initiatives, as well as emerging technologies, and
- The program provides an integrated assessment of DSM opportunities and identifies specific retrofit solutions for each customer.
-

6) Program Implementation

a. Statewide IOU Coordination

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing and outreach materials e.g. research, target audience, collateral, delivery mechanisms
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

In addition to providing the program to Southern California Gas business customers, Energy Challenger is also delivered to SDG&E customers. Discussions are underway with other California IOUs and agencies.

The Program is linked and integrated with statewide IOUs programs as follows:

- For each customer, the program will conduct a detailed assessment of opportunities for the customer to implement IOU statewide energy efficiency programs and measures;
- Customer reports will include a prioritized list of energy efficiency opportunities including energy efficiency measures for which statewide IOU programs and/or incentives are available;
- Customer reports will include linkages to applicable statewide incentives and programs for business customers – for example:
    - Express efficiency program and incentives;
    - Savings by design, and

- Standard performance contract.

b. Program Delivery and co-ordination

i. Emerging Technologies program

A key feature of Energy Challenger is its flexibility, enabling it to be modified over the course of the program period to incorporate emerging technologies. These improvements can be incorporated either through additions or changes to questions within the assessment, changes to actions, or links to new technologies/opportunities/initiatives from the customer's action plan.

All of the customer responses from Energy Challenger are stored in a secure database. The database can be used to identify energy efficiency trends within sectors, uptake of emerging technologies within the Company's territory, and penetration rates of energy efficiency programs. Importantly the database can also be used to identify opportunities for targeted marketing on individual technologies in specific sectors and identify potential leads for emerging technologies.

ii. Codes and Standards program

The Program will also identify technologies and solutions to provide businesses with a roadmap to implement energy efficiency improvements beyond energy efficiency standards.

The Program's flexibility enables it to be modified over the course of the program period to incorporate new codes and standards. These improvements can be incorporated either through additions or changes to questions within the assessment, changes to actions, or links to new technologies/opportunities/initiatives from the customer's action plan.

iii. WE&T efforts

The Program provides an on-line resource for workforce education and training, for small to mid sized business customers.

Consistent with the 2009 – 2020 California Statewide Energy Efficiency Strategic Plan, the program, through the on-line audit, is available as a training resource to contractors, energy auditors and building energy operators, to support them in identifying specific opportunities to improve energy management in small to mid sized businesses. The Program is also available as a training resource to contractors such as plumbers and electricians.

iv. Program-specific marketing and outreach efforts (provide budget)

The Program includes a comprehensive and multi-pronged marketing plan to engage with businesses across the Company's territory. The program will be targeted at small/medium-sized businesses that have traditionally been 'hard-to-reach' and have historically had low participation rates in energy efficiency programs. Energy Challenger is relevant to a broad cross section of commercial

and industrial sectors including, but not limited to Hospitality, Retail, Commercial, Manufacturing, Small Industrial, Schools, Hotels, Grocery and Convenience stores.

v. Non-energy activities of program

Energy Challenger is an energy business assessment/audit tool that covers a much broader range of energy efficiencies than covered in traditional on-line energy audits as outlined below:

- Energy Challenger covers a wide range of end use loads;
- For commercial customers, in addition to reviewing opportunities for SoCalGas technology rebates, the business assessment/audit will include broader opportunities (such as building envelope, load management, location of control sensors, operation of current control systems);
- For industrial customers Energy Challenger will target applicable technical areas such as refrigeration, heating systems, boilers, compressed air systems, steam systems, pumping, motor systems, etc.

vi. Non-IOU Programs

This is not applicable to this program.

vii. CEC work on PIER

The Program includes the following links with PIER:

- The program complements and reinforces the PIER program by providing owners and tenants of buildings with a practical tool to identify steps to improve their building end-use energy efficiency;
- The Program provides customers with a prioritized roadmap to improve energy efficiency including both technology upgrades, improvements in operating and maintenance practices and behavioral change;
- Each customer receives a detailed energy improvement report incorporating interactive links to programs, rebates and services to help them implement the opportunities;
- The Program will identify technologies and solutions to provide businesses with a roadmap to implement energy efficiency improvements beyond energy efficiency standards;
- The Program will be modified during the course of the program period to incorporate new opportunities identified through PIER;
- To assist customer decision making, the program prioritizes opportunities based on cost effectiveness for both no/low cost savings opportunities as well as longer term strategic improvements;
- The Program encourages discussion and collaboration between owners and tenants on opportunities to improve energy efficiency, and
- The Program is available through SoCalGas's website to other market plays including industry associations, consultants, architects and trade allies.

viii. CEC work on codes and standards

The Program supports and complements the CEC work on Codes and Standards by providing a road map to best practices in energy efficiency. Following an initial assessment, each customer is provided with an action plan containing prioritized measures to improve energy efficiency. The customer also receives a password, enabling them to repeat the process and identify their next steps to continued improvement and best practice in energy efficiency. The Program also includes for on-going improvement to the assessment, to incorporate new technologies and drive the customer beyond codes and standards.

ix. Non-utility market initiatives

A significant market trend identified in the 2003 California study "Statewide Small Industrial Customer Needs and Wants Study", conducted by Quantum Consulting, Inc. for PG&E was that "Medium customers have shown themselves to be willing and able to implement energy efficiency measures when provided with detailed, actionable recommendations for cost-effective process improvements".[2]

- The program addresses this market trend by providing customers with detailed and actionable recommendations for cost-effective process improvements;

The same study identified that for small/medium businesses "the owner is the most important player in selecting equipment for retrofit projects".

- The program addresses this market factor by providing a business assessment tool specifically designed for owners and managers, that addresses energy management as a business management issue;
- Additionally marketing and outreach is targeted at business owners and managers;

The Program incorporates other non-utility initiatives, trends and market forces as follows:

- Includes energy efficiency measures beyond those covered by utility initiatives, for which the customer can utilize non-utility initiatives (e.g. programs available through other agencies (such as water agencies for low flow shower heads or preferred contractor or tradesman);
- The program will be modified during the course of the program period to incorporate new energy efficiency opportunities and technologies emerging through market forces;
- Customers will be provided with a tailor-made roadmap to SoCalGas energy efficiency programs/incentives, and where these are not available for the measure, links to other relevant non-utility resources and programs to provide implementation support, for example:
  - Third party programs,
  - ENERGY STAR

[2] "Statewide Small Industrial Customer Needs and Wants Study," Quantum Consulting, Inc., July 2, 2003. Available at: www.calmac.org.

  - U.S. Department of Energy resources and programs
- Customers will receive a strategy and action plan that addresses both the traditional technical programs as well as identified areas for action in management practices.

The implementation plan for the 2009-11 program period will include:

- Confirming SoCalGas's objectives to add value to business customers and confirm program deliverables;
- Planning the logistics of the continued delivery through 2009-11;
- Reviewing any changes to the SoCalGas program portfolio for 2009-11, including energy efficiency rebates and services, and third part programs, and
- Reviewing the current SoCalGas customization of Energy Challenger and updating links to SoCalGas programs as appropriate.

c. Best Practices

The Energy Challenger Program will utilize the following best practices in non-residential programs:

- Program Theory and Design: Program has developed a sound program plan and links its strategic approach to policy objectives and constraints.
- Program Management – Project Management: Program provides technical assistance to help applicants through the process;
- Program Management – Reporting and Tracking: Utilizes the program's website to facilitate data entry and reporting and integrating all program data, including measure-level data, into a single database
- Program Implementation – Participation Process: Keeps the application process simple and quick to navigate while at the same time not over simplifying.

d. Innovation

The Energy Challenger program will provide the following innovations:

- Transforms the "selling" process with the customer from the traditional, low success rate, "bottom-up" approach (begins with facility managers and engineers and ends with management acceptance) to a highly successful, "top-down" approach that begins with senior management commitment;
- Utilizes a proven method of engaging senior managers and small business owners to gain commitment and buy-in to improving energy efficiency;
- Empowers Southern California Gas's business customers to self assess their energy management needs and prepare an action plan for improvement in 5 - 10 minutes (vs. traditional approach of 30 to 45 minutes). Greater than 80% of businesses that start complete the assessment/audit.

e. Integrated/Coordinated Demand Side Management

This Program supports the ideals of integrated demand side management by encouraging customer adoption of a variety of energy efficiency and other energy-related measures. Energy Challenger is in itself a coordinated assessment of potential DSM opportunities

for small and medium sized business customers. It is tailored to the business sector and size of customer. The assessment includes energy efficiency technologies as well as operating and maintenance practices, and integrated program delivery. The customer report includes both technology improvements as well as improvements in management and operating practices.

The Program has close linkages with SoCalGas's portfolio of energy efficiency programs for small and medium sized business customers including; Express Efficiency, Savings by Design and Energy Efficiency Business Seminars.

f. Integration Across Resource Types (energy, water, air quality, etc)

The Program is primarily focused on improvements in energy resource management. In addition, the Program includes assessment of water efficiency opportunities where the energy measure/technology also has a water resource component (e.g. low flow shower heads and pre-rinse valves on dishwashers). That is, the measure/technology delivers both improvements to energy and water efficiency.

g. Pilots

The Program for 2009-11 is an extension of an existing 2006-08 program and as such does not include any pilot projects. The program design and delivery has been continuously improved based on feedback received during the 2006-08 cycle.

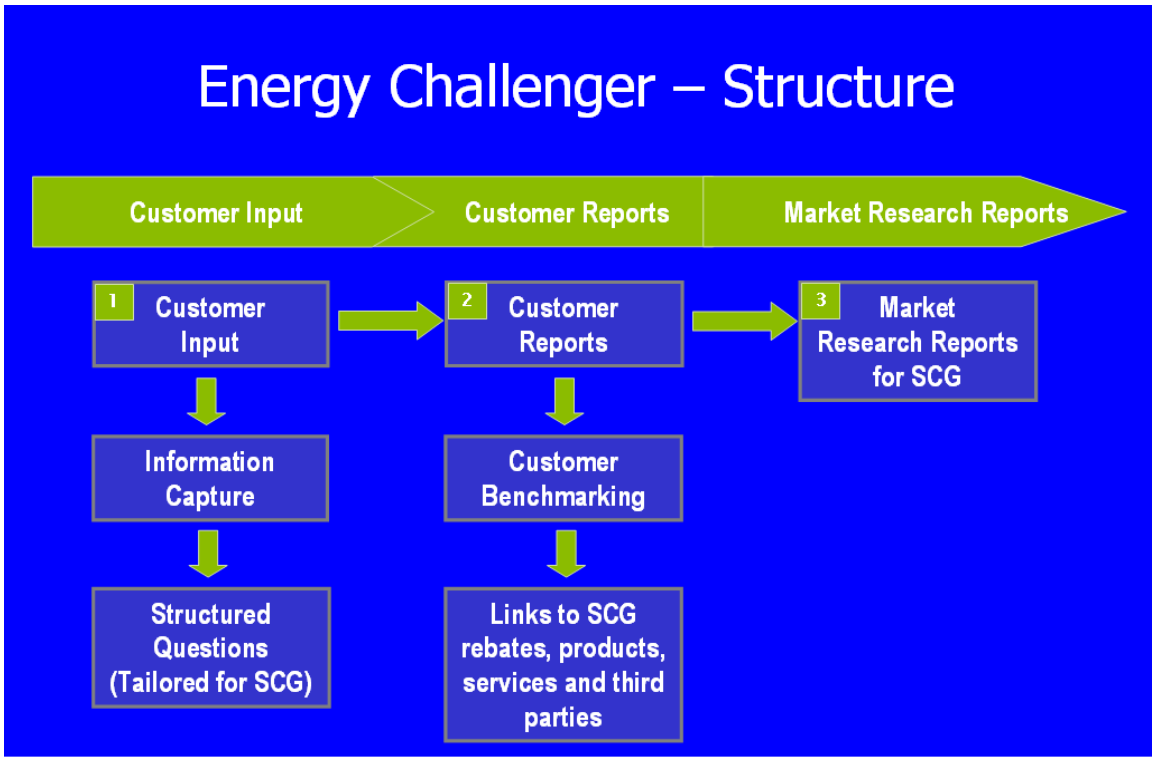
h. EM&V

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

2009-2011 Energy Efficiency Programs
Energy Challenger
Program Implementation Plan

7) Diagram of Program

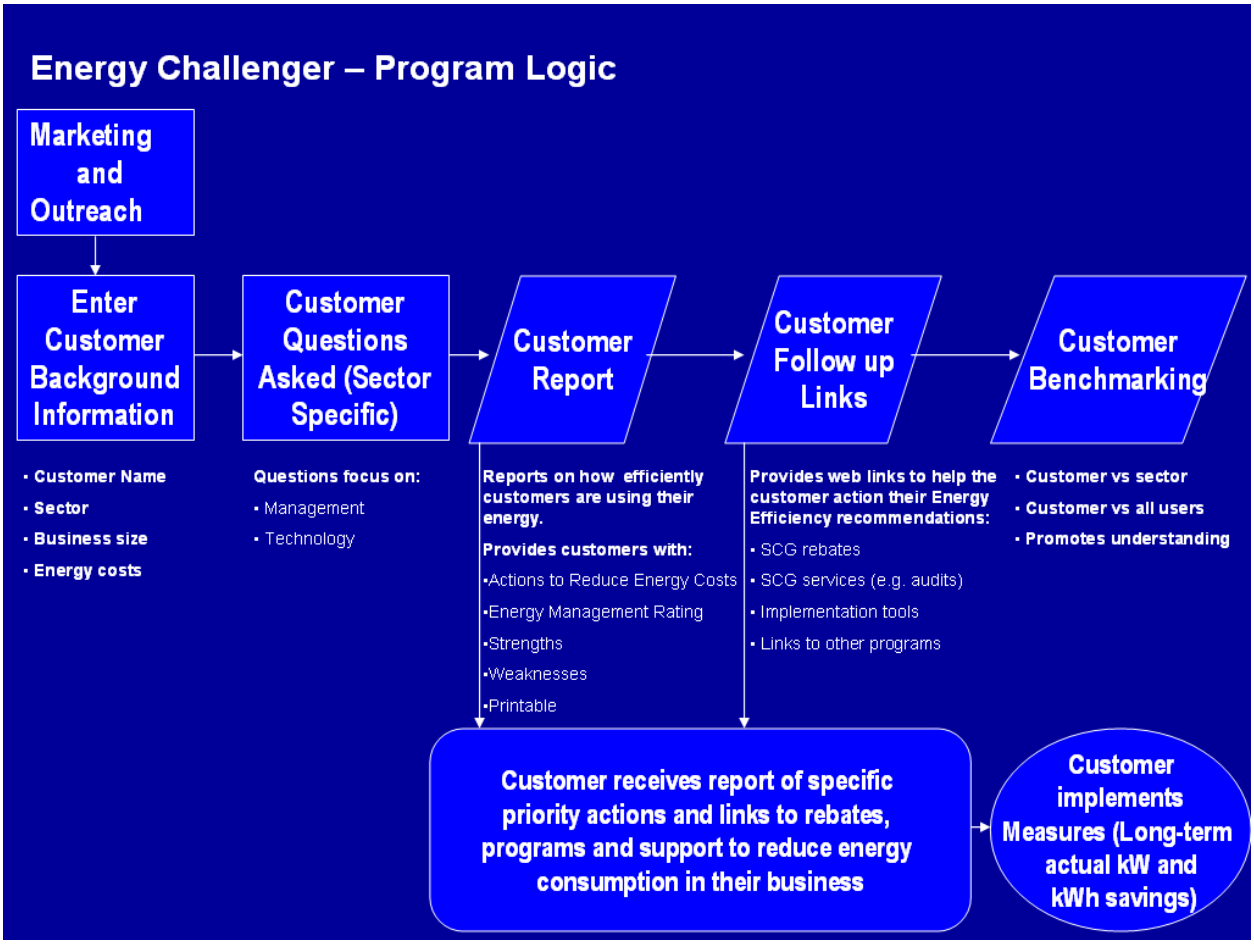
No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6. However, a diagram of the Program's structure is provided below.



Energy Challenger Structure

8) Program Logic Model

The Program logic model is provided below.



Program Logic Model

2009-2011 Energy Efficiency Programs
PACE Energy Savings Project
Program Implementation Plan

1) Program Name: PACE Energy Savings Project (PACE Energy Efficient Ethnic Outreach Program)
   Program ID Number: TBD
   Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The PACE Energy Savings Project (PACE ESP) is a multi-ethnic outreach program that actively promotes the energy efficiency programs of The Gas Company to residential and small business customers who belong to the Chinese, Korean, Hispanic, and Vietnamese communities. In 2009-2011, the program proposes to expand its outreach to the Filipino community and other geographical areas including Orange, Riverside, San Bernardino, and Ventura Counties. In addition, the program will take its outreach efforts to "the next level" by encouraging target small businesses to take more concrete steps to saving energy as well as conducting follow-through and follow-up activities to determine the extent to which customers practiced or employed energy savings in their homes or work places.

In 2009-11, the program will pursue the following:

- Continue outreach efforts and energy efficiency education programs that were demonstrably effective in 2006-2008.
- Develop and implement effective outreach and marketing strategies to penetrate the Filipino community including, but not limited to hiring a Marketing Specialist who speaks Tagalog and have extensive experience in working with members of this community. These plans will target both residential and small business communities.
- Develop and implement outreach and marketing plans for four additional counties: Orange, Riverside, San Bernardino and Ventura.
- Develop and implement outreach and assistance programs for small businesses and facilitate their undertaking concrete steps to become efficient energy users.

- Develop and implement outreach and education programs for nursing, hospices and/or convalescent homes that are owned and operated by and/or served members of the five targeted ethnic communities.

For program year 2009 to 2011, the Program will extend its outreach to the Filipino community and expand its efforts of promoting the energy savings programs of The Gas Company in four other Counties (Orange, San Bernardino, Riverside and Ventura) in addition to Los Angeles.

To reach stated marketing penetration objectives, the Program will:

- Recruit, hire and train staff who belong to the Filipino community, are fluent in Tagalog, both orally and in writing to facilitate kinship with this community.
- Conduct orientation and/or training programs to inform and prepare staff in implementing program goals in 2009 to 2011.
- Participate in 100 community events in the five counties where target ethnicities have traditionally gathered to maximize potential exposure of program information to identified customers.
- Conduct outreach among targeted populations in their particular ethnic languages to foster greater understanding and subsequently, adoption of energy efficient practices.
- Leverage existing relationships and/or establish collaborations with ethnic community, religious, educational and trade/professional organizations;
- Develop and/or translate information and promotional materials into Chinese, Korean, Spanish, Tagalog and Vietnamese, and utilize these as primary tools to introduce and explain energy savings programs. The program will utilize all available media—print, broadcast, video or internet/website media.
- Use available incentives to encourage increased participation of target ethnicities in the practice of energy efficiency at home and at work.

In addition, the Program will intensify its outreach efforts through the:

- Organization and conduct of 30 workshops among target communities regarding simple energy-saving practices in their homes and businesses (low-cost or no-cost practices) to reduce energy consumption;
- Increase in partnerships with ethnic mass media to reach a broader percentage of ethnic audiences. The program representatives will appear on radio and television shows popular among or directed toward targeted populations as well as influence the publication of stories or articles about energy efficiency. The program will deliver at least a total of 30 appearances on radio and television, published news articles or stories and/or internet posting promoting or discussing energy efficiency and energy savings programs offered by The Gas Company.
- Design of follow-up instruments in the different ethnic languages to determine impact of outreach efforts to reduce therm use and institutionalizing energy-saving practices/consciousness;
- Use of incentives to encourage positive response to invitations to participate in the various energy saving programs, mail back confirmation brochures and/or follow-

up surveys to gauge impact of outreach and elicit suggestions to strengthen program implementation (e.g., raffles, contests, giveaways, etc.).

b) List measures

This is a non-resource program and has no measures and no incentives.

c) List non-incentive customer services

Outreach will be conducted in the appropriate ethnic language, through culturally-sensitive activities, by staff that speak the language and are familiar with cultural practices that have been proven successful during the first program cycle. The program will:

- Participate in or host ethnic community events, meetings and other activities where identified residential and small business customers are expected to congregate as venues to distribute energy efficiency program information and energy efficiency kits (faucet aerators and low flow showerheads) and complete the Home Energy and Water Efficiency surveys.
- Translate into and/or develop program materials in Chinese, Korean, Tagalog, Spanish and Vietnamese to facilitate program understanding and appreciation of their benefits.
- Utilize mainstream and local ethnic media channels—print, broadcast and the internet—to disseminate energy efficiency information to the widest possible audience.

The Contractor expects the foregoing activities will increase knowledge and awareness of targeted customers of The Gas Company about available energy savings programs and their benefits. The increased awareness is expected to encourage them to utilize these programs and/or practice energy efficiency in their daily lives.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given

in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers:

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier

Barrier	Solution
Lack of consumer information about energy efficiency benefits	Program conducts extensive marketing, education and awareness efforts to raise target audience's levels of awareness about energy efficiency benefits.
Customers who do not have easy access to information or do not participate in energy efficiency are due to:	
Language: Primary language spoken is other than English and program information is not accessible	By targeting the Chinese, Korean, Filipino, Vietnamese and Hispanic/Latino communities, translating program materials to native languages, focusing on media outlets with ethnic audiences, and developing community and school educational programs in conjunction with municipalities, the Program is able to overcome language and other cultural barriers.
Small businesses do not prioritize efficient energy use due to small portion of overall cost structure and have a difficult time taking the steps to install energy efficient measures.	The Program targets small businesses, develops materials specifically designed to raise small business owners' levels of awareness and seeks to assist these customers with efforts to pursue installation of energy efficient measures.

d) Quantitative Program Targets:

The PACE Energy Savings Project aims to conduct outreach activities in the appropriate ethnic language and culturally-sensitive approach directed towards identified ethnic customers of The Gas Company. Specifically, the program will work towards attaining the following major targets in 2009 to 2011:

Table 5

Energy Efficient Ethnic Outreach (PACE Energy Savings Project)	Program Target by 2009	Program Target by 2010	Program Target by 2011
1. Translate and/or update program materials into Chinese, Korean, Tagalog, Spanish and Vietnamese	5	0	0
2. Translate (oral) seminar and/or demonstration proceedings	1	0	0
3. Conduct orientation training/workshops on energy efficiency programs and easy-to-implement low-cost or no-cost actions among residential customers, in language	10	10	10
4. Develop and/or translate/update training and marketing materials (English and 5 ethnic languages)	10	10	5
5. Redesign/overhaul/maintain PACE Energy Savings Project web pages, to include ethnic translations, links to The Gas Co. website, other utility providers	1	0	0
6. Create public service announcements (English and five ethnic languages	5	5	5
7. Create/update PowerPoint/multimedia presentations (English and 5 ethnic languages): 1 res/1 biz	6	0	0
8. Conduct presentations to ethnic community, religious, social and educational associations or groups	7	7	6

2009-2011 Energy Efficiency Programs
PACE Energy Savings Project
Program Implementation Plan

Energy Efficient Ethnic Outreach (PACE Energy Savings Project)	Program Target by 2009	Program Target by 2010	Program Target by 2011
9. Produce and distribute press releases	10	10	10
10. Place articles, stories, ads in PACE quarterly newsletter/other ethnic/public media	10	10	10
11. Attend ethnic community events/gatherings and operate information booths	35	35	30
12. Create and distribute follow-ups instruments (surveys, etc.) to determine effectiveness of outreach	2	2	2
13. Design and implement an incentive program	2	2	2
14. Create 12 lists and contact target small businesses			
14.1. Real estate companies	84	84	82
14.2. HVAC/other home improvement contractors	34	34	32
14.3. Appliance retailers	50	50	50
14.4. Escrow/home inspection companies	25	25	25
14.5. Financial/lending institutions	67	67	66
14.6. Condo/apartment/townhouse owners/managers	34	34	32
14.7. Foodservice owners/operators	667	633	700
14.8. Laundromats/dry cleaners	125	125	125
14.9. Small hotels/motels	67	67	66
14.10. Beauty/nail salons	167	167	166
14.11. Nursing homes/hospices	20	20	20
14.12. Ethnic organizations/associations	134	134	132
15. Coordinate energy audits by The Gas Company	27	28	35
16. Coordinate use of ERC test kitchen facilities	5	5	5
17. Coordinate attendance in regularly scheduled seminars at ERC/satellite venues (ethnic businesses)	25	25	25
18. Coordinate in-language foodservice seminars	2	2	1
19. Attend ethnic community events, other forums	35	35	30
20. Distribute faucet aerators, single family customers	5,000	5,000	5,000
21. Distribute faucet aerators, multi-family customers	334	334	332
22. Distribute low flow showerheads	5,000	50,600	5400
23. Assist in completion of HEE Surveys, paper	4,500	4,500	4,500
24. Assist in completion of HEE Surveys, online	834	834	832
25. Contact/sign up residential customers re EE programs.	5,000	5,500	5,500
Follow-up activities	2	2	2

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan goals and objectives:

This program supports the State's energy efficiency Strategic Plan in the following manner:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
Promotes energy efficiency Chinese, Filipino, Korean, Spanish and Vietnamese residential customers using culturally-sensitive and language-appropriate outreach that is expected to lead to greater understanding of these programs and the benefits these bring.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-2: Promote effective decisionmaking to create widespread demand for energy efficiency measures.
Promotes energy efficiency Chinese, Filipino, Korean, Spanish and Vietnamese residential customers using culturally-sensitive and language-appropriate outreach that is expected to lead to greater understanding of these programs and the benefits these bring,	Residential	Develop comprehensive, innovative initiatives to reverse the growth of plug load energy consumption through technological and behavioral solutions.	3-2 In coordination with Strategy 2-2 above, develop public awareness of and demand for highly efficient products.
By targeting underserved ethnic communities, the program will help improve delivery of SoCalGas's programs to a broader mix of customers.	Low Income Residential	By 2020, all eligible customers will be given the opportunity to participate in the LIEE program.	1-3: Improve program delivery
Will actively promote SoCalGas financing programs to ethnic small businesses, many of whom may be income qualified.	Low Income Residential	The LIEE programs will be an energy resource by delivering increasingly cost-effective and longer-term savings.	2-2: Coordinate and communicate between LIEE, energy efficiency and DSM programs to achieve service offerings that are seamless for the customer.
Disseminates information that promotes energy efficiency to targeted small businesses using appropriate ethnic language.	Commercial	50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.	2-5: Develop tools and strategies to use information and behavioral strategies, commissioning, and training to reduce energy consumption in commercial buildings.

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
Collaborates with ethnic community-based organizations, trade associations, religious organizations and educational institutions and other groups to bring the benefits of energy savings to its identified markets through workshops, information booths, etc.	Workforce Education and Training	Ensure that minority, low income and disadvantaged communities fully participate in training and education programs at all levels of the DSM and the energy efficiency industry.	2-1: Collaboratively identify appropriate goals and strategies to build California's energy efficiency workforce through 2020, focusing on training that increases participation from within minority, low-income and disadvantaged communities in achieving California's economic energy efficiency potential.

6) Program Implementation

a. Statewide IOU Coordination:

i. Program Name
ii. Program Delivery Mechanism
iii. Incentive levels
iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

The Program is a collaboration with SoCalGas that aims to outreach to ethnic communities with historically low participation rate in its energy savings programs. By providing information and assistance in appropriate ethnic language and implementing culturally-sensitive outreach activities to Chinese, Korean, Filipinos, Spanish and Vietnamese customers, the program will encourage them to actively incorporate energy savings practices in their daily lives. The Program will make efforts to collaborate with local governments and other groups as appropriate to increase the Program's reach and effectiveness.

Although Program efforts will be aimed primarily at promoting identified energy savings programs of The Gas Company to the five ethnic communities, it will be prepared to assist customers in accessing information that supplements these programs and are supplied by other utility providers (Southern California Edison, Los Angeles Department of Water and Power, etc.). Program implementation will be sensitive to similar outreach efforts offered by other utility providers to ensure that overlaps do not occur. In particular, coordination with managers of other utility programs will be facilitated through a shared calendar of events where PACE participation is planned. Through this, it is expected that no duplication of efforts will occur.

b. Program delivery and coordination:

i. Emerging Technologies program

Not applicable to this third-party program.

ii. Codes and Standards program

The Program is aimed at promoting energy savings programs provided by The Gas Company to its qualified residential and small business customers. These programs are the product of technologies already considered "mature". Coordination with Emerging Technologies and Codes and Standards efforts are, therefore, expected to be minimal. However, the Program's Contractor will be ready to promote new technologies as they are commercialized.

iii. WE&T efforts

Where applicable, program will promote the WE&T efforts within the specified regions.

iv. Program-specific marketing and outreach efforts (provide budget)

Promotion of the energy saving programs will be conducted by staff that is bilingual in the appropriate ethnic language. Staff will also create and/or translate program materials in language. Assistance will also be provided in language, by culturally aware personnel to overcome cultural and language barriers. As well, Contractor will continue to leverage its alliances and affiliations with established ethnic organizations to reach a larger number of ethnic customers. Where applicable, it will coordinate its efforts with local governments, educational institutions or organizations.

The Program will also participate in popular ethnic community events, meetings and other congregations where a high percentage of targeted customers are expected to gather. Ethnic mass media will also be utilized to promote program information. Contractor will create and distribute in language press releases and articles for publication and/or broadcast in these media. Contractor will also make appearances in ethnic radio and television shows to promote energy savings programs.

The projected marketing budget for the three years is $1,067,894.

v. Non-energy activities of program

The Energy Efficient Ethnic Outreach Program will promote the following programs to Chinese, Filipino, Korean, Hispanic and Vietnamese communities, living or conducting business in Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties:

- Installation of 16,000 energy efficiency kits—faucet aerators and low flow showerheads
- Completion of HEES (paper and online versions)
- Rebate programs for single and multi-family residential customers
- Rebate programs for small businesses

- Energy audits of small businesses
- Participation in and use of programs and services provided by The Gas Company's Energy Resource Center and its satellite facilities

The Contractor will continue to coordinate with managers of these and other programs, as necessary to ensure it is abreast with the latest program information.

It should be noted that the Contractor has also been implementing other energy savings programs under the administration of LIHEAP, The Gas Company and Southern California Edison. These programs involve weatherizing low-income and qualified homes in targeted zip codes in Los Angeles, conducting quality control inspections of weatherized projects, and administering a utility assistance program for low-income households in selected zip codes. PACE has also been recently awarded a private grant to organize a company to promote solar energy. In this regard, Contractor has endeavored and will continue to practice cross-implementation of these programs, where applicable.

vi. Non-IOU Programs
This is not applicable to this program.

vii. CEC work on PIER
This is not applicable to this program.

viii. CEC work on codes and standards
This is not applicable to this program.

ix. Non-utility market initiatives
This is not applicable to this program.

b. Best Practices:
The Contractor is utilizing a number of best practices in managing the Program, including[2]:

- Program Theory and Design: The program has a sound program plan, links its strategic approach to policy objectives and constraints, and demonstrates a thorough understanding of local market conditions.
- Program Management: The program has well-defined markets, areas of concentration, targets/goals and success indicators.
- Program Implementation – Participation Process: The program aims to keep participation simple and develop participation strategies that are multi-pronged and inclusive. The program allows flexibility to evolve and adapt strategies that prove to be more effective in reaching its target market and areas.
- Organizational Practices and Customs—The program utilizes three or more strategies to promote programs, forms coalitions with and leverages its existing ties with ethnic

[2] See Volume S – Crosscutting Best Practices Report and Project Summary, National Energy Efficiency Best Practices Study, December 2004, pages S14-15.

community, social, religious and educational organizations and employs all appropriate mass media—mainstream and ethnic/regional—to bring the message of energy efficiency and its benefits to its target communities.

c. Innovation:

The Program is innovative in conducting its outreach efforts in the ethnic language that is native to targeted customers in five counties in Southern California. The Contractor also employs staff who are bilingual (oral and written) and are the same ethnicity as the Program's target customers. Previously, this approach was little utilized in disseminating information among ethnic communities.

d. Integrated/coordinated Demand Side Management:

Although this Program is not an Integrated Demand Side Management program, it will seek to incorporate information about energy efficiency programs offered by other utility providers in its outreach activities to ensure that all available avenues to conserve and efficiently use energy resources are disseminated to interested customers.

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

It is therefore important that customers interested in programs other than what is offered by The Gas Company be provided at least basic information that will link them to other utility providers. Program staff will make an effort to be reasonably knowledgeable about the other energy efficiency programs offered by The Gas Company, Southern California Edison and/or the Department of Water and Power, among others and how these programs complement and/or reinforce the overall energy efficiency movement.

To accomplish the foregoing, Program staff will attend energy savings program seminars and/or workshops to learn about other programs it is not actively promoting and maintain a library of informational materials and program contact information. The Program staff will also familiarize itself with the California Long Term Energy Efficiency Strategic Plan to gain insight about the short, medium- and long- term goals and key result areas that guide overall energy efficiency efforts in California.

Where inquiries about these programs are raised, Program staff will provide program contact information to direct customers to the appropriate party(ies) and/or keep a record of the customer's name and contact information for appropriate referral. While Program efforts are directed to specific ethnic communities, information and assistance about energy savings and energy efficiency programs will be available to all interested residents and businesses.

The Contractor will closely coordinate with The Gas Company in order that it is kept abreast of any updates on program priorities as well as any program redirection it may need to adopt that reinforces the dissemination of information and promotion of energy savings initiatives among its target customers.

f. Pilots:

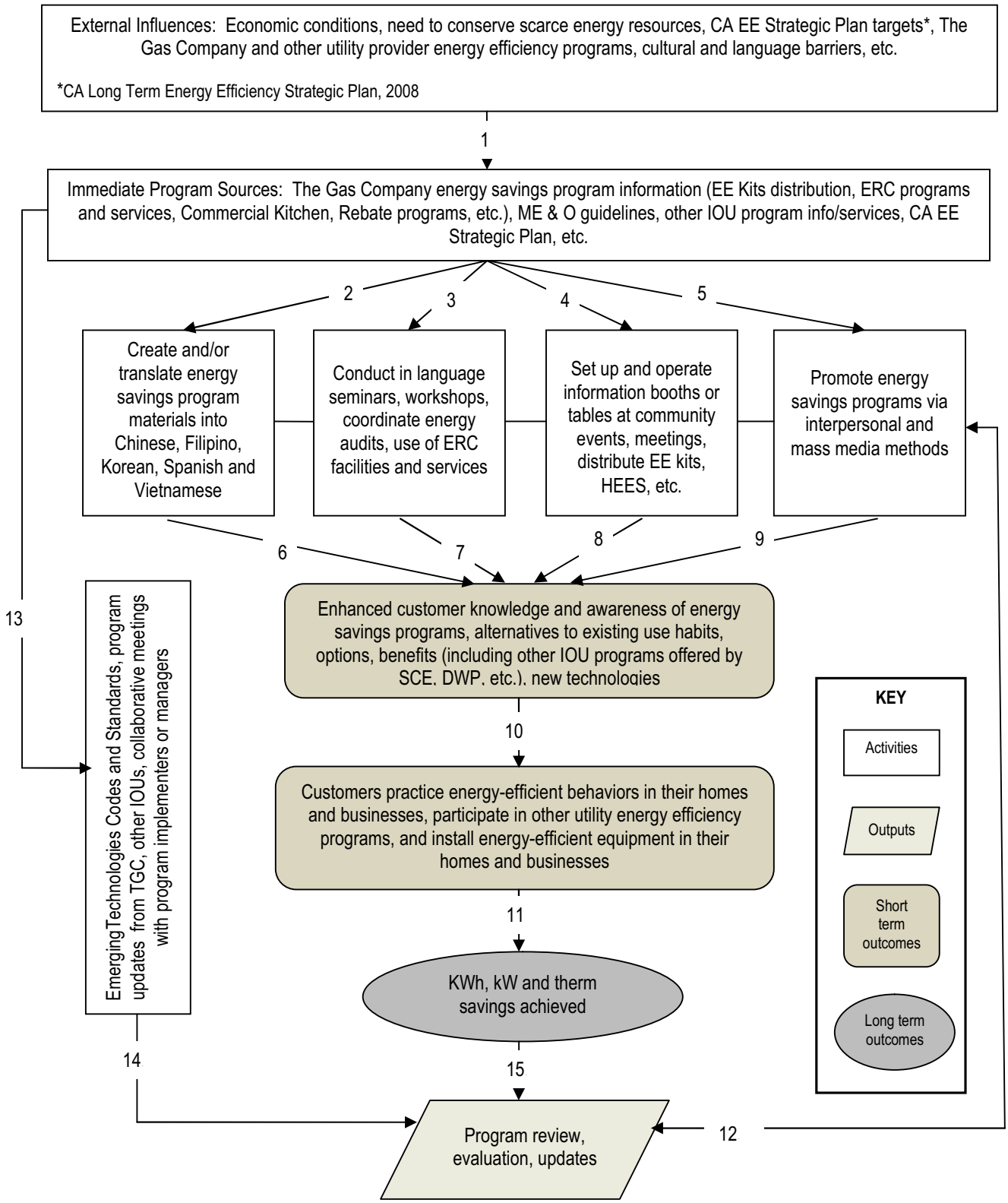
PACE Energy Savings Project does not plan to implement any pilot projects for program period 2009 to 2011.

g. EM&V:

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

7) Diagram of Program:

Energy Efficient Ethnic Outreach (PACE Energy Savings Project) Program Diagram



2009-2011 Energy Efficiency Programs
PACE Energy Savings Project
Program Implementation Plan

The Energy Efficiency Ethnic Outreach (PACE Energy Savings Project) program goals and activities are influenced by: the need to conserve scarce resources and reduce carbon emissions footprints as articulated in California's Energy Efficiency Strategic Plan of 2008 (1), directives from The Gas Company and feedback/collaborative efforts with program managers or implementers of energy efficiency programs administered by other utility providers.

The Program is primarily geared at conducting in language ethnic outreach to member of five ethnic communities: Chinese, Filipino, Korean, Hispanic and Vietnamese residing and/or working and conducting business in Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties.

Outreach strategies will involve the:

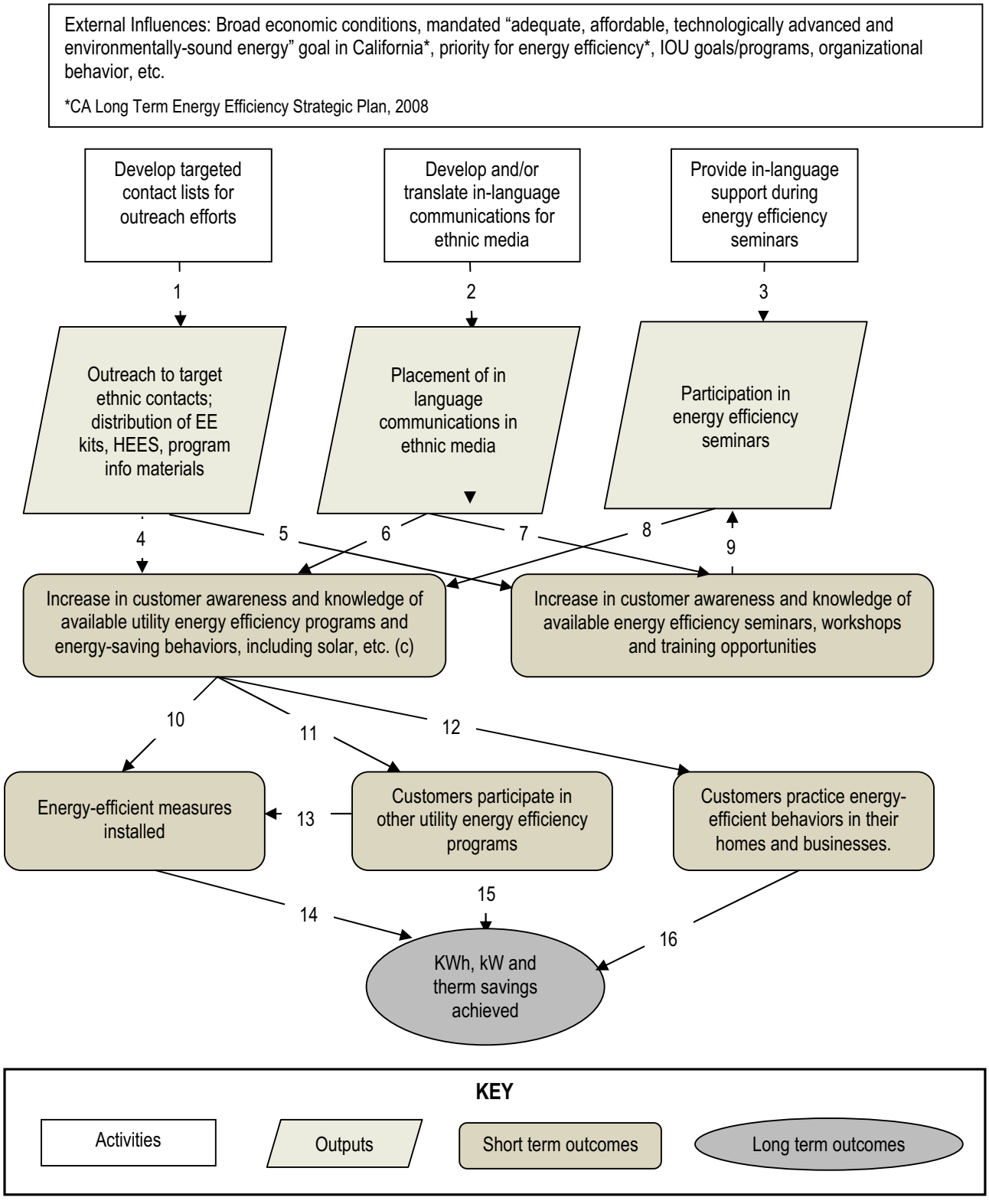
- Creation and/or translation of energy savings program materials into the five ethnic languages (2) to facilitate understanding and appreciation of the programs' benefits.
- Conduct of in language seminars and workshops to promote and explain energy savings programs, distribution of rebate application forms, low flow showerheads and faucet aerators, as well as the completion of the Home Energy and Water Efficiency Surveys (HEES) (3).
- Organization and operation of information booths and/or tables at ethnic community events, meetings (4). PACE will also utilize these events to distribute EE kits, rebate forms and assist customers in completing HEES. Program will also leverage its partnerships and affiliations among other ethnic groups to facilitate access to target ethnic communities.
- Promotion of program information through interpersonal and mass media methods (5). Creation and placement of press releases and other articles in ethnic newspapers and radio and television is anticipated to widen the program's information reach.

The foregoing strategies are envisioned to enhance the knowledge level of residential and small business ethnic customers about available energy savings programs and alternatives to current lifestyles or habits in utilizing natural gas, water and electricity (6-9). The increased awareness and understanding of available programs, their benefits and ease of participation are anticipated to encourage customers to employ energy-efficient behaviors in their homes and workplaces. As well, the Program expects this increased understanding to result in the purchase and installation of energy-efficient equipment (10), resulting in energy savings (11).

As is paramount in implementing an effective program, PACE will, in coordination with The Gas Company, conduct regular reviews of its program activities as well as information provided to customers (12). Such evaluations will take into account feedback from Gas Company staff as well as staff of other utility providers (Southern California Edison, LADWP). Feedback is expected to flow down from the overall economic and environmental conditions in California, as well as any updates or directives from the Public Utilities Commission (13, 14). Updates and other revisions or program refinements are then incorporated into the Program's activities and strategies. Collaboration and coordination with The Gas Company as well as other utility providers is expected to lessen, if not eliminate duplication of program efforts and promote a more integrated and cohesive outreach to targeted customers. Follow-through will also be conducted by the Contractor to ensure that its strategies to promote energy efficiency programs are positively received, understood and accepted by its targets. Feedback received from program participants will be reviewed and where appropriate, incorporated to strengthen program outreach (15).

8) Program Logic Model:

Program Logic Model/Diagram – Energy Efficiency Ethnic Outreach (PACE Energy Savings Project)



2009-2011 Energy Efficiency Programs
PACE Energy Savings Project
Program Implementation Plan

Program Diagram Description for Ethnic Energy Efficiency Outreach (PACE Energy Savings Project)

Link Number	Program Theory Description	Potential Performance Indicator	Possible Data Source
1	A large number of residential and small business customers in The Gas Company service area are not fluent in English. PACE uses its specific knowledge of the identified ethnic communities and cultures to develop targeted contact lists. Through targeted outreach to these contacts the program will overcome both language and cultural barriers and increase the awareness and knowledge of non English-speaking customers about energy efficient behaviors, the benefits of energy efficiency and available programs and resources (including distribution of EE kits, HEES completion, etc.)	Number of community events, number of attendees; number of presentations to ethnic social, community and small business associations, number of attendees; number of workshops/seminars, number of attendees; and number of meetings with association leaders.	Review of program tracking databases.
2	A large number of residential and small business customers in The Gas Company service area are not fluent in English. PACE uses in-language communications (including public service announcements, press releases, etc.) in Chinese, Korean, Vietnamese, Filipino and Spanish media outlets to overcome language and cultural barriers, and raise awareness of the benefits of energy efficiency and the opportunities available.	Marketing collateral and communications are created and/or translated that have a clear and complete message that describes programs, procedures for participation and benefits accruing to customer, the environment. It is easy to understand the specifics of the educational opportunities through PACE and The Gas Company.	Review of marketing and communications materials. Focus group and/or quantitative survey of participants and non-participants.
3	A large number of residential and small business customers in The Gas Company service area are not fluent in English. Because of this, current energy efficiency foodservice and other energy efficiency seminars are not being utilized by non English-speaking residential and small businesses in Southern California. Making in-language support available will cause ethnic customers to attend foodservice and other energy efficiency seminars.	Number of seminars, number of attendees. In-language materials and/or translations are available and easy to understand.	Review of program tracking databases. Survey of participants who attended in-language seminars and workshops. Observation of seminar and workshop proceedings.
4	Ethnic customers do not know about the benefits of saving energy, energy-saving equipment and strategies, and the availability of other utility- (electricity, water) provided energy efficiency programs. Through PACE's targeted outreach to ethnic community and small business associations and operation of information booths at various cultural events, contacts increase their awareness and interest in additional opportunities.	Self-reported increase in awareness, knowledge and change in attitude.	Survey of customers who attended community events, meetings or PACE presentations.

2009-2011 Energy Efficiency Programs
PACE Energy Savings Project
Program Implementation Plan

Link Number	Program Theory Description	Potential Performance Indicator	Possible Data Source
5	Currently, The Gas Company energy efficiency foodservice and other energy efficiency seminars are not being utilized by non English-speaking residential and small business customers in Southern California. Through targeted outreach to ethnic community, religious, educational and small business associations and association leaders at community events, the program will overcome both language and cultural barriers and increase their awareness of available foodservice and other energy savings seminars.	Self-reported increase in awareness and knowledge about foodservice and other energy efficiency seminars.	Survey of participants who attended foodservice and other seminars. Survey of customers who attended ethnic community events, association meetings or PACE presentations.
6	The placement of in-language communications from a trusted source in ethnic media outlets will increase customers' awareness and knowledge about energy efficiency strategies and programs available for their homes and businesses.	Self-reported increase in awareness, knowledge and change in attitude.	Survey of participants and non-participants.
7	The placement of in-language communications from a trusted source in ethnic media outlets will increase customers' awareness of the available foodservice and other seminars.	Self-reported increase in awareness and knowledge about foodservice and other seminars.	Survey of participants who attended foodservice and other seminars. Survey of customers who attended ethnic community events, meetings or PACE presentations. Survey of customers about source of information concerning seminars/events.
8	Customers are taught the benefits of saving energy and energy-saving equipment and strategies and practices in an in-language group setting with other similar ethnic members and business categories. Foodservice and other seminars that are available in the ethnic customers' language and with others that speak his language will put the customer at ease.	Self-reported increase in awareness, knowledge and change in attitude.	Survey of participants who attended foodservice and other seminars/workshops.
9	Increased awareness and knowledge regarding foodservice and other seminars availability in appropriate ethnic language makes non-English customers want to attend the seminars.	Non English-speaking customers attend the foodservice and other seminars.	Review of program tracking databases. Survey of participants who attended energy efficiency seminars.

2009-2011 Energy Efficiency Programs
PACE Energy Savings Project
Program Implementation Plan

Link Number	Program Theory Description	Potential Performance Indicator	Possible Data Source
10	Increased awareness, knowledge and change in attitude makes non English-speaking customers want to change their practice in their use of energy, to purchase and install energy-efficient equipment and take advantage of available rebates.	Non English-speaking customers change their energy use habits, install energy-efficient equipment and apply for available rebates.	Survey of participants who attended energy efficiency seminars or workshops. Survey of customers who attended ethnic events or PACE presentations.
11	Increased awareness, knowledge and change in attitude, along with the ease of accessing information about the programs makes non-English-speaking customers want to participate in other programs and services offered by The Gas Company and other utility providers.	Non-English-speaking customers participate in other The Gas Company programs and services as well as those offered by other utility providers (electric, water).	Tracking databases for other programs. Survey of participants who attended seminars and workshops. Survey of customers who attended community events or PACE presentations.
12	Increased awareness, knowledge and change in attitude makes non English-speaking customers want to change their energy use habits and/or business operation and maintenance practices.	Non English-speaking customers change their energy use habits and/or business operation and maintenance practices.	Survey of participants who attended seminars, workshops or ethnic events. Survey of customers who attended ethnic events or PACE presentations.
13	By participating in other utility efficiency programs, non-English-speaking customers may want to change their use of energy and selection of home and business equipment.	Non English-speaking customers change their energy use habits and selection of home and business equipment.	Survey of participants who participated in other utility programs.
14	Customers install energy-efficient equipment resulting in energy and demand savings.	M&V of savings	Impact analysis
15	Customers participate in other programs and services offered by The Gas Company and other utility providers resulting in energy and demand savings.	M&V of savings	Impact analysis
16	Customers change their use and maintenance practices resulting in energy and demand savings.	M&V of savings	Impact analysis

2009-2011 Energy Efficiency Programs
Gas Cooling Retrofit
Program Implementation Plan

1) Program Name: Gas Cooling Retrofit
Program ID Number: TBD
Program type: Third Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Gas Cooling Retrofit
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

This Program will encourage customers in the SoCalGas service territory to purchase and retrofit inefficient gas cooling units by offering information on the newer technology and incentives for gas cooling units up to 100 tons in size. This program would support the effort to not increase the electrical peak demand and total energy usage. The primary target market will be small commercial customers who currently have old gas cooling units and the secondary market would be residential. The program will pay an incentive of .80 per therm saved to either the customer or the upstream channel. Marketing focus will continue to be expanding its distribution channels by increasing CEC certified products and working with current and new manufacturers.

Changes to the Program during this cycle, that will help achieve market penetration objectives include:

- Improve Product Availability & Distribution – The program will increase its potential market penetration by including two new technologies to its offer. A new 8-16 ton gas heat pump called Ecovaire has just been introduced by ASHRAE and will result in increased interest in the program. Also, the current manufacturer, Robur, has introduced a new unit with a heat recovery component that will spark new interest.
- Establish Market Channel Training – A specific technical training curriculum that supports the program goals will be designed in order to improve knowledge of the technology and potential opportunities. Participants will be the Institute of Heating and Air Conditioning (IHACI), Plumbing Heating and Cooling Contractors (PHCC), equipment manufacturers and their representatives, distributors and dealers, and HVAC contractors.

- Increase Incentive Structure – Incentives will be paid on a $0.80/therm saved per ton of cooling for each of four technologies as opposed to $0.575/therm saved per ton of cooling previously. This increase in incentive will help defray the first cost.

b) List measures

Customer incentives are based on Number of Cooling tons x Therms saved per ton x $.80. The table below shows samples of the incentives by measure.

	Commercial			Residential
	Single effect gas absorption - 3-25 RT	Double effect gas absorption - 25-100 RT	Engine driven chiller - 25-100 RT	Single effect gas absorption - 3-25 RT
CZ 6	$166	$173	$176	$87
CZ 8	$178	$198	$210	$131
CZ 9	$185	$205	$223	$138
CZ 10	$196	$215	$242	$149
CZ 14	$189	$208	$243	$147
CZ 15	$241	$267	$350	$174

c) List non-incentive customer services

Information on other energy savings opportunities through other utilities or local community offices for their business or residency will be available. Efforts shall be made to encourage the customer for example to consider seal ductwork, insulation, and use any programs available to support their efforts.

Program will also aim to expand the number of available manufacturers of the gas cooling equipment by expanding the list of qualified equipment by meeting the California Energy Commission (CEC) certification requirements.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry

sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome:

Barrier	Solution
Lack of consumer information about energy efficiency benefits	Increase market communication and outreach and educate customers more robustly
Rising price of natural gas increases the ROI	A higher incentive level to offset
High first cost of equipment	Continue to build market channel and expand to new construction

Barrier	Solution
Lack of availability of high-efficiency products	Program aims to increase number of manufacturer's products in the market.
Barriers to the entry of new energy efficiency technologies or systems whose efficiency or system performance levels are uncertain due to lack of experience	Provide free or low cost training for contractors on benefits of new technology

d) Quantitative Program Targets

Table 5

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Number of new manufacturers in the market area	1	2	1
Number of new training classes coordinated for new manuf. products	1	2	1

Note: Values provided represent yearly targets

e) Advancing Strategic Plan goals and objectives

This program supports the Strategic Plan in the following manner:

1) The program introduces higher energy efficiency product into the market.
2) Gas cooling can be utilized to contribute to Permanent Load Reduction (PLR) Goals. This can be better described as a preventative measure to avoid replacement of gas cooling units with electric units.

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
Program works with Institute of Heating and Air Conditioning (IHACI), Plumbing Heating and Cooling Contractors (PHCC), equipment manufacturers, distributors and dealers, and HVAC contractors to implement specific technical training curriculum.	Heating, Ventilation and Air Conditioning	Quality HVAC installation and maintenance becomes the norm. The marketplace understands and values the performance benefits of quality installation and maintenance.	2-3: Develop and provide expanded QI/QM training for contractors, technicians and sales agents.
Program seeks to develop new California-oriented HVAC technologies that accelerate their emergence in the market place.	Heating, Ventilation and Air Conditioning	New climate-appropriate HVAC technologies (equipment and controls, including system diagnostics) are developed with accelerated marketplace penetration.	4-3: Accelerate market penetration of advanced technologies by HVAC industry promotions and updating/expanding current utility programs to include the new

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
Specifically, the program seeks to advance market penetration of advanced technologies that serve to reduce HVAC impacts on system electrical peaks.			technologies as appropriate.
Program proposes to help educate installers regarding the importance of monitoring and maintenance.	Heating, Ventilation and Air Conditioning	New climate-appropriate HVAC technologies (equipment and controls, including system diagnostics) are developed with accelerated marketplace penetration.	4-6: Prioritize in-field diagnostic and maintenance approaches based on the anticipated size of savings, cost of repairs, and the frequency of faults occurring.
Program proposes to help educate installers regarding the importance of monitoring and maintenance.	Workforce Education and Training	Establish energy efficiency education and training at all levels of California's educational system.	1-3: Incorporate energy efficiency and demand side energy management into traditional contractor and technician training, such as for plumbers and electricians, and expand training resources to produce target numbers of trained workers.

6) Program Implementation

a. Statewide IOU Coordination:
   i. Program name
   ii. Program delivery mechanisms
   iii. Incentive levels
   iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
   v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
   vi. Similar IOU and POU programs

This third-party program only operates within SoCalGas's service area. The Program is designed to support and complement SoCalGas's core program activities. If this Program shares common elements with the IOU's core programs, other third-party programs, or programs in other IOU service areas, SoCalGas and the Contractor will strive to coordinate the similar activities.

b. Program delivery and coordination:

i. Emerging Technologies program
Not applicable to this program.

ii. Codes and Standards program
Not applicable to this program.

iii. WE&T efforts
Not applicable to this program.

iv. Program-specific marketing and outreach efforts (provide budget)
Key program elements include:

- Program candidate identification
- Market channel development for manufacturers, distributors and contractors
- Qualification and benefit review with customers
- Customer Application Process
- Contractor installation of a gas cooling unit & commissioning
- Program documentation and reporting to SoCalGas
- Rebate Processing
- Measurement, verification and quality assurance
- Other SoCalGas reporting

Working with gas cooling equipment manufacturers and market distribution channels (distributors, contractors, customer lists) will create a potential list of customers. Additional customer identification will be achieved through working with those SoCalGas account reps who wish to assist with their key customers.

Each manufacturer will be able to identify its key contractors. An expanded list will include new manufacturers with certified and qualified increase gas cooling tonnage. Additionally, working with IHACI and PHCC will target potential contractors interested in participating in the cooling program.

The existing "gasiscool.com" web site will undergo updates and co-branding with the new name"CoolGas". Other programs offered will draw into the main site to bring about awareness of other SoCalGas programs.

Customer Description:

- Any SoCalGas commercial or residential customer and,
- Gas Cooling equipment must be in operation, no stand-by or inoperable equipment qualify and,
- Gas Cooling equipment must be more than XX years in operation and
- Gas Cooling equipment COP rating less than 0.6,
- Gas Cooling equipment must be currently in use

- Gas cooling equipment with 100 ton or less sized technology.
- The distribution channels will be the manufacturers, distributors and HVAC contactors that support the gas cooling technology

Market/Customer Served:

- Any climate zone – although those that have higher cooling needs will be the best targets
- Primary CZ 6
- Customer lists from the new participant manufacturers will be used to target market out reach
- IOU support to identify key customers needing gas cooling replacement

Marketing Material:

Revised program brochure will be sent to SoCalGas and the following marketing materials will be utilized:

- Website with brochure information
- Hard copy brochures
- PowerPoint Presentation
- Email blasts

Copies of the redesigned brochure will also be sent to all market channel participants including; installing contractor, end use customer, potential manufacturer/distributor. A sample is included with the CoolGas branding to help promote the gas cooling concept.

The Program-specific marketing and outreach budget is $250,000.

v. Non-energy activities of program

Not applicable to this program.

vi. Non-IOU Programs

Not applicable to this program.

vii. CEC work on PIER

Not applicable to this program.

viii. CEC work on codes and standards

Program will also aim to expand the number of available manufacturers of the gas cooling equipment by expanding the list of qualified equipment by meeting the California Energy Commission (CEC) certification requirements.

ix. Non-utility market initiatives

Not applicable to this program.

c. Best Practices

The program design incorporates various best practice elements. Specific items include[2]:

- Program Implementation – Participation Process: Program proposes to keep participation and rebate structures simple.
- Program Implementation – Marketing and Outreach: Provides trade allies with training and resources to enhance marketing.
- Growth and Expansion - Expanding the available manufactures & distributors for gas cooling equipment by assisting them in their CEC certification requirements Note: current program has only one manufacturer promoting the product. The new program will have 5+ manufacturers
- Co-branding the program with the "CoolGas" program, this focuses on the peak energy savings of gas cooling. .
- All materials and program application will be web based and use electronic processing to ease in customer use
- Offer incentives to upstream market participants as opposed to only the downstream customer
- Integrate available third party financing options to assist customers
- Coordination with IHACI and/or PHCC to improve training and outreach
- Leverage marketing efforts through cooperative marketing collaboration with qualified channel partners

d. Innovation:
Not applicable to this program.

e. Integrated/coordinated Demand Side Management:
Although this program is not an Integrated Demand Side Management program, it will seek to integrate where possible information about other energy efficiency programs.

f. Integration across resource types.
The Program is not targeting integration across resource types.

g. Pilots:
There are no pilot projects integrated into this program.

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

[2] See Volume S – Crosscutting Best Practices Report and Project Summary, National Energy Efficiency Best Practices Study, December 2004.

implementation has begun, since plans need to be based on identified program design and implementation issues.

7) Diagram of Program:

No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6.

8) Program Logic Model:

Third party programs are an implementation channel and are included in the appropriate market segment logic models. No specific logic model for a particular third party program has been developed.

2009-2011 Energy Efficiency Programs
HERS Rater Training Advancement
Program Implementation Plan

1) Program Name: HERS Rater Training Advancement
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
HERS Rater Training Advancement
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Program will promote, develop, and deliver training to currently certified Home Energy Rating System (HERS) raters and energy analysts involved in new housing in Southern California Gas service territory. The curriculum will address technical and administrative elements of Home Energy Ratings, and will cover both current issues and changes based on Title 24 requirements taking effect in 2009.

Although California leads the nation in "professionalizing" the residential energy consultant industry and despite the size of this service sector and, in fact because of it, there is a natural tendency for the large number of certified raters in California to have divergent approaches to rating new homes. This program will be an important means toward helping create more consistency and comparability of new construction performance. Also, as advanced designs, materials, and systems are incorporated into new homes, there is an on-going need to provide guidance on how to model and inspect these elements in the rating process so that they are treated correctly and consistently.

The program rationale begins with the need for HERS Rater Training Advancement that incorporates new codes and standards, green building and zero net energy technologies and practices, and provides raters comprehensive and consistent tools and information. By providing training advancement opportunities through web-based and classroom instruction, the utility seeks to improve and align HERS Rater skill sets to (a) include the long-term focus on whole-building energy efficiency opportunities, (b) integrate and digest local, regional and state building codes, statutes and programs such that builders and developers can count on HERS raters for current information and appropriate recommendations, and (c) engage and equip the HERS rater profession as emissaries in

the deployment of new energy efficiency technologies and adoption of voluntary building standards in the near term.

b) List measures

This is a non-resource program that provides no technologies or incentives.

c) List non-incentive customer services

The services to be provided in this program are:

- Conduct a survey of stakeholders to help determine the content of courses to be developed.
- Create a program website to provide multiple resources including: an initial rater assessment screening; a rater basics primer; registration for the classroom courses; video capture of the classroom trainings; related online training materials.
- Develop program marketing materials, and distribute to raters and energy analysts.
- Develop of a minimum of 32 course curricula.
- Deliver 144 training sessions, geographically dispersed throughout SoCalGas service territory.
- Develop a marketing toolkit for raters who have completed courses.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would

not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers:
The priority barriers to widespread education and implementation of new standards, adoption of consistent rating protocols and the advancement of HERS raters commensurate to the challenges of AB32 and the Long Term Energy Efficiency Strategic Plan are:

Barrier	Solution
Accessibility and participant cost	Training will be provided frequently, accessibly and affordably. This will be enhanced through availability of online course materials.
Comprehensiveness and consistency across the SoCalGas service area	Web training and classroom curricula will be designed with comprehensiveness and consistency in mind enabling raters from throughout the region to obtain comprehensive and consistent advanced training content.
Timely delivery of updates consistent with the 2009-11 goals of the Strategic Plan	The Program includes trusted and knowledgeable sources to develop updated materials.
Garnering participant interest and trust such that the program achieves broad participation	To increase training participation, marketing will be directly and narrowly focused toward a limited, easily

	identified, and motivated group, rather than broadcast. The partner organizations are well known to the rater community, making it more likely that they will respond positively to the offerings of this program.

d) Quantitative Program Targets:

The key activities for the Program are: a) the development of course curriculum for 32 topic areas and b) the effective presentation of these courses to raters in 144 classroom and/or field training half-day or full-day sessions.

Table 5

HERS Rater Training Advancement	Program Target by 2009	Program Target by 2010	Program Target by 2011
Courses Developed	0	16	16
Classroom / Field Training Sessions	0	72	72
Web-based courses	0	16	16

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan goals and objectives:
The Program advances the Strategic Plan in the following ways:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
By enhancing codes and standards knowledge among raters, the Program will help increase levels of compliance with Title 24 and facilitate continual advances in building efficiency.	Residential	Deliver Zero Net Energy New Homes By 2020.	1-1: Drive continual advances in technologies in the building envelope, including building materials and systems, construction methods, distributed generation, and building design.
By educating HERS Raters and professionaliziong their services the Program promotes effective decisionmaking and demand for energy efficiency measures.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-2: Promote effective decisionmaking to create widespread demand for energy efficiency measures.
By promoting training regarding Title 24 and coordinating these efforts with information about utility programs, program will increase code compliance and improve coordination with other programs and policies.	Codes and Standards	Continually strengthen and expand building and appliance codes and standards as market experience reveals greater efficiency opportunities and compelling economic benefits.	1-5: Improve coordination of energy codes and standards with utility programs.
By improving knowledge of Title 24, the Program enhances code compliance.	Codes and Standards	Dramatically improve code compliance and enforcement.	2-1: Improve code compliance and enforcement.
Enhances training and knowledge of HERS auditors and installers.	Workforce Education and Training	Establish energy efficiency education and training at all levels of California's educational system.	1-3: Incorporate energy efficiency and demand side energy management into traditional contractor and

			technician training, such as for plumbers and electricians, and expand training resources to produce target numbers of trained workers.

6) Program Implementation

a. Statewide IOU Coordination:

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

This third-party program only operates within SoCalGas's service area. The Program is designed to support and complement SoCalGas's core program activities. If this Program shares common elements with the IOU's core programs, other third-party programs, or programs in other IOU service areas, SoCalGas and the Contractor will strive to coordinate the similar activities.

b. Program delivery and coordination:

The Program will be delivered in concert with a number of the statewide program priorities.

i. Emerging Technologies program

A key component of the Long Term EE Strategic Plan (2008) is the advancement of technologies, standards and building practices to deliver Zero Net Energy Homes by 2020. The immediate near-term goal (2009-11) is that 50% of new homes exceed 2005 Title 24 standards by 35% and 10% exceed these standards by 55%. The Program is an essential bridge between new technology development and deployment. As innovative financing opportunities become available, and new energy efficiency and renewable technologies enter the market, HERS raters trained through this program will be positioned to guide builders and developers in selecting appropriate technologies and financing instruments for their projects.

ii. Codes and Standards program

With respect to Codes and Standards, with the adoption of statewide green building standards in July 2008, California's Building Standards Commission has set a voluntary benchmark for green buildings, effective in 2009. These standards are expected to become mandatory by 2012. Through the Program, HERS raters will be trained in these new standards as a part of their codes and standards

training module, which includes Title 20 and Title 24 code changes. By 2011, HERS raters will have access to convenient, low-cost, and up-to-date training on these important changes in the building standards pipeline.

Because state and local green building initiatives and standards may vary, with local governments moving toward higher benchmarks, the training program will provide much-needed integration of state and local government policies in a format that is accessible to HERS raters and energy rating professionals. Through active engagement and ongoing education in these codes and standards as they develop, the HERS raters who participate in the Program will be positioned to assist builders and developers in navigating the myriad codes and standards applicable to their housing developments. This is consistent with the vision statement for the residential sector (section 2.13) and market transformation strategies for Building Innovation and Comprehensive Solutions in the Long Term EE Strategic Plan (section 2.1.4)

iii. WE&T efforts

Although workforce education and training efforts broadly encompass many private and public institutions of higher learning, the Program meets a specific need in workforce education and training by offering HERS raters affordable, easily accessible advanced training on home energy systems, energy efficiency opportunities, renewables, and green building practices. Of the many near-term (2009-11) goals for energy efficiency education and training, this program serves to expand training curricula and training and professional career development in building construction, services and energy efficiency technical fields (Action 1-2, p. 78 Long Term EE Strategic Plan).

iv. Program-specific marketing and outreach efforts (provide budget)

Marketing and outreach is coordinated through energy rating organizations with a statewide presence, including CalCERTS and CHEERS, with the expectation that CABEC (California Association of Building Energy Consultants) will provide additional outreach support. By coordinating directly with statewide organizations, the Program will tap into the vast resources of these organizations and build training programs consistent with statewide codes and regulations, and appropriate to the training needs of current raters.

Having CalCERTS and CHEERS together on the project is a tremendous benefit and an innovative aspect of the marketing strategy. With both of the major HERS providers integrated into the program from the outset, the first and most difficult obstacle to reaching our primary target audience is significantly reduced. Both organizations have direct and valued contact with their own raters, and are a recognized source for training and general information about the rating industry. This allows us to reduce traditional marketing costs while improving penetration. The marketing staff will coordinate with team members CalCERTS and CHEERS to leverage their membership directories. Through this close partnership, the Program team will provide a strong customer base of HERS raters who can effectively target and market. Marketing duties include the design, development

and printing of program materials including marketing collateral, direct market mailings, email blasts, and involvement with local trade organizations and local trade sponsored events and conferences, that will afford networking opportunities across industry players.

Marketing the training to raters will have begun through the survey process by alerting all southern California CHEERS and CalCERTS-certified raters about the forthcoming program. Once online and classroom courses are developed and a schedule has been established, raters and energy analysts will receive an email announcement detailing the program and courses, including how they can register through the program website. Once a HERS Rater has successfully completed his/her training, the web site will also provide access to a host of marketing material that will be housed in the HERS rater online tool kit. The database-driven site will deliver tools to HERS Raters, including training aids, downloadable materials, links and an online print store. The site will enable HERS Raters to take advantage of marketing material by customizing print ads, brochures and direct mail pieces. Announcements will also be through IOU and various related associations.

v. Non-energy activities of program

Stakeholder Survey and Curriculum Development

The first step in the process of creating meaningful curricula for HERS raters is to determine the subject matter. Contractor will use a combination of online surveys and face-to-face interviews with stakeholders in the rating industry to assess the uniformity of ratings and identify areas of interest and need for further training. A survey questionnaire will be developed by the team with input from SoCalGas. The program will invite survey participation from all CalCERTS and CHEERS certified raters in the SoCalGas service territory. It is also anticipated that the California Association of Building Energy Consultants (CABEC), given their existing relationship with CalCERTS and CHEERS, will provide support for such outreach to their raters. The organizations will send emails to all their members in those counties, describing the goal of the survey and providing a link to it. This approach will serve two purposes: first, it will provide direct input from within the group we are trying to reach; second, it will introduce raters to the forthcoming training program, and engage them in the process from the outset.

At the same time the Program will conduct a series of interviews with other stakeholders including SoCalGas program managers, energy analysts, code officials, builders, developers and regulators to get perspectives from outside the rater community. This includes outreach to and coordination with public agencies, planning departments, and special districts to integrate local and regional goals and perspectives into the training agenda. Responses will be reviewed to identify general patterns and specific needs for subjects to cover in the training program. It is suggested, however, that not all of the thirty-two anticipated courses be finalized at the outset of the program. It is prudent to leave several courses unidentified for year three so that new curricula can be created, which responds to unforeseen developments.

Once the training needs have been identified, technical staff from CalCERTS, CHEERS, and Contractor will generate a draft timeline for curriculum development, which will be reviewed with SoCalGas before a final plan is set. The plan will establish the order in which courses should be developed. Once the timeline is established, staff will begin creating outlines of the courses. After the outlines are drafted and following review with SoCalGas, the detailed content development will proceed.

Training Delivery

The training program will incorporate three distinct elements that, taken together, provide convenience, customization, and reinforcement, and that appeal to various learning styles. A combination of online and classroom courses will be offered to help raters advance their technical and programmatic skills and knowledge. As presented here, *modules* are the basic building blocks of technical and programmatic information to be communicated. Modules will be assembled into *courses*, each covering a distinct subject. For example, a course devoted to photovoltaics would be comprised of modules on subjects like: siting and solar access, inverters, modeling and inspection, and more. Finally, *training sessions* are meant to describe the delivery of a course. A minimum of thirty-two courses will be developed for the program, with each course being delivered multiple times in training sessions that are convenient for attendees in terms of both time and location. Also, the online element of our program means that there are an unlimited number of sessions that a rater may take whenever, wherever, and as often as they would like to.

Online "Knowledge Verifier" and Rater Basics Primer

The training process will begin with an online primer of fundamentals that every rater should know in order to do the basic work of rating a home. Raters will go to the program website and register for the online primer, and can then begin "attending" this online series of modules that cover basic concepts, design considerations, materials, systems, and procedures. (Other elements can be included in the primer based on survey results.) Alternatively, raters can skip directly to a knowledge assessment quiz, the "Knowledge Verifier" tool. The test will build on the existing self-assessment test and will cover all the core topics addressed in the training program. It will be organized using lesson topics and will include 2-3 questions per topic for a total test length of about 60 to 90 questions.

If raters complete the quiz successfully, they will become eligible to attend classroom trainings for a small fee (designed to cover food costs). Raters who choose not to take the assessment quiz or who do not successfully complete the quiz may still take the classroom trainings, but will have to pay a registration fee. The results of the online assessment will be used to instantly generate a customized course of study for the rater. Specific questions will be linked to online training modules on the same subject, and a set of modules will be created that guide the rater to instructional material covering the areas in which they need

further review. After completing this customized set of modules at their own pace and as often as they like, the rater will be able to retake the assessment quiz. Subsequent tests will re-examine the rater's knowledge on the areas that they missed. Once they complete the quiz successfully, they will be eligible to register for classroom training courses and attend them for the small fee only.

Classroom Courses

Building on the fundamentals that are covered in the online primer, the classroom trainings are meant to provide more advanced skills and, where warranted, hands-on practical experience. A minimum of thirty-two courses will be developed over the term of the program, with approximately four new courses offered every quarter. Each course will be delivered three times in different locations throughout SoCalGas service territory to make them more convenient for raters to attend without excessive travel. A set of six courses (three per calendar year) will be selected in consultation with the SoCalGas for delivery nine times. Courses will be one-day or half-day duration, as needed to cover the material. Where appropriate, portions of instruction will be held in the field so that real world issues can be demonstrated. Also, using video archives, the field will be brought into the classroom to show details that are otherwise difficult to describe.

Online Classroom

Each of the thirty-two courses will be captured on video for placement on the program website. This will be beneficial to raters who attended the live training and wish to review, and also to raters who are unable to attend. The online presentation of the courses will combine video of the training session, related presentation materials and links back to the primer materials which are related to the subject matter. The website that houses the online courses will be built from a sophisticated database-driven system that provides test tracking and administrative functions and features. The multi-media, self-study, online training "academy" will be uniquely tailored for SoCalGas and individually suited for HERS raters. The comprehensive training program will include various levels of training. Each level will contain individual courses made up of lectures and/or multi-media presentations with reading assignments, online quizzes and a final exam. The training program will include online testing functions and administrative tools that will allow SoCalGas to monitor training success and offer certification upon completion of any or all stages of the program.

vii. Non-IOU programs

HERS Raters are registered under State of California Energy Commission approved providers and have connections with non-IOU programs. Other industry players that acknowledge Raters and their role include local building and planning departments, the design and engineering community, and associations such as the California Association of Building Energy Consultants, Institute of Heating & Air Conditioning, and Air Conditioning Contractors of America. (ACCA). This program will be coordinated in concert with the CHEERS and CalCERTS organizations, drawing on their technical expertise and resources in order to provide their members with cost-effective delivery of web and classroom

training seminars. Coordination with non-IOU programs such Cool California (a partnership between the California Air Resources Board, California Energy Commission, Berkeley Institute of the Environment, UC Berkeley, Lawrence Berkeley National Laboratory and Next 10), the Green Building Initiative, and the South Coast Resource Conservation and Development Area will be sought as a means to identify training needs and to broaden and fine-tune course offerings. As feasible, these organizations will be invited to provide PDF documents and/or links to web content related to new construction and emerging technologies useful to HERS raters.

vi. CEC work on PIER

Although the Program does not specifically budget funds for coordination with CEC work on PIER, technical papers and publications from PIER shall inform the training curriculum, and links to relevant PIER publications will be made available on the program website as available.

vii. CEC work on codes and standards

CEC work on codes and standards underpins much of the content in new building technologies, energy efficiency building codes and green building standards. Again, the program does not specifically budget coordination with ongoing CEC work into the delivery of training materials, but coverage of codes and standards is implicit in providing meaningful training advancement for HERS Raters.

viii. Non-utility market initiatives

Much of the Southern California Gas service area is part of the South Coast Resource Conservation and Development Area. Shared goals include similar missions to develop and deploy workforce education and training programs, creating "green collar" jobs, promoting the adoption of solar and renewable technologies, and utilizing educational initiatives and programs to advance green building practices. The South Coast Resource Conservation and Development Area Council consists of member Resource Conservation Districts covering the SoCalGas service area from the coast to the inland reaches of Southern California, close partnership with the National Resource Conservation Service and alliances with county government officials. Non-utility market actors include a myriad of special districts and local governmental entities, nearly all of which are advancing green building practices, educational materials and standards. By providing HERS raters with access to ongoing developments in local and regional efforts to comply with AB32 and advance highly localized green building initiatives, the HERS Rater Training Advancement Program will provide an essential link between home builders and the multi-faceted governmental elements (codes, standards, feebates, and financial instruments or incentives) that affect local new construction developments.

c. Best Practices:

The program design incorporates many of the best practice elements from the National Energy Efficiency Program Best Practices Study[2]. Specific items include:

Program Theory and Design

- Anticipation of market challenges built into program design
- Program integrates statewide policy objectives into program design
- Defines and identifies key information needed to track and report throughout the program process.
- Program implementers will periodically review & update market level information about construction practices, EE market share, and measure adoption.

Project Management

- Clear lines of responsibility and communication shall be set forth in the subcontracts with CalCERTS, CHEERS and BMI.

Reporting and Tracking

- Program performance and participation data will be integrated into a database-driven website.
- The program utilizes web-based communications including the program website, e-forms and submittal processes, educational support services (ESS) and hybrid ESS incentive options.
- Program prospects will be contacted and tracked early to engage early adopters and drive program participation.
- The level of tracking will be balanced against resource availability.

Participation Process

- The application process and forms will be designed for user-friendly navigation and ease of use, including electronic pre-testing and submittal options, telephone support and classroom-based training.
- Technical assistance is provided to Raters via one-on-one customer training support.
- The program works with key stakeholders, including industry associations, to maximize reach and acceptance.
- Trade allies (CalCERTS and CHEERS) will be trained in program policies and procedures so they may then assist HERS raters in selecting training modules and participation levels appropriate to their needs.
- Program funds are slated to cover program operations for the duration of the three-year cycle, throughout each year.

[2] The best practices listed below are identified in the *National Energy Efficiency Best Practices Study, Volume S – Crosscutting Best Practices and Project Summary*, Quantum Consulting, Inc., December 2004.

d. Innovation:

In addition to the unique partnership arrangements this program utilizes, the Program will employ several innovative technical elements. Team partner BMI will create and develop a unique computer/internet based learning management system (LMS) built off of standard LMS platforms already created. The SoCalGas HERS LMS will include an initial assessment test (or knowledge verifier) and the subsequent course layout will offer users distinct learning units, each containing an individual video segment or Flash presentation supporting the course's topic. Courses will contain a rich mix of text, photo, audio and video content. The framework will be flexible, and will easily accommodate expansion and updates. Lessons will also include any necessary study guide materials, online quizzes ("Check Your Understanding"), and a final exam that will serve as the basis for special recognition. This learning platform is innovative in the sense that it incorporates state-of-the-art technological elements with tested learning principles and methods to offer HERS raters the advantages of low-cost, one-stop, convenient access to Title 20, Title 24 and green building standards and information on emerging technologies, renewables, and whole-house approaches to energy efficiency. The Program couples innovative and content-rich web learning opportunities with classroom training and self-testing to reinforce training advancement through audio, visual and interactive cues.

The Program's unique approach to training is to provide content-rich, but industry-specific information. The HERS pre-qualifier will engage three variations of a virtual distance learning training package – traditional instructor led training, in-field video and game-based education.

The Program team will deploy various innovative technologies to achieve the highest learning objectives, including:

- Educational Support Services (ESS) and hybrid ESS incentive options: These increase the percentage of online training participants and provide technical expertise and assistance results that maximize the use of rebates and incentives;
- Quantifiable measurements: An integrated learning management system allows for real time data on users, access to specific information, educational roadmaps, and detailed reports on training programs taken, tests completed, videos launched and incentives achieved, and
- One-on-one customer support: Customer inquiries will be addressed in a scaled support system of (1) FAQs with answers, (2) E-mail with response within 24 hours, and (3) Dial in number for direct live support.

e. Integrated/coordinated Demand Side Management:

This is not an Integrated Demand Side Management program.

f. Integration across resource types

The Program does not specifically aim to integrate across resource types (energy, water, or air quality). However, to the extent that Title 24 sets the standards for all aspects of new construction, this training program and the resulting improved quality of rating and testing will positively affect all resource types. Moreover the program plans to incorporate training materials from the California Air Resources Board and other public agencies that address Zero Net Energy Homes, and GHG emission reductions associated with green building practices. Website links to resources for green building practices and local codes and policies will include information on building-related water and air resource programs and practices such as standards for meeting water-conservation building ordinances, native and low-water use landscaping practices and new construction standards consistent with meeting the California Building Standards Commission benchmark for green buildings.

g. Pilots:

The Program has no planned pilots.

h. EM&V:

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

7) Diagram of Program:

HERS Rater Training Advancement Program

Emerging Technologies and Codes and Standards As advanced designs, materials, and systems are incorporated into newly constructed homes, this program will provide guidance on how to model and inspect these elements in the rating process so that they are treated correctly and consistently. Training curriculum will capture a wide range of viable technologies and building practices

Workforce Education and Training (WE&T) Removing cost and logistical barriers. Complies with the HERS and CHEERS training requirements. This program will contribute to statewide efforts to educate the workforce on green buildings and technologies.

Integrated efforts across DSM programs Trainings will identify and provide information on local, and utility DSM Programs. Trained techs will provide a single point of contact so end users can receive current DSM information.

Coordinated approaches across IOUs Although there is not a direct link to other IOUs, other IOUs will benefit from the advanced skill set of raters trained in this program.

Statewide and individual IOU marketing and outreach HERS raters will be educated in a whole house approach to coincide with and support statewide and individual IOU marketing efforts

8) Program Logic Model:

Third party programs are an implementation channel and are included in the appropriate market segment logic models. No specific logic model for a particular third party program has been developed.

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1) Program Name: LivingWise™
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

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3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

LivingWise (LW) is a school-delivered residential energy savings program that is currently sponsored through collaboration between Southern California Edison (SCE) and Southern California Gas Company (SoCalGas), along with additional water agency funding for more than 50% of program locations. The Program is run by Resource Action Programs (RAP) and provides a proven blend of classroom activities and take-home retrofit and audit projects which students complete as homework assignments with their parents and families. Audit data and installation reports are collected via surveys, which are returned to teachers and forwarded to the LW Program Center for tabulation and storage. LW is used at the 6th Grade level in California to best align with State Learning Standards, and is offered to eligible teachers as an elective program. Teacher enrollment is very high, and overall participant program satisfaction (including parents) is excellent.

This Program covers the expansion of the ongoing SCE/SoCalGas LW Program into areas of the SoCalGas service territory that are not served by SCE. Municipal electric utilities and water providers have already expressed interest in partnerships, and partnership demand should easily consume the proposed program budgets. Los Angeles Department of Water and Power (LADWP) alone area covers 30,000 sixth grade students per year. No SoCalGas funding will be utilized without at least one co-sponsor providing 100% or more matching funds**.**

b) List measures

Program Energy Efficiency Measures and Incentives

Measure	Incentives (per unit)
Showerhead	$6.36
Aerators	$1.75

The measures are provided free to customers.

c) List non-incentive customer services

LW program activities center on the home retrofit and audit projects completed by students and their families as homework assignments. Among the non-incentive customer services the Program provides are: water temp check cards or thermometers, stickers and magnets for new behaviors, mini tape measures, flow rate test bags, resource fact slide charts, toilet leak detector tablets, drip gauges, installation instructions, and surveys.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers:

There is a need for a cost-effective school program to educate students and their families about energy, water, and climate issues while at the same time inspiring immediate energy efficiency action.

Barrier	Solution
Lack of consumer information about energy efficiency benefits	The Program provides consumer information about the benefits of energy efficiency through direct education and provision of specific measures.
Lack of a viable and reliable resources to educate and inform	Program provides targeted energy efficiency information directed to 6th grade students, their teachers and their families.
Hassle and transaction costs discourage customers from pursuing information about energy efficiency benefits and purchasing energy efficient measures.	The Program educates students and their families, inspiring immediate savings and long-term changes in household energy use.
Customers are skeptical about performance of energy efficient measures.	By targeting students and providing educational materials, the Program reduces customer skepticism about energy efficient measures.
Bounded rationality – although armed with information, there is general resistance to change and inability to make decisions because of impression that information is incomplete.	The Program provides an effective method of overcoming bounded rationality and encouraging customers to act to install energy efficient measures.

d) Quantitative Program Targets:

Table 5

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1: Kits	40,000	40,000	40,000
Target #2: Showerheads	40,000	40,000	40,000
Target #3: Aerators	80,000	80,000	80,000

Note: Values provided represent yearly targets

e) Advancing Strategic Plan goals and objectives:

The Program supports the Strategic Plan in the following ways:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
By targeting 6th grade students, teachers and their families, Program creates a close connection to consumer decision making about energy efficient measures and practices.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-2: Promote effective decisionmaking to create widespread demand for energy efficiency measures.
By targeting and partnering with schools to integrate energy efficiency information into curricula, the Program ensures achievement of the CEESP's workforce education objectives	Workforce Education and Training	Establish energy efficiency education and training at all levels of California's educational system.	1-5: Develop K-12 curriculum to include energy efficiency fundamentals (e.g. math, science, behavior) and identify career options in energy-related fields.

6) Program Implementation

a) Statewide IOU Coordination:

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

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The LivingWise Program is implemented as part of the SCE and SoCalGas program portfolio and uses the same program name in both service territories. However, SCE is including LivingWise as an evolving Statewide IOU Workforce, Education and Training (WE&T) program while SoCalGas is filing the Program as part of its 3P (residential) portfolio. The proposed program will complement coverage provided in the SCE territory. To the extent applicable, the Program will leverage marketing and outreach efforts across service territories, although these efforts will be targeted within each service territory.

b) Program delivery and coordination:

i. Emerging Technologies program
Not applicable to this program.

ii. Codes and Standards program
Not applicable to this program.

iii. WE&T efforts
The LivingWise Program will be implemented in accordance with broader Workforce Education and Training efforts. Specifically, the Program provides both training and practical experience for students to conduct residential audits and retrofits in their own homes. The Program's Contractor is also participating on the Workforce Education and Training Task Force, and anticipates incorporating additional features into the program content as the Task Force completes its work.

In addition, the Program will work to attract funding from municipal electric utilities and water agencies, such as the Los Angeles Department of Water and Power.

iv. Program-specific marketing and outreach efforts (provide budget)
Not applicable to this program.

v. Non-energy activities of program
Not applicable to this program.

vi. Non-IOU Programs
Not applicable to this program.

vii. CEC work on PIER
Not applicable to this program.

viii. CEC work on codes and standards
This program will coordinate with CEC and Statewide Codes and Standard efforts to ensure timely incorporation of new measures when appropriate.

ix. Non-utility market initiatives

Not applicable to this program.

c) Best Practices:

LivingWise has emerged as the leading model for energy efficiency education as a resource acquisition program. The mix of education and hands-on application of new knowledge and skills also lends itself to the Workforce Education and Training goals of the Strategic Plan.

d) Innovation:

The Program is innovative in: integrating efforts of gas, electric, and water utilities and creating a platform for future content on emerging topics such as climate change, transportation, and specific topics are among the innovative aspects of the program.

e) Integrated/coordinated Demand Side Management:

Although not an Integrated Demand Side Management program, LivingWise can support the outreach for any other program – from energy efficiency to demand response, and low-income programs. Any program which affects residential customers can be publicized through the LivingWise program by inclusion of promotional/enrollment materials, or even custom activities and promotions to spotlight the target program.

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

The Program already attracts electric and water agency funding. This Program will only be implemented in areas where there is co-funding from water or electric providers - or both. LivingWise, therefore, will provide integration across resource types where such funding mechanisms have been put in place.

g) Pilots:

No pilot projects are planned at this time.

h) EM&V:

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

7) Diagram of Program:

No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6.

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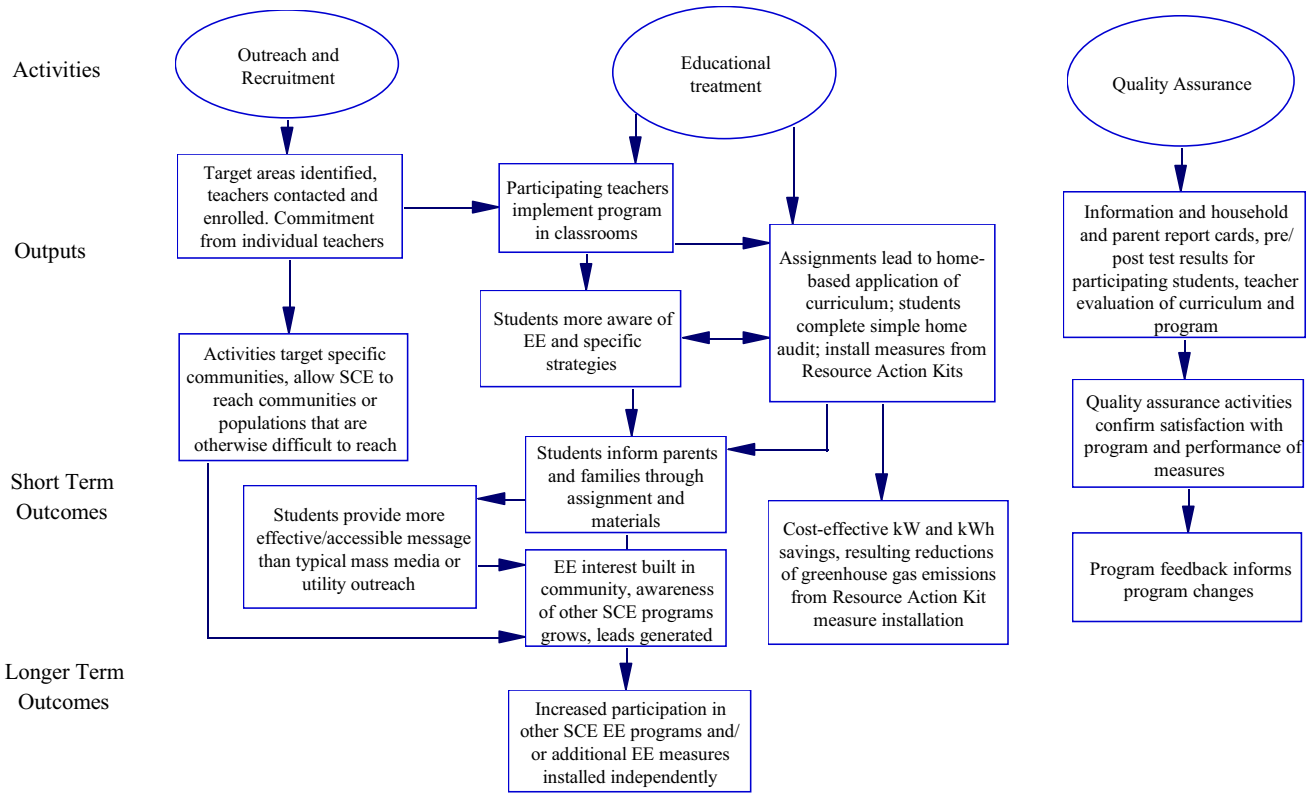
8) Program Logic Model:

Logic Model of the Living Wise Program
November 2007



2009-2011 Energy Efficiency Programs
Multi-Family Direct Therm Savings
Program Implementation Plan

1) Program Name: Multi-Family Direct Therm Savings
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Multi-Family Direct Therm Savings
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Multi Family Direct Therm Savings Program, marketed and branded as "*Energy Smart*", is a field sales and direct installation program for multi family dwellings and apartment buildings. The Multi Family Direct Therm Savings Program will help deliver energy savings to multifamily customers located in Los Angeles, Ventura, and Santa Barbara counties during the 2009-2011 program period.
(Note: Since there are two contractors implementing similar programs for multifamily customers in SoCalGas territory, each contractor has been assigned specific counties in which to market their program).

The program implementation process will follow this streamlined process:

- Provide direct sales outreach through a face-to-face "account manager" relationship by the field sales staff and through professional telemarketing that will find the decision makers and educate the customer about the benefits of participating.
- Obtain site specific data in preparation for the installation.
- Schedule installation of energy measures. Provide field staff to distribute the Notice to Tenant or send the Notice to Tenant to the site contact via fax, e-mail or mail.
- After securing signed authorization on the Customer Authorization Form, conduct site audit. Site audit will consist of basic evaluation of gas equipment and appliances located at each multifamily property. It will include an assessment of each piece of equipment based on the age and condition, and will provide written recommendation for replacement or repair.

- Energy efficient devices will be installed in all accessible units.
- Common area hot water heater pipe wrap will be installed.
- Customer Authorization and Workorder will be completed with the property manager signature.
- Staff will enter all site and installation data into a database for reporting in the approved data system.
- Ongoing, professional customer service.

Field Operations

All program documentation, including the Site Audit Form, Customer Workorder and Authorization, quality assurance processes, recruiting and training, marketing collateral design and development, outreach strategies, and enrollment processes were approved and will continue to be utilized in 2009.

On Site Audit

Through the on site audit, Contractor will collect data on all gas using appliances throughout the complex, primarily collecting accurate information such as:

- Type of equipment (boiler, furnace, hot water system, etc);
- Age of equipment;
- Nameplate information including consumption;
- Condition, and
- History (if available).

Site Visit

On the day of the audit and installations, Program team members will be accompanied through the building by the building manager or owner, who will provide access to areas such as utility closets, boiler rooms, etc. This property representative will also be available to our team as we move through the individual apartment units conducting the audit and installing measures. A copy of the Customer Workorder will be given to the customer. Each day's work will be data-entered into our internal database. Contractor's installations will be warranted for a period of one year from the date of installation.

Installation of Measures

Contractor's field operations will consist of two-person teams per apartment site, to both maximize production, as well as accomplish both the audits and the installations during the same visit. Each team will be closely monitored by a field supervisor, who will conduct random, unannounced ride-alongs. The team lead will meet with the with the property manager to coordinate the access to the apartments. Contractor will ask the site manager to open each door for the installers. We found that this approach maximizes productivity and integrity.

The team lead will audit all gas using appliances on the property, collecting data and identifying and or installing pipe wrap. After the audit is completed, the team will go from apartment to apartment installing showerheads, aerators and pipe wrap, where appropriate.

For interested customers, the installations will be scheduled with the property manager or owner, planned and coordinated by our program staff and completed within an expedited timeframe to maximize participation and to quickly provide the therm savings credit to SoCalGas.

In order to meet property management / tenant guidelines, the Contractor will work to ensure that the property management properly notifies tenants of the project. The Program's contractor will offer to distribute the Notice to Tenant for the property manager as an added convenience. If the property manager prefers, the Contractor will provide the informational materials for dissemination to tenants, including a process to follow for defective equipment. The Program team is available as needed for follow-up site visits.

b) List measures

The Contractor will install the following Therm savings measures throughout a portion of SoCalGas's service territory as noted in Program Description; specifically, Los Angeles, Ventura, and Santa Barbara counties. Since there are two contractors implementing similar programs for multifamily customers in SoCalGas territory, each contractor has been assigned specific counties in which to market their programs.

Measure
1.5 gpm showerheads
1.0 gpm bathroom faucet aerators
1.5 gpm kitchen faucet aerators
Water heater gas pipe wrap

c) List non-incentive customer services

The Contractor will conduct site audits of gas using appliances. Contractor's goal is to conduct site audits for 2,700 buildings (averaging 25 apartment units per building).

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers:

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier

Barrier	Solution
Lack of consumer information about energy efficiency benefits	The Program uses an account management strategy to educate customers about energy efficiency opportunities.
Split incentives (between owners/landlords and tenants)	The Program overcomes the split incentive problem by providing services free of charge to end users.
Lack of financing for energy efficiency improvements	By providing measures and services free of charge to customers, the Program overcomes the lack of financing barrier.
Lack of qualified personnel resources to support objectives.	Program Staff is highly qualified and has previous program experience to help educate customers and achieve program goals
Residential	
Housing Type: Multi-family and mobile home tenants	The Program targets multi-family units and adapts its marketing approach to ensure penetration of this market.

d) Quantitative Program Targets:

Over 2,700 buildings (with an average of 25 units) will receive Energy Smart services. In order to reach this goal, more than 10,000 potential customers will be contacted by the field sales and telemarketing staff. The response rate of all customers contacted has been approximately 25% during the previous program cycle July through December 2008.

Table 5

Multi-Family Direct Therm Savings	Program Target by 2009	Program Target by 2010	Program Target by 2011
# Apartment units installed	39,000	30,500	
# of Buildings installed	1,560	1,220	
# of Phone calls made	6,200	4,880	
# of 1.5 gpm Showerheads installed	27,800	22,000	

Note: Values provided represent yearly targets

e) Advancing Strategic Plan goals and objectives

This program supports the Strategic Plan in the following manner:

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
The Program employs active on-site education and training of site personnel.	Workforce Education and Training	Establish energy efficiency education and training at all levels of California's educational system.	1-3: Incorporate energy efficiency and demand side energy management into traditional contractor and technician training, such as for plumbers and electricians, and expand training resources to

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
			produce target numbers of trained workers.
To the extent possible, this Program can support the development of the statewide marketing plan and social marketing initiatives.	Marketing, Education & Outreach	Create and launch an integrated, statewide Marketing, Education and Outreach effort for energy efficiency, including an energy efficiency brand.	1-3: Use social marketing techniques to build awareness and change consumer attitudes and perceptions.

6) Program Implementation

a. Statewide IOU Coordination:

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

This third-party program only operates within SoCalGas's service area. The Program is designed to support and complement SoCalGas's core program activities. If this Program shares common elements with the IOU's core programs, other third-party programs, or programs in other IOU service areas, SoCalGas and the Contractor will strive to coordinate the similar activities.

b. Program delivery and coordination:

i. Emerging Technologies program

The Energy Smart program is an emerging technologies program. Contractor is installing the next generation of low flow showerheads which not only reduce natural gas use in multi family dwellings, but also can improve shower quality over older generation "low flow showerheads". Through advanced technology, multi family dwellings are able to obtain new showerheads, without a loss in comfort. Throughout the Program pilot, customer satisfaction has been very high.

ii. Codes and Standards program

Not applicable to this program.

iii. WE&T efforts

Not applicable to this program.

iv. Program-specific marketing and outreach efforts

v.

The "Energy Smart" team will perform program marketing and customer enlistment through a telemarketing and field sales campaign run out of Contractor's office.

In addition, the Contractor will develop lists of target facilities and their owners/managers by analyzing Contractor-purchased customer lists, as well as by sorting the customer database file provided by SoCalGas. The Program will network with organizations that are of interest to property owners and managers to publicize the program. Contractor will install measures throughout a portion of SoCalGas's service territory as noted in Program Description; specifically, Los Angeles, Ventura, Santa Barbara and Tulare counties.

The Program will supplement the telemarketing and field sales components with a direct mail piece to GME and CF account holders. Contractor's sales staff will attend all pertinent industry trade shows and events and will hand deliver sample products.

vi. Non-energy activities of program

The Program will save significant amounts of water with the direct installation of next generation showerheads and aerators.

vii. Non-IOU Programs

The Contractor is seeking to partner with the Metropolitan Water District (MWD) to propose multiple programs outreach to the same customer. MWD is currently proposing water conservation measures to multi family owners and managers. The Contractor believes that delivering multiple conservation program information will provide significant benefit for the end use customer.

viii. CEC work on PIER

Not applicable to this program.

ix. CEC work on codes and standards

Not applicable to this program.

x. Non-utility market initiatives

Not applicable to this program.

c. Best Practices:

The program design incorporates various lessons learned during direct implementation activities. The market strategy was enhanced with an increase in face-to-face meetings that included handing out samples of the products to be installed. Customers are impressed by the quality of products that would be provided at no cost and many tested the products at home before agreeing to schedule an installation appointment.

The "*Energy Smart*" program staff experienced last minute cancellations due to on site managers failing to distribute the legally required Notice to Tenant. A part-time field person was hired to distribute the Notices on behalf of the property manager. This effort reduced the number of no notice cancellations.

Another best practice operational change included the sales and telemarketing staff. As soon as the customer information is obtained, the customer is transferred to the scheduler to calendar the appointment. This immediate transfer of the customer from the sales staff to the scheduler minimized the number of "hot leads" that would have otherwise turned cold.

d. Innovation:

The Program addresses challenges in providing significant value to multi-family customers, as well as substantial and cost effective therm savings for SoCalGas. Currently, many customers do not have available incentives to reduce consumption, either because they do not understand the ease in conservation or they do not pay their bill and thus lose focus on the actual cost to supply natural gas to their dwelling. In much the same way, landlords frequently do not pay the utility bills, but either pass on the cost or do not see the bill in the first place. The Contractor will provide this educational piece through its sales and marketing outreach. The products and installation throughout the individual units will be provided at no cost to the customer.

e. Integrated/coordinated Demand Side Management:

Although the Program is not an Integrated Demand Side Management program, it will provide a coordinated delivery of multiple DSM program options to multi family customers. Specifically, the Contractor can deliver additional measures for in-apartment DSM and conservation savings, for water and electricity DSM. In addition, the Contractor can provide audit services in order to assess common area integrated DSM efforts.

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

The Program will save a significant amount of water with the direct installation of next generation showerheads and aerators. Currently, the Program is not measuring the amount of water savings achieved. However, the Contractor believes that the Gas Company would benefit from the study of water savings achieved, enabling potential co-funding from water and electric utilities across their service territory.

Because this program features close customer contact, on-site visual inspections of multifamily properties, and an ongoing sales process, Contractor will have the opportunity to identify an extensive list of measures that each property can install to achieve further efficiencies, including gas, electricity and water, both utility and non-utility sponsored. We will inform property owners about opportunities to increase efficiency through efficiency measures such as:

- Boilers, commissioning and replacement with high-efficiency gas boilers and controllers
- High-efficiency gas central water heaters
- High-efficiency gas or electric storage water heaters
- Tank wrap
- Low-flow toilets

g. Pilots:

This is not applicable.

h. EM&V:

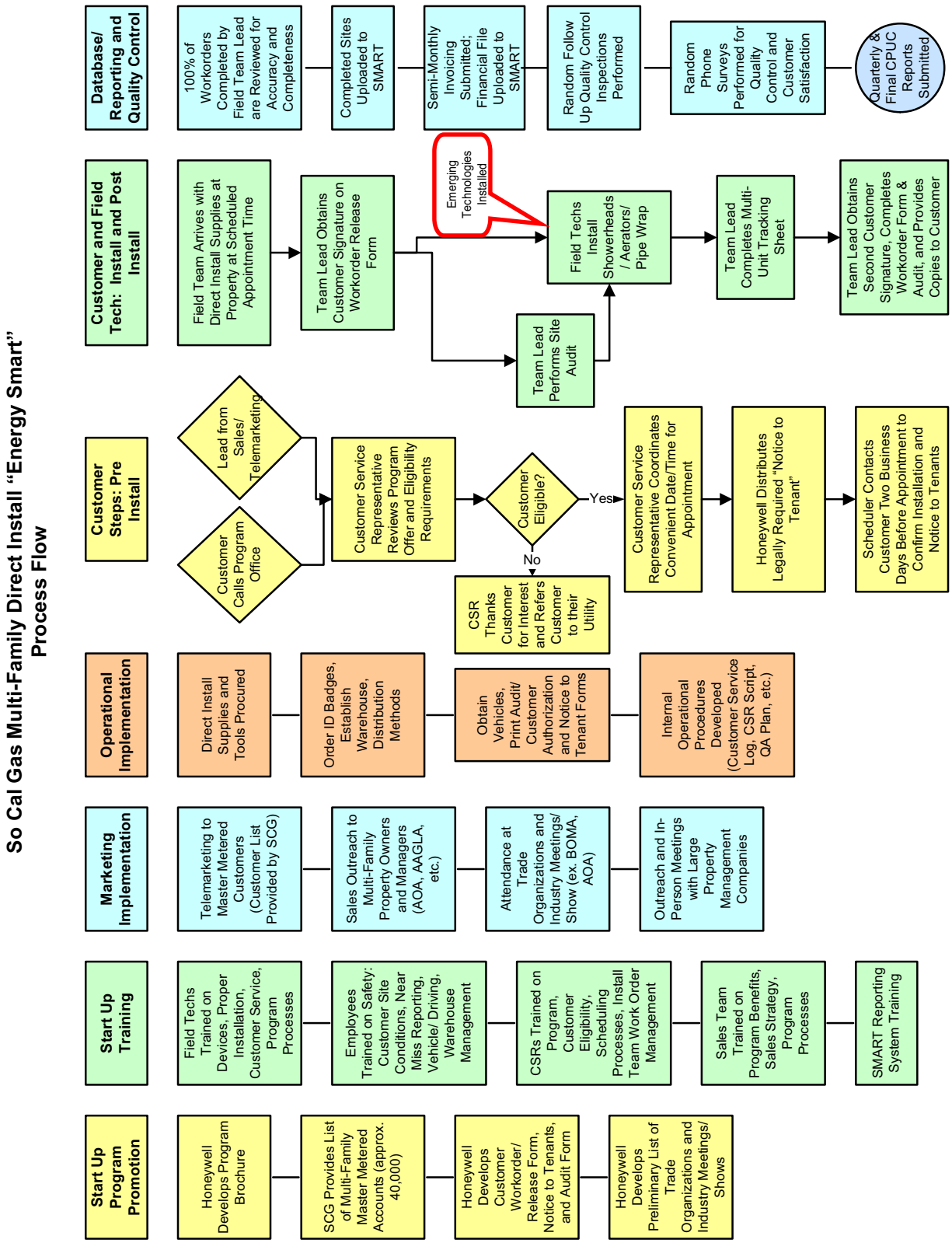
The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2009-2011 after the program implementation plans are filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy Division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

2009-2011 Energy Efficiency Programs
Multi-Family Direct Therm Savings
Program Implementation Plan

7) Diagram of Program :

Please see the following Diagram of the Operations Process Flow for the Energy Smart Program. The Emerging Technologies is identified below "Customer and Field Tech: Install and Post Install."

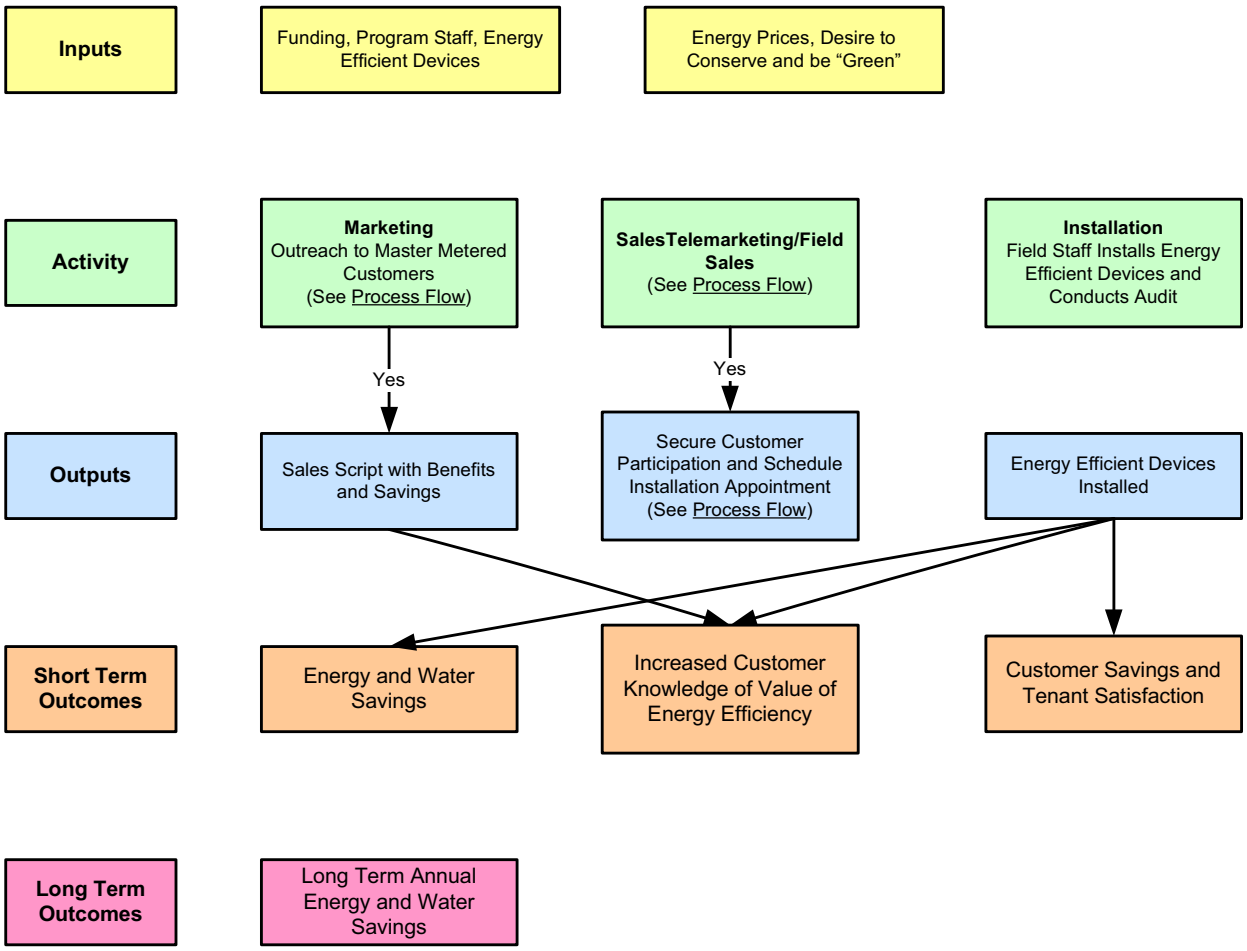
2009-2011 Energy Efficiency Programs
Multi-Family Direct Therm Savings
Program Implementation Plan



2009-2011 Energy Efficiency Programs
Multi-Family Direct Therm Savings
Program Implementation Plan

8) Program Logic Model:

So Cal Gas Multi-Family Direct Install "Energy Smart"
Program Logic Model



2009-2011 Energy Efficiency Programs
Multi-Family Solar Pool Heating
Program Implementation Plan

1) Program Name: Multi-Family Solar Pool Heating
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Multi-Family Solar Pool Heating
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Multi Family Solar Pool Heating Program aims to encourage large apartment building owners, condominium and homeowners associations as well as property managers to install solar pool heating system for their swimming pools or if it is not practical to do so, to replace their old pool water heaters with more efficient technologies. The program will be directed to the larger apartment complexes with swimming pools that are heated throughout the year.

The Program's Contractor has long experience in the multi family sector water and pool heating systems and has been in discussions with many of the mid-size and larger apartment management firms and owners and they have indicated their interest in participating in the program.

Key program elements shall include the following:

- Provide field evaluation of customer sites
- Conduct utility bill analysis & F-Chart analysis
- Provide customer with energy, carbon and economic analysis
- Develop a design standard for solar pool heating systems
- Establish solar collector metrics of performance with Florida Solar Energy Center data
- Establish acceptable solar collector models
- Establish acceptable replacement water heater models, sizes and efficiencies

- Review all system design and provide design assistance to installing subcontractor if necessary
- Standardize rebate amounts for various sizes of water heaters and solar collector areas
- Provide training seminars and hands on training to maintenance staff

Key program implementation strategies will include:

- Conduct field surveys of potential customers before proposing a program to the utilities. This requires investment in time and money that others are not doing.
- Identify the decision makers in the apartment building and speak directly with them.
- Conduct preliminary survey of the property to get estimates of annual savings and installation costs and indicate that the survey will be free of charge.
- Management understands that if such a program is proposed, the company will participate.
- Select the most qualified subcontractors for the program.
- Set up "best practice" standards for solar thermal system installation and pool heater replacement that must be followed by all subcontractors
- Conduct post installation surveys and inspections to determine that quality assurance is high
- Conduct follow up service visits to a random sample of sites to ensure that program reliability of savings is high.

b) List measures

There are two measures in this program: a solar pool heating system and a high efficiency (82%+ thermal efficiency) pool heater. The measures are mutually exclusive. The Program will install whichever measure is appropriate for the customer. However the primary goal is to market and install solar pool heating systems. Therefore this measure will be dominant and all activities such as site audits, marketing; market transformation ad innovation will be centered on the primary measure.

Measure	Incentives (per unit)
Solar Pool Heating System	50% of installed price
High Efficiency Thermal Pool Heater	$2,000

c) List non-incentive customer services

The Program will provide customer education on energy efficiency and will conduct surveys of the customer domestic and pool heating operation to determine other EE measures that can be recommended. These may include the following:

- Re-circulating pump control on the DHW loop;
- Re-insulation of piping with deteriorated insulation, and
- Evaluate hot water distribution system and identify remedial measures.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after

approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Market Barriers

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier:

Barrier	Solution
Lack of consumer information about energy efficiency benefits	The Program will use direct customer contact to educate about the benefits of the energy efficient alternatives.
Lack of financing for energy efficiency improvements	Program will provide meaningful financial incentives to reduce first cost of more energy efficient measures.
Need for short paybacks	Incentives should substantially reduce payback periods.
Uncertainty over performance of energy efficient technologies	Target marketing, direct customer contact and educational campaigns will help to overcome customer uncertainties about technologies and effects on comfort levels.

d) Quantitative Program Targets

Table 3

Multi-Family Solar Pool Heating	Program Target by 2009	Program Target by 2010	Program Target by 2011
Solar Swimming Pool Heating Systems	20	60	70

Swimming Pool Heater Replacement	10	20	20

Note: Values presented in this table represent yearly targets.

e) Advancing Strategic Plan Goals and Objectives

This program supports the Strategic Plan in the following manner:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
By implementing solar pool heaters the program is moving MF buildings toward ZNE.	Residential	Deliver integrated DSM Deliver Zero Net Energy New Homes By 2020.	1-1: Drive continual advances in technologies in the building envelope, including building materials and systems, construction methods, distributed generation, and building design.
The Program emphasizes DSM integration through promotion of solar and high efficiency gas water heaters.	DSM Integration and Coordination	Deliver integrated DSM options that include efficiency, demand response, energy management and self generation measures, through coordinated marketing and regulatory integration.	1-3: Develop integrated DSM programs across resources, including energy, water, and transportation.

6) Program Implementation
   a. Statewide IOU Coordination:

      i. Program name
      ii. Program delivery mechanisms
      iii. Incentive levels
      iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
      v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
      vi. Similar IOU and POU programs

This third-party program only operates within SoCalGas's service area. The Program is designed to support and complement SoCalGas's core program activities. If this Program shares common elements with the IOU's core programs, other third-party programs, or programs in other IOU service areas, SoCalGas and the Contractor will strive to coordinate the similar activities.

b. Program delivery and coordination:

i. Emerging Technologies program

Program will coordinate with SoCalGas's Emerging Technologies program, Codes and Standards program, and Workforce Education & Training efforts. It is difficult to estimate when the market for solar pool or more energy efficient water heaters will be transformed.

ii. Codes and Standards program

The knowledge and data gathered through the utility EM&V of this program will benefit the Codes and Standards activities within the California utilities. The Contractor will work with changes to building energy standards to potentially incorporate solar thermal swimming pool heaters elements.

iii. WE&T efforts

This is a third-party program and does not use any new and emerging technology. However, the solar swimming pool heating industry is an underutilized technology in the marketplace.

iv. Program-specific marketing and outreach efforts (provide budget)

The Program's marketing and outreach activities will be primarily centered on addressing the barriers to use of solar water heating. The market barriers to solar pool heating are many. Solar thermal domestic water heating, pool heating and space heating are still very expensive. However, in multifamily applications, there are some economies of scale especially in swimming pool heating because they are heated year round and it is an amenity often marketed by the property owners.

Marketers of solar pool heating have not yet figured out a successful marketing strategy to pique the interest of property owners in solar heating. The traditional method of marketing such as small price discounts, pamphlet distribution and industry journal and newspaper advertisements are not successful because they are not targeted to the decision makers who are the corporate officers.

The Program will reduce the first cost by offering a substantial rebate, which should bring the simple payback down to less than 5 years for the system. In order to build awareness of the technologies and their benefits, the Contractor plans to develop marketing materials such as brochures that illustrate sample costs and savings, describe the technologies and their benefits, product availability and announcement of the program.

Key program marketing strategies can be summarized as follow:

- Conduct field surveys of potential customers before proposing a program to the utilities. This requires investment in time and money that others are not doing.
- Identify the decision makers in the apartment building and speak directly with them.
- Conduct preliminary survey of the property to get estimates of annual savings and installation costs and indicate that the survey will be free of charge.
- Select the most qualified subcontractors for the program.
- Set up "best practice" standards for solar thermal system installation and pool heater replacement that must be followed by all subcontractors
- Conduct post installation surveys and inspections with SoCalGas to determine that quality assurance is high
- Conduct follow up service visits to a random sample of sites to ensure that program reliability of savings is high.

v. Non-energy activities of program

Not applicable to this program.

vi. Non-IOU Programs

Not applicable to this program.

vii. CEC work on PIER

Not applicable to this program.

viii. CEC work on codes and standards

Not applicable to this program.

ix. Non-utility market initiatives

Not applicable to this program.

c. Best Practices

The Program will use industry standards and best practice methods in program design, delivery and measure installation. Specifically, the Program emulates program design best practices, including: understanding local market conditions and conducting sufficient market research. In addition, in terms of program management/project management the Program has clearly defined program management responsibilities to avoid confusion as to roles and responsibilities and uses well-qualified engineering staff.

In measure installation, the Program plans to follow industry standards and local and state codes and ordinances to ensure quality installation. This will be followed by thorough field inspection by competent persons to ensure that these standards and best practices are being followed by the installing subcontractors. Other solar industry best practices used will include the following:

- Building America Best Practice Series, Chapter on Solar Thermal Water Heating
- Collaboration for High Performance Schools (CHPS) Best Practice Manual (2002)
- Solar Rating and Certification Corporation (SRRC) installation standards

Program staff will also work with the customer to develop a customer education program for the renters through print matter, elevator announcement and website with energy efficiency tips regarding the DHW systems.

d. Innovation

The Program will use innovative marketing and delivery methods to implement the program. In addition, the Program is offering a fairly mature technology in solar pool heaters but its limited market penetration makes it innovative. The Contractor will design a targeted marketing program through print advertisements and program summary pamphlets to reach the apartment building owner/operator community and design targeted marketing program to major solar contractor and water heater/boiler installers in Southern California Gas Company (SoCalGas) service territory.

e. Integrated/Coordinated Demand Side Management

Although this program is not an Integrated Demand Side Management program, it will seek to identify other demand side management opportunities when on site.

f. Integration Across Resource Types (energy, water, air quality, etc):

This program is only focused on solar water heaters.

g. Pilots

The Program will not have any pilots.

h. EM&V

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

7) Diagram of Program

No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6.

2009-2011 Energy Efficiency Programs
Multi-Family Solar Pool Heating
Program Implementation Plan

8) Program Logic Model

The third party is an implementation channel and is included in the appropriate market segment logic models. No specific logic model for this particular third party program has been developed.

2009-2011 Energy Efficiency Programs
Multi-Family Home Tune-Up
Program Implementation Plan

1) Program Name: Multi-Family Home Tune-Up
Program ID Number: TBD
Program type: Third Party

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Multi-Family Home Tune-Up
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

Through the Multi-Family Home Tune-up Program, Contractor will help deliver energy savings to multifamily customers located in Orange, San Bernardino, Riverside, and parts of San Luis Obispo, Fresno, Kern, Kings, Tulare and Imperial counties during the 2009-2011 program period.

Since there are two contractors implementing similar programs for multifamily customers in SoCalGas territory, each contractor has been assigned specific counties in which to market their program.

To differentiate this program from other direct install programs, this program, in addition to the measures listed, will provide valuable efficiency education directly to both multifamily property owners and tenants. Through this program, Contractor will:

- Perform building audits at multifamily properties, identifying a comprehensive list of gas, electricity and water savings opportunities available in each property and delivering education and training about the benefits of efficiency and proper maintenance to these property owners and managers
- Directly install high-efficiency measures in multifamily units during the Program's three-year course
- Deliver efficiency education in a one-on-one setting with available multifamily tenants during the Direct Install services
- Provide SoCalGas's Multifamily Energy Efficiency Retrofit program materials and contact information to multifamily property owners and managers, and pass

warm leads of prospective properties to the SoCalGas or other appropriate utility programs as appropriate

b) List measures

The following measures will be implemented by this program:

- Low Flow Showerheads
- Faucet Aerator
- Pipe Wrap

c) List non-incentive customer services

Through this program, Contractor will do the following:

- Perform holistic building audits at multifamily properties, identifying a comprehensive list of gas, electricity and water savings opportunities available at each property
- Deliver education and training about the benefits of energy efficiency and proper maintenance to property owners and managers
- Deliver efficiency education in a one-on-one setting with available multifamily tenants during the direct install services
- Provide SoCalGas's Multifamily Energy Efficiency Retrofit Program materials and contact information to multifamily property owners and managers, as appropriate
- Provide potential customer lead opportunities for additional services to other programs, such as SoCalGas's Multifamily Energy Efficiency Retrofit Program.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers:
The barriers that have been identified in previous years are:

Barrier	Solution
The lack of consumer information about energy efficiency benefits creates reluctance on behalf of decision-makers.	The Program uses an account management strategy to educate customers about energy efficiency opportunities.
Measures are generally paid for by the property owner but benefit the tenant), split incentives (between owners/landlords and tenant	The Program overcomes the split incentive problem by providing services free of charge to end users.

Lack of financing for energy efficiency improvements	By providing measures and services free of charge to customers, the Program overcomes the lack of financing barrier
Lack of availability of high-efficiency products	IOU requires measure specification to meet high efficiency eligibility requirements
Residential	
Housing Type: Multi-family and mobile home tenants	The Program targets multi-family units and adapts its marketing approach to ensure penetration of this market.
OTHER BARRIERS	
Agreeing upon the procedures and measurement of energy saving and reliability benefits.	Extensive education and marketing will be conducted and targeted toward decision makers of multi-family properties
The models developed for assessing usage are often confusing to financiers & managers. Need to be expressed in plain English	Extensive education and marketing will be conducted and targeted toward decision makers of multi-family properties

d) Quantitative Program Targets

Table 5

Multi-Family Tune-Up	Program Target by 2009	Program Target by 2010	Program Target by 2011
Low flow shower heads installed			
Faucet aerators installed			
Pipe wraps installed			

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan goals and objectives:

This program supports the Strategic Plan in the following manner:

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
The program performs whole-building approach audits and identifies comprehensive list of gas, electricity and water savings opportunities.	Coordination	Deliver integrated DSM options that include efficiency, demand response, energy management and self generation measures, through coordinated marketing and regulatory integration	1-3: Develop integrated DSM programs across resources, including energy, water, and transportation.
The program employs active on-site education and training of site personnel.	Marketing Education & Outreach	Establish energy efficiency education and training at all levels of California's educational system	1-3: Incorporate energy efficiency and demand side energy management into traditional contractor and technician training, such as for plumbers and electricians, and expand training resources to produce target numbers

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
			of trained workers

6) Program Implementation

a. Statewide IOU Coordination:

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

This third-party program only operates within SoCalGas's service area. The Program is designed to support and complement SoCalGas's core program activities. If it is determined that this program shares common elements with the IOU's core programs, other third-party programs, or programs in other IOU service areas, SoCalGas and the Contractor will strive to coordinate the similar activities.

b. Program delivery and coordination:

i. Emerging Technologies program
Not applicable to this program.

ii. Codes and Standards program
Not applicable to this program.

iii. WE&T efforts
Not applicable to this program.

iv. Program-specific marketing and outreach efforts (provide budget)
Program marketing developed by Contractor's in-house marketing group will focus on materials and strategies to educate multifamily property owners, managers and tenants and generate direct install commitments. The Multifamily Home Tune-up Program will largely be driven by direct outreach to property owners, rather than large-scale mass marketing. Most program marketing materials will support these outreach activities with information about energy efficiency, its benefits and available programs to assist owners and tenants to install further efficiency measures designed to create an effective, unified message to prospective program participants.

Expected Program marketing materials include:
- Tenant relationship materials, including:

  - Notice of entry templates
  - Educational leave-behind materials
  - List of other available utility programs
- Program executive packets, including:
  - Energy efficiency benefit sheet
  - Operations and maintenance best practices
  - List of other available utility programs
  - Case studies
  - Guide to energy efficiency in the multifamily market
  - Information sheet about the Comprehensive Multifamily Retrofit program
  - Rebate application form for the Comprehensive Multifamily Retrofit program
  - Program contact information
- Trade magazine advertising
- Trade show marketing, including:
- Program informational brochures
- Trade show booth banner
- Program giveaways

v. Non-energy activities of program

Not applicable to this program.

vi. Non-IOU Programs

Because this program features close customer contact, on-site visual inspections of multifamily properties, and an ongoing sales process, Contractor will identify a list of measures that each property may install to achieve further efficiencies, including gas, electricity and water, both utility and non-utility sponsored. The Program will inform property owners about other opportunities to support its effort to reduce consumption and increase efficiency, such as:

- Boilers, commissioning and replacement with high-efficiency gas boilers and controllers
- High-efficiency gas central water heaters
- High-efficiency gas or electric storage water heaters
- High-efficiency dishwashers
- High-efficiency forced-air units and replacement filters
- Insulation in the walls, attics and floors
- Tank wrap
- Door and window caulking
- Low-flow toilets
- ENERGY STAR qualified ceiling fans
- Compact fluorescent light bulbs (CFLs)
- High-efficiency refrigerators
- Water-saving sprinkler timers
- High-performance dual-pane windows

vii. CEC work on PIER

Not applicable to this program.

viii. CEC work on codes and standards
Not applicable to this program.

ix. Non-utility market initiatives
Not applicable to this program.

c. Best Practices:

The program design incorporates various best practice elements. The Contractor's process utilizes best practices sales techniques to develop relationships with multi-family decision-makers, educate them about the benefits of efficiency measures, garner energy savings through direct install services, and identify and implement efficiency measures that will add the most value to their properties

.

Specific items include[2]:

- Program Theory and Design: Program is tailored to the unique needs of the sector and understands the financial and ownership structure of the local multi-family market and the relationships among the various market actors.
- Program Management – Project Management: Contractor has developed and retains institutional knowledge of the multi-family building sector and lessons learned as implementation structures shift over time.
- Program Implementation – Participation Process: Program provides support to building owners throughout the process.
- Program Implementation – Marketing and Outreach: Program works with property owners and other market participants to help them succeed according to their objectives, and promote program benefits that align with these objectives.

In addition, lessons learned of the multi-family market will be applied to develop the strategies included in the proposal for this program. Key strategies the Program will employ to create this pipeline include the following:

- Work closely with SoCalGas account managers, program managers and other stakeholders to generate the greatest possible benefits from SoCalGas's current relationships and programs
- Focus on specific audiences — investors, owners and managers of multifamily properties — in an introductory program Road Tour designed to generate interest among these key decision-makers
- Employ a lead-qualification sales process to help move the most-promising projects through the project pipeline

d. Innovation:

Although not highly innovative, this program uses specific methodologies and approaches to help achieve its goals and objectives.

[2] The best practices listed below are identified in the *National Energy Efficiency Best Practices Study, Volume S – Crosscutting Best Practices and Project Summary*, Quantum Consulting, Inc., December 2004.

e. Integrated/coordinated Demand Side Management:

This program will take advantage of face-to-face interaction with property owners and representatives to communicate opportunities for an integrated DSM approach. While the program itself does not offer all DSM opportunities, it will provide the contact to offer a full complement of DSM programs.

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

The Program will seek to integrate electricity and water savings information into discussions with property owners and managers.

g. Pilots:

There are no pilots currently considered for this program.

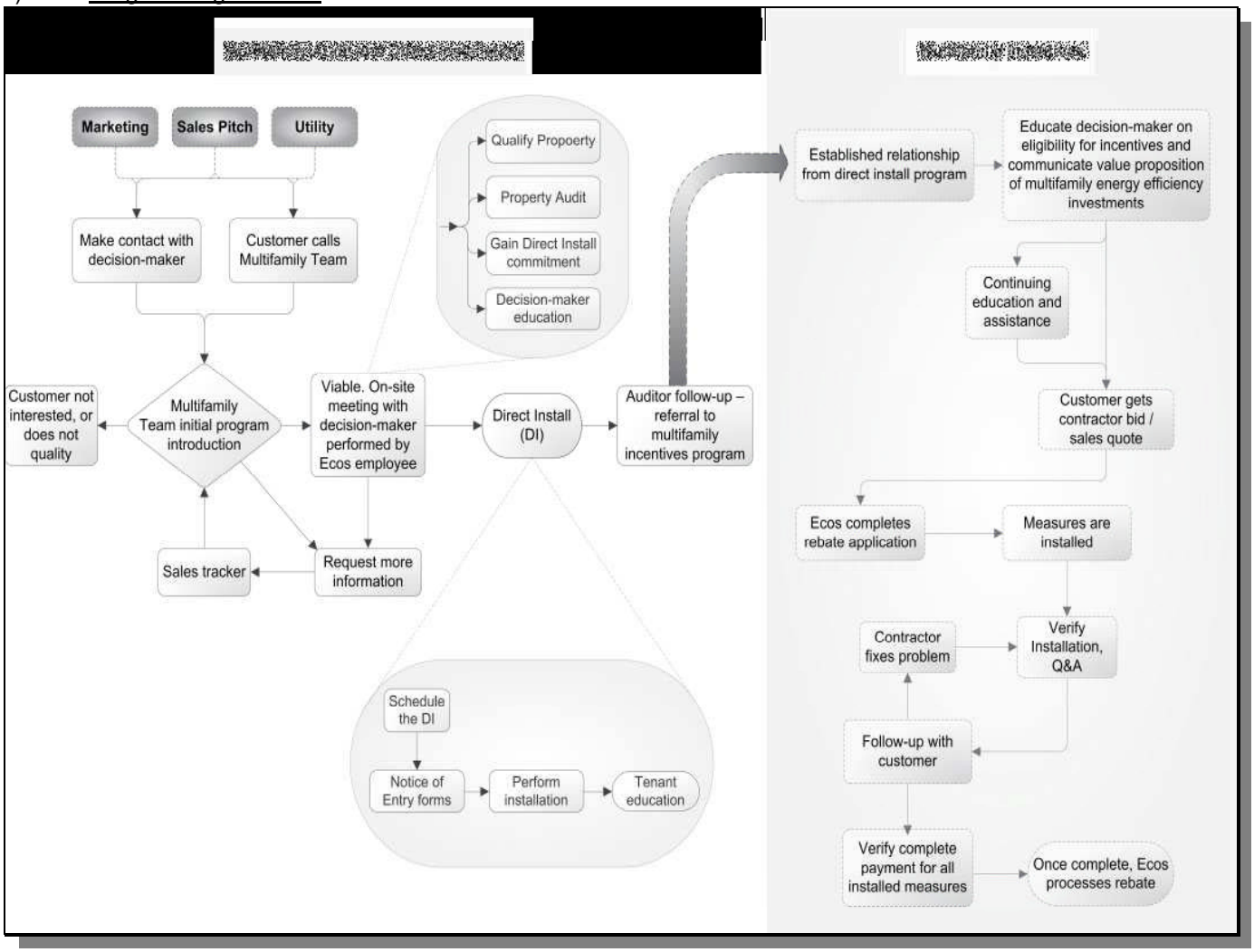
h. EM&V:

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

7) Diagram of Program:

No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6.

8) Program Logic Model:



2009-2011 Energy Efficiency Programs
Comprehensive Manufactured and Mobile Home
Program Implementation Plan

1) Program Name: Comprehensive Manufactured and Mobile Home
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Comprehensive Manufactured and Mobile Home
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The residential Comprehensive Manufactured and Mobile Home Program (CMHP) has been designed to complement the SoCalGas Residential Energy Efficiency Portfolio by reaching manufactured and mobile home customers, where there is a rich potential for cost-effective energy and demand savings. The Program is run by Synergy Companies. This is a targeted market that is not generally reached by statewide mass-market programs. Manufactured homes are defined as factory built, pre-fabricated housing, mobile homes, and homes within mobile home type communities, but does not include homes traditionally built entirely at the construction site.

b) List measures

Program Energy Efficiency Measures and Incentives

Measure	Incentives (per unit)
Duct Test & Seal	$328.00
Water Heater Pipe Wrap	$25.00
Energy Efficient Faucet Aerator	$12.70
Energy Efficient Low Flow Showerhead or Shower Start	$37.95
Filter Tone	$5.00

c) List non-incentive customer services

A major innovation is the mind-set of linking the installation or completion of energy efficiency measures with educating customers (residents) on the energy savings achieved through this program and the importance of energy savings.

2009-2011 Energy Efficiency Programs
Comprehensive Manufactured and Mobile Home
Program Implementation Plan

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available

c) Program Design to Overcome Barriers:

There are many factors leading to market failures and barriers for the mobile home market such as cost effectiveness, split incentives, park management directives, income, and language. In addition, there are a limited number of contractors serving this market segment in part because of the limited degree to which residents take advantage of programs due to age, language, economic, or educational barriers. In addition, many of the tenants are senior citizens, on a fixed income and many times not physically able to install measures themselves.

The CMHP Program focuses on those identified measures and geographic segments which both SoCalGas and their customers find desirable. This program also targets a hard-to-reach market, which other utility programs would not otherwise specifically address on a targeted basis.

The program has been designed to provide a comprehensive energy program to manufactured and mobile home customers in the SoCalGas service territory through collaborating with local communities within this service area to maximize service to the citizens of their cities and towns.

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier

Barrier	Solution
Lack of consumer information about energy efficiency benefits	Program includes a significant educational component to help overcome the lack of consumer information about the benefits of energy efficiency.
Split incentives (between owners/landlords and tenants)	The Program works with landlords, park management and owners to bridge the split incentive problem.
Lack of financing for energy efficiency improvements	The Program's incentives for a wide variety of measures help overcome the lack of financing.
Reduction assessment is seen as an effort with limited returns.	Program presents a strong value proposition to target customers through direct education, incentives and direct install.
Residential	

Barrier	Solution
Customers who do not have easy access to information or do not participate in energy efficiency are due to:	
Language: Primary language spoken is other than English	Program places a large emphasis on providing services through personnel who speak customers' native languages.
Income: Income levels less than 400% of federal poverty guidelines	Many owners of mobile and manufactured homes are low income.
Housing Type: Multi-family and mobile home tenants	By addressing mobile and manufactured homes, the Program is directly targeting an under-served population and helping increase their exposure to energy efficient measures.
Physical inability to install measures (e.g. Senior Citizens)	Program's target population includes senior citizens and its direct install feature helps overcome this barrier.

d) Quantitative Program Targets:

Table 5

Comprehensive Manufactured and Mobile Home	Annual Installation Schedule		
Measure Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Duct Test and Seal	6,000	6,000	6,000
Energy Efficient Faucet Aerator	6,000	6,000	6,000
Energy Efficient Low Flow Showerhead	6,000	6,000	6,000
Energy Efficient Shower Start	3,000	3,000	3,000
Water Heater Pipe Wrap	4,000	4,000	4,000
Filter Tone	4,000	4,000	4,000

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan goals and objectives:

The Program advances the Strategic Plan in the following ways:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
In providing services to an underserved population, the Program helps promote effective decisionmaking for energy efficiency measures to a difficult to reach segment.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-2: Promote effective decisionmaking to create widespread demand for energy efficiency measures.
In targeting and developing deeper knowledge of the mobile home hard to reach segment, program	Low Income	By 2020, all eligible customers will be given the opportunity to participate in the LIEE program.	1-1: Strengthen LIEE outreach using segmentation analysis and social marketing tools.

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
supports statewide segmentation research efforts.			
By targeting the underserved mobile and manufactured home segment, the program is able to provide services to a larger number of low and middle-income residential customers.	Low Income	By 2020, all eligible customers will be given the opportunity to participate in the LIEE program.	1-3: Improve program delivery

6) **Program Implementation**

a. Statewide IOU Coordination:

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing materials
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

While servicing the SoCalGas service territory, contemporary sister manufactured-mobile home retrofit programs are operating in the SCE, SDG&E and PG&E service territories. Additionally, the Program is designed to complement other IOU Programs available to manufactured and mobile home owners, property owners and managers. The program design is expected to maximize energy efficiency opportunities by promoting electricity savings, as well as therm and water savings. This Program will provide new and measurable direct savings via the installation of energy efficient measures.

b. Program delivery and coordination:

i. Emerging Technologies program

The Program's Contractors collaborate through the CPUC Energy Division and utility staff to provide updated input on energy savings data into DEER. If new measures and/or energy savings data can be identified, they would be submitted for consideration to the program manager, in the form of work papers that would support the rationale for the new measure.

ii. Codes and Standards program

Not applicable to this program.

iii. WE&T efforts

The Comprehensive Manufactured and Mobile Home Program supports the California Workforce Education & Training Plan by: (1) Providing installation of measures by certified technicians that focus on energy efficiency and demand side management (DSM); (2) Offering necessary training and certification for

technicians to develop new skills and knowledge; and (3) Providing educational material and training directly to customers or residents so that ongoing energy savings are realized.

iv. Program-specific marketing and outreach efforts (provide budget)
Not applicable to this program.

v. Non-energy activities of program
The Manufactured and Mobile Home Program, in addition to the energy savings activities, also provides an enormous and collective boost to a segment of the population that is ill-equipped, because of age, language or the complexity of installing these measures.

vi. Non-IOU Programs
The Program helps support the *Western Climate Initiative* with the utilization of advanced energy efficient technologies and reduces the carbon footprint created by single family and multi-family residences in California.

vii. CEC work on PIER
Not applicable to this program.

viii. CEC work on codes and standards
Not applicable to this program.

ix. Non-utility market initiatives
Not applicable to this program.

c. Best Practices:
The CMHP utilizes an innovative and comprehensive marketing and implementation program designed to maximize the participation of mobile home occupants and to optimize energy efficiency at each property.

The CMHP has now worked continuously statewide for over five years. There are strong processing and procedural economies of scale that will continue to contribute to more efficient servicing of mobile home customers, while avoiding duplication and confusion in the market place. SoCalGas and the Program's Contractor are known among the mobile home park communities. Additionally, the Contractor is a member of several mobile home associations and is actively involved in their conferences and seminars.

The 2009-2011 CMHP adopted valuable lessons from prior mobile home programs for maximum effectiveness in the marketplace. This program has significant innovative features to it:

1. The introduction of 100% quality at every installation site using technology and full-time quality supervisors to maximize customer satisfaction and production quality.

2. The unique marketing approach to optimize market saturation in working with park owners, managers and residents.
3. A direct install feature that removes the barriers for installation of highly effective EE measures.
4. Regular in-house inspections of work completed and also regular inspections with the SoCalGas inspectors to review the work completed.

d. Innovation:

One of the more innovative building blocks in the CMHP is the construction of a Master database organized by mobile home park which includes each unit in the park. The database is loaded with SoCalGas customer database information (under a non-disclosure agreement) and a history of work that has been completed at this site. Then, when marketing is conducted and a customer schedules an appointment, the scheduler simply checks the box and time for the technician to do the work. Once the work is completed, the technician confirms that all work completed is captured in the database and checks a box, indicating the work is ready for billing. This process completely eliminates data entry and the possibility for data entry errors to customer information. It allows the CMHP database to sync up 100% with the SoCalGas database during the invoice process.

e. Integrated/coordinated Demand Side Management:

This Program offers an innovative outreach and consumer education regarding the installed measures as well as additional energy efficiency programs available including demand response and DSM options.

The Program includes a basic evaluation and assessment and recommendations which include many relevant energy management opportunities which the customer may take advantage of including advice on energy efficiency, demand response, distributed generation, Permanent Load Shifting (PLS), solar rebates, and other applicable measures.

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

All resources produce various positive results due to the comprehensive approach of this Program. The Program includes measures that are highly efficient and reduce consumption of gas, energy, and water. The ability to conduct multiple measures at each residence allows this program to concurrently target many different savings areas.

g. Pilots:

The Program will not have any pilots.

h. EM&V:

SoCalGas is proposing to conduct market assessment/characterizations and process evaluations by market segments. Within each of these evaluations, a portion of the research will be assigned to the third parties involved to both ensure that the third party programs are being run efficiently and that their integration to the portfolio is effective.

2009-2011 Energy Efficiency Programs
Comprehensive Manufactured and Mobile Home
Program Implementation Plan

7) Diagram of Program:

No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6.

8) **Program Logic Model:**

Comprehensive Manufactured/Mobile Home Program Theory and Logic

Inputs or Outputs	Description	Expected Short-Term Outcome	Expected Long-Term Outcome
Input	Resources: (1) Design Program (2) Develop Implementation Plan (3) Set Benchmarks (4) Monthly Accountability and Reporting (5) Assure that Financial Resources are available for sufficient operating capital (6) Allocate Office Team, Management, Production Team and Quality Control (7) Have a good interface and communication with SoCalGas	These resources will allow the program to get launched in an organized and productive manner that sets up benchmarks and monitors program progress, quality and success	These resources ultimately will contribute to the successful implementation and completion of this program, achieving the program energy savings and goals.
Input	Activities: (1) Have team planning session with all partners and associates. (2) Kick-off marketing and installation. (3) Do training with installers and technicians on processes and equipment. (4) Kick-off quality control program and review. Technicians' installations and customer surveys. (5) Monthly Reporting of Program Progress. Regularly confer with SoCalGas on program progress, opportunities and challenges. (6) Complete the Final Report with Program Outcomes.	We would expect to see from the implementation of these activities that the program comes on line on a timely basis, is meeting program benchmarks on a monthly basis, allowing for a regularly evaluation and progress report together with SoCalGas. There would be no surprises with this program. From the customer surveys we will also be able to assess customer satisfaction as we are moving through the program.	By implementing these activities we should have steadily work toward the successful completion of this program on or ahead of time.
Input	Market Actors: (1) Outreach personnel. (2) Marketing Research and Direct Mail Manager (3) Customer Service. (4) Liaison with property managers and owners. (5) Community Outreach.	With the engine of Contractor's marketing, outreach personnel connecting with communities, property owners and managers we are able to explain the benefits of the program and market it to the end users and customers	These individuals, coming together, provide the targeted market customer base to where the energy savings serves will be provided.
Output	Outreach contacts Made: 100 parks Customers reached through flyers and outreach: 25,000 Installations complete: 13,000	The month-by-month report will show the systematic realization of the program goals and objectives	The successful completion of the program goals and objectives as outlined in this proposal.

2009-2011 Energy Efficiency Programs
Comprehensive Manufactured and Mobile Home
Program Implementation Plan

Inputs or Outputs	Description	Expected Short-Term Outcome	Expected Long-Term Outcome
	Energy Tips Brochure Distributed: 15,000		

2009-2011 Energy Efficiency Programs
OnDemand Efficiency
Program Implementation Plan

1) Program Name: On Demand Efficiency
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The On-Demand Efficiency Program (ODE) provides a method of decreasing the natural gas consumption, with demand (recirculation) controls, of central domestic hot water (CDHW) systems with recirculation loops in multifamily buildings, while improving occupant satisfaction with the hot water delivery. Demand controls on hot water recirculation systems turn off the recirculation pump when it is not needed, thereby reducing unnecessary heat loss from the loop, reducing the boiler run time, and thus reducing natural gas consumption. For this program, the innovative technology, "D'Mand Pump" will be utilized to capture maximum energy savings within the multi-family CDHW market segment.

Data shows that there are a large number of boilers and commercial water heaters serving multifamily residences in Southern California Gas Company's service territory. Data also shows that a substantial number of these either have no recirculation controls installed, or if they do have a control, it is often a timeclock.[2] Timeclocks are very ineffectual controls even when they work, but they are frequently bypassed for tenant satisfaction reasons. This program will find sites with potential savings and install controls that are appropriate and sustainable, and the program's efforts will save natural gas while maintaining comfort for the occupants. The program will provide and install at least 510 demand controls, saving approximately 645,660 gross therms.

[2] Heschong Mahone Group. June 2006. "Measure Information Template—Central Hot Water Distribution Systems in Multifamily Buildings" *2008 California Building Energy Efficiency Standards*. PDF Version of document downloaded on June 11, 2007 from http://www.energy.ca.gov/title24/2008standards/documents/2006-07-12_workshop/reviewdocs/

2009-2011 Energy Efficiency Programs
OnDemand Efficiency
Program Implementation Plan

The baseline target segment is multifamily residence apartment complexes with central boilers and a timeclock or no control. The program will achieve its savings by making direct offers to known decision makers identified in the niche market. There is a large pool of older multifamily residence apartment buildings in SoCalGas territory (estimated to be nearly ¼ of California's roughly 4.1 million multifamily units). Many of these buildings (25%-50%) have central boilers serving individual buildings on the property. While other programs address boiler efficiency, the On Demand Efficiency program is targeted at the delivery mechanism (re-circulation system).

Through targeted marketing, the proposed program strategically addresses an identified need. Targeted penetration levels will be achieved through a combination of effective marketing combined with a program that creates a financial benefit to the customer. Specific elements include:

- Direct Customer contact by phone from program representatives
- Installation of on-demand device at low net cost to program participant
- Offer of training for site personnel
- Survey that assesses participant satisfaction
- Monitoring of performance in a subset of the installations
- Referral 'web' that utilizes property management firms, boiler companies and other market channels to increase identification of potential participants

The following outline details the implementation process:

- Potential participant is identified through one of three channels (direct marketing, referrals from plumber or certified installers, and sub-contractors)
- Potential participant is contacted via phone and screened for applicability
- Participant is sent program collateral and is directed to the program website for more information
- Participant submits a rebate application
- Qualified installer will be assigned
- Participant site is scheduled for a feasibility visit
- Program partner or plumber makes visit to site and determines feasibility
- Program partner or plumber refers to compatible program if site is not suitable for the ODE program and might be suitable for a temp modulation controller
- Installer (plumber) writes up sales offer
- Offer is accepted and signed by decision maker
- Installation is scheduled
- Installation takes place
- Installation is documented by photos and installer signs confirmation form
- Customer signs confirmation form
- Incentive check is ordered for payment to manufacturer
- Incentive check is mailed
- A subset of sites are monitored for energy savings and water use impacts
- Participant is referred to other programs if desired

- As part of this program, we will administer a web-based satisfaction survey. As part of this survey, we will query the participant as to their interest level in complimentary programs. If there is interest shown, the computer application will automatically send a referral to the complimentary program and will send a copy to the Gas company program manager.

b) List measures

The Program's measure is the D'Mand Pump, which is actually a system that includes the pump, a flow sensor, a temperature sensor and a controller unit. The D'Mand Pump reduces heat losses from central DHW distribution loops in multifamily buildings by shutting off the re-circulation pump when it is not needed.

Program Energy Efficiency Measures and Incentives

Measure	Incentives (per unit)
D-Mand E Pump	$1,600

c) List non-incentive customer services

Services provided include: project feasibility analysis, measure installation and verification, and, where appropriate, participant referral to complementary programs.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would

not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers:

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier.

Barrier	Solution
Lack of consumer information about energy efficiency benefits	Program's marketing and outreach efforts take the information to customers where they can easily access it: their association meetings, brochures (as a follow-up to direct contact), and during normal interactions with their plumbers.
Lack of qualified personnel resources to support objectives.	Program's marketing and outreach efforts take the information to customers where they can easily access it: their association meetings, brochures (as a follow-up to direct contact), and during normal interactions with their plumbers.
Split incentives (between owners/landlords and tenants)	Although most of target market does not experience split incentives, rebates are high enough to overcome this barrier when it occurs.

Barrier	Solution
Lack of financing for energy efficiency improvements	Program covers the full cost of the new pumps and controls so that the investment risk is minimized.
Barriers to the entry of new energy efficiency technologies or systems whose efficiency or system performance levels are uncertain due to lack of experience	Program makes a significant investment of time in helping decision-makers to understand how the technology works, so that fears of failure or tenant dissatisfaction are allayed.

d) Quantitative Program Targets

The Program's goal is to identify at least 600 properties with CDHW systems during the first two years and 400 the third year. The Program will install at least 510 systems during the three-year period, and give out customer surveys to 100% of the completed installations.

Table 5

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Identify CDHW systems in Gas Co. territory	600 properties	600 properties	400 properties
Install demand controls	200 installations	210 Installations	100 installations
Customer Satisfaction Survey	100% of installations	100% of installations	100% of installations
Number of property management firms involved	50	100	100
Number of building owners involved	40	120	120
Mentions in the trade press	2	3	5

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan Goals and Objectives

The Program will advance the goals of the Strategic Plan in the following ways:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
The Program is pursuing technologies that PIER is studying for effectiveness (boiler controls).	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-3: Manage research into new/advanced cost effective innovations to reduce energy use in existing homes.
In promoting adoption of an established but leading edge technology, the program helps advance CEESP research and technology objectives.	Research and Technology	Conduct targeted emerging technologies R&D to support the Big, Bold Energy Efficiency Strategies/Programmatic Initiatives and integrated energy solutions goals.	2-2: Promote cost-effective near term performance enhancements of existing technologies

2009-2011 Energy Efficiency Programs
OnDemand Efficiency
Program Implementation Plan

6) Program Implementation

a) Statewide IOU Coordination

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing materials
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

This third-party program only operates within SoCalGas's service area. The Program is designed to support and complement SoCalGas's core program activities. If this Program shares common elements with the IOU's core programs, other third-party programs, or programs in other IOU service areas, SoCalGas and the Contractor will strive to coordinate the similar activities.

b) Program delivery and coordination

i. Emerging Technologies program

The Program primary measure, though market ready, is still considered an 'advanced' technology. It is barely a step beyond an emerging technology, and is currently bridging into market acceptance. The Program serves to increase its acceptance and levels of market saturation. In order to connect to new emerging technologies, the results of CEC emerging technologies grants and contracts to assess opportunities for program improvements will be monitored. It is expected that there may be potential improvements to the technology or program delivery mechanisms that we will evaluate for inclusion.

ii. Codes and Standards program

ODE staff have participated in virtually every iteration of the California Building Energy efficiency Standards in the past twenty years, and will be able to inform on Codes and Standards development process related to CDHW systems. Continuing gathering of significant quantities of data on both the performance of demand controls and, more generally, MF CDHW market characteristics is occurring. Much of that data will be useful to inform codes and standards changes. For 2008, per the adopted building standards, timeclocks are an acceptable boiler control in new buildings and there is no additional 'credit' for anything beyond that. Research has demonstrated that more energy savings potential can be realized if almost any improved control device is installed, but there is not enough data to establish installation requirements or the specific impact of upgrades

iii. WE&T efforts

Although ODE has no specific connection to any workforce education and training efforts outside of the program, the Program offers training to MF site maintenance staff and management staff. Often these are people with potential for greater understanding of and responsibility for performance of energy related systems, but little opportunity for more formal training on these systems. The training flowing from ODE helps make them more employable.

iv. Program-specific marketing and outreach efforts (provide budget)

ODE staff (including subcontractors and qualified installers) will identify prospects through a variety of means. The main technique will include mining websites that serve apartment seekers. The Program will follow-up referrals from plumbers, other IOU programs, and contacts made at trade shows and conferences.

The potential participants are all screened to see if their buildings are served by one or more central hot water distribution loops. Those who confirm they have such a system are given the program offerings. The Program provides explanatory information to potential participants through the web site and printed collateral material. Those who refuse the program offer are still entered into the Program's database for possible future use.

v. Non-energy activities of program

The Program provides voluntary training to site maintenance and/or management staff on how the new controls work as well as a larger understanding of how the CDHW system works. This training should result in lower maintenance costs and fewer tenant complaints. The Program will distribute a customer satisfaction survey once installation is finished and provide an assessment of this non-energy impact (customer satisfaction) of the program.

vi. Non-IOU Programs

The ODE program offer is made directly to customers that ODE staff have pre-screened to determine eligibility. The Program utilizes a brochure and website to provide more information to prospective participants on the mechanics and benefit of the program. After feasibility is determined, program staff generates a proposal, the device is scheduled to be installed and the installation takes place. After the installation is verified, the rebate is issued and the savings are claimed.

vii. CEC work on PIER

There is an ongoing study within the CEC's PIER program to investigate the effectiveness of various types of boiler controls and to inform a rewriting of the hot water distribution algorithms with the compliance software. The current device is one of the control types about which the study is gathering data. Therefore, even though our program includes a monitoring function, the reliability of demand control energy savings will be independently documented and verified.

The PIER study will also be comparative among types of devices and will show savings under multiple conditions.

viii. CEC work on codes and standards

The PIER research referenced above will directly lead into the next round of Codes & Standards updates, as will the demand control and MF market data that will be collected as part of the ODE Program.

ix. Non-utility market initiatives

The Program's personnel are part of a team that, through a different contract, will be developing a quality control manual for CDHW systems, and providing training to installers, manufacturers, and inspectors. The training will include a segment on how to spot faults in CDHW systems and how to assess the best opportunities for system improvements. The personnel that work in the ODE Program will help inform that effort, and vice versa. The industry is struggling with how to improve the quality of installations and ensure long-term energy savings. ODE is an integral part of that progression and there are many spillover opportunities that the program will seek to exploit.

c) Best Practices

This program reflects best practices in that it addresses a specific problem with a simple solution that requires a minimum level of hassle on the customer's part, intelligently involves relevant market actors, and uses a state-of-the art database-driven website to track marketing, installations, savings and more.

d) Innovation

The On Demand Efficiency Program relies on the "D'Mand Pump" as an innovative technology and employs an innovative program strategy to deliver an efficiency solution to the multifamily market sector. The D'Mand Pump is actually a system that includes the pump, a flow sensor, a temperature sensor and a controller unit. It reduces heat losses from central DHW distribution loops in multifamily buildings by shutting off the re-circulation pump when it is not needed. The flow sensor detects when a tenant turns on the tap, and the temperature sensor takes the temperature of the water in the line. The control unit turns the pump on if the water temperature is too low, and shuts the pump off as soon as the water temperature is high enough near the last tenant on the loop. A similar system has been used in single-family homes for over a decade, but the more complex sensing and logic needed for multi-tenant systems is a relatively new innovation that has not had much penetration yet in the market.

e) Integrated/Coordinated Demand Side Management

Not applicable to this third-party program.

f) Integration Across Resource Types (energy, water, air quality, etc)

This program has the potential to reflect electric savings as well as possibly water savings, although there is no plan at this time to claim those savings, the Program's Contractor is interested is interested in exploring those possibilities in the future.

g) Pilots

There are no pilot projects that are part of this program at this time

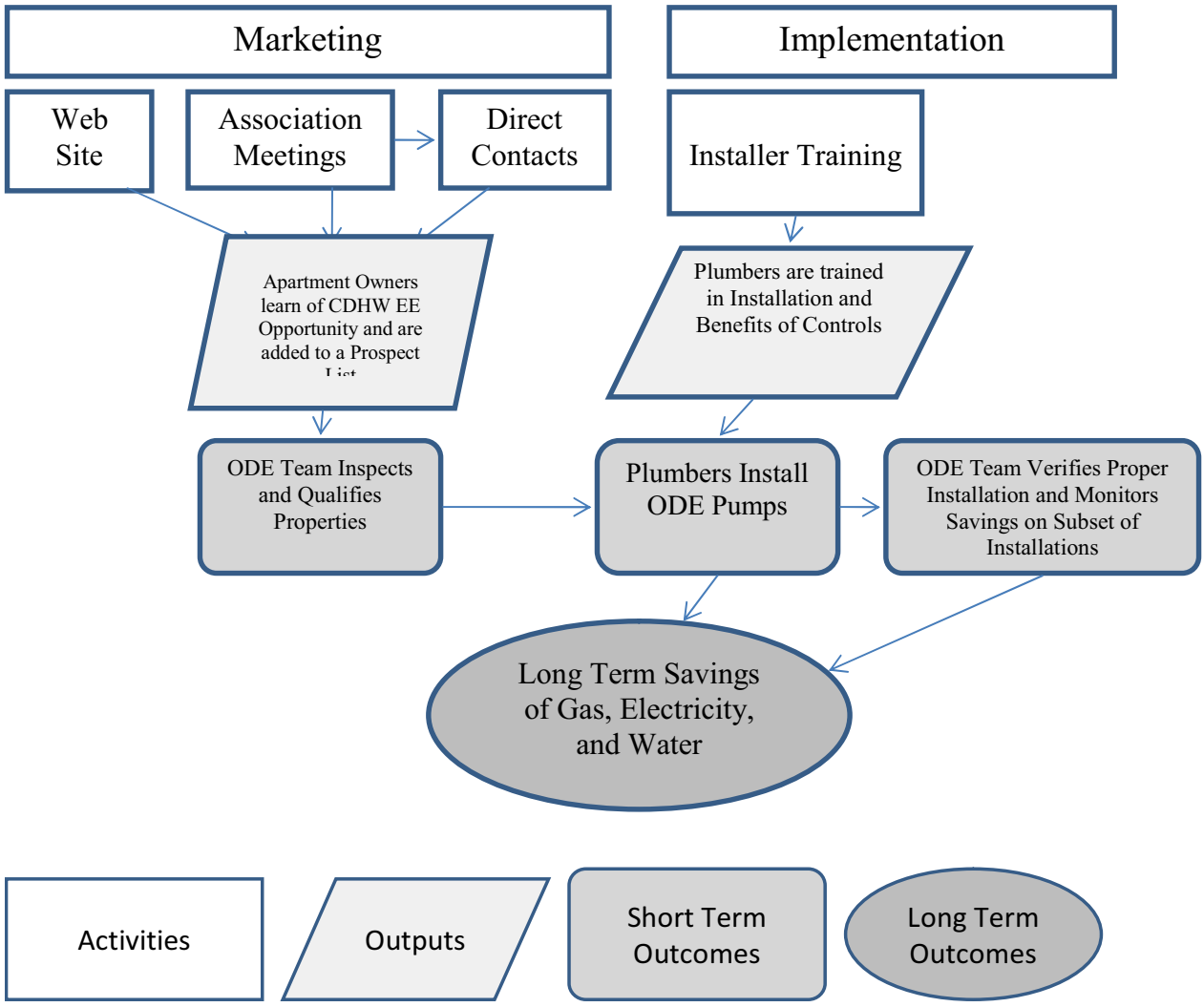
h) EM&V

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

2009-2011 Energy Efficiency Programs
OnDemand Efficiency
Program Implementation Plan

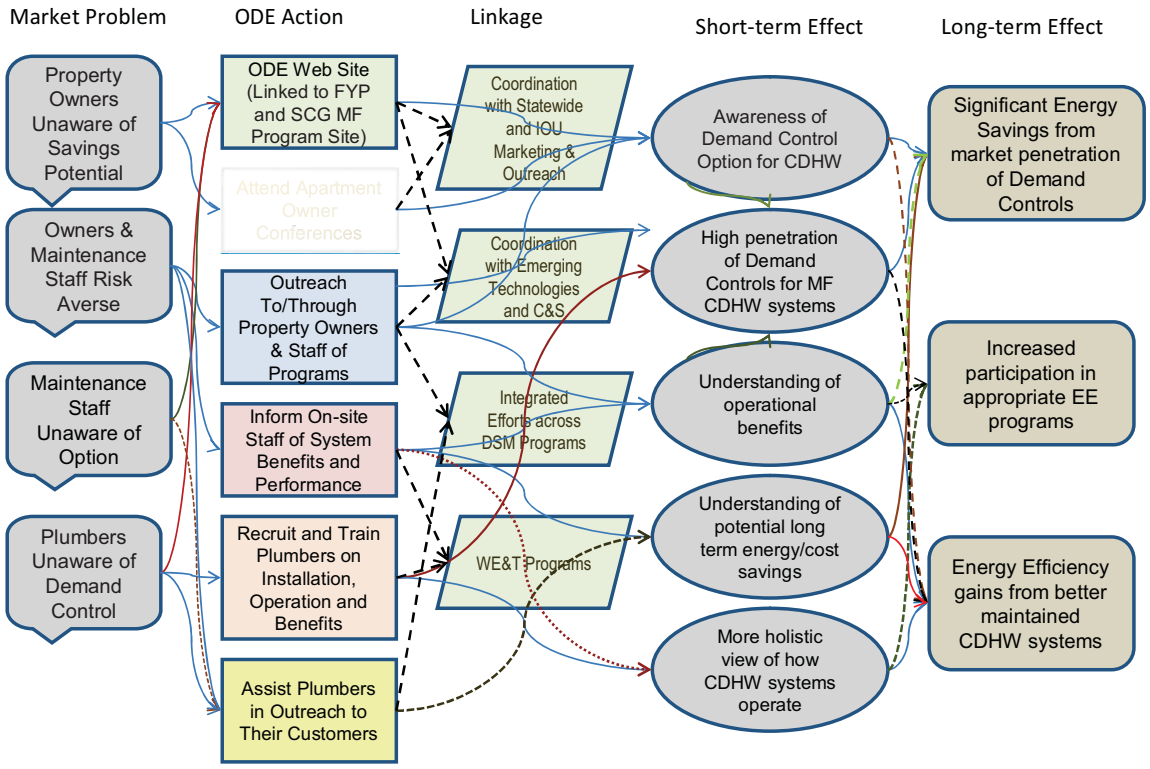
7) Diagram of Program

No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6. Following is a diagram of the Program's implementation and marketing.



2009-2011 Energy Efficiency Programs
OnDemand Efficiency
Program Implementation Plan

8) Program Logic Model



2009-2011 Energy Efficiency Programs
Portfolio of the Future
Program Implementation Plan

1) Program Name: Portfolio of the Future (PoF)
   Program ID Number: TBD
   Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Portfolio of the Future (PoF) is designed to leverage and enhance Southern California Gas Company's (SoCalGas) Emerging Technology (ET) efforts by identifying and accelerating the market adoption of emerging technologies that can significantly improve end-use energy efficiency in Southern California. It will do so by:

- Helping to validate the technology, demonstrate the benefits, build the necessary market infrastructure, and promote and encourage early adoption by concurrently providing assistance, defining the value proposition, and addressing market barriers,
- Building awareness regarding the benefits from the emerging technologies and setting the stage for including some of the emerging technologies in the next cycle of (2012–2014) energy efficiency programs; and
- Leveraging SoCalGas resources and those of other utilities (including municipal utilities, water utilities, Southern California Edison (SCE), San Diego Gas and Electric (SDG&E) and Pacific Gas and Electric Co. (PG&E)), NCI, potential R&D partners (including the U.S. Department of Energy, CEC PIER, NYSERDA), private equity, and venture capital funds), the utilities' customers, other state and federal agencies, and local governments.

The Portfolio of the Future (PoF) program seeks to achieve market transformation through accelerated adoption of high potential energy efficiency technologies that are not yet in SoCalGas's energy efficiency portfolio.

Emerging energy efficient technologies face a long path and multiple hurdles to achieve commercialization. The energy services market is particularly fragmented and dependent

upon multiple actors to develop and sustain a viable market. Many energy efficiency technologies represent niche markets and, as a result, building owners and specifiers are notoriously conservative in specifying new technologies. Therefore, a network of installers and maintenance firms is required before widespread commercial adoption will occur. The Portfolio of the Future program identifies and evaluates promising technologies. For the selected technologies, the PoF sponsors pilot tests to provide credible benefits specifiers; develops market data to facilitate investment and market entry; works with firms to establish a California market presence; facilitates partnerships (e.g. other utilities, other government agencies, distributors, etc.); assists utility programs managers to incorporate these technologies into their programs; and assists in building market awareness.

b) List measures

This is not applicable. PoF is a non-resource program that focuses on accelerating market acceptance and adoption of high potential emerging natural gas efficiency technologies. Candidate technologies are identified during the course of the program through technology scans and stakeholder input.

c) List non-incentive customer services

Some aspects of the PoF program may entail helping SoCalGas customers select, install, test, demonstrate and evaluate the potential energy savings, operational costs and impacts, air emissions, and other impacts attributed to adoption of new technologies. Other aspects of the program involve developing and implementing pilot projects and market research with SoCalGas customers. Educational materials may also be prepared and targeted customers trained on the costs and benefits of technologies selected for inclusion in SoCalGas's 2012-2014 energy efficiency portfolio. While these activities are being conducted to gain information about technologies, SoCalGas customers may also benefit and deem aspects of participation in PoF's activities as a beneficial service.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or

measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier.

Barrier	Solution
Barriers to the entry of new energy efficiency technologies or systems whose efficiency or system performance levels are uncertain due to lack of experience	• Identifying and promoting the most significant opportunities, including supporting a portfolio with a balance of near-, short-, mid- and long-term opportunities; • Providing local demonstrations to document and establish the credibility of the energy savings and environmental benefits of the technology.
The energy services market is fragmented and depends upon multiple actors to develop and sustain a viable market.	For the selected technologies, the PoF sponsors pilot tests to provide credible benefits; develops market data to facilitate investment and market entry; works with firms to establish a California market presence; facilitates partnerships (e.g. other utilities, other government agencies, distributors, etc.); assists utility programs managers to incorporate these technologies into their programs, and assists in building market awareness.

d) Quantitative Program Targets

The program has a set of targets related to identifying and accelerating adoption of emerging technologies that can significantly improve end-use natural gas efficiency in SoCalGas's service territory. Building on the initial baseline of 517 technologies identified through the initial portfolio screen during the 2006-2008 energy efficiency program cycle, the table below shows the targets for 2009-2011.

Table 3

Portfolio of the Future	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1: Additional high potential technologies identified	8	8	8
Target #2: Additional high potential technologies selected for development	4	4	4
Target #3: Pilot projects conducted	2	2	2
Target #4: Market research, studies & assessments conducted	1	1	1
Target #5: Program readiness packages or market transformations strategies prepared for technologies selected for inclusion in SoCalGas's portfolio	3	3	3
Target #6: Partners engaged	3	3	3
Target #7: Early adopters recruited	3	3	3

e) Advancing Strategic Plan Goals and Objectives

This program supports the Strategic Plan in several ways:

- By promoting emerging technologies, this program encourages adoption of leading edge technologies
- Assists in the technology specific assessment of new and emerging technologies
- Implements activities that create favorable conditions for EE technology investments
- PoF supports the following EE Strategic Plan's Research and Technology goals.

2009-2011 Energy Efficiency Programs
Portfolio of the Future
Program Implementation Plan

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
PoF's scope includes advancing technological innovation and promoting commercialization of promising residential energy efficiency technologies.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-3: Manage research into new/advanced cost effective innovations to reduce energy use in existing homes
Program aims to transform markets through commercialization and adoption of new technologies.	Residential	Develop comprehensive, innovative initiatives to reverse the growth of plug load energy consumption through technological and behavioral solutions.	3-2 In coordination with Strategy 2-2 above[2], develop public awareness of and demand for highly efficient products.
Program employs a variety of tools and techniques that start with scans of technology opportunities that are then characterized and ranked to identify those with high potential near term net benefits.	Research and Technology	Create demand pull and set the research agenda to pursue both incremental and game changing energy efficiency technology innovations.	1-1: Apply systems approaches to establishing research priorities
Program involves partnering with a wide variety of public and private entities to leverage complementary efforts. Targeted partners include but are not limited to: CEC PIER, DOE and the National Labs, NYSERDA and other state RD&D organizations, industry associations and their RD&D affiliates, technology developers, equipment manufacturers and distributors.	Research and Technology	Create demand pull and set the research agenda to pursue both incremental and game changing energy efficiency technology innovations.	1-2: Leverage private industry and Federally funded technology research and investment
Program conducts market research, assessments and pilot demonstration projects of high potential new technologies that are selected through a structured process of screening and ranking to fill gaps in California utilities' portfolios of emerging technologies.	Research and Technology	Create demand pull and set the research agenda to pursue both incremental and game changing energy efficiency technology innovations.	1-3: Enhance market intelligence and behavioral research activities related to energy efficient technologies.
Helps facilitate through active participation in PIER and ET efforts stakeholder input into alignment of PIER activities with Big Bold Initiatives.	Research and Technology	Conduct targeted emerging technologies R&D to support the Big, Bold Energy Efficiency Strategies/Programmatic Initiatives and integrated energy solutions goals.	2-3: Develop initiatives aimed at PIER to support larger gains in support of Big Bold Initiatives.

[2] Strategy 2-2 is *Promote effective decision-making to create widespread demand for energy efficiency measures.*

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In October 2007, the CPUC recognized that California's very ambitious efficiency and greenhouse gas reduction goals require long-term strategic planning to eliminate persistent market barriers and effect lasting transformation in the market for energy efficiency across the economy. Accordingly, the Commission developed the Long Term Energy Efficiency Strategic Plan (Strategic Plan) to guide California's energy efficiency efforts through 2020 and beyond.

The Strategic Plan lists emerging technologies as one of the five policy tools employed to "push" or "pull" more efficient products or practices to the market. The market transformation strategies covered in the plan are built around these five policy tools. Moreover, the Strategic Plan was structured around four vertical market sectors and seven cross-cutting areas. Research and technology is one of the seven cross-cutting areas.

6) Program Implementation

a) Statewide IOU Coordination

i. Program Name
ii. Program Delivery Mechanisms
iii. Incentive Levels
iv. Marketing and outreach plans
v. IOU program interactions
vi. Similar IOU and POU programs

The primary point of coordination with statewide IOU efforts is the respective Emerging Technologies programs of the other IOUs (SDG&E, SCE and PG&E), both individually and through the Emerging Technologies Coordination Council (ETCC). The PoF program is structured specifically to address gaps in SoCalGas's gas efficiency portfolio and complement SoCalGas's and other IOUs' emerging technologies efforts.

PoF is a non-resource program and, therefore, no incentives are paid under this program for energy savings, although pilot participants may be compensated to offset their costs of participating in pilot demonstration and research projects. Depending on the nature of the pilot or market research activities, other IOUs may be requested to share in the costs.

The Program coordinates with other RD&D agencies including CEC PIER, the national laboratories, the U.S. EPA and DOE, and other state energy RD&D agencies. In addition, PoF coordinates with the California ARB and regional air quality management districts in the conduct of its pilot demonstration projects, and also with respect to evaluating the air emissions impacts of evaluated technologies. Further, PoF coordinates with local permitting agencies and governmental authorities in structuring and conducting its pilot projects.

The PoF is structured to complement SoCalGas's emerging technologies activities, and those of other IOUs and the ETCC. California POUs typically do not have specific

emerging technologies programs but do present an opportunity for collaboration. For example, discussions are in progress with respect to a potential partnership with the City of Riverside's utilities division, Riverside Public Utilities (RPU), that provides electric, water and wastewater utilities services. RPU is very interested in helping PoF secure pilot participants within its service area.

b) Program Delivery and Coordination

i. Emerging Technologies

PoF is designed specifically to complement California's existing emerging technologies programs and activities.

The Program's scope includes identifying key barriers to adoption of new technologies. During the process of conducting pilot projects and market assessments, PoF will identify any potential conflicts with codes and standards, and will document the potential benefits of new technologies affected so that the appropriate regulatory bodies can review the codes and standards and determine whether changes should be made.

ii. Codes and Standards

This is not applicable to this program.

iii. WE&T (Workforce Education & Training)

Similarly, lack of a trained workforce to perform installations, operations and repair services can be a significant barrier to technology adoption. PoF considers and will document these types of barriers in its technology assessments, and suggest potential remedies.

iv. Program Specific Marketing & Outreach

PoF has several levels of marketing and outreach:

- Recruit participants in technology demonstration projects, market research, studies and assessments
- Share information about PoF technologies and activities, and learn about what other IOUs, POUs, energy research organizations, and other key stakeholders are doing that might be complementary
- Develop case study materials that document the costs, benefits and performance of technologies
- Upon successful demonstration, prepare select technologies for launch in SoCalGas's portfolio with Program Readiness Packages that include mini-business plans and strategies for recruiting targeted adopters
- Develop technical brochures to inform targeted adopters about selected new technologies and applicable SoCalGas programs and incentives

The above PoF marketing and outreach activities will be performed in conjunction with SoCalGas, PG&E and the ETCC to assure:

- success in recruiting targeted participants;
- that PoF's activities are coordinated and complementary to those of the IOUs, the ETCC and other key energy research stakeholders, and
- that information about high potential technologies being advanced through PoF is widely disseminated to targeted adopters throughout California.

In addition, PoF will leverage the extensive network of relationships and communications channels developed by its sister program, the California Sustainability Alliance (Alliance). Alliance participants include the Public Sustainability Partnership, the Public Technology Institute and Strategic Energy Innovations, three non-profit organizations that have a strong network of members and partners in California and throughout the U.S. that would be candidates for both participants in PoF pilots and market research studies, and could also be potential partners.

The 3-year budget for the marketing and outreach activities described under item 6.a. above is $450,000.

v. Non-Energy Activities of Program

The Program's primary focus is on identifying and facilitating adoption of new gas efficiency technologies. However, some technologies also achieve ancillary non-energy benefits. For example, technologies that reduce gas consumption for water heating by reusing hot water have an additional benefit of saving water. In addition, many technologies can also reduce air emissions. Those that reduce potable water consumption reduce embedded energy that was used to produce and deliver that potable water, and also reduce the amount of energy needed to treat wastewater. Other technologies directed at improving gas efficiency, e.g., in combustion, may have the added benefit of reducing associated emissions. All such ancillary benefit streams are documented by PoF in the cost-benefit analysis of each technology being evaluated.

vi. Non-IOU Programs

As noted previously, one of the Program's primary strategies is to identify and leverage complementary non-IOU resources, assets and activities being conducted by others through proactive partnering. During the 2006-2008 program cycle, PoF partnered with various technology developers, manufacturers and distributors; energy and water utilities; and a wide variety of diverse stakeholders. During 2009-2011, PoF anticipates much broader partnering with other energy RD&D organizations and stakeholders, including CEC PIER and U.S.DOE; non-profit organizations such as the Public Technology Institute that brings new technologies to its members, local governments; POUs such as Riverside Public Utilities; and other energy, water and wastewater utilities.

vii. CEC work on PIER

SoCalGas, the CEC Public Interest Energy Research division (PIER) and the other IOUs have closely related projects designed to support emerging technologies. Avoiding duplicative efforts is critical. The PoF will monitor and coordinate its activities to ensure that resources are effectively deployed to complement and avoid duplication of efforts. SoCalGas will facilitate coordination with other IOUs through the Emerging Technology Coordinating Council (ETCC).

PoF will meet quarterly with SoCalGas to review the emerging technology pipelines and portfolio of projects. At these meetings, the portfolio of activities will be reviewed and adjustments to the portfolio (including continuation of pilots; as well as the number of and scopes of pilots, assistance, and assessments to be completed) will be approved by SoCalGas.

The PoF provides multiple innovative approaches to leverage the efforts of CEC PIER and the California utilities. Below is a description of the types of activities conducted by the PoF:

- Coordinate with and leverage other efforts as directed by SoCalGas ETP staff. These will include CEC PIER and DOE's energy efficiency R&D planning efforts, private equity and original equipment manufacturers on new technology market assessments and entry and other California utilities including the water and municipal utilities in Southern California).
- Work with technology developers (including inventors, Asian and European companies, small firms, and major companies – e.g. United Technologies, Johnson controls, etc.) to develop strategies for bringing new technologies to market.
- Recruit and monitor demonstration installations.
- Foster integration into SoCalGas programs.
- Develop "spillover" from these efforts.
- Integrate information activities with the PoF's sister program – the California Sustainability Alliance.

viii. CEC work on codes & standards

This is not applicable to this program.

ix. Non-utility initiatives

The "Portfolio of the Future" initiative includes the following elements related to non-utility initiatives:

- Accelerate the commercialization of energy efficient technologies in support of the California Energy Efficiency Strategic Plan (CEESP) and Big/Bold Initiatives;
- Partner with a wide variety of stakeholders including other utilities, industry, EPRI, DDE, and CEC to leverage resources and maximize impact, and

- Develop a portfolio of pilot opportunities.

c) Best Practices

PoF was designed to embody the best practices in energy efficiency emerging technologies programs. Below is a listing of the best practices recommendations from the Best Practices database that were integrated into the POF program theory and design.[3]

Program Theory, Design, Management, Reporting, QC, and Process Design

Cross Program Best Practice	
Develop a sound program plan; if possible have a clearly articulated program theory	The PoF program theory and design are described in this PIP
Link strategic approach to policy objectives and constraints	The PoF program is designed to help SoCalGas "fill-the-gap" needed to meet the Commission's "stretch" energy savings goals
Build feedback loops into program design & logic	Feedback is both internal from regular meetings and briefings with SoCalGas ET staff, and external from pilot project demonstration projects, market research, analytical studies and assessments, other RD&D agencies and stakeholders, other IOUs and POUs, and other partners
Do not over-promise results	The nature of PoF is to test and assess before bringing recommendations to SoCalGas.
Understand local market conditions	PoF is designed to deepen SoCalGas's understanding of the markets for applicable new technologies
Conduct sufficient market research	PoF's process includes extensive market research, including pilot demonstrations, as needed
Maintain program design flexibility to respond to changes in market & other factors	Program flexibility is built into the program design that responds to market opportunities and changes
Put process plan (including program management) in writing	Each step of the PoF process has been described and vetted with utility staff as well as other key stakeholders
Define & locate hard-to-reach customers & target programs accordingly, as appropriate	PoF targets participants according to the needs of the technologies it is assessing, and in accordance with the type of activity (e.g., pilot demonstration project, market research, market assessment)

Program Management: Project Management

Cross Program Best Practice	
Clearly define program management responsibilities to avoid confusion as to roles and responsibilities	PoF's program design includes extensive and clear definition of roles and responsibilities, decision and reporting channels
Use well-qualified engineering staff (for technical programs)	PoF's diverse team allows matching the most suitable resources to specific program needs (e.g., engineers for technical aspects of the program, marketing & communications experts for outreach, etc.)
Delegate responsibility based on risk versus reward	The program design has decision making for key program elements remaining within SoCalGas hands

Program Management: Reporting and Tracking

[3] See the *National Energy Efficiency Best Practices Study, Volume S – Crosscutting Best Practices and Project Summary*, Quantum Consulting, Inc., December 2004.

Cross Program Best Practice	
Define & identify key information needed to track & report early in the program development process	The PoF process documents program criteria and the scanning methodology, provides M&V plans for pilot demonstrations, develops technology marketing assessment plans and designs, and develops program readiness packages including work papers, and project plans
Clearly articulate the data requirements for measuring program success	These are clearly identified in the project plans and activities
Design program tracking system to support the requirements of evaluators as well as program staff	All PoF program elements and processes are developed and ready for review as part of the program theory and design

Program Implementation: Participation Process

Cross Program Best Practice	
Keep participation simple	The PoF process is designed to simplify transaction between utility and emerging technology providers; and facilitates all research and collaboration between SoCalGas and the industry
Develop participation strategies that are multi-pronged & inclusive	The PoF process is inclusive and thorough in its approach to emerging technology review and recommendation
Provide quick, timely feedback to (applicants) technology partners, interested industry participants and ET developers	The program includes regular "hand-holding" of each of the players in the process as PoF evaluates ETs for program readiness
Review & understand product availability before establishing product eligibility	This is one of the criteria and elements of ET selection as "program ready," and includes linking with the ET provider to ensure utility service area support for the new technology
Offer a single point of contact for customers	PoF simplifies the program process and avoids technology provider confusion

d) Innovation

The POF program is the only one of its kind in that nation and is distinctive in that the goal of the Program is to not only to identify promising technologies, but also to support SoCalGas efforts to integrate these into the utility's approved Commission portfolio. The focus of the program is on emerging technologies beyond the R&D stage, but needing some further research, testing, enhancements or support to be "program ready," and thus able to be integrated into utility program offerings.

e) Integrated/Coordinated Demand Side Management

Although this Program is not an Integrated Demand Side Management program, it has opportunities for integration. The level and type of integration with DSM programs, though, will depend on the nature of the various technologies being evaluated and readied for integration into SoCalGas's 2012-2014 portfolio. The PoF's process scans for technologies in all markets and sectors. The evaluation of each technology considers how it might complement or compete with other technologies in SoCalGas's existing portfolio for different types of customers and businesses. This understanding is used to structure the recommended programs and incentives for each technology selected by SoCalGas for its future portfolio.

f) Integration Across Resource Types (energy, water, air quality, etc)

Although the primary purpose of this program is to accelerate the adoption of high potential natural gas efficiency technologies, there are many ancillary resource benefits. For example, one of the primary end uses of natural gas is to heat water. Many new gas efficiency technologies identified during the 2006-2008 energy efficiency program cycle such as drain water heat recovery and laundry water recycling, involve reusing heated water which results in savings of water as well as of natural gas. To the extent that potable water is used for such processes, the electricity embedded in that reduced water consumption is also avoided, resulting in reductions in greenhouse gas emissions.

g) Pilots

Pilot projects will be conducted subject to SoCalGas approval. Pilot activities in 2009-2011 will include:

- Market persistence follow-up of the enzymatic water detergent market test
- Completion of the SpyroCor™ demonstrations
- Completion of any pilots initiated in the last 6 months of 2008, including possibly industrial water/recycling

In addition, new pilots will be conducted for additional high potential technology opportunities identified during the 2009-2011 market scans. Following is a description of the pilot project process.

1. For each pilot project, a pilot project plan will be developed that includes an executed agreement and participation terms for each pilot participant. The agreement will cover the following terms and conditions:

- Identification of participants in the pilot
- Definition of roles and responsibilities of the parties
- Documentation of resources and assets contributed by each party
- Needs/ownership and interests/benefits (if any) that accrue to each party
- Amount of SoCalGas incentives available/requested
- Terms for payment of incentives (e.g., direct subsidy vs. performance based)
- Ownership of data and pilot results
- Contractor and SoCalGas access to facilities and data
- Rights (if any) to technology or products developed through the pilot(s)
- Terms and conditions for termination of pilot(s)
- Basis for determining pilot(s)' "success"
- Commercialization plan, market forecast, and future opportunities
- Pilot organizational structure (designation of technical team assigned to manage each project and assigned roles and responsibilities)
- Schedules and milestones
- Technical plans that specify the type(s), level(s) and frequency(s) of testing, data capture, monitoring, measurement and reporting

- Defined reporting types, forms, intervals, protocols (including case studies and detailed technical reports reporting results and lessons learned, and conditions needed for successful implementation)

2. The pilot will then be conducted in accordance with the plan.

3. Data analyses will be conducted that document expected energy savings.

4. Upon completion of pilots, debriefings will be conducted with pilot participants, capturing lessons learned and key factors required for success in future applications.

5. A pilot summary report will be prepared that includes a description of the pilot, the pilot results and learning, and recommended next steps. Technical specifications, documentation of the data analyses and other pertinent data will be documented in the report appendices. The pilot summary report will include: a description of the pilot; the pilot objectives; pilot design; data collected; data analytical approach; data analysis results; energy savings/production; cost-effectiveness calculations; risks and uncertainties; lessons learned; applicable market(s); and recommendations.

6. If appropriate, a publicity packet may be prepared that includes a press release, a web story with links to additional information, technology guidelines, and customer testimonials.

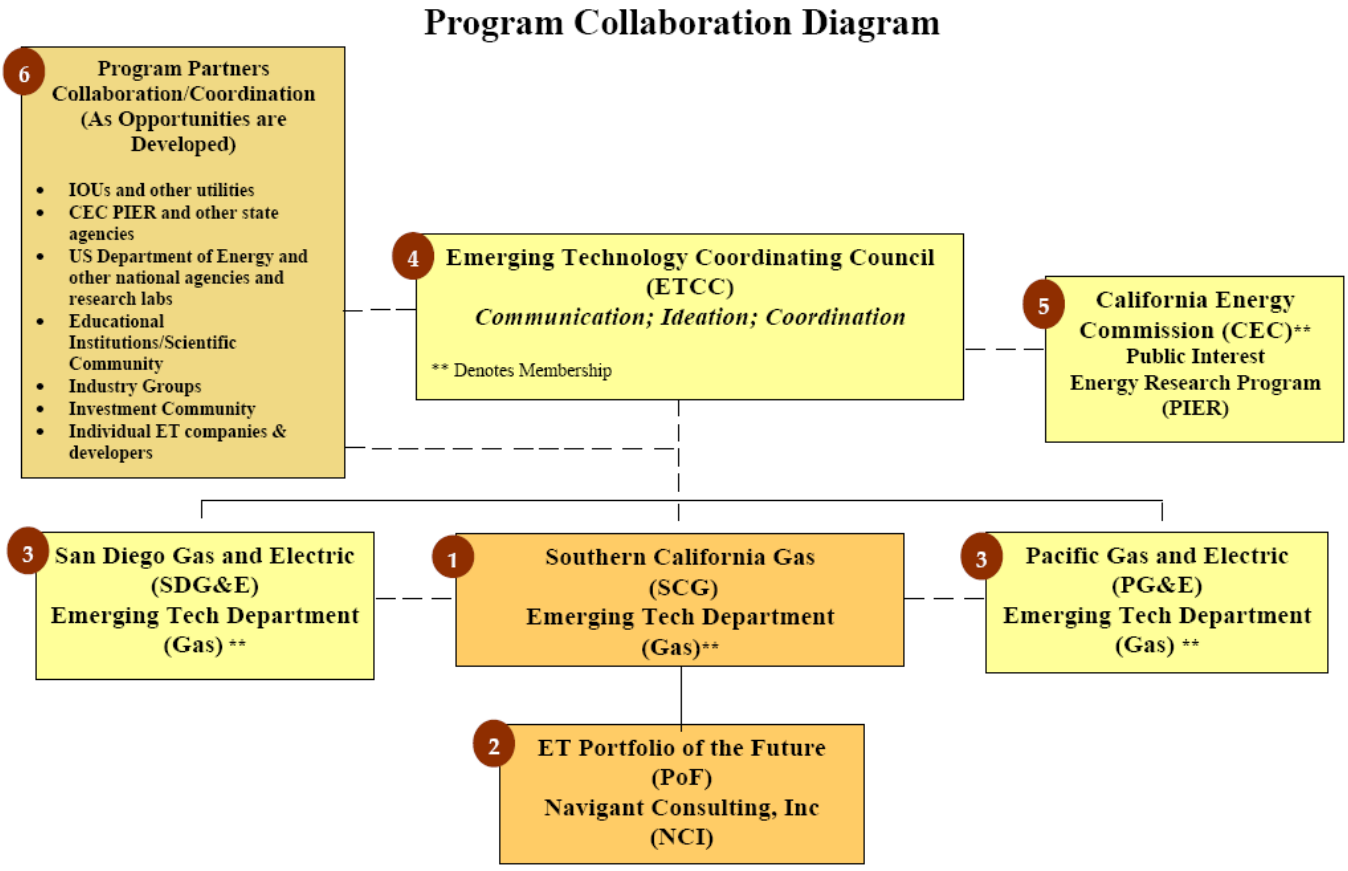
7. Finally, an application brief will be prepared, if appropriate, that describes the technology, its applicability, benefits, and sources for more information and assistance. Technology-specific information will be uploaded to the website of the PoF's sister program, the California Sustainability Alliance's website, and any other appropriate venues agreed to by SoCalGas and PoF.

h) EM&V

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

2009-2011 Energy Efficiency Programs
Portfolio of the Future
Program Implementation Plan

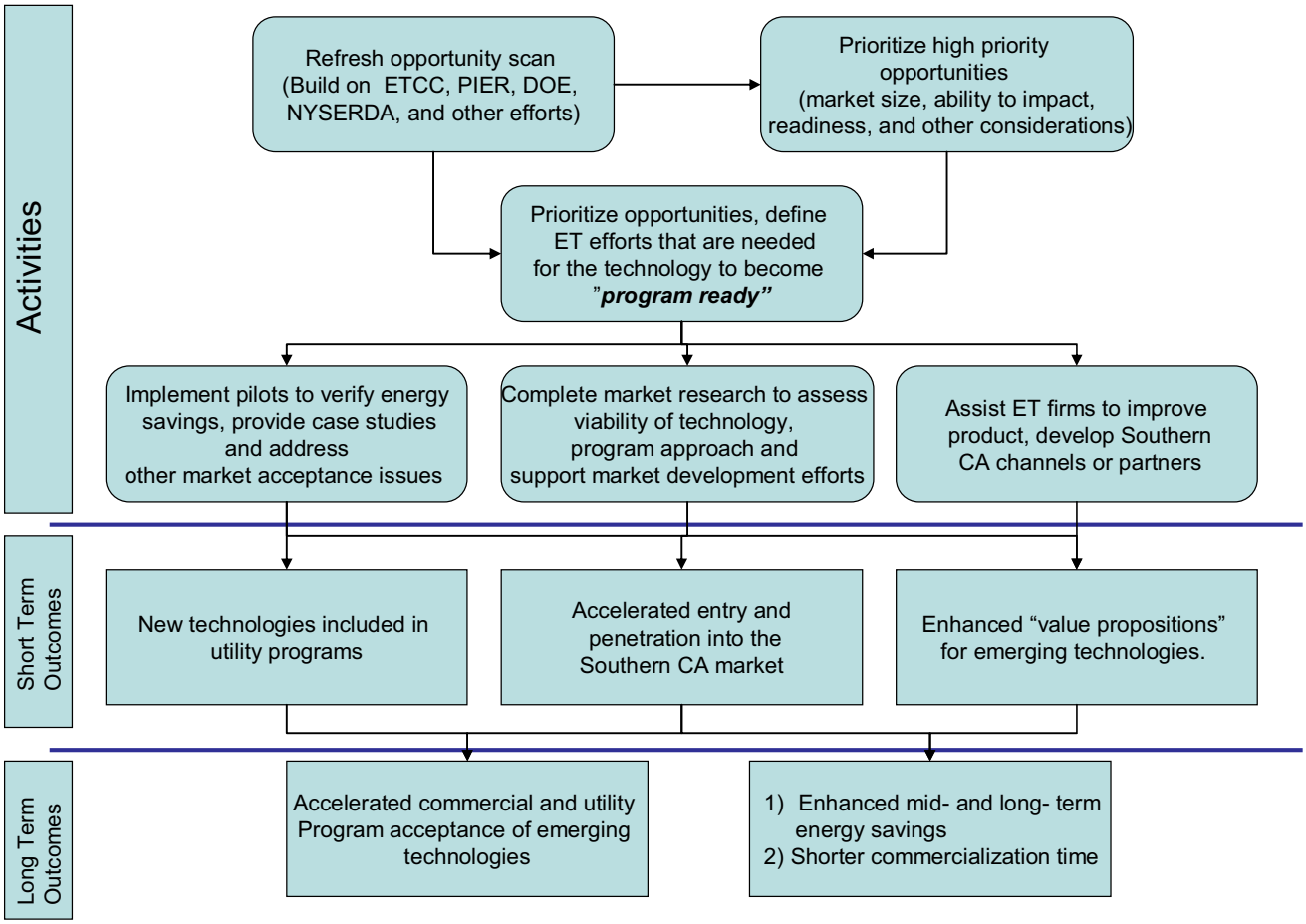
7) Diagram of Program



1. Southern California Gas – SoCalGas is responsible for overall management of the Emerging Technology PoF program. The program is a continuation of a successful third-party program effort during the 2006-08 program cycle
2. Navigant Consulting, Inc (NCI) is the third-party operator of the PoF program and reports directly to SoCalGas
3. The PoF program coordinates it efforts as appropriate with the natural gas energy efficiency savings program of both San Diego Gas & Electric and Pacific Gas and Electric companies
4. SoCalGas shares PoF research findings with the Emerging Technology Coordinating Council, of which it and the other IOUs are members.
5. Likewise, SoCalGas and its contractor, NCI coordinates it research efforts with the CEC PIER program. The PIER program has a major focus on research and development of newly emerging technologies. The focus of the PoF program is on ones that are nearly market ready, or already in the market, but needing validation for utility program integration.
6. The PoF program will continue its broad based collaboration efforts with relevant emerging technology research efforts at the federal and state agency level as well as with relevant educational entities and industry groups, e.g.; NCI currently provides direct support to the CEC PIER program and works closely with the U.S. Department of Energy

on related efforts.

8) Program Logic Model



2009-2011 Energy Efficiency Programs
Resource Efficiency in Private Schools
Program Implementation Plan

1) Program Name: Program for Resource Efficiency in Private Schools (PREPS)
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Resource Efficiency in Private Schools
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Program Resource Efficiency in Private Schools (PREPS) program will target private K–12 schools, colleges and universities, preschools, and trade and technical schools throughout Southern California Gas Company (SoCalGas) service territory. The primary goal of PREPS is to capture therm savings within the private school sector. Another goal to educate end-users on cost-effective energy efficiency measures and practices to improve overall building operations and comfort. This will be achieved through a practical and comprehensive approach by identifying, evaluating, and supporting the installation of specific and applicable energy efficiency measures within these market segments.

Customers interested in participation will be required to complete a questionnaire either through the program's website or directly with a qualified representative. The questionnaire will gather information to: 1) evaluate the available energy efficiency opportunities, 2) ascertain the intent and desire of the customer to implement energy efficiency measures, and 3) target specific program services based on the school's needs and goals. Upon customer completion of the initial questionnaire, a determined level of services will be presented. The services offered are determined on the size of the school and/or the opportunities identified. .

Customers interested in participating in the Program will sign a Program Participation Agreement (PPA) that allows approved representatives to access the facility, conduct an energy audit, complete an energy audit report, and develop a Project Implementation Agreement (PIA). Upon presentation of the identified energy efficiency measures, the customer will sign the PIA committing the customer to implement any or all of the

measures identified. The PIA outlines the terms and conditions of the projects and specifies and financial compensation. Tier type rebates are also part of the incentive/rebate structure and that may be available to the customer. Such types are marketed, as "The Early Commitment Bonus" and "Early Installation Bonus"

The Installation Support Services component is the component of the program that helps schools that have a greater need for project implementation support. Installation Support Services are valuable to schools that lack the staff, knowledge, or internal ability to accurately define the project requirements and move projects into implementation

Installation Support Services may include assistance in:

Project Financing Support: Assistance in developing and submitting an application for a low interest loan to support implementation of the project,
Bid Package Development: Develop equipment specifications, contractor terms and conditions, bidder instructions, etc.,
Bid Support and Evaluation: Perform site walkthroughs, evaluate bids, and provide recommendations,
Contracting and Project Management: Support the contracting process, manage project schedules, report progress, develop punch list and perform final inspection.

The PREPS Program approach is to include not just the typical upgrade applications typically, but to work closely with the utility's Emerging Technologies program. Also, in cooperation with the CEC and PIER organization to incorporate innovative technologies and building improvement strategies into its marketing education and outreach, audit reports and project implementation strategies. The result of this coordination will be wider acceptance of technologies and the development of specific case studies that can serve as examples of successful and innovative projects for others to pursue.

b) List measures

Through comprehensive energy audits and Installation Support Services PREPS will seek to implement:

- Pool boiler replacement
- Pool covers
- Solar thermal hot water heating
- Space heating boiler replacement
- Improved control strategies
- Instantaneous water heaters
- Tank insulation
- Pipe insulation
- Boiler tune-ups
- Other measures as identified in field audits including emerging technologies and retrocommissioning opportunities where savings can be appropriately documented.

The base incentive levels will match those provided through the core programs. The program will also offer sprint campaign activities to accelerate activities in required areas to encourage commitment and expedite completion of projects.

c) List non-incentive customer services

The PREPS program provides financial incentives to encourage project implementation and identifies the installation of additional cost effective building upgrades. At all levels of program participation - from evaluating specific technologies to implementing and supporting the customer throughout the project implementation phase – PREPS provides quality customer service to assist the customers. Non-incentive customer services included in the program, but not limited too, will be:

- Provide information on existing building performance and potential improvements in operating and maintenance practices,
- inform the customer on other local or third-party programs for which they may qualify,
- provide information on low interest financing options to encourage project implementation and,
- educate the customer on new energy efficiency technologies.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would

not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers:

Barrier	Solution
Schools also lack information about energy efficiency benefits	Experience in this market sector, uses a proactive approach to reducing school costs, helps improve building operations and performance, and develops a strategic and phased approach to project implementation.
Schools have historically suffered from lack of financing for energy efficiency improvements	Program provides targeted financing tailored to schools and that seeks to reduce paybacks to acceptable levels.
Schools also lack internal staffing resources to support energy efficiency improvements.	Specific program activities and services will be provided to achieve program goals including customer screening, comprehensive energy audit reports, rebates, bonuses, and Installation Support Services. The rebates, bonuses and Installation Support Services components of the Program address the “lack of support” and “lack of resources” barriers by 1) providing post-audit services to assist the customer in further developing the specific scope of the project and securing installation contractors to perform the work, and 2) providing cash incentives to

Barrier	Solution
	offset the costs to implement the project.

d) Quantitative Program Targets:

Specific outcomes include:

- Provide technical options and financial impacts related to energy efficiency building improvement strategies based on RSG facility analysis;
- Direct prioritization of energy efficiency investments with key decision makers;
- Encourage comprehensive projects implemented with unbiased and vendor-neutral information on the best operating practices and equipment upgrades available.

Table 5

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1			
Target #2			
Target #3			
Target #4			

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan goals and objectives:

The PREPS program addresses the Strategic Plan in the following ways:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
The Program identifies for and assists customers in applying for low-interest loans to implement measures.	Commercial	50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.	2-6: Develop effective financial tools for EE improvements to existing buildings.
PREPS integrates water resource savings into services provided to customers.	DSM Coordination and Integration	Deliver integrated DSM options that include efficiency, demand response, energy management and self generation measures, through coordinated marketing and regulatory integration.	1-3: Develop integrated DSM programs across resources, including energy, water, and transportation.
Program will provide students opportunities to participate in energy audits and develop	Workforce Education and Training	Establish energy efficiency education and training at all levels of California's	1-4: Create or expand college and university programs with energy

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
energy audit reports.		educational system.	efficiency focus and foster green campus efforts to apply this knowledge in clear view of students and faculty.
Implements activities that create favorable conditions for EE technology investments.	Research and Technology	Create demand pull and set the research agenda to pursue both incremental and game changing energy efficiency technology innovations.	1-2: Leverage private industry and Federally funded technology research and investment
Program also incorporates water savings opportunities - the CEESP mentions the energy-water nexus but indicates it will be part of future CEESPs.			

6) Program Implementation

a. Statewide IOU Coordination:

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing materials
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

PREPS outreach activities will be coordinated closely with the utility and the utility account managers to ensure customers receive clear information on the full breadth of service offerings and incentives available to them. The Program will seek opportunities to co-host customer workshops and other third party program providers such as the private schools program offered by Southern California Edison (SCE). The Program will incorporate efforts to coordinate with community agencies and their events, in an order to promote the PREPS Program and enlist as many qualified and viable candidates for program participation. Continued effort will be made to work with the utility to develop co-marketing materials as necessary and coordinate presenting the information to customers via one-on-one meetings and/or at larger customer community venues.

The Program's incentive levels will match those of SoCalGas's core programs.

b. Program delivery and coordination:

i. Emerging Technologies program

Not applicable to this program.

ii. Codes and Standards program

Not applicable to this program.

iii. WE&T efforts

Not applicable to this program.

iv. Program-specific marketing and outreach efforts (provide budget)

The PREPS Program will rely on effective marketing methods listed below to reach targeted customers who provide the best opportunity for maximum efficiency gain. SoCalGas will support and provide potential participants for the PREPS Program. Target segments (NAICS code 61), and customers will be evaluated and prioritized. Through a focused, coordinated outreach effort and during one-on-one customer meetings, the goal will be to capitalize on the greatest opportunities early in the program cycle.

Customer Recruitment

The 2009–2011 PREPS will be marketed through various channels such as, but not limited to vendors, utilities, and other industry channels to encourage a high level of program awareness and participation. In addition, the existing relationships with the private schools network, industry trade associations and organizations, such as the National Association of Independent Colleges and Universities (NAICU) and the California Association of Private School Organizations (CAPSO) are available for contact. Within these forums, efforts to seek opportunities to attend venues to display information and educate potential participants about the Program and the benefits will be coordinated. Other efforts will include working with SoCalGas to develop and distribute program information and marketing materials synergistically with other utilities, third-party programs, and services available to the schools sector.

A customer-screening checklist that results with data that demonstrates a high level of interest and opportunity to upgrade/ replace inefficient equipment to evaluate each customer for the Program will provide information to adequately plan resources and project support and achieve the desired outcome to efficiently reach Program goals.

Presenting marketing and outreach materials during early in program cycle to school personnel and maintenance staff will be a primary effort. Such effort will include educating personnel on the costs and benefits of energy efficiency, the services available to complete projects and the process. Materials will also include co-marketing materials as necessary with the utility. Continued effort will be done to work with the utility to develop co-marketing materials as necessary and coordinate presenting the information to customers via one-on-one meetings and/or at larger customer community venues.

Marketing and Outreach Plan – Budget $139,872

v. Non-energy activities of program

Non-energy activities will include incorporating student-learning opportunities where applicable. RSG will coordinate with student organizations interested in learning more about energy efficiency, sustainability, energy use analysis, and project management as part of its service delivery activities. In addition, the program will work to co-host customer workshops and other third party program providers to inform potential participants of the Program and its benefits. The workshops will provide technical training to district facility managers and decision-makers to develop an energy management strategy and implement cost-effective building improvements. Such plans will include potential reduction in operating costs and improve building operations.

vi. Non-IOU Programs

The Program's close coordination with SoCalGas and other implementers will ensure that the team is aware of additional complementary program offerings that can improve the cost effectiveness of other program measures. In addition, by incorporating a comprehensive approach to the development of an energy management strategy, the program will provide complementary technical support services with an individual school, for both new construction and retrofit opportunities, and streamline the delivery of energy efficiency services

vii. CEC work on PIER

Not applicable to this program.

viii. CEC work on codes and standards

Not applicable to this program.

ix. Non-utility market initiatives

Not applicable to this program.

c. Best Practices:

The PREPS Program incorporates a variety of approaches - from participation to project implementation – that are consistent with best practices employed in the industry today. The PREPS design is to target and pursue hard-to-reach customers and target program services accordingly. In addition, keeping the participation process simple and following a consistent recruitment and implementation strategy will lead to the completion of efficiency projects in a timely and efficient manner and minimize programmatic challenges.

Through the existing schools program in northern California, experience has demonstrated that it is necessary to inform utility representatives, industry service providers and customers early on in the program cycle. Such timing will take place during the launch phase so that there is a clear and consistent message of the program process, and the benefits to all participants. During the program design and implementation phase, opportunities to coordinate closely with both utility representatives and other providers will be made to ensure each is clear on the program

model and identify opportunities to coordinate service delivery activities. A clear and well-defined message and a coordinated delivery approach will minimize customer confusion and lead to program participation and energy savings earlier in the cycle.

Another "lesson learned" is the need to identify early on in the process the potential opportunity from the customer and any potential resources required to complete the projects and the customers' expectations and needs. Focus will be at the front end of the customer sign up and qualification process to better ascertain the true opportunities that exist with the customer and thoroughly evaluate the participant's level of interest and potential project opportunities. This effort will be more proactive in developing a customer strategy that justifies the level of effort based on the desired outcome instead of cutting a wide swath and conducting multiple audits that may not lead to project implementation and actual energy savings.

d. Innovation:

PREPS provides an innovative, integrated approach in the following ways:

- Offers services that are customized to the needs and opportunities of each prospective customer and will seek the most comprehensive yet cost-effective approach to maximize the energy savings potential with each customer.
- Allows for identification of emerging technologies that can be included as a customized measure for existing buildings or in the design of new school facilities.
- Provides comprehensive audits that will address all cost-effective gas measures, and reports will rank investment opportunities based on a lifecycle cost analysis.
- Integrates information on other resource opportunities in the audit report when applicable.
- Offers Installation Support Services to help customers overcome a range of barriers, from the inability to convince decision-makers to invest in energy efficiency to the technical know-how required to manage the installation of measures.
- Speeds the process of the first-time efficiency upgrades for customers through the comprehensive audits and Installation Support Services which increases their confidence in the Program and validity of energy savings potential, demonstrating cost-effective savings to senior management, and securing the opportunity to conduct additional upgrades within the Program period.
- Ongoing customer interactions provide continued reminders of additional upgrade opportunities, and in many cases, lead to follow-up on projects and additional audits in facilities and locations going beyond the initial customer site.
- The incentive structure rewards customers for moving quickly to sign agreements and install measures.

e. Integrated/coordinated Demand Side Management:

Although this is not an Integrated Demand Side Management program, the Program provides a comprehensive evaluation of electric, gas and water saving opportunities and periodically includes demand response and onsite generation.

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

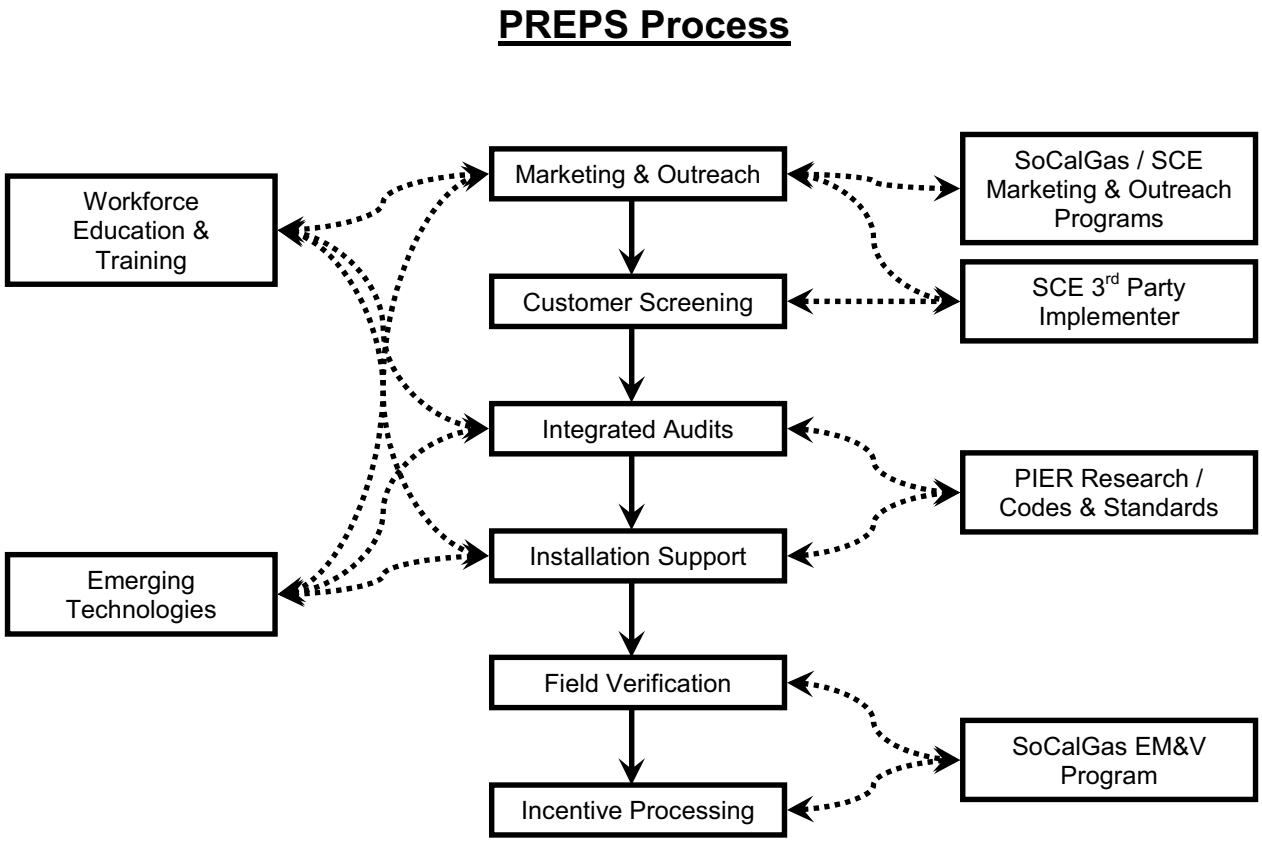
The Program integrates water saving opportunities into energy audits reports when practical.

g. Pilots:

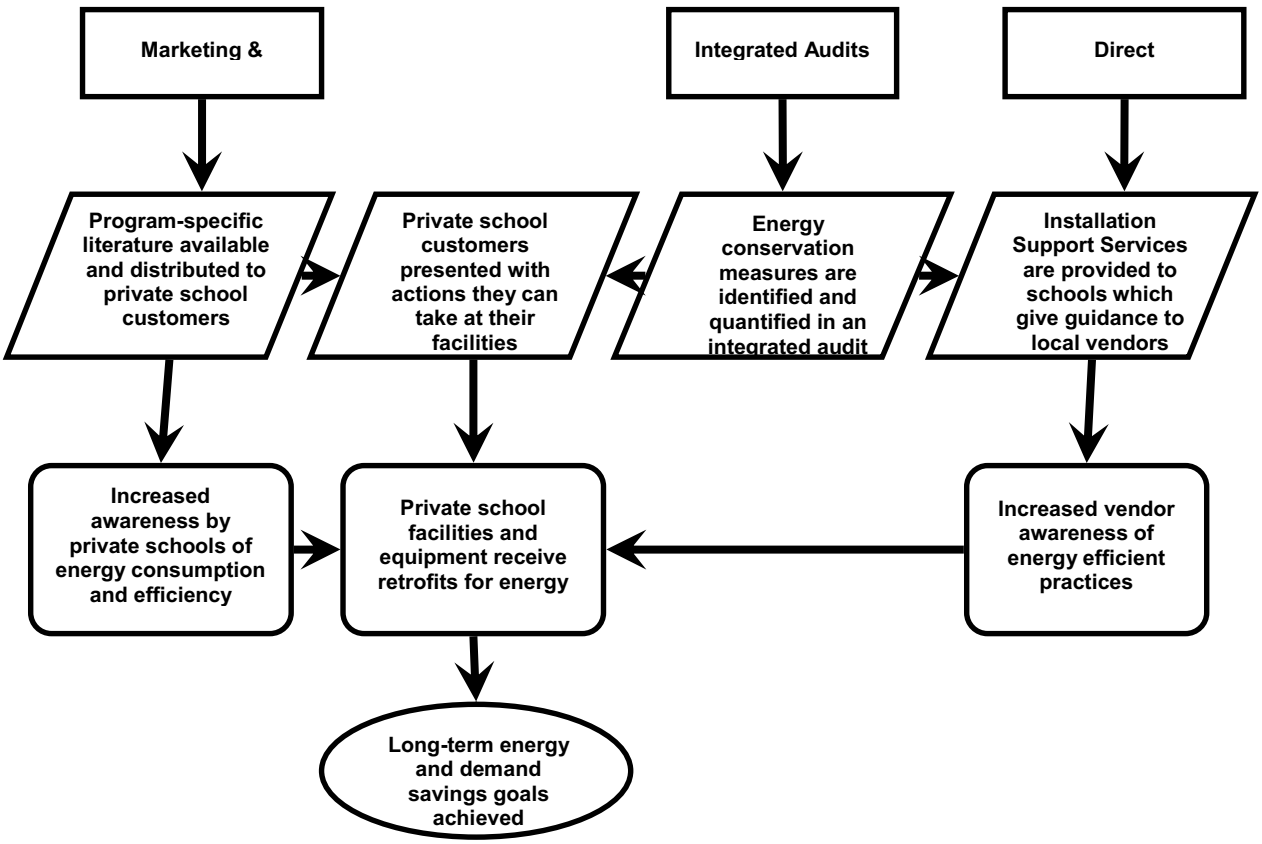
The Program has no pilots planned during 2009-11.

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

7) Diagram of Program:



8) Program Logic Model:



2009-2011 Energy Efficiency Programs
SaveGas Hot Water Control with Continuous Commissioning
Program Implementation Plan

1) Program Name: SaveGas Hot Water Control with Continuous Commissioning
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
SaveGas Hot Water Control with Continuous Commissioning
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

This program addresses gas savings in SoCalGas's service territory by implementing domestic hot water (DHW) control systems in hotels, motels, resorts and senior care facilities plus other associated hot water end uses. (e.g. on-site kitchen and laundry facilities). A typical equipment arrangement consists of a hot-water storage tank, a hot-water boiler which includes a circulation pump, a loop or network of piping to supply the heated domestic hot water to the facilities guest rooms / dwelling units, and a recirculation pump on the return line from the piping loop.

Almost every DHW system has deficiencies and system malfunctions which result in excess use of natural gas for water heating. Wasted energy from water heating can be as high as 119 therms per hotel room.

The controller will help identify existing system malfunctions as well as system malfunctions occurring during the life of the controller. The programmable setback feature has demonstrated to save an additional 21 therms per hotel room annually.

The Program will implement three process improvement components:

- Sensors and Data loggers – The maximum thermostat set point of DHW systems in hotels and motels is usually set too high because of system inefficiencies and malfunctions. Such system inefficiencies and malfunctions are frequently identified only after the installation of a variety of sensors and a data logger. The data can be retrieved remotely or on-site. Once the inefficiencies and malfunctions are identified and corrected, the maximum thermostat set point can be reduced. The DHW system will still provide the

minimum required hot water temperature to the rooms, but with significant energy savings.

- Set-Back DHW Thermostat Controller – This energy savings measure is to install a programmable set-back temperature controller on the DHW system. A programmable set-back controller saves energy by lowering the DHW thermostat setting during times of low DHW usage. The controller can be programmed remotely or on-site.
- Continuous Commissioning® – By using continuous commissioning of energy consumption and system parameters long-term energy savings will be maintained. Without continuous commissioning taking place, new system problems can continue for months without being detected and repaired. Continuous commissioning is an essential part of the long-term gas savings from DHW thermostat controllers.

Targeted market penetration levels will be achieved through specific elements:

- Increased customer awareness about existing energy use and practices;
- Increased understanding of technical options and financial impacts related to energy efficiency building improvement strategies, and
- Increased comprehensiveness of projects implemented due to the unbiased and vendor-neutral information on the best operating practices and equipment upgrades

The SaveGas Hot Water Control program is 100% complimentary to other programs. As far as delivery and implementation, all efforts are conducted directly by Program personnel without the use of subcontractors.

Customers will participate in a web-based interactive presentation which uses as an example technology on similar facilities to those installed (size and plumbing configuration). During this presentation the customers learn how they will be able to validate the ongoing savings and how to use the system as a management tool allowing proactive monitoring and verification.

Facility Pre-installation Analysis/Audit
After the customer provides a list of properties, technicians perform an onsite survey of the hot water systems looking for existing issues (e.g., system layout, applicability and proper installation and operation of the existing equipment). A general analysis of the property is completed including gas consumption history, and general building layout. The information is captured and logged online.

Proposal
Based on the pre-installation analysis, a proposal is generated for the property. The proposal states the minimum savings that will be achieved, the ongoing economic value, return on monthly investment, net savings, payback period, etc. The customer is informed that the Contractor equipment will be installed at no cost to the customer. However, the customer is then provided the option to enroll in the continuous monitoring service at a cost of $1.00 per room. This service includes data analysis/tracking,

consulting and control maintenance and updates; however the customer is not required to purchase this service in order to install the controllers.

Installation of Equipment
After the contract has been authorized, installation of the equipment takes place. Installation includes the Contractor's DHW controllers, Contractor's computer(s) and Contractor's proprietary communication network. All of the equipment, installation and configuration settings are logged online. At this point in the process the controls are set up just to monitor and establish a baseline/benchmark of the customer's facility.

On site training takes place in which the installation technician provides an overview of how the technology works, how to bypass the computer in case of an emergency and how to go online for systems analysis. Additionally property contact information is captured so that the system can notify the appropriate onsite personnel should a hot water issue be detected.

Commissioning the Contractor's Control Systems
Once a period of baseline operation has been established and recorded (approximately two weeks), the system is commissioned for operation. This entails switching the Contractors computers into control mode and adjusting delivery temperatures to provide optimal operation for the facilities equipment.

Contractor's administrative personnel conduct formal training for the property and management. During this training the SaveGas website is configured so that customers can go online and view their data, analyze their site and set themselves up to receive alerts for hot water issues.

Ongoing Savings, Monitoring and Verification
The controllers provide ongoing savings and the monitoring and verification tools track the overall system performance and savings looking for deviations that might interrupt or impede the savings or system efficiency.

Record Retention Procedures
Records include customer contract data, installation information, the data acquired during baseline/benchmarking periods as well as data acquired and system malfunctions identified and repaired over the life of the installation.

The Program's technology provides proven savings with constantly verifiable data that the technology is in place and operational. This capability is the latest trend in energy conservation, and having a third party utility program directly validates the technology and economics.

b) List measures

The Program will implement specialized technology that includes three process improvement components: Sensors/Data loggers, Set-Back DHW Thermostat Controller and Continuous Commissioning.

Measure	Incentives (per unit)
DHW - res	$28.74
DHW - com	$28.74
DHW - com laundry	$1,500

c) List non-incentive customer services

The Program will also provide continuous commissioning service, customer education, data analysis/tracking, consulting and control maintenance and updates.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers:
Customers are often unaware that their water heater systems are malfunctioning. In addition, there is often customer resistance to install new technologies due to dissatisfaction with previously installed technologies that failed or resulted in operational issues.

This program will implement a hot water controller with a programmable setback feature to help identify existing and future system malfunctions and control gas consumption.

To overcome resistance to new technologies, the Program will not target individual property owners but rather will target those who own and manage portfolios of properties as "assets". In typical installations, the program will retrofit all of the hot water systems where the technology is applicable, corporate wide. This allows participants to manage the hot water systems, and thus achieve consistent savings within the entire portfolio of properties. This is accomplished from a central or remote location via an asset manager who is incented to grow asset value (savings).

In addition, Contractor will offer a continuous commissioning service which consists of automated monitoring and analysis of the DHW system performance at all time, along with prompt notification of system malfunctions to the owner/operator of the facilities. This will help encourage continuing awareness of system performance and help increase customer acceptance of the new technology.

Barrier	Solution
Lack of consumer information about energy efficiency benefits	Continue to educate target market on benefits of DHW technology for long-term

Barrier	Solution
	energy savings
Lack of financing for energy efficiency improvements	Technology installation cost is incurred by program – no first cost for customer
Lack of a viable and competitive set of providers of energy efficiency services in the market	This specific technology is unique and as such EDC is the only provider. Continue to aggressively market the product to target market
OTHER BARRIERS	
The models developed for assessing usage are often confusing to financiers & managers. Need to be expressed in plain English,	This program provides a comprehensive baseline test period that culminates in a thorough energy analysis. A report is provided to the customer and explained in detail so the customer can understand the importance of the controller system

d) Quantitative Program Targets:

Table 5

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
SaveGas Hot Water Control with Continuous Commissioning # of Properties	22,800 rooms approximately 228 properties	22,800 rooms approximately 228 properties	22,800 rooms approximately 228 properties
SaveGas Hot Water Control with Continuous Commissioning # of Laundry / Kitchens	60	60	60

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan goals and objectives:

This Program supports the Strategic Plan in the following manner:

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
Program is participating directly in the CEC-PIER program and technology is being utilized directly for establishing Title 20 and Title 24 guidelines.	Residential	Deliver Zero Net Energy New Homes By 2020.	1-1: Drive continual advances in technologies in the building envelope, including building materials and systems, construction methods, distributed generation, and building design.
On site training takes place in which the installation technician provides an overview of how the technology works, how to bypass the computer in case of an emergency and how to go online for systems analysis	Workforce Education & Strategy	Establish energy efficiency education and training at all levels of California's educational system.	1-3: Incorporate energy efficiency and demand side energy management into traditional contractor and technician training, such as for plumbers and electricians, and expand training resources to produce target numbers of trained workers.
Direct program involvement of the technology's manufacturer helps lead to increased development and utilization of energy-efficient products and services and implement activities that create favorable conditions for EE technology investment and development.	Research & Technology	Create demand pull and set the research agenda to pursue both incremental and game changing energy efficiency technology innovations.	1-2: Leverage private industry and Federally funded technology research and investment
Through program, Contractor works collaboratively with the R&D community and utilities to promote cost-effective performance enhancements.	Research & Technology	Conduct targeted emerging technologies R&D to support the Big, Bold Energy Efficiency Strategies/Programmatic Initiatives and integrated energy solutions goals.	2-2: Promote cost-effective near term performance enhancements of existing technologies
Through statewide collaborations and active participation in the CEC's PIER program, Contractor through this program expands activities that support Big Bold initiatives.	Research & Technology	Conduct targeted emerging technologies R&D to support the Big, Bold Energy Efficiency Strategies/Programmatic Initiatives and integrated energy solutions goals.	2-3: Develop initiatives aimed at PIER to support larger gains in support of Big Bold Initiatives.

2009-2011 Energy Efficiency Programs
SaveGas Hot Water Control with Continuous Commissioning
Program Implementation Plan

6) Program Implementation

a. Statewide IOU Coordination:

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

This third-party program only operates within SoCalGas's service area. The Program is designed to support and complement SoCalGas's core program activities. If this Program shares common elements with the IOU's core programs, other third-party programs, or programs in other IOU service areas, SoCalGas and the Contractor will strive to coordinate the similar activities.

b. Program delivery and coordination:

i. Emerging Technologies program

This is not applicable to this program.

ii. Codes and Standards program

This is not applicable to this program.

iii. WE&T efforts

On site training takes place in which the installation technician provides an overview of how the technology works, how to bypass the computer in case of an emergency and how to go online for systems analysis. Additionally property contact information is captured so that the system can notify the appropriate onsite personnel should a hot water issue be detected.

Contractor's administrative personnel conduct formal training for the property and management. During this training the SaveGas website is configured so that customers can go online and view their data, analyze their site and set themselves up to receive alerts for hot water issues.

iv. Program-specific marketing and outreach efforts (provide budget)

v. Non-energy activities of program

This is not applicable to this program.

vi. Non-IOU Programs

This is not applicable to this program.

vii. CEC work on PIER

The Program's contractor is participating directly in the CEC-PIER program and the technology is being utilized directly for establishing Title 20 and Title 24 guidelines.

viii. CEC work on codes and standards

This is not applicable to this program.

ix. Non-utility market initiatives

This is not applicable to this program.

c. Best Practices:

The program design incorporates various best practice elements. Specific items include:

- Program Management - Project Management: Program uses well-qualified engineering staff.
- Program Management - Reporting and Tracking: Through detailed recording of installations and operating parameters, the program has a well-designed program tracking system to support the requirements of evaluators as well as program staff.
- Program Implementation – Marketing and Outreach: The program sells the customer benefits first, then energy efficiency and keeps benefits quantifiable in economic terms.

Lessons learned is that customers are very open and eager to embrace programs that are supported and successful. Most of the installations done under the 2006-2008 program were exploratory in nature (to verify the technology). Now that things have been verified, customers are looking to expand the program.

d. Innovation:

Control technologies are not new; however, the Program's user interface is new and innovative. Through the Program's technology, customers are kept 100% aware of the savings they are achieving and any energy waste that may be occurring as a result of hot water system issue, failures, etc. Through this interface, energy conservation is now elevated to become an integral part of daily operations as opposed to a concept or widget that is installed and forgotten.

e. Integrated/coordinated Demand Side Management:

The savings data generated from the SaveGas Hot Water Control with Continuous Commissioning program is being directly used by CEC/PIER in a statewide study. Additionally the Program's contractor has been directly consulted as a result of the data, market penetration and experience in helping to craft title 21 and title 24 codes and standards.

When Contractor technicians perform an onsite survey of the hot water systems, they will often encounter additional energy savings opportunities beyond the scope of the

Contractor DHW program. The opportunities will be noted and relayed to Contractor's primary contact within the customer organization.

f. Integration across resource types (energy, water, air quality, etc):
This program does not integrate across resource types.

g. Pilots:
The Kitchen and Laundry components of the 2009-2011 implementations are pilot projects. The environment for Laundry and Kitchens is identical to that of other DHW applications and preliminary data is showing similar savings results.

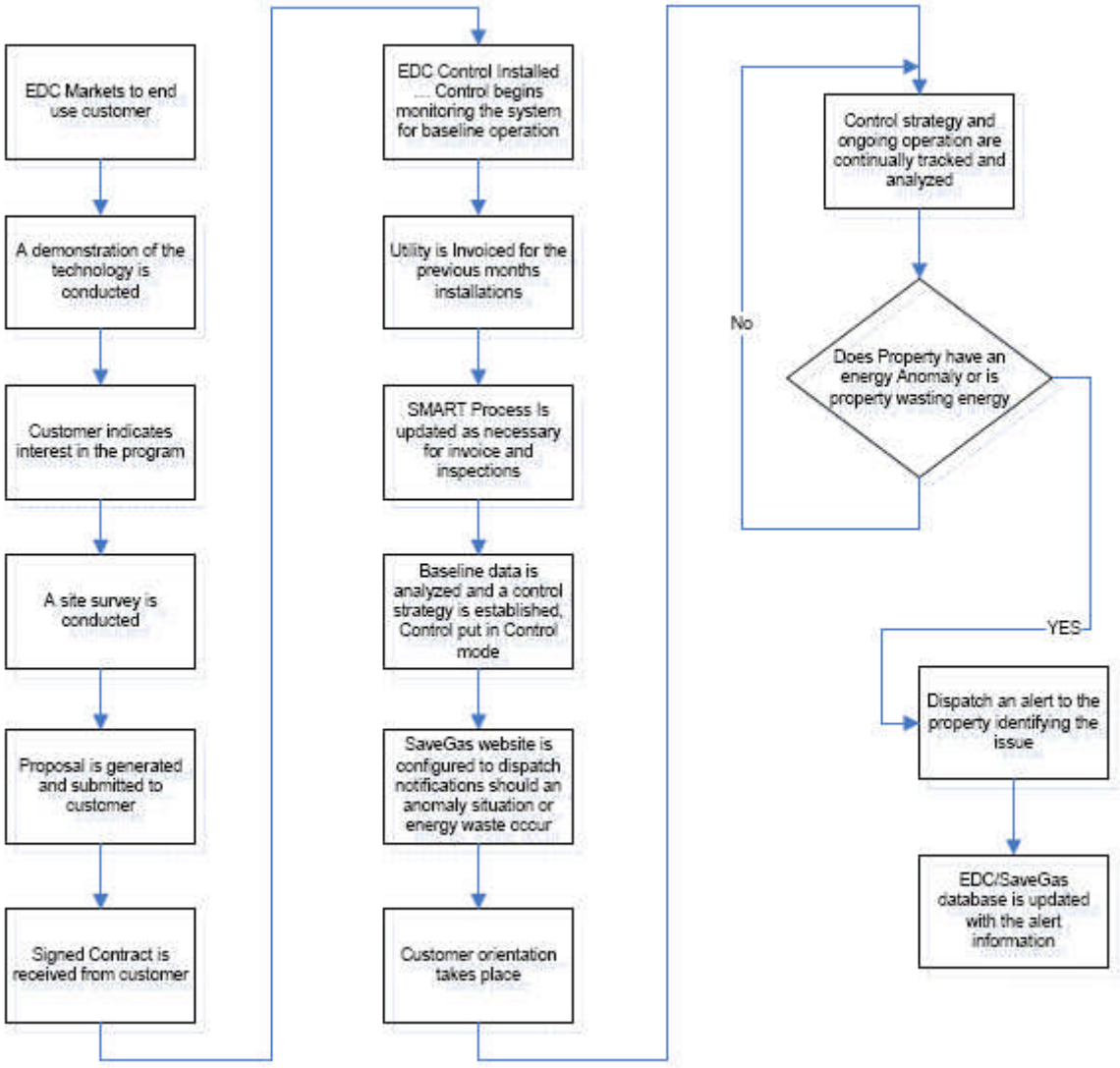
h. EM&V:
The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2009-2011 after the program implementation plans are filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy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

7) Diagram of Program:
No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6.

2009-2011 Energy Efficiency Programs
SaveGas Hot Water Control with Continuous Commissioning
Program Implementation Plan

8) Program Logic Model:

Third party programs are an implementation channel and are included in the appropriate market segment logic models. No specific logic model for a particular third party program has been developed. However, provided below is a diagram of the Program's implementation.



2009-2011 Energy Efficiency Programs
Small Industrial Facility Upgrades
Program Implementation Plan

1) Program Name: Small Industrial Facility Upgrades
Program ID Number: TDB
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Small Industrial Facility Upgrades
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Small Industrial Facility Upgrades Program will assist Southern California Gas Company (SoCalGas) small industrial customers in becoming more energy efficient and productive through the adoption of existing, including low-penetration, technologies. The program will target small industrial customers with annual gas usage less than 50,000 therms. The Program will offer proven measures currently used in SoCalGas's Local Business Energy Efficiency Program (BEEP) and Express Efficiency Program Rebate Program (EERP). These measures include calculated custom process improvements for heat recovery, process equipment replacement, and equipment modernization, furnace and oven improvements, and excess air reduction. The Program will also include deemed measures such as boilers, water heaters, and steam trap replacements, along with insulation improvements.

There are approximately 14,500 small industrial customers, defined as a meter with annual usage between 10,000 and 30,000 therms that would benefit from the program. In addition, there are 2,645-meter installations for customers with annual usage between 30,000 and 50,000 therms. Industrial customers with annual usage below 10,000 therms are very small with limited cost-effective energy savings potential; however, the Program will address such customers if needs are identified.

Because the small industrial market segment has limited energy savings opportunities, and this market segment is struggling to focus on the core business and rarely has the time or expertise to focus on energy issues, the vendor community's focus is on repair and maintenance instead of new energy efficient equipment and practices. As a result, a "one size fits all" marketing approach has not been effective.

2009-2011 Energy Efficiency Programs
Small Industrial Facility Upgrades
Program Implementation Plan

Targeted market penetration levels will be achieved through a combination of effective marketing combined with a program that creates a financial benefit to the customer. The elements below are designed to begin the market transformation process in this market segment.

Specific elements include:

- Offer an inclusive set of 33 itemized and custom measures for natural gas equipment that address operational concerns raised by small industrial facility managers and owners. As is well known, managers and owners do not always share the same perspectives, which is why the selected measures address both managerial (providing reliable improvements to the facility's operations) and owner concerns (offering cost-effective, sustainable savings of natural gas).
- Offer both comprehensive and targeted surveys and audits. This flexibility to suit the customer and conditions will keep the Program effective and cost-effective.
- Use marketing and implementation strategies that encourage sequential projects with an individual customer. The difficulty is in establishing the trust and credibility of the promise of energy savings; once it is established, customers become believers. With realized benefits from a first project and short payback, spillover activities are fairly common.
- Include not only small industrial facilities, but also local equipment vendors and active work with industrial associations like the California League of Food Processors, the California Mining Association, the Chemical Industry Council of California, and the Brewers Association, whose members routinely share information, advice, and tips.
- Work closely with SoCalGas's representatives on identifying customers "ripe" for change.

b) List measures

The table below includes all of the available measures:

Based on SoCalGas Local Business Energy Efficiency Program (BEEP)	Unit Definition	Rebate ($/Unit)
PER Furnace Replacement	Therm	0.80
PER Oven Replacement	Therm	0.80
CPI Heat Recovery	Therm	0.80
PER Misc. Process Equip. Replacement	Therm	0.80
CPI Equip. Modernization	Therm	0.80
EER Large Vat Fryers	Unit	500.00
EER Single Rack Oven	Unit	1,000.00
EER Double Rack Oven	Unit	2,000.00
Excess Air	Therm	0.80
Thermal Oxidizer	Therm	0.80
Based SoCalGas Express Efficiency Program Rebate Program (EERP)		
Process Boiler – Steam	MBtuh	0.50
Process Boiler – Water	MBtuh	0.50
Direct Contact Water Heater	MBtuh	2.00
Storage Water Heaters (LRG >75 MBTUH)	MBtuh	2.00
Storage Water Heaters (SML <= 75 MBTUH)	MBtuh	2.00
Instantaneous Water Heaters (>= 200 MBTUH)	MBtuh	0.50
Instantaneous Water Heaters (< 200 MBTUH)	MBtuh	2.00
Space Heating Boiler – Steam	MBtuh	0.25
Space Heating Boilers - Large Water	MBtuh	0.25
Commercial Boiler (Non-Space Heat, Non-Process)	MBtuh	0.50
Tank Insulation - Low Temperature Applic. (LF) 2 in	SquareFT	3.00
Tank Insulation - High Temperature Applic. (LF) 2 in	SquareFT	4.00
Tank Insulation - Low Temperature Applic. (LF) 1 in	SquareFT	2.00
Tank Insulation - High Temperature Applic. (LF) 1 in	SquareFT	3.00
Steam Trap Replacement - Commercial <12hr/day (Dry Cleaners)	Unit	100.00
Steam Trap Replacement - Industrial <15 psig/Other Commercial 12-24 hr/day	Unit	100.00
Steam Trap Replacement - Industrial >15 psig	Unit	200.00
Pipe Insulation -Hot Water Application < 1" pipe	LinearFt	2.00
Pipe Insulation -Hot Water Application >= 1" pipe	LinearFt	2.00
Pipe Insulation - Low pressure steam <=15 psi < 1" pipe	LinearFt	3.00
Pipe Insulation - Low pressure steam >15 psi >= 1" pipe	LinearFt	3.00
Pipe Insulation - Medium pressure steam <=15 psi < 1" pipe	LinearFt	3.00
Pipe Insulation - Medium pressure steam >15 psi >= 1" pipe	LinearFt	3.00

c) List non-incentive customer services

Program services will include:

- On-site survey/audits to identify energy savings opportunities
- Design assistance to help customers understand and best achieve energy savings
- Water savings benefit calculations and inclusion of measures in the portfolio that provide water savings in addition to energy savings
- Referrals to other SoCalGas services and resources, such the Energy Resource Center.

- Referrals to other programs available in the customers' area that may help reduce consumption and reduce operating costs, and provides cash flow towards which additional energy saving improvements
- Coordination with industry associations to promote energy efficiency improvements through trusted sources and encourage market-transforming practices among equipment vendors and purchasers.

The Program will target all the major natural gas consuming systems associated with process needs within small industrial facilities.

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier.

Barrier	Solution
Lack of financing for energy efficiency improvements	Program provides targeted rebates and incentives to help customers overcome financial constraints.
Barriers to the entry of new energy efficiency technologies or systems whose efficiency or system performance levels are uncertain due to lack of experience	Program provides benchmarking and design advice and has established relationships with industry vendors/associations.
Customers have a primary focus on production, not energy efficiency	The program administration will use marketing efforts to highlight the need to also focus on energy efficiency
Lack of information about new programs and technologies	Program will utilize marketing and targeted information to educate customer on available technologies and programs available to them
Time and cost associated with hiring implementation contractors	Program will provide technical assistance, audits, and design advice.
Difficulty accessing industry-relevant technical resources	Program will provide technical assistance, audits, and design advice.
Potential language barrier with Hispanic run businesses	Program employs Spanish speaking staff

d) Quantitative Program Targets

The program is designed to provide gas energy savings through a comprehensive and integrated approach. Specific components of the program are critical to the success of the program. These key non-incentive program services are shown in Table 5.

Table 3

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Numbers of on-site survey/audits conducted for small industrial customers	16	69	80
Number of outreaches conducted to vendors and trade allies	5	10	5

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan Goals and Objectives

This program supports the Strategic Plan in the following manner:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
By incorporating water savings measures with energy savings measures and encouraging customer participation in other EE and DR efforts, the program helps develop coordinated energy and resource management objectives for the industrial sector	Industrial	Support California industry's adoption of energy efficiency by integrating energy efficiency savings with achievement of GHG goals and other resource goals.	1-1:Develop coordinated energy and resource management program for CA's industrial sector, to enhance use of energy efficiency.
By incorporating water savings measures with energy savings measures and encouraging customer participation in other EE and DR efforts, the program helps develop coordinated energy and resource management objectives for the industrial sector,	DSM Integration and Coordination	Deliver integrated DSM options that include efficiency, demand response, energy management and self generation measures, through coordinated marketing and regulatory integration.	1-3: Develop integrated DSM programs across resources, including energy, water, and transportation.

6) Program Implementation

a) Statewide IOU Coordination

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing materials

v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

Coordinating efforts will be made for customers that participate in the SoCalGas Large Industrial Program in where customers' annual consumption exceeds 50,000 therms and have multiple facilities involving both large and small buildings. Additionally, the proposed program will also coordinate with implementers and other third party industrial programs for both with local utilities and municipalities. The Contractor will leverage its recruitment and site visits for all of these programs to provide comprehensive energy savings solutions.

b) Program Delivery and Coordination

The Program on as combined "systems" and "hands-on" approach examines each small industrial facility to locate multiple energy improvement opportunities and deliver optimal natural gas savings. The "systems" approach to optimizing processes captures much greater savings than is possible by simply replacing components. The Program has been further refined based on experiences gained from working at industrial and agricultural facilities. .

The "hands-on" aspect reflects a commitment to the program participant throughout the project cycle. The team leads the participant through each step of the process, making sure that all concerns and questions are addressed, and ensuring that the participant, as well as the utility, is satisfied with the project results. In addition, the team has Spanish speaking members to address an identified barrier to participation.

i. Emerging Technologies program

Not applicable to this program.

ii. Codes and Standards program

Not applicable to this program.

iii. WE&T efforts

Not applicable to this program.

iv. Program-specific marketing and outreach efforts (provide budget)

The Program will use several marketing methods to reach the targeted customers, including face-to-face contact with equipment vendors, trade associations, and directly with customers; direct mail, inserts in trade publications, and via web access. The marketing plan is designed to educate small industrial facilities about the bottom-line benefits of identifying and installing energy efficiency measures in their plants and about the technical and financial assistance available through the Program and other SoCalGas programs. The marketing materials will be designed to increase awareness and participation, and explain the energy and non-

energy benefits of the Program. Examples of potential marketing materials include:

- Brochure with general information about the program, application procedures, and benefits
- Letters and inserts for targeted mailings and email campaigns to small industrial facilities and vendors
- Newsletter articles, fact sheets, and case studies for inclusion in publications read by small industrial facility owners and managers

The design of this program is based on the experience and success of implementation of similar programs, familiarity with the technology and targeted markets, and the extensive technical knowledge and personnel resources available.

v. Non-energy activities of program
Not applicable to this program

vi. Non-IOU Programs
Not applicable to this program

vii. CEC work on PIER
Not applicable to this program

viii. CEC work on codes and standards
Not applicable to this program

ix. Non-utility market initiatives
Not applicable to this program

c) Best Practices

The program design incorporates various best practice elements.[2] Specific items include:

- Program Theory and Design: The program has developed a sound program plan and has a clearly articulated program theory.
- Program Management: Program uses well-qualified engineering staff and motivates field staff and efficiency service providers.
- Program Participation Process: Program keeps the application process and forms from being overly complex and costly to navigate while at the same time not being over-simplified, provides technical assistance to help applicants through the process, and develops a cadre of trade allies who can then assist customers through the process.
- Marketing and Outreach: Program will market energy efficiency options directly to end users at the earliest decision-making stages of major equipment or facility modifications, use personal marketing, where cost effective, to identify and

[2] See Volume S – Crosscutting Best Practices Report and Project Summary, National Energy Efficiency Best Practices Study, December 2004.

address customer-and industry-specific barriers and customer issues, develop and disseminate case studies of key technologies and segment applications.

Based on previous experience, the program includes the following lessons learned:

- Targeted surveys and audits that focus on specific aspects of the operations result in more effective project development than do comprehensive audits. Experience has been only 12% of comprehensive audits have produced energy savings projects for small to medium sized industrial customers. Customers want to start with smaller projects that address their immediate needs. This allows them to become familiar with the process, while achieving some energy savings at lower cost and risk.
- In our experience the most useful way to characterize customers is (a) those that are already knowledgeable about their energy utilization and know where and how they can save energy and (b) customers who don't already know much about their facility's detailed energy use, nor what specific opportunities exist for energy savings. For the first group of customers, the program will serve as an enabler. For the second group, the program is an educator, facilitator, and opportunity identifier.
- Customers with industrial processes typically prefer to make changes to one specific aspect of their operation at a time. They want to see success with one measure before considering others. Many times customers install additional measures as their satisfaction with and confidence in our advice builds. Repeat contact is quite effective in bringing projects to completion and making subsequent projects more likely.

d) Innovation

The strategies to fully engage this market segment in the concept of energy efficiency will include:

- building upon the success of the vendor outreach utilized by SoCalGas to identify customers that are likely to respond positively to a more comprehensive approach;
- working with SoCalGas representatives to develop a strategic plan targeting this sub-segment;
- developing partnerships with successful additional vendors and creating strategies that identify additional candidates for replacements to capture energy savings opportunities and,
- mining past SoCalGas activities including energy audits and Energy Van visits to help target customer specific recruitment efforts.

e) Integrated/Coordinated Demand Side Management

Although this is not an Integrated Demand Side Management program, the energy efficiency (EE) and demand response (DR) capabilities will allow the program to integrate and implement strategic objectives for the SoCalGas small industrial customers. The process will provide an opportunity to be able to identify electric energy savings and other utility savings within this market segment that might otherwise be missed in the

absence of the program. Coordinating efforts will be done with core programs, SCE and other utilities to identify these opportunities and realize all energy saving opportunities.

f) Integration Across Resource Types (energy, water, air quality, etc)

Continuous expansion on the existing relationships will be done with the South Coast Air Quality Management District (SCAQMD) and California Air Resources Board (CARB). Integration efforts with these agencies will support the effort identify energy saving opportunities to help the small industrial customers meet increasingly stringent air quality regulations. Additional integration efforts will also build upon the increased attention to natural gas energy efficiency associated with AB32 and the increased national emphasis on reducing greenhouse gases. The audits will include information on the amount of greenhouse gas reductions are associated with each energy saving project.

g) Pilots

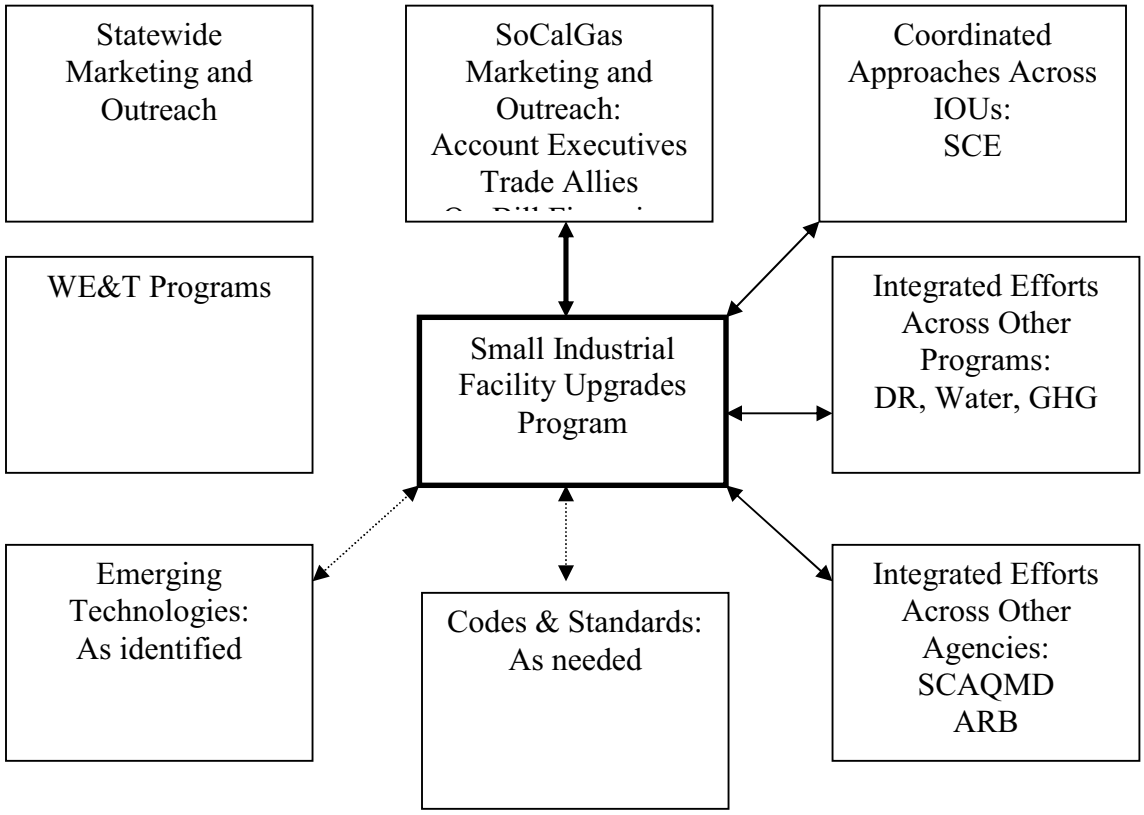
Contractor is not planning any pilots associated with this program.

h) EM&V

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

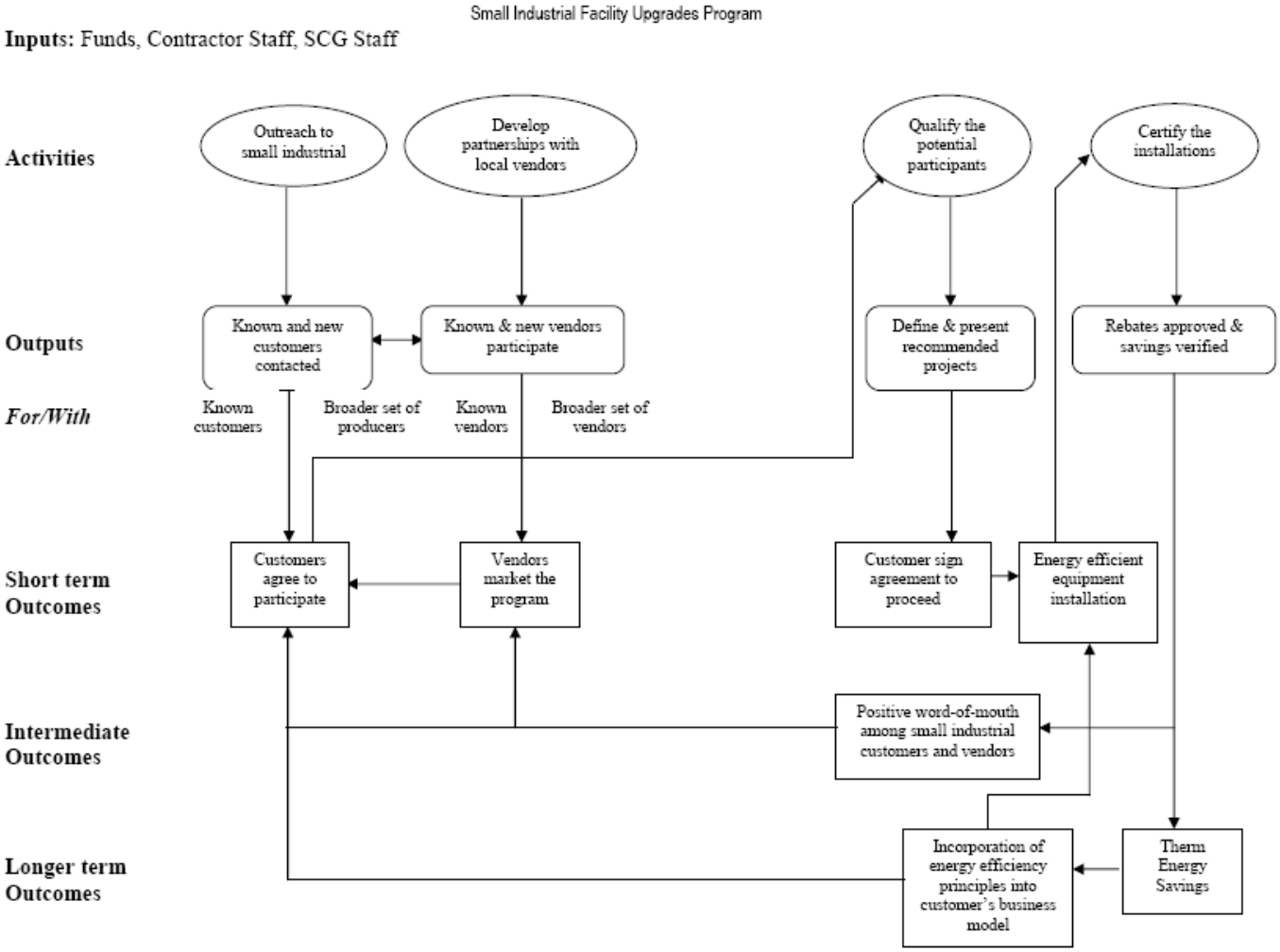
2009-2011 Energy Efficiency Programs
Small Industrial Facility Upgrades
Program Implementation Plan

7) Diagram of Program



2009-2011 Energy Efficiency Programs
Small Industrial Facility Upgrades
Program Implementation Plan

8) Program Logic Model



2009-2011 Energy Efficiency Programs
Steam Trap and Compressed Air Survey
Program Implementation Plan

1) Program Name: Steam Trap and Compressed Air Survey
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Steam Trap and Compressed Air Survey
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Program for Steam Trap and Compressed Air Survey (SCAS) will provide compressed air and steam audits and evaluations to small, medium, and large industrial customers throughout the Southern California Gas Company (SoCalGas) territory. All customers of SoCalGas with air and steam systems will be eligible to participate in the program. Targets will be industrial customers, but other qualifying facilities including governmental, institutional, and military facilities may also participate if they meet the program requirements. This program is designed for a range of industrial customers from small to very large industrial processes with gas consumption greater than 50,000 therms per annum.

Audit activities carried out in the field at the customer site will include the identification of a baseline of current energy consumption, field analysis of energy consuming equipment, application of best practices, use of standard engineering protocols for design, identification of alternate methods of accomplishing the same task with less energy input, methods to maintain quality, reliability, and safety of plant operations while achieving the energy savings goals. Each project will be unique based on the requirements of the industry, system, and plant. The project will also account for other unique company or industry factors such as: required project Internal Rate of Return (IRR), safety requirements, back-up or redundancy requirements, quality of steam and air, and tolerance for risk.

The Program will provide focused support and education to help customers become aware of and participate in other SoCalGas programs and/or qualify for incentives and rebates. The follow-on services are designed to keep the customer engaged in the process of moving toward project implementation with additional engineering support, project review services, and customer defined services.

2009-2011 Energy Efficiency Programs
Steam Trap and Compressed Air Survey
Program Implementation Plan

Presently there are approximately 25,000 customers with industrial processes within the SoCalGas service territory. Targeted customers are (but not limited to) those with the following North American Industry Classification System (NAICS) manufacturing codes: 320000 (Refineries); 322000 (Pulp & Paper Manufacturing); 311000 (Food Manufacturing); 325000 (Chemical Manufacturing); and 331000 (Primary Metals). This program is designed for a range of industrial customers from small to very large industrial processes with gas consumption greater than 50,000 therms per annum.

Targeted market penetration levels will be achieved through a combination of effective marketing combined with a program that creates a financial benefit to the customer. Specific elements include:

- Increased customer awareness about existing energy use and practices;
- Increased understanding of technical options and financial impacts related to energy efficiency building improvement strategies;
- Increased comprehensiveness of projects implemented due to the unbiased and vendor-neutral information on the best operating practices and equipment upgrades; and
- Setting of baseline energy use at the facility to allow submittal of projects through other existing SoCalGas programs.

This is a non-resource program without energy saving goals. Follow-up with customers will be maintained to facilitate the implementation of projects.

b) List measures

The Program will provide in-depth audits and evaluations of gas consuming equipment and systems, but will not offer incentives.

c) List non-incentive customer services

Customers will receive various levels of services under this Program including: education, in-field audits and evaluations, engineering reports, follow-on support, and services to help with project implementation.

Educational opportunities will be provided to all customers in areas of compressed air, steam systems, boilers, and other gas consuming equipment and systems. Education will be provided through trade shows, case histories, web-related information, and seminar series funded directly through the program.

2009-2011 Energy Efficiency Programs
Steam Trap and Compressed Air Survey
Program Implementation Plan

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Program Design to Overcome Barriers

The success of this program will depend upon the ability to overcome actual and perceived market barriers. The table below lists some of the barriers to energy efficiency in an industrial setting and the mitigating strategies that this program will use to surmount each obstacle.

Barrier	Solution
Companies don't have the funds and qualified staff to identify energy efficiency opportunities.	Energy audits are provided at no cost to qualifying facilities.
Managers don't have time to schedule audits/manage projects.	The program will provide a minimally invasive audit procedure and will offer guidance on implementation.
End users are focused on safety and quality of raw goods and finished products.	Team members include professionals who have had successful careers working with energy efficiency projects, speak the language of industry and understand customer concerns.
Energy efficiency projects do not meet investment criteria, or other projects are more competitive.	A pre-qualifying questionnaire will explore customer investment criteria and identify sites most likely to yield very competitive projects. Availability of incentives through other SoCalGas programs may enhance the attractiveness of energy efficiency projects.
Companies lack investment capital.	This program will identify cost effective measures and help customers identify funding sources from SoCalGas and other utilities to facilitate installation.
Companies are wary of information provided by vendors.	The program will provide vendor-neutral audits, courses, information, and recommendations.
Companies are wary of new technologies that affect or change common processes.	This program will focus primarily on technologies that are fully commercialized, readily available and well proven, minimizing the appearance and likelihood of the risk of adverse process impacts.

The Program will utilize a proven hands-on approach that looks at the entire manufacturing process of each participant to deliver program results. This process

includes collecting the right information at the site, providing rigorous engineering evaluations, imparting the results to the customer in a clear and concise format, and following through to make sure the projects are implemented to achieve the desired energy savings.

d) Quantitative Program Targets

Table 5

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Customers Contacted	20	40	20
Audits Completed	15	30	15

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan goals and objectives

This Program supports the vision, goals and strategies of California's Long Term Energy Efficiency Strategic Plan in the following manner:

California Long Term Energy Efficiency Strategic Plan Goals and Strategies

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
Program emphasizes energy savings associated with process loads for industrial and other large customers.	Industrial	Build market value and demand for continuous improvement in industrial efficiency through branding and certification.	
The Program will make the most advanced approaches and technologies available to participating customers. Through training classes, on-site interactions with equipment manufacturers, and discussions with OEMs, the program will actively promote new ideas and approaches to the marketplace.	Research and Technology	Conduct targeted emerging technologies R&D to support the Big, Bold Energy Efficiency Strategies/Programmatic Initiatives and integrated energy solutions goals.	2-2: Promote cost-effective near term performance enhancements of existing technologies.

6) Program Implementation

a. Statewide IOU Coordination

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels

iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

Although this third party program only operates with SoCalGas's service territory and is primarily designed to support/complement the Company's core program, to the extent the Program overlaps with other IOU programs (core and third party) and can benefit from coordination with such programs, the Program will strive to coordinate activities

b. Program delivery and coordination:

i. Emerging Technologies program

The program will make the most advanced approaches and technologies available to participating customers. Through training classes, on-site interactions, and a comprehensive approach to system analysis, the program will actively promote new ideas and approaches to the marketplace.

As with the Emerging Technologies Program, the SCAS Program will seek out and promote the use and development of new technologies in the marketplace and help to promote the development of these technologies by OEMs.

There will be committed staff and resources to developing an Energy Services Business group that is focused on improving system efficiencies at customer sites. It is anticipated that the Program will help drive others in the industry to emulate its behavior in offering energy services to clients. The greater the participation by leaders in the industry with utilities and other industry drivers, the faster the marketplace will move toward more efficient products and services as the norm for doing business with industrial sites.

Issues of cost control and environmental impact are becoming more important at the corporate level of most companies and these concerns are trickling down to plant level personnel in the form of energy reduction goals and conservation targets. Funding for cost reduction programs and implementation of cost effective energy projects has increased over the past two years. In addition, market actors (Vendors, consultants, and OEMs) have made energy and environmental impact more prominent in their approach to projects.

This program will complement these trends by identifying energy projects and providing investment grade audits to allow plant personnel to evaluate additional projects and baseline energy savings in order to move from concept to implementation. The program efforts will both support general market trends and benefit from these market trends in moving customers to implementation.

Audit activities carried out in the field at the customer site will include a baseline of current energy consumption, field analysis of energy consuming equipment,

application of best practices, use of standard engineering protocols for design, identification of alternate methods of accomplishing the same task with less energy input, methods to maintain quality, reliability, and safety of plant operations while achieving the energy savings goals. Each project will be unique based on the requirements of the industry, system, and plant. Other factors that are unique to the company and industry such as required project Internal Rate of Return (IRR), safety requirements, backup or redundancy requirements, quality of steam and air, and tolerance for risk, will also be taken into account.

ii. Codes and Standards Program

Not applicable to this third-party program

iii. Workforce Education and Training

Although this program does not have a direct WE&T component as part of system design, all training opportunities will be open to the public and any person with an interest in industrial gas system efficiency is welcome to participate. All seminars and educational opportunities will be publicized throughout the SoCalGas network.

iv. Program specific marketing and outreach

The 2009–2011 SCAS Program will be marketed through various vendor, contractor, utility, and industry channels to encourage a high level of program awareness and participation.

The marketing plan is designed to both educate and foster participation in the SCAS Program. A variety of marketing methods will be employed to target potential program participants, including direct mail, trade shows, case studies, website links, and partner/affiliate marketing, as well as working directly with established customers and sister facilities. In addition, workshops designed to overcome barriers to the implementation of energy efficiency equipment and practices will be available. Educating and involving vendors and service providers will also help bring customers to the program since they have daily contact with end-users of steam and compressed air.

A key element of the early marketing approach will be to work with SoCalGas personnel to educate them about the Program. This will take the form of a technical seminar on steam and compressed air efficiency and the costs of steam and compressed air as a utility. The personnel will then be able to talk to the customers they contact on a regular basis and inform them of the availability of the program and a key link in providing information to customers regarding seminar schedules and recruiting facility personnel for seminars and projects.

Specific program materials that explain the benefits of the proposed approach and the savings will be developed. The customer can anticipate as a direct result of participating in the SCAS program, as well as implementing comprehensive, cost-effective energy efficiency projects by participating in other programs being offered by SoCalGas. These marketing materials will be prepared and distributed through established relationships with trade, local and regional organizations, and other trade allies and channels that are identified as the program proceeds.

The Program will produce the following marketing materials: An Internet site with a unique identity for the program; Web based tracking and reporting system specific to this program will be implemented; a multi-branded program brochure to be distributed to partner organizations, market participants, government agencies, and others; and case studies to convey the benefits of program participation.

Total budget for marketing and outreach is: $354,800

v. Non-energy activities of program

Non-energy activities are mainly focused on education and training services as well as project facilitation services. The program has budgeted for a total of 6 training classes over the three year program cycle, broken down further to 2 training sessions per year. In addition, trade shows and conferences will be conducted at a rate of 4 in year #1, 3 in year #2, and 2 in year #3.

vi. Non-IOU programs

In addition, the Program will interface and support non-IOU programs where applicable. These may include participation with water companies and other related industries.

vii. CEC work on PIER

The Program will also coordinate efforts with other CEC-PIER statewide programs where applicable and will support efforts by other programs in this or other sectors.

viii. CEC work on codes and standards

If applicable, the Program would support code and standard efforts for California utility industrial customers.

ix. Non-utility market initiatives

Not applicable to this third-party program.

c. Best Practices

The SCAS program incorporates a variety of approaches that are consistent with cross-cutting best practices. Specific items include[2]:

- Program Theory and Design – define and locate industrial customers with the highest potential for efficiency gains
- Program Management – clearly define program management responsibilities
- Program Implementation: Participation Process – keep participation simple
- Program Focus – Customer driven approach to analysis in order to identify projects with highest likelihood of implementation
- Utility Integration – working directly with SoCalGas Account Executives throughout the process to achieve maximum support and pull through of projects.

[2] The best practices listed below are identified in the *National Energy Efficiency Best Practices Study, Volume S – Crosscutting Best Practices and Project Summary*, Quantum Consulting, Inc., December 2004.

These elements have been refined from years of utility program experience and will result in a higher project implementation rate. This program also uses U.S. Department of Energy (DOE) standards and techniques utilizing the DOE Steam Best Practices tools and approach.

d. Innovation

The Program will use patented technologies that are unique in the industry to acquire information on current plant operations. Further, the SCAS Program will develop a website that will contain all Program educational materials and surveys relating to this Program. The site will provide ready access to industry information, links to energy efficiency technologies for the target market, benchmark tools for DOE and other sources, similar utility programs, incentive structures, and best practices information.

e. Integrated/coordinated Demand Side Management

Although this is not an Integrated Demand Side Management program, all aspects of the audit services will drive program participation in other SoCalGas programs. The greatest impact may be on programs that include steam trap measures as customers become aware of the measure, as well as identify traps in need of replacement through the audit process. Custom measures such as condensate return system upgrades, heat exchanger upgrades, boiler systems, heat recovery, and turbine installations may also show in increase in acceptance. Follow-up with customers will be maintained to facilitate the implementation of projects.

The proposed program will avoid lost opportunities by using a "hands-on" systems approach to identify all potential energy savings possibilities at each industrial facility as they relate to compressed air and steam equipment, as well as other process related equipment. Vendors have extensive end-use and process related expertise and can identify, analyze, and recommend the entire portfolio of energy savings opportunities. The program will also work to educate owners through classes, publications, case study reports, and examples; this will show owners and operators of compressed air and steam systems the true cost and value of energy efficient strategies. This program will further enhance SoCalGas's current educational efforts with the Energy Van program and training classes held in-house at the ERC or at customer sites.

f. Integration across resource types

There will be spillover of identified energy savings into electric and water savings areas. The energy and water savings will be identified where applicable in the customer report, and the customer will be encouraged to take advantage of any programs and opportunities offered by other participating utilities.

g. Pilots

There are no pilots anticipated with this program design.

h. EM&V

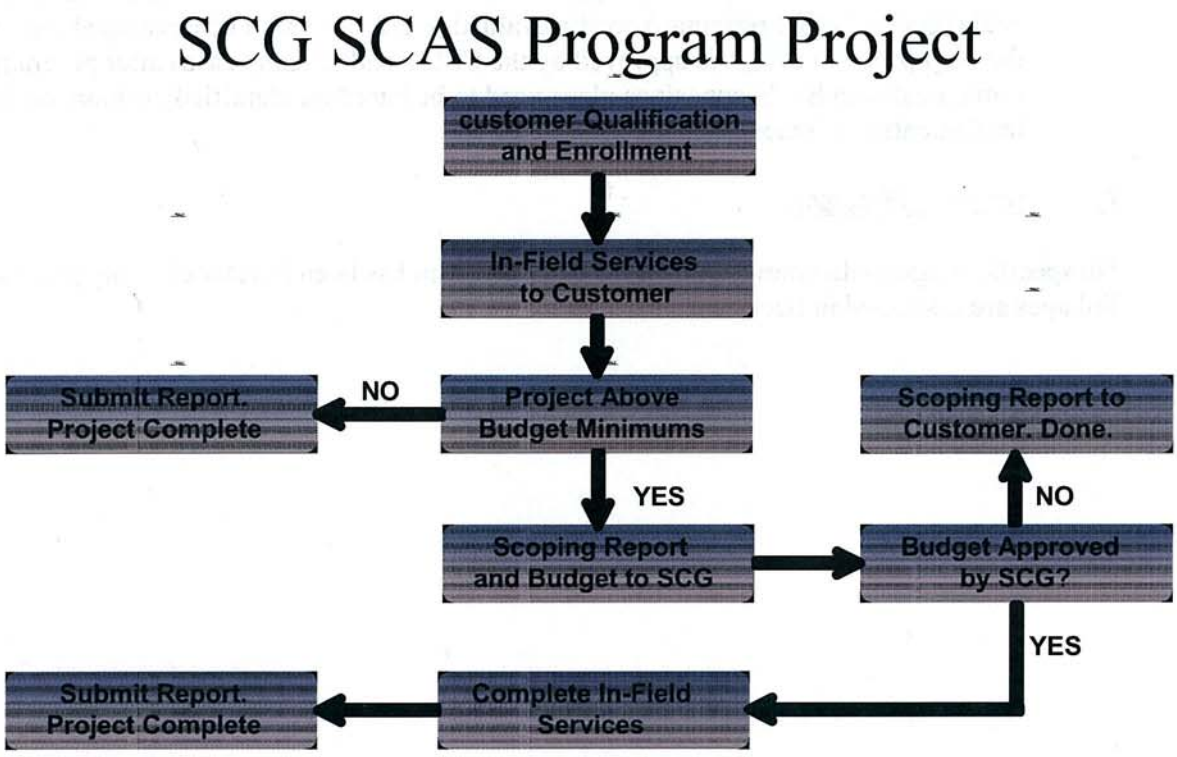
The utilities are proposing to work with the Energy Division to develop and submit a comprehensive EM&V Plan for 2009-2011 after the program implementation plans are filed. This will include process evaluations and other program-specific studies within the context of broader utility and Energy Division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

7) Diagram of Program

No specific program diagram for this third party program has been developed. Any program linkages are discussed in Section 6.

2009-2011 Energy Efficiency Programs
Steam Trap and Compressed Air Survey
Program Implementation Plan

8) Program Logic Model



2009-2011 Energy Efficiency Programs
Upstream High Efficiency Water Heater Rebate
Program Implementation Plan

1) Program Name: Upstream High Efficiency Gas Water Heater Rebate
Program ID Number: TBD
Program type: Third-Party Program

2) Projected Program Budget Table

Table 1[1]

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	TOTAL Direct Implementation	Integration Budget Allocated to Other Programs (if Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

These budget numbers are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.1 - 2009 - 2011 IOU Strategic Planning Program Budget

[1] Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.
Total Budget is the sum of all other columns presented here
Definition of Sub-Program: A "sub-program" of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

2009-2011 Energy Efficiency Programs
Upstream High Efficiency Water Heater Rebate
Program Implementation Plan

3) Projected Program Gross Impacts Table

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three-Year EE Program Gross kWh Savings	2009 - 2011 Three-Year EE Program Gross kW Savings	2009 - 2011 Three-Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

These savings values are presented in Appendix F: Energy Division Tables, Graphs & Pie Charts: Table 7.2 - IOU 2009 - 2011 Program Savings Estimates

4) Program Description

a) Describe program

The Program for Upstream High Efficiency Gas Water Heater will provide comprehensive services to establish and maintain an upstream rebate system, (i.e. distributors/wholesalers) to reduce or altogether remove the price differential between the standard and high-efficiency gas water heaters in the Southern California Gas Company (SoCalGas's) service territory. The primary objective of the program is to support and complement SoCalGas's existing Single Family Residential Energy-Efficiency Rebate Resource Program by stimulating plumber and contractor participation in energy efficiency rebates. This program is to be implemented for replacement market only and only storage gas water heaters, 50 gallons or smaller with an Energy Factor of 0.62 or higher, will qualify.

Because the program targets plumbers/contractors/installers, it will stimulate purchase of higher efficiency products through implementation of a point-of-sale rebate system at the wholesaler/distributor level. Through this system, the contractors/plumbers will be provided with extra motivation to select high-efficiency water heaters in lieu of standard-efficiency products.

The Program has the following goals:

- Work with up to 70 wholesaler locations in SoCalGas's territory to implement the upstream rebate system.
- Provide rebates for 110,000 high efficiency gas water heaters.
- Work with wholesalers/distributors and manufacturers to increase stocking of qualifying energy efficient products, thus increasing product selection for installers.

2009-2011 Energy Efficiency Programs
Upstream High Efficiency Water Heater Rebate
Program Implementation Plan

Targeted market penetration levels will be achieved through a combination of effective marketing combined with a program that creates a financial benefit to the customer. Specific elements include:

- Increased customer awareness about existing energy use and practices;
- Increased understanding of technical options and financial impacts related to energy efficiency building improvement strategies;
- Increased comprehensiveness of projects implemented due to the unbiased and vendor-neutral information on the best operating practices and equipment upgrades, and
- The program touches all involved in the chain of delivery of water heaters to the end user.

The Program will utilize promotional and sales tools that are most effective and seek to increase the quality of trade ally participation. The key design issues relating to the Upstream High Efficiency Gas Water Heater Program concern: (1) the actors targeted by the program, (2) the barriers these actors face in improving energy efficiency, and (3) the best means for intervening with the relevant actors to overcome the barriers they face. In the water heater sales process, manufacturers, distributors, wholesalers and retailers can be considered to be "Sellers" and builders/developers, plumbing contractors, landlords, and end-users can be considered to be "Purchasers." In some instances the plumbing contractors may cross the boundaries and be viewed as selling water heaters.

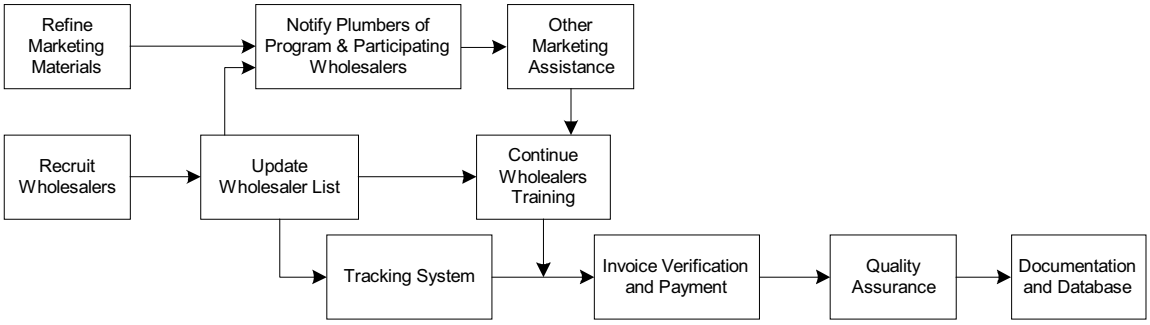
With regard to homeowners, more often than not they are purchasing on a one-time basis, usually to replace a failed water heater. Contact prior to and after the sale is minimal, if any, and the buying decision is usually made in a very short span of time (e.g., no more than a couple of hours). During the course of a year, approximately 6% of the service territory population (based on a 15-year equipment life-cycle) will be involved in the decision to purchase a water heater. In this scenario, although the end-user's requirements set the stage for the purchase, the plumber makes the actual selection of the unit; this is usually made prior to the call by the end-user. In an effort to provide immediate service, the plumber will purchase and stock several water heaters in their warehouse (sometimes a garage). If the end-user wants a special order (this would include an energy efficient unit), the end-user may experience an installation delay. This underscores the importance of placing the rebate in the hands of the plumber or contractor.

The Upstream High Efficiency Water Heater Program's theory relies on the following assumptions:

- Availability of rebates drives contractors/plumbers/installers to select energy efficient water heaters in lieu of those with standard-efficiency.
- The proposed rebate system increases participation of the contractors/installers in the program as it removes the often lengthy and cumbersome process associated with a traditional mail-in-rebate system.

- The rebate system enhances installers' experiences and leaves them with a positive impression of energy efficient products in general and SoCalGas's programs in particular.

The Program will be flexible in its approach and will collaborate with SoCalGas to finalize program design and delivery mechanisms. An overview of the process for implementation of the program is presented in the figure below.



Flow Chart of Tasks and Linkages

The program design and implementation is built upon offering a rebate at the upstream level (distributor/ wholesaler) to reduce or remove altogether the price differential between standard and high-efficiency gas water heaters. This effort is supplemented with extensive outreach efforts to plumbers and contractors to attract their attention and inform them that the prices of high-efficiency water heaters have been made comparable to those of standard-efficiency units.

Specifically, the Program will engage in the following tasks:

- Send a program announcement to the targeted wholesalers.
- Contact the prospective wholesalers to secure a meeting with the decision-maker.
- Present them the Statement of Confidentiality Agreement that we prepared for the previous High-Efficiency Water Heater programs.
- Wholesaler appointments are scheduled to ensure that the decision-maker is on the site and available to speak with a field representative upon visit.
- Provide zip codes within 20 miles of each distributor, in each of the cities, as an indicator for the zip codes where the units will be installed.
- Ask each distributor to distribute pre-printed adhesive labels to the plumbers, which will identify the rebated water heaters as high-efficiency units. Plumbers will be asked to attach these labels to each unit after installation. The plumbers, for better customer satisfaction, will be willing to attach the label indicating that the unit is high-efficiency, especially if they are charging a higher price to install a high-efficiency unit.
- Ask all program participants to sign a program agreement that details the responsibility of each party. A program manual will also be prepared and provided to participating facilities.

- Request (wherever possible) to attend the weekly or monthly staff training sessions to make sure that all of the wholesaler's staff members are fully aware of the program and how it works.
- Assign program field-representatives to make the initial contacts, enlist the participation of the wholesalers, perform any required training, and provide continued support.
- Prepare monthly reports to SoCalGas in compliance with SoCalGas's reporting requirements to the CPUC.
- Work with manufacturers to select products that qualify for rebate.
- Make the incentive payments to a wholesaler within 10 working days of receiving their invoice confirming their purchase/sale of the high-efficiency gas water heaters.
- Verify purchases through computer tracking. Purchases of five or more water heaters are investigated further to ensure that the purchases are not for new construction projects.
- Prepare a report that documents work on the Upstream High Efficiency Gas and Electric Water Heater Program. The report will include statistics on the number of wholesalers recruited to participate in the program and on their sales of high-efficiency gas and electric water heaters to plumbing contractors.
- Matrix will be responsible for all aspects of the program. There will be no subcontractors.

The current economic situation (e.g. high energy costs and awareness), has presented the industry with unprecedented opportunities to market and promote energy-efficiency measures, programs, and most importantly, the frame of mind to adopt economic energy-wise strategies that will help sustain the effort into the far future.

b) List measures

Program Energy Efficiency Measures and Incentives

Measure	Incentives (per unit)
0.62 Gas Water Heater	$15
0.63 Gas Water Heater	$15
0.64 Gas Water Heater	$15

c) List non-incentive customer services

The services provided through the program will encompass all aspects of project implementation, including: establishment of a rebate system for distributors/wholesalers and delivery of continuing support to the distributors/wholesalers. This effort will be supplemented with extensive outreach effort to plumbers and contractors to attract their attention and let them know that prices of high-efficiency water heaters have been made comparable to those of standard-efficiency units. The program will be available in all SoCalGas territory and will involve gas water heating end uses.

2009-2011 Energy Efficiency Programs
Upstream High Efficiency Water Heater Rebate
Program Implementation Plan

5) Program Rationale and Expected Outcome

a) Quantitative Baseline and Market Transformation Information

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

Market Transformation has not been a major focus of the California energy efficiency programs since the energy crisis. Consequently, relatively little attention has been given in recent years to identifying and gathering data on indicators of change towards market transformation. For some programs or sub-programs that promote a single end use or measure, there may be some data available for this purpose, probably from industry sources, that we have not yet identified. For many of the programs, however, this kind of long-term, consistent, and expensive data collection has not been done in California.

The utility program planners have worked closely with their respective EM&V staffs and with each other to identify available information and propose potential metrics. Each utility and each program has some data available, but attempts to distill the limited available information into a common set of agreed-upon metrics have proved far more difficult to accomplish. Offering metrics in which there is not strong confidence would not be productive. Therefore, the utilities respectfully exclude "draft" metrics at this time and instead suggest a means of developing meaningful indicators.

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and administer studies to gather and track consistent, reliable and valid baseline and market effects data. We would propose to use the program logic models and The California Evaluation Framework (2004) as guides, and to begin this work after approval of the Application using funding provided for Evaluation, Measurement & Verification.

We expect that the baseline studies (1) adequately describe the operation of markets that are targeted by a program, (2) confirm our tentative identification of measurable parameters that would indicate changes towards greater efficiency in the market(s) and that are likely to be affected by the program, and (3) gather the current values of those parameters, to serve as baselines against which future market movement can be tracked.

b) Market Transformation Information

Table 4

	Internal Market Transformation Planning Estimates		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

As explained immediately above, the utilities propose to provide these draft metrics when available.

c) Market Barriers

The following table provides descriptions of the barriers that Program seeks to address and the solutions the Program proposes to overcome the barrier:

Barrier	Solution
The price differences between high and standard-efficiency units limit stocks of high-efficiency units as higher prices can cut into profits. Consequently, a retail level mail-in rebate program can tend to have lower participation rates.	Provide an upstream rebate to decrease or eliminate this wholesale price differential
Many customers are still unaware of rebates	Ensure active marketing
Plumbers may not be willing to supply the high-efficiency units due to the additional cost to stock them.	By moving the point of rebate to the upstream level, the contractors/plumbers are able to get discounts on high-efficiency unit wholesale prices. Thus providing the incentive to the contractor/installer to purchase the energy efficient unit.
Because the end-use customer needs a replacement water heater immediately, the plumber makes the actual selection decision	Ensure that the incentive goes directly to the plumber

d) Quantitative Program Targets

The Upstream High Efficiency Gas Water Heater Rebate Program will provide rebates for 110,000 high efficiency gas water heaters by coordinating with 70 wholesalers.

Table 3

Upstream High Efficiency Gas Water Heater Rebate	Program Target by 2009	Program Target by 2010	Program Target by 2011
Gas water heaters sold by wholesalers 0.62 EF or higher	35,000	40,000	35,000

Note: Values provided represent yearly targets.

e) Advancing Strategic Plan Goals and Objectives

The Program supports the Strategic Plan in the following manner:

Description	Strategic Plan Sector	Strategic Plan Goal	Strategic Plan Strategy
Reduces energy consumption in the existing residences.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-1: Deploy full-scale Whole-House programs.
Encourages and promotes widespread demand for energy efficient measure.	Residential	Transform home improvement markets to apply whole-house energy solutions to existing homes.	2-2: Promote effective decisionmaking to create widespread demand for energy efficiency measures.

6) Program Implementation

a) Statewide IOU Coordination

i. Program name
ii. Program delivery mechanisms
iii. Incentive levels
iv. Marketing materials
v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
vi. Similar IOU and POU programs

The primary objective of the program is to support and complement SoCalGas's existing Single Family Residential Energy-Efficiency Rebate resource program by stimulating plumber and contractor participation in energy efficiency rebates.

A similar program is being implemented in Pacific Gas and Electric Company's service territory, with the same incentive levels and methods of allocation of incentives between wholesalers and plumbers. This program recognizes that end-users could apply for rebates for purchase of high-efficiency water heaters. However, the number of such applications is quite small, relative to the market that this program intends to penetrate.

Both programs will use similar marketing material and methods of outreach to maximize marketing effectiveness. Similarly, rebate processing and payment for both programs will be done in conjunction to maximize administrative efficiency.

When the Contractor becomes aware of other water heater programs it will mount a coordinated effort to share marketing materials and delivery strategies to maximize effectiveness.

2009-2011 Energy Efficiency Programs
Upstream High Efficiency Water Heater Rebate
Program Implementation Plan

b) Program Delivery Mechanisms

i. Emerging Technologies program

Not applicable to this program.

ii. Codes and Standards program

Not applicable to this program.

iii. WE&T efforts

This is an upstream/midstream program. Since the water heaters are normally replaced on an emergency basis, the individual customers would not be screened. However, the program provides education and outreach through the entire water heater delivery chain, including the end user.

- The manufacturers, who are involved in making sure that adequate high efficiency units are manufactured and delivered to the wholesalers and distributors, will get the message that high efficiency units are more in demand and they will plan accordingly for the future;
- Distributors / wholesalers are trained on how to promote high efficiency units;
- Plumbers, who are informed directly through the mailings, point-of-sale program information, and through the wholesalers, are also educated to differentiate between low-efficiency and high-efficiency units and informing the end users about the high-efficiency unit that is being installed;
- Customers are informed by the plumbers about the benefits of high-efficiency units. They also are reminded about energy efficiency whenever they see the high efficiency label placed on the unit.

iv. Program-specific marketing and outreach efforts (provide budget)

The Program marketing budget is $231,000.

v. Non-energy activities of program

Not applicable to this third-party program.

vi. Non-IOU Programs

This is not applicable to this program.

vii. CEC work on PIER

The Program is in line with the CEC's PIER Building End-Use Energy Efficiency Program which focuses on lowering energy use in new and existing buildings in residential and commercial sectors.

viii. CEC work on codes and standards

This is not applicable to this program.

ix. Non-utility market initiatives
This is not applicable to this program.

c) Best Practices

The UHEWHR Program design incorporates various best practice elements. Specific items include:

- Program Theory and Design: The program has a sound program plan, links its strategic approach to policy objectives and constraints, and demonstrates a thorough understanding of local market conditions.
- Program Implementation – Participation Process: The program keeps participation simple, has participation strategies that are multi-pronged & inclusive, provides quick, timely feedback to applicants, and uses the Internet/electronic means to facilitate participation. Includes procedures to report installation details.

d) Innovation

This program is innovative in the following ways:

- Delivery of UHEWHR brings all of the trade allies (manufacturers, wholesalers, plumbers and customers) together into an integrated process. The mere fact that if a high efficiency unit is manufactured means that it is installed, and that it saves energy. This indicates that the program is comprehensive in delivery of continuous energy efficient water heating capacity to customers for about fifteen years.
- Point-of-Sale rebate keeps plumbers coming back for more. Other programs (e.g. mail-in-rebates) take time to process rebate payments.
- Midstream market demand makes manufacturers produce more high efficiency models. This pressure would not be felt as strongly if the program rebated the end user.
- The labels affixed to the high-efficiency water heaters will create awareness in any one laying eyes on the unit about energy efficiency. This will minimize lost opportunities for energy-efficiency measures. Few other programs take this approach to customer education. The stickers display a mascot that is meant to solicit an emotional response from the customer.

e) Integrated/Coordinated Demand Side Management

This third-party program only operates within SoCalGas's service area. The Program is designed to support and complement SoCalGas's core program activities. If this Program shares common elements with the IOU's core programs, other third-party programs, or programs in other IOU service areas, SoCalGas and the Contractor will strive to coordinate the similar activities.

f) Integration Across Resource Types (energy, water, air quality, etc)

This program does not aim to integrate across resource types, but there are several interactive effects that should be noted.

- New air quality requirements drive up the cost of water heaters. Rebate programs help customers replace their water heaters when necessary.
- High efficiency water heaters are often more efficient in water usage.
- Customer education results in across-the-board conservation.

g) Pilots

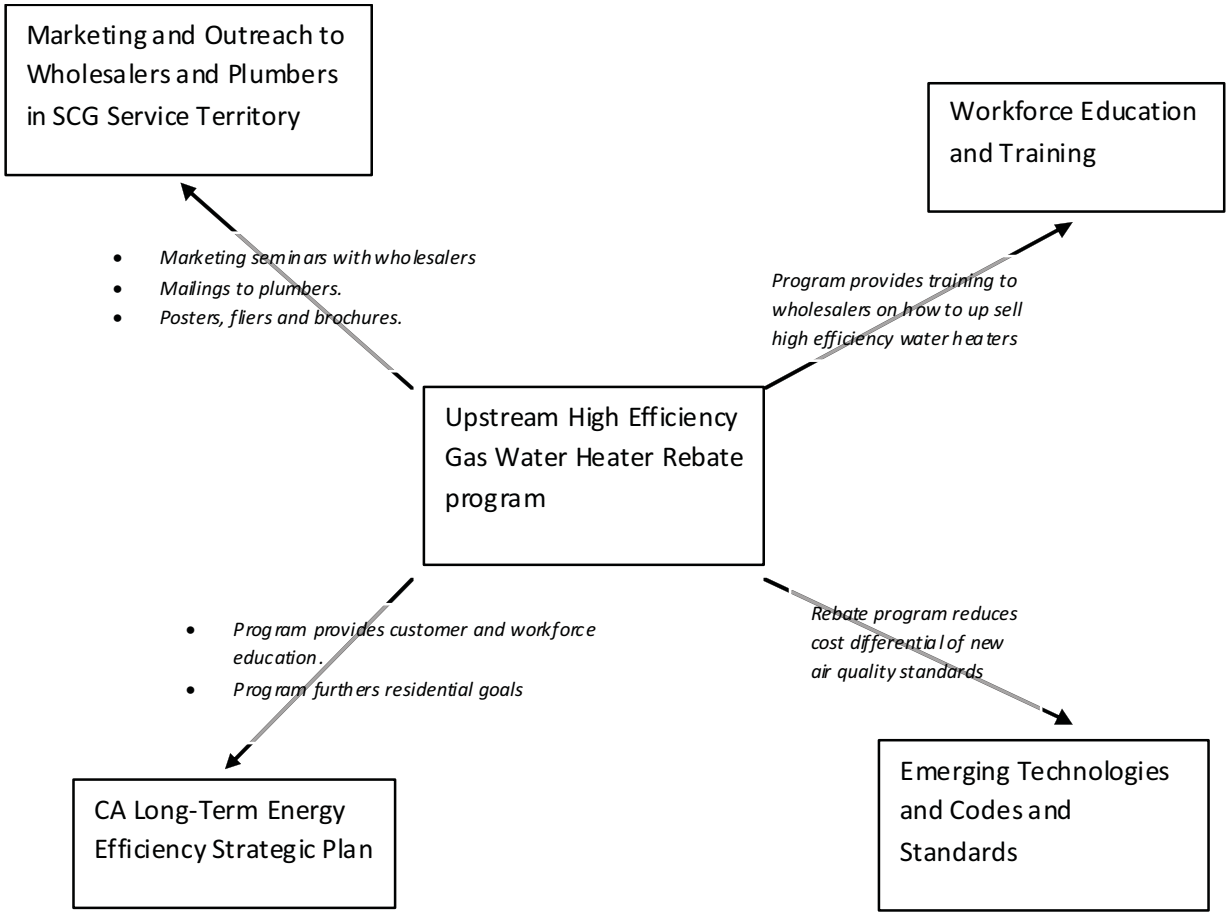
This program does not have any pilot projects.

h) EM&V

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

2009-2011 Energy Efficiency Programs
Upstream High Efficiency Water Heater Rebate
Program Implementation Plan

7) Diagram of Program



8) Program Logic Model: