

2013-2017 Energy Efficiency Programs
Southern California Regional Energy Network
Program Implementation Plan

1) Sub-Program Name:

Subprogram C: Continue and Expand the Southern California Regional Energy Center (SoCalREC)

Pilot to the entire Southern California Region

2) Sub-Program ID number: _____

3) Type of Sub-Program: Core Third Party Partnership

4) Market sector or segment that this sub-program is designed to serve¹:

- a. Residential
 - i. Including Low Income? Yes No;
 - ii. Including Moderate Income? Yes No.
 - iii. Including or specifically Multifamily buildings Yes No.
 - iv. Including or specifically Rental units? Yes No.
- b. Commercial (List applicable NAIC codes: All Municipal codes _____)
- c. Industrial (List applicable NAIC codes: _____)
- d. Agricultural (List applicable NAIC codes: _____)

5) Is this sub-program primarily a:

- a. Non-resource program Yes No
- b. Resource acquisition program Yes No
- c. Market Transformation Program Yes No

6) Indicate the primary intervention strategies:

- a. Upstream Yes No
- b. Midstream Yes No
- c. Downstream Yes No
- d. Direct Install Yes No
- e. Non Resource Yes No

¹ Check all that apply

7) Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC)

ELECTRI:	TRC <u>0.70</u>	PAC <u>1.55</u>
GAS	TRC <u>1.20</u>	PAC <u>1.57</u>

8) Projected Sub-Program Budget

Table 1 - Electric (Subprogram C): Projected Sub-Program Budget, by Calendar Year²

Sub-Program C: SoCalREC	Program Year		
	2013	2014	Total
Admin (\$)	548,226	548,226	1,096,452
General overhead (\$)	0	0	0
Incentives (\$)	0	0	0
Direct Install Non-Incentives (\$)	6,510,508	6,510,508	13,021,016
Marketing & Outreach (\$)	484,629	484,629	969,257
Education & Training	0	0	0
Total Budget	7,543,363	7,543,363	15,086,725

Table 2 - Gas (Subprogram C): Projected Sub-Program Budget, by Calendar Year³

Program Year

² Individual utility specific information to be provided in this table

³ Individual utility specific information to be provided in this table

Sub-Program C: SoCalIREC	Program Year		
	2013	2014	Total
Admin (\$)	54,507	54,507	109,015
General overhead (\$)	0	0	0
Incentives (\$)	0	0	0
Direct Install Non-Incentives (\$)	647,308	647,308	1,294,617
Marketing & Outreach (\$)	48,184	48,184	96,369
Education & Training	0	0	0
Total Budget	750,000	750,000	1,500,000

Table 3 - Combo (Subprogram C): Projected Sub-Program Budget, by Calendar Year⁴

Sub-Program C: SoCalIREC	Program Year		
	2013	2014	Total
Admin (\$)	602,733	602,733	1,205,467
General overhead (\$)	0	0	0
Incentives (\$)	0	0	0
Direct Install Non-Incentives (\$)	7,157,816	7,157,816	14,315,633
Marketing & Outreach (\$)	532,813	532,813	1,065,626
Education & Training	0	0	0

⁴ Individual utility specific information to be provided in this table

Total Budget	8,293,363	8,293,363	16,586,725
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9) Sub-Program Description, Objectives and Theory

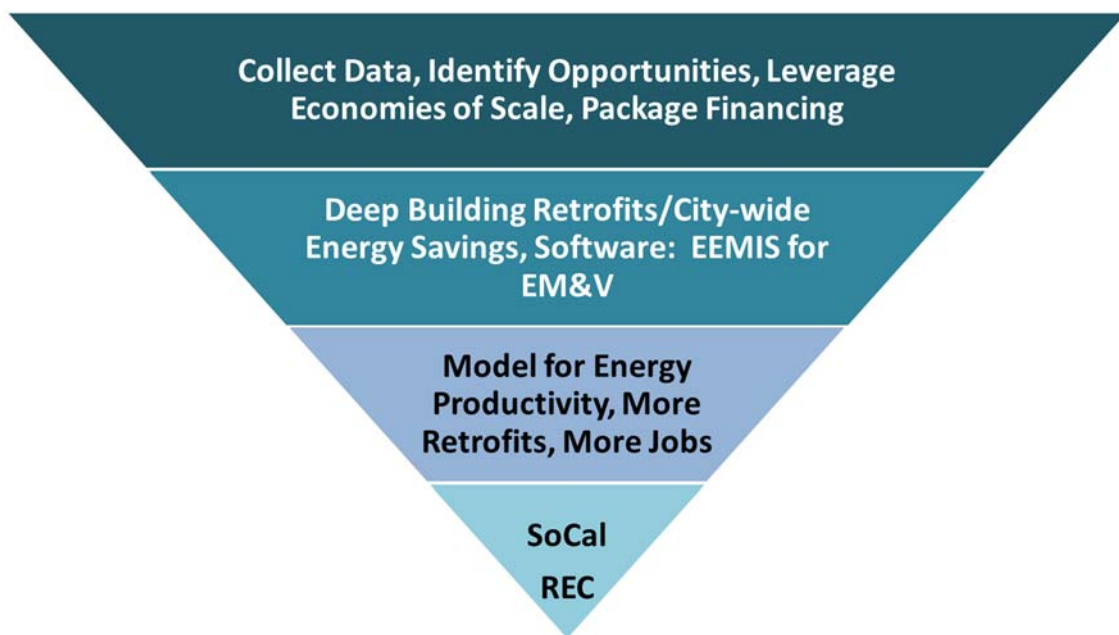
a) Sub-Program Description and Theory:

The Southern California Regional Energy Network (SoCalREN) will expand Southern California Regional Energy Center (SoCalREC) activities that were piloted under SCE Flight 5.6 and EECBG funding to all participating jurisdictions in the Southern California region. SoCalREC is a local government pilot project launched by Los Angeles County and the City of Huntington Beach that will end in 2012. The SoCalREC pilot demonstrates how Los Angeles County, in conjunction with numerous participating cities, counties and local government partnerships, can work together under a regionally-focused program to facilitate a broader regional energy reach in Southern California and dramatically increase energy efficiency in local governments and local communities. SoCalREC already has 55 local government partners and has identified over \$20 million in previously untapped municipal facility projects for potential implementation under a creative, aggregated regional financing program. Its primary focus, and ultimately that of the proposed SoCalREN, is to demonstrate how joint actions by a broad group of engaged cities can add value to and work in concert with existing Local Government Partnerships and significantly expand the innovative implementation of cost-effective energy efficiency projects. The SoCalREC provides a credible and feasible plan to achieve Goal 5 of the CEESP: local government energy efficiency expertise becomes widespread and typical.

The SoCalREC team will access untapped and underserved markets to drive greater reductions in energy use, create jobs and prudently invest ratepayer funds for significant energy management benefits in

local communities. SoCalREC will be instrumental in driving the energy services marketplace from an over reliance on sole source approaches to a more competitive selection and contract award process based on best value for end users through greater use of standard terms and conditions and value pricing. Very significantly, SoCalREC will also serve jurisdictions in the region that are not presently involved in an LGP program as well as work closely with the current IOU local government partnership programs to ensure complementary program delivery and leveraged resources without duplicating efforts..

Figure 25 (Subprogram C): The SoCalREC Big Picture



For the 2013-2014 transition period, specific program elements and services of the SoCalREC will be primarily focused in the following six (6) functional areas. SoCalREC budget is a combined budget for all components in the amount of \$16,586,725.

C1: Regional procurement program that develops and implements aggregated purchase, acquisition and management for energy projects, services and equipment - \$6,711,540

- Identify projects that are suitable for aggregate purchasing strategies, i.e. street light retrofits, VFDs on municipal pool pumps, efficient lighting and HVAC systems, etc.
- Facilitate collective procurement processes by developing RFQ, RFP and other project bidding and contracting templates as well as evaluation expertise and assistance for review of proposals and bid submittals aimed at creating a short list of approved vendors with negotiated pricing, simplifying the process for public agencies to utilize.
- Coordinate cost-effective procurement activities and project management/implementation approaches across all participating jurisdictions.
- Create templates and approaches for restructuring of basic service approaches for infrastructure assets described above to identify comprehensive solutions that address combined energy, operations and maintenance needs.
- Prepare meaningful and straightforward case studies that not only present 'best practices' and accomplishments by the SoCalREC and participating SoCalREC jurisdictions, but also clearly explain the challenges, pitfalls and barriers that were confronted and overcome in the process. These case studies will be disseminated both within the SoCalREC and more widely to other cities and counties throughout the state.

C2: Integrated and comprehensive retrofits to develop high performance buildings and infrastructure for municipalities in the SoCalREN region - \$6,655,532

- Develop a building energy/resource consumption database for facility benchmarking and application of building rating systems.
- Implement an Enterprise Energy Management Information System (EEMIS) for public buildings and facilities that automates and expedites large portions of energy project identification and development on a shared platform, such as the LA County EEMIS.

- Provide EEMIS training and overall administration.
- Provide EEMIS access to a number of both public and private buildings within the region.
- Coordinate information from other Utility Manager Systems used by other jurisdictions with EEMIS information.
- Design and implement a searchable web-based energy mapping system that lists local government energy efficiency project details including summaries for kWh and therm savings totals both within jurisdictions and across the region.
- Provide energy project development and management services.
 - Provide technical evaluation and analysis resources, project procurement and management services which “fill the gaps” in existing offerings.
 - Provide high quality energy analysis including technical investment level audits and evaluations for public facilities that “fill the gaps” in existing offerings.
 - Tap expertise of a technical advisory group to identify best practices and appropriate technology for municipal energy projects which can be used for comprehensive retrofits or as an aggregated procurement measure.
- Provide centralized and standardized project management services.
 - Create standard forms, templates and documents for project specifications, procurement processes, contracting and project/construction management.
 - Provide a centralized and accessible online collaborative virtual workspace (such as Microsoft Sharepoint) and online library for development and dissemination of shared tools and templates that provides a very basic starting point for interested users.
 - Focus on pre-packaged measures and procurement services and coordinate multiple and simultaneous projects within and between jurisdictions to achieve economies of scale.
- Implement integrated energy efficiency projects and comprehensive retrofit that incorporate all feasible and cost-effective IDSM measures and approaches

- Include a focus on additional opportunities for streetlighting retrofits, Retro-commissioning, public facility projects with special districts such as water and schools, changing energy management behaviors and other energy use reduction opportunities.
- Evaluate and implement, where appropriate, coordinated demand-response protocols and action plans for public buildings and facilities that can be mobilized during peak energy demand events. Leverage these programs with existing and emerging energy emergency plans.
- Integrate and coordinate energy upgrade work within public facilities to avoid redundant and counterproductive work steps and achieve streamlined, standardized and optimized results.

C3: Using completed city and Council of Governments (COG) plans and work accomplished by the LARC under ARRA funding as a starting point, provide support for development of regional collaborative climate action plans and tracking/reporting that increase reductions in GHGs - \$790,240

The Los Angeles region has long been known as a “fragmented metropolis,” with geographic size and jurisdictional rivalries preventing integrated planning and cooperation. The Los Angeles Regional Collaborative for Climate Action and Sustainability (LARC) represents a sea change in the region, creating a forum for local governments, districts, agencies, universities and the private sector to collaborate to address a critical issue of the 21st century: climate change. LARC members include the County of Los Angeles, City of Los Angeles, LA County Metro, Santa Monica, South Bay Cities COG, and others, and these members have tasked LARC with coordinating regional climate action and sustainability strategies. Los Angeles County Metropolitan Transportation Authority (Lead on Joint Proposal)

Combined with ARRA funding and a California Strategic Growth Council Grant, CPUC funding will support the completion of the LARC county-wide climate action and sustainability plan, called “A Greater

L.A.: the Framework for Regional Climate Action and Sustainability" (Framework) including these specific Tasks:

Regional Climate Change and Sustainability Strategies Compendium:

LARC will complete an inventory of best management practices (BMPs) and an assessment of barriers and opportunities to implementation in Los Angeles County communities. We will also analyze the appropriateness of each strategy to LA-area communities, their impact on core goals including greenhouse gas (GHG) emissions reductions and adaptation planning, the value to stakeholders, and economic impact of each strategy/BMP. This will include the construction of a generalized indicator and impact analysis framework for use in municipalities throughout the state. The compendium will tie into existing efforts including state and SCAG databases and various statewide regulatory plans and requirements. CPUC funding will support electricity and natural gas focused activities only.

Local Implementation Measures/Model Ordinance:

This document will offer an implementing tool for cities to adopt locally appropriate, regionally integrated climate action policies and land use regulations that address the broader GHG emission reduction, transportation, water, and energy efficiency goals of SB375 and AB32. The ordinance will offer suite a suite of regulations and strategies such as sustainable planning for transit oriented districts, elements of Low Impact Design and LEED-Neighborhood Design, to name a few. The Model Ordinance will be accompanied by a series of technical memos that offer a legal overview and economic and environmental impacts to support cities in policy adoption.

The Final Framework, "A Greater L.A.":

These documents will be developed through a comprehensive stakeholder outreach and engagement program, and once completed will be shared through educational workshops, outreach, and an online platform. The outreach plan includes technical assistance to cities to ensure the use of the model ordinances, inter-jurisdictional work, and regional planning elements. Cities will be offered an active set of workshops and trainings, as well as detailed evaluation of the use and effectiveness of policies to support adoption efforts. By providing best practices and coordination for the entire County, the Framework will also allow economically disadvantaged communities to benefit from coordinated planning, inclusion in Framework development, and leveraged capacity in order to meet the Framework's community goals.

This document will provide regional policy direction, coordinated strategic planning, and relevant policy/ordinance/BMP resources for local governments. It will draw upon the county-wide GHG inventory and mitigation strategies study currently underway as well as the downscaled climate change simulation being completed for adaptation planning, among other regional plans.

LARC has already secured over \$1 million of funding to develop the scientific basis for climate and sustainability planning across this diverse region of 10 million people. This work includes a county-wide GHG emissions inventory, climate adaptation modeling, sustainable energy systems research, and stakeholder working groups. This grant will leverage these projects and add critical planning tools to create an actionable plan for combating climate change and reducing greenhouse gas emissions region-wide. Through extensive outreach and stakeholder engagement, collaborative strategy development, and the provision of implementable model policies and technical assistance, the Framework will mobilize regional entities to reach the goal of creating sustainable communities county-wide.

C4: Integration of the water-energy nexus in selected program offerings - \$507,787 Design and implement, in coordination with municipal, regional and private water agencies, an integrated program to capture energy savings from water system operations, building upgrades and community-wide education

and water-energy behavior change programs and strategies. Develop linkages among methodologies for capturing the energy efficiency impacts from embedded energy in potable water systems.

C5: Coordination of region-wide municipal implementation and training on a community energy efficiency project management system (CEEPMS) - \$277,470

- Provide public agency staff with the ability to identify and track community-wide energy efficiency projects processed through online permit systems to assist in reporting overall public agency energy savings and GHG emissions.
- Provide permit applicants (homeowners, business owners or contractors) with the latest rebate information and efficiency program eligibility requirement based on the energy efficiency (EE) improvements noted in the permit application.
- Provide 'energy neutral' information outreach to all customers to leverage IOU, publically owned utility (POU) and water utility rebates and resources.

C6: Workforce Development - \$300,000

The County agreed with comments made by the California Construction Industry Labor Management Cooperation Trust (Trust) that energy efficiency portfolio proposals did not adequately address development of training and employment opportunities for minority, low-income and disadvantaged workers. The County proposed to develop a pilot training program within the SoCalREC proposal to connect and coordinate labor resources from local job training groups that assist minorities, low-income and disadvantaged workers. The CPUC approved the pilot training program if it could be funded out of the approved budget. The activities to be conducted are described below.

- Identify the need/demand for labor in non-residential building sectors, primarily the Municipal, University, School, Hospital (MUSH) sector.
- Identify and connect training and pre-apprenticeship resources with potential labor pools.
- Establish linkages with existing registered apprenticeship programs. .
- Develop and deploy standard contract language for contractor selection that includes local hiring, support for state-certified apprenticeship programs, and job quality standards.
- Develop small contractor procurement opportunities and skill development in the MUSH market.

- Develop a research protocol/program to assess outcomes
- Develop a proposal to scale up the pilot during the 2013-2014 implementation period and in planning for the next energy efficiency program cycle.
- The pilot, and the potential scaling up of the pilot, will explore and leverage the unique expertise and resources of the SoCalREN local governments and workforce stakeholders, which emphasize opportunities for minority, low-income and disadvantaged workers and the value of local hiring practices.

END OF DESCRIPTION OF SUBPROGRAM C: SOCALREC

b) **Sub-Program Energy and Demand Objectives-** If this sub-program has energy and demand objective, please complete Table 2.

Table 2 (Subprogram C). Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year⁵

	Program Years		Total
	2013	2014	
Sub-program C: SoCalREC			
GWh	0	0	0
Peak MW	0	0	0
Therms (millions)	0	0	0

c) **Program Non-Energy Objectives:**

⁵ Individual utility specific information to be provided in this table

- Participating jurisdictions will receive the following: SoCalREN templates and guidebooks for project management and financing, case studies that highlight best practices and report definitive actions and accomplishments of SoCalREN and participating jurisdictions.
- Participating cities will receive information about the collective aggregate procurement process.
- Participating jurisdictions will be trained in subject matters including, but not limited to: aggregated procurement process, EEMIS facility management software system, use of SoCalREN templates for project management and financing, an online permit tracking system for participating cities to enable capturing and reporting overall energy savings and GHG emissions (CEEPMS)
- Participating cities will receive information about the following tools: a building energy/resource consumption database for facility benchmarking and application of building rating systems, a web based energy mapping system that lists local government energy efficiency project details including summaries for kWh and term savings totals both within jurisdictions and across regions

Table 3 (Subprogram C): Quantitative Subprogram Targets (PPMs)

Target	2013	2014
Number of buildings treated	7	8
Number of units incented or rebated	7	8

- d) **Cost Effectiveness/Market Need:** What methods will be or have been used to determine whether this program is cost-effective?⁶ If this is a non-resource program, describe the literature, market assessments or other sources that indicate a need for this program.

Methods contained in the current and revised Standard Practice Manual will be followed. The measure “Whole Facility Upgrades” is a comprehensive *green* or *sustainable* measure designed to reduce

⁶ If the program has energy and demand objectives, simply state that the methods contained in the Standard Practice Manual will be used. If the program does not have energy and demand objective, propose an approach to assess cost-effectiveness.

energy and water use, and greenhouse gas emissions. It involves investigating an existing building's operations to identify potential improvements in equipment and operations (beyond normal maintenance and standard retrofits) to achieve lower utility bills.

- System Approach—high efficiency chillers
- Lighting power density reduction
- Daylighting and controls
- System Approach—premium efficiency motors
- System Approach—HVAC energy reduction (such as changing from constant air volume double-duct to variable air volume double-duct air handling systems, implementing airside economizers, etc.)

e) **Measure Savings/ Work Papers:**

- a. Indicate data source for savings estimates for program measures (DEER, custom measures, etc).

The Database for Energy Efficient Resources (DEER) contains both new construction and retrofit energy efficiency measures in the database. However, "Whole Facility Upgrades" measures are actually bundled measure components with interactive effects. This bundled measure category represents custom calculated measures and is not represented in the DEER database.

Measures, energy savings, and demand reduction are highly building specific and project specific. Although there are certain "standard" types of equipment and system configurations, HVAC and lighting systems in larger buildings are unique and tailored for specific building occupancy and operating schedules, orientation, climate zone, interactive effects, etc. Deemed savings do not apply for these applications.

The measures summarized in this Work Paper encompass a more diverse set of equipment than what the DEER contains, and the savings estimates are based on site specific base case equipment,

measures, and operating parameters. There are however, relevant SCE Work Papers to cite. (These documents are embedded in the References list.)

b. Indicate work paper status for program measures:

Table 4 (Subprogram C) – Work paper Status

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
	GENERAL LIGHTING			
1	Street lighting (LS1 to LS2 conversion)		X	
2	Outdoor lighting (parks, parking structures)		X	
	INTERSECTION LIGHTING			
3	Traffic signal		X	
4	Safety lights (street light)		X	
5	Street signs		X	
6	Walk signal		X	
	PUMPS			
7	Pool pumps		X	
8	Other pumps		X	
	WHOLE BUILDING DEEP RETROFITS			
9	Detailed list of measures included in E3 Calcs. Please see Exhibit C1.		X	

10) Program Implementation Details

a. **Timelines:** List the key program milestones and dates. An example is included below.

Table 5 (Subprogram C):. Sub-Program Milestones and Timeline

Milestone	Date
Project Initiation Meeting	Feb 2013
Draft Work Plan for program	Mar, 2013
Draft separate Work Plan for each Objective	Apr, 2013

Draft separate Implementation Plan for each Objective	May, 2013
Expand templates and guidebooks to entire region	Mar - Jun, 2013
Disseminate information to local governments	Feb, 2013-Dec, 2014
Begin Program Implementation	Apr, 2013
Quarterly Progress Reports	Apr, July, Oct. 2013/ Feb, May, Sept, 2014
Quarterly Newsletter	Mar, June, Sept, Dec, 2013/ 2014
Bi-annual workshop on technologies aggregating	Jun, 2013/Nov, 2013/Mar, 2014/Sept, 2014
Annual joint conference with IOUs to complement Local Government Partnership Program	Apr, 2013/Apr. 2014
Annual update to Implementation Plan reflecting changes to strategy	Feb, 2014
Final report of pilot	Dec, 2014

- b. **Geographic Scope:** List the geographic regions (e.g., CEC weather zones) where the program will operate

Table 6 (Subprogram C): Geographic Regions Where the Program Will Operate

Geographic Region	Subprogram C: SoCalREC
CEC Climate Zone 1	
CEC Climate Zone 2	
CEC Climate Zone 3	
CEC Climate Zone 4	

CEC Climate Zone 5	X
CEC Climate Zone 6	X
CEC Climate Zone 7	X
CEC Climate Zone 8	X
CEC Climate Zone 9	X
CEC Climate Zone 10	X
CEC Climate Zone 11	
CEC Climate Zone 12	
CEC Climate Zone 13	X
CEC Climate Zone 14	X
CEC Climate Zone 15	X
CEC Climate Zone 16	X

c. Program Administration

Table 7 (Subprogram C): Program Administration of Program Components

Subprogram Name	Subprogram Component	Implemented by IOU staff (X = Yes)	Implemented by contractors to be selected by competitive bid process	Implemented by contractors NOT selected by competitive bid process	Implemented by local government or other entity (X = Yes)
SoCalIREC	1: Regional Procurement				X (LA County)
	2: Deep Level Retrofits				X (LA County)
	3: Climate Action Support				X (LA County)
	4: Water-Energy Nexus				X (LA County)
	5: CEEPMS				X (LA County)

	1. Workforce Development				X (LA County)
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d. Program Eligibility Requirements:

- i. **Customers:** List any customer eligibility requirements (e.g., annual energy use, peak kW demand):

Table 8 (Subprogram C): Customer Eligibility Requirements

Customer Eligibility Requirement	IOUs
Regional procurement: Public agency must be located in IOU service territory.	X
Deep level retrofits: Public agency must be located in IOU service territory.	X
Climate action support: Public agency must be located in IOU service territory.	X
Water-Energy Nexus: Public agency must be located in IOU service territory.	X
CEEPMS: Public agency must be located in IOU service territory.	X
Workforce Development: Public agency must be located in IOU service territory	X

- ii. **Contractors/Participants:** List any contractor (and/or developer, manufacturer, retailer or other "participant") eligibility requirements (e.g. specific IOU required trainings; specific contractor accreditations; and/or, specific technician certifications required).

Table 9 (Subprogram C): Contractor/Participant Eligibility Requirements

Contractor Eligibility Requirement	IOUs
Regional procurement	None
Deep level retrofits	None
Climate action support	None
Water-Energy Nexus	None
CEEPMS	None
Workforce Development	None

e. **Program Partners:**

- a. **Manufacturer/Retailer/Distributor partners:** For upstream or midstream incentive and/or buy down programs indicate⁷:

Table 10 (Subprogram C): Manufacturer/Retailer/Distributor Partners

Manufacturer/Retailer/Distributor Partner Information	IOU
Manufacturers enrolled in program	None
Manufacturers targeted for enrollment in program	None
Retailers enrolled in program	None
Retailers targeted for enrollment in program	None
Distributors enrolled in program	None
Distributors targeted for enrollment in program	None

- b. **Other key program partners:** Indicate any research or other key program partners:

Other key program partners include the following:

⁷ Provide in a consistent format for all IOUs. Indicate program partners across all IOU territories in one table or spreadsheet.

Append to end of PIP.

- Los Angeles Department of Water and Power
- Los Angeles Regional Collaborative (LARC)
- City of Los Angeles
- University of California Los Angeles Institute of Environment and Sustainability
- Long Beach Gas & Oil
- Pasadena Water & Power
- Glendale Water & Power
- Azusa Light & Water
- City of Vernon Light & Power
- Anaheim Municipal Utility District
- Moreno Valley Electric Utility
- City of Corona Department of Water & Power
- City of Riverside Public Utilities
- Santa Ana Watershed Project Authority
- Irvine Ranch Water District
- Metropolitan Water District
- Southern California Association of Governments (SCAG)
- Southern California Air Quality Management District (SCAQMD)

f) **Measures and incentive levels:** E3 calculators will provide the list of measures and incentive levels to be provided via the program. In this section the utilities should provide a summary table of measures and incentive levels.

Table 11 (Subprogram C): Summary Table of Measures, Incentive Levels and Verification Rates

Measure Group	Market Actor Receiving Incentive or Rebate	IOU	
		Incentive Level	Installation Sampling Rate
GENERAL LIGHTING			
Street lighting (LS1 to LS2 conversion)	Local government	Current IOU offering	Per IOU QA Standards
Outdoor lighting (parks, parking structures)	Local government	Current IOU offering	Per IOU QA Standards
INTERSECTION LIGHTING			
Traffic signal	Local government	Current IOU offering	Per IOU QA Standards
Safety lights (street light)	Local government	Current IOU offering	Per IOU QA Standards
Street signs	Local government	Current IOU offering	Per IOU QA Standards

Walk signal	Local government	Current IOU offering	Per IOU QA Standards
PUMPS			
Pool pumps	Local government	Current IOU offering	Per IOU QA Standards
Other pumps	Local government	Current IOU offering	Per IOU QA Standards
WHOLE BUILDING DEEP RETROFITS			
Detailed list of Measures included in E3 Calcs (Please see Exhibit C5)	Local government	Current IOU offering	Per IOU QA Standards

- a. Use a single excel spreadsheet to indicate the eligible measures for the program across all IOUs. Indicate the expected incentive level by measure or measure grouping for each IOU, making clear where these vary.
- b. For each incented or rebated measure, indicate the market actor to whom this will be provided.

g) **Additional Services:** List additional services that the sub-program will provide, to which market actors.

- a. For each service provided, indicate any expected charges to market actors of the services, and/or the level at which any such services will be incented or funded.

Table 12 (Subprogram C): Additional Services

Additional Services that the Sub-Program Will Provide	To Which Market Actors	IOU
TBD		

Not applicable.

h) **Sub-Program Specific Marketing and Outreach:** Please describe, providing timelines (suggested word limit: 300 words)

The goal of marketing and outreach for the SoCalREC program will be to educate and engage cities in the program offerings and opportunities. In order to accomplish this, public agencies will be directed to a SoCalREC website, housed within the REN general web portal that provides information about the various

program offerings, technical assistance resources, aggregate procurement opportunities, a regionwide energy mapping system, and financing. A password protected online resource library will provide participating jurisdictions with access to tools, templates, guidebooks and other relevant information developed as part of the pilot. Participating jurisdictions will receive bi-monthly e-newsletters with up-to-date information about activities, best practices, case studies and relevant information on SoCalREC resources. In addition, SoCalREC will host four workshops and coordinate joint IOU meetings to encourage dialogue about implementation and lessons learned. Marketing materials will also be developed to distribute at community events, expos and other public participation venues.

SoCalREC will also support municipalities who participate in a SoCalREC project with communicating their successes to their community and other SoCalREC cities in coordination with IOU LGP programs. Once energy efficiency improvement measures have been implemented by a City, energy and cost savings data will be compiled and shared with local and regional media outlets, relevant social media channels (if present), and community marketing vehicles such as a City's newsletter and website. The traditional and grassroots public relations and marketing messaging will aim at sharing the story of the City's fiscally responsible endeavors through the successful implementation of energy reduction measures. Saving energy and money creates savings for the entire community. This public benefit will ideally have board appeal to media outlets as well as the community at large.

The timelines for these marketing efforts are included in Table 5.

- i) **Sub-Program Specific Training:** Please describe, providing timelines (suggested word limit: 300 words)

During the first half of 2013, SoCalREC will host workshops jointly with the IOUs for cities to learn about SoCalREC opportunities and program offerings. This will include information about the benefits and opportunities for aggregated procurement and implementation, financing, and shared technical assistance.

In addition, training will be provided to building managers in participating cities in the following areas, using tools and templates developed for the project:

- Data collection process
- Building audit process
- Benchmarking
- EEMIS system and overall administration

j) Sub-Program Software and/or Additional Tools:

- a. List all eligible software or similar tools required for sub-program participation.
- b. Indicate if pre and/or post implementation audits will be required for the sub-program.
 Pre-implementation audit required ___ Yes No
 Post-implementation audit required ___ Yes No
- c. As applicable, indicate levels at which such audits shall be rebated or funded, and to whom such rebates/funding will be provided (i.e. to customer or contractor).

Table 13 (Subprogram C): Post-implementation Audits

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Not applicable. Will be covered through post-inspections from IOUs.	Can be designated to either.

- k) Sub-Program Quality Assurance Provisions:** Please list quality assurance, quality control, including accreditations/certification or other credentials

Table 14 (Subprogram C): Quality Assurance Provisions

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
Not applicable. Relying on existing IOU rebate processing for realizing of energy savings.	NA.	NA.

- l) Sub-program Delivery Method and Measure Installation /Marketing or Training:** Briefly describe any additional sub-program delivery and measure installation and/or marketing & outreach, training and/or other services provided, if not yet described above.

Overall Strategy

- Engage jurisdictions within the SoCalREN service area (cities, COGs, LGPs)
 - Host regional workshops with SCE/SCG
 - Send invitation memo to jurisdictions outlining SoCalREN opportunities
 - Develop outreach strategy to inform/educate/engage participating jurisdictions

- Design and Disseminate Tools, Templates, Processes
 - Develop and disseminate guide books for participating jurisdictions to use or request assistance filling out
 - Develop and disseminate templates for project management and financing to 100% of participating jurisdictions
 - RFQ, RFP and other bidding and contracting templates
 - Standard forms, documents for project specifications, procurement processes, contracting and project/construction management
 - Design and implement website, on-line resource library

- Collect Data and Identify Eligible Jurisdictions/Projects
 - Identify participating jurisdictions
 - Disseminate data collection tools
 - Support data collection efforts
 - Identify eligible projects for collective procurement and/or whole building retrofits

- Identify pooled technology project opportunities. Technologies include, but are not limited to:
 - Streetlight retrofits (LED or induction- LS2/LS3s)
 - Pool Pump VFD replacement
 - Signal lights/intersection packages
 - Other outdoor lighting
 - HVAC Package units

- Identify whole building retrofits- selected demonstration projects in each participating County
 - Identify potential target buildings (200 kW or larger)
 - Benchmark building performance using EEMIS or EPA Portfolio Manager
 - Obtain 12-36 month billing information for each building

- Complete technical assistance form for each building
 - Confirm eligibility through preliminary analysis
 - Coordinate and perform audit
 - Look for water efficiency savings and relative incentives
 - Identify demand response opportunities
- Cross promote renewable energy programs and opportunities Develop Aggregate Project Opportunities
 - Obtain interest list from participating public agencies Develop RFP/RFQ solicitation process, bidding
 - Transparent procurement and evaluation/selection process
 - Coordinate short list vendors Provide pro-formas and business case scenarios for cities allowing them to understand the “deal” before committing to implement
- Identify Attractive Financing
 - Qualify SoCalREC identified projects for financing through the public agency master lease financing
 - Coordinate with other financing programs including, but not limited to: IOU OBF, CEC loan, ESCO financing, other private equity financing
- Implement projects
 - Assist participating cities with project implementation technical assistance, as needed, including identification of technical assistance resources
 - Coordinate with IOU programs, funneling all energy savings opportunities through their incentive programs in order to capture the appropriate energy savings
 - Coordinate procurement using a centralized, standardized process with tools and templates.
 - Reporting

- Integrate energy project and savings information in to existing on-line energy mapping system
 - Post implementation EM&V
 - Warranty rectification assistance if needed through short list vendors
- m) **Sub-program Process Flow Chart:** Provide a sub-program process flow chart that describes the administrative and procedural components of the sub-program. For example, the flow chart might describe a customer's submittal of an application, the screening of the application, the approval/disapproval of an application, verification of purchase or installation, the processing and payment of incentives, and any quality control activities.

Figure 26 (Subprogram C): Enterprise Energy Management Information System (EEMIS) Flow Chart

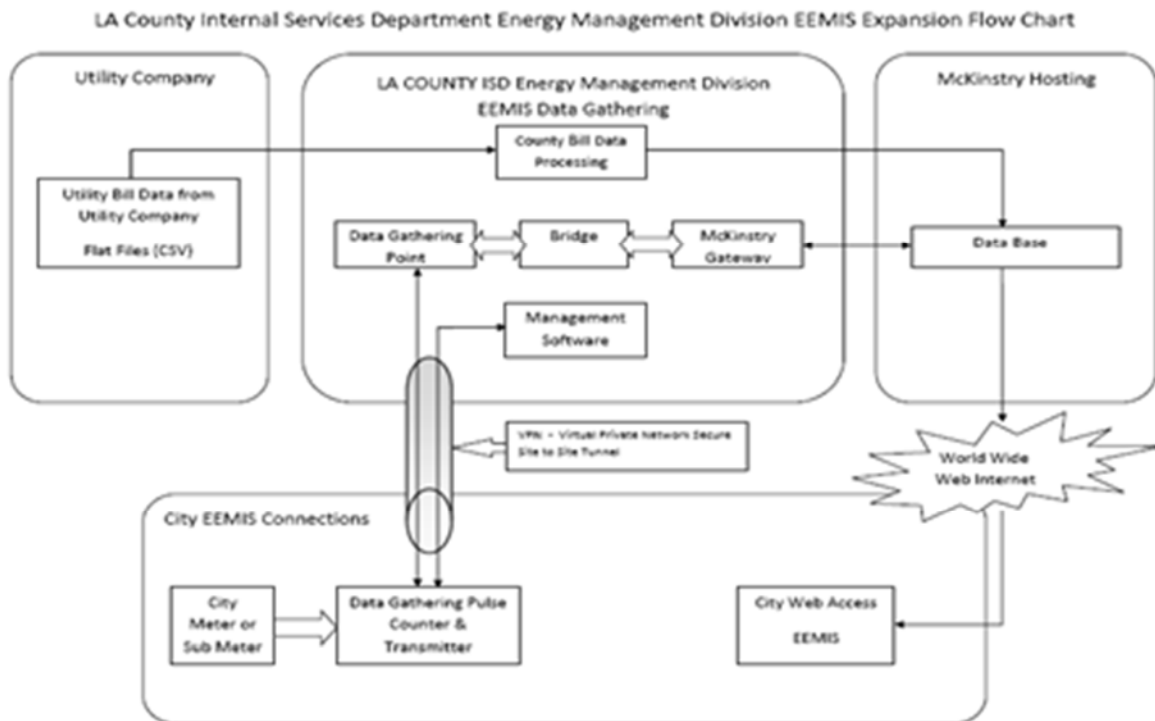


Figure 27 (Subprogram C): Community Energy Efficiency Program Management System (CEEPMS)

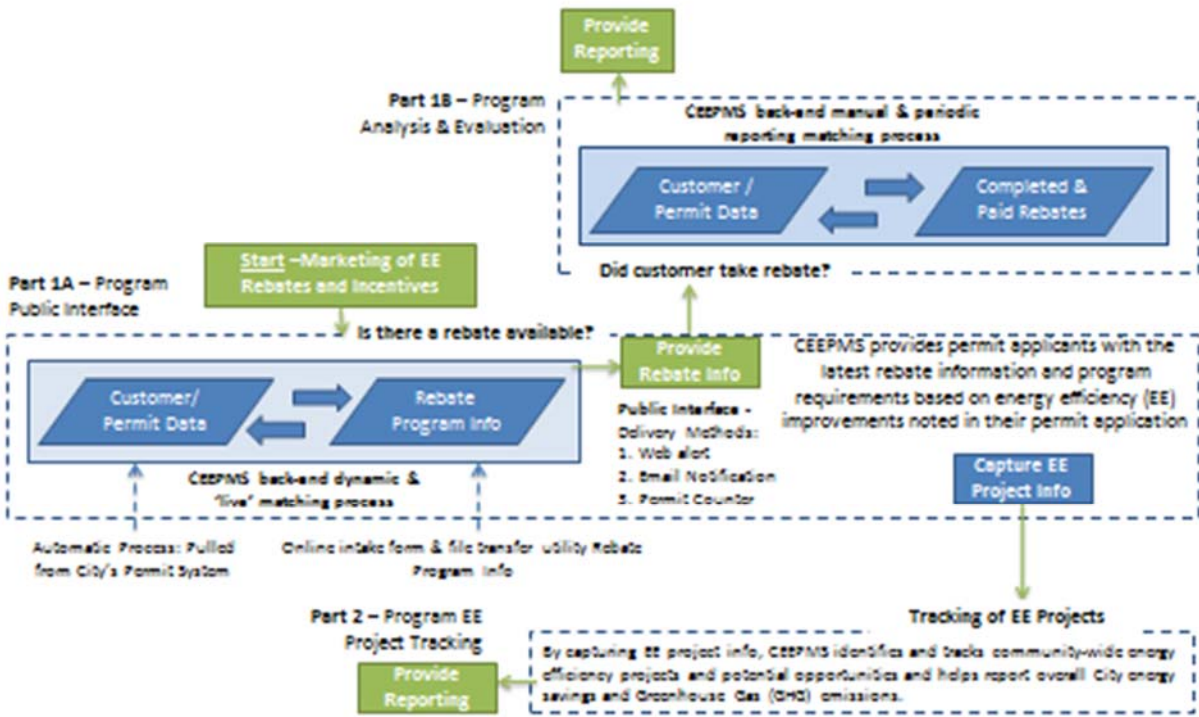


Figure 28 (Subprogram C): SoCalREC Flow Charts

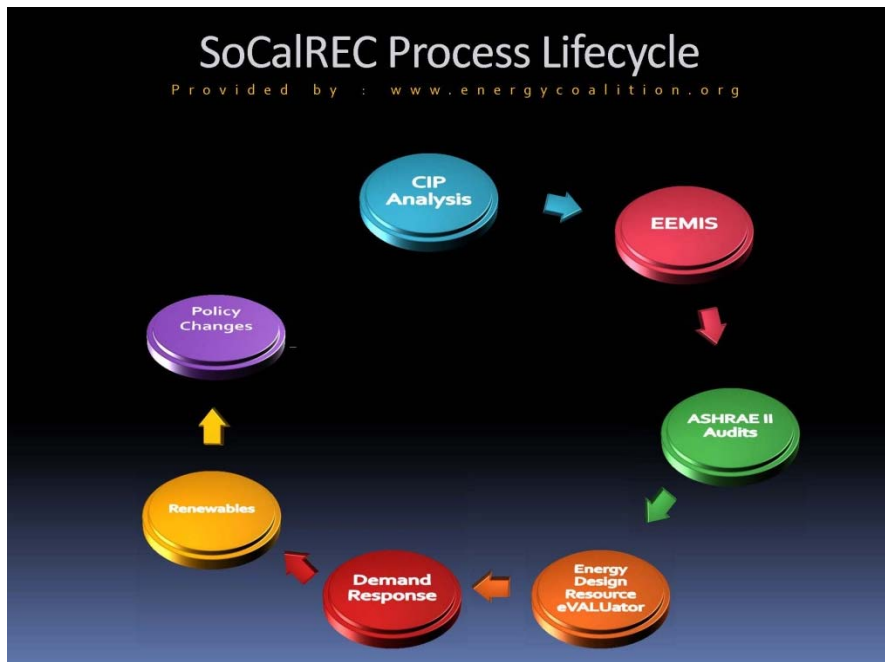
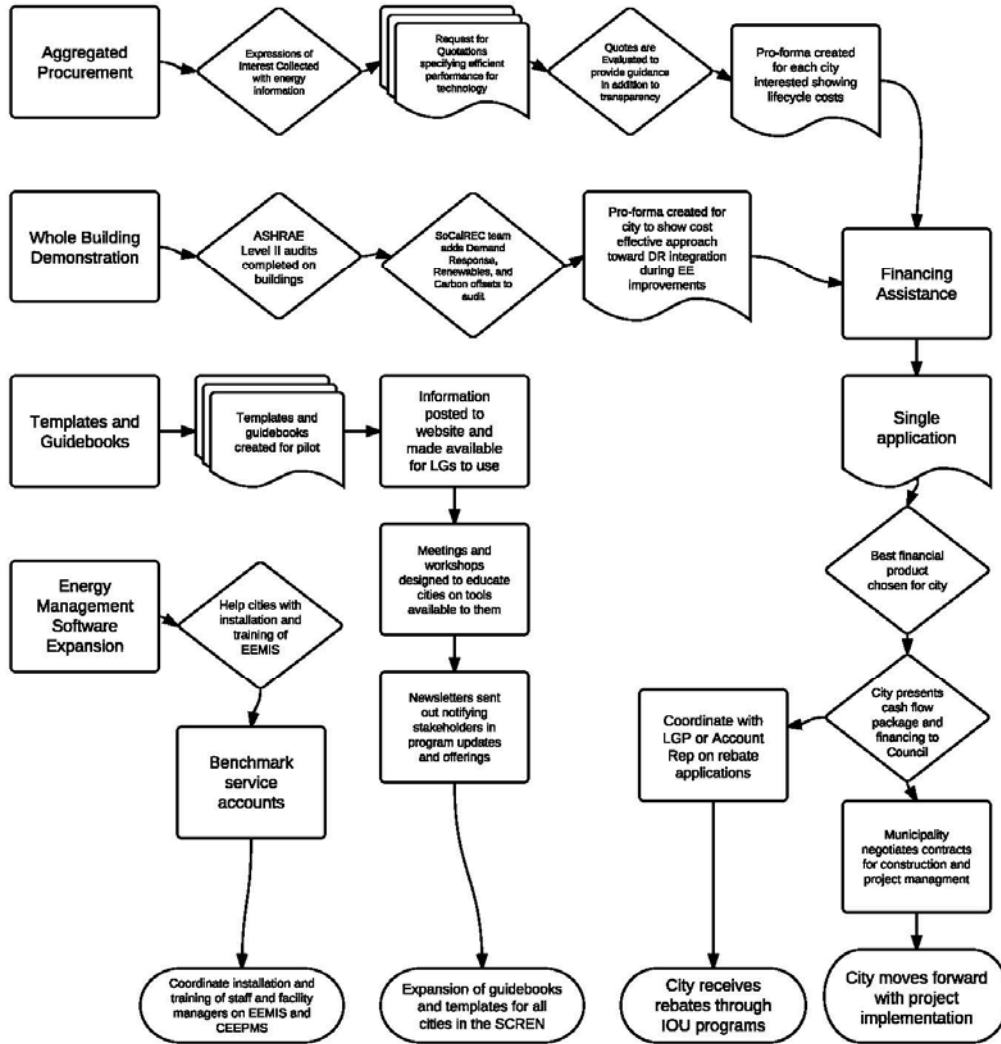


Figure 28 (Subprogram C) cont.: SoCalREC Flow Charts



n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:** Indicate other IOU EE, DR or DG sub-programs with which this sub-program will regularly coordinate. Indicate also key non-IOU coordination partners. Indicate expected coordination mechanisms⁸ and frequency⁹:

Table 15 (Subprogram C): Cross-cutting Sub-program and Non-IOU Partner Coordination

Subprogram C: SoCalREC Portfolio		
Other SoCalREN Subprograms	Coordination Mechanism	Expected Frequency
Energy Upgrade	Project referrals	All potential projects
Financing	Project referrals	All potential projects
IOU Program Name	Coordination Mechanism	Expected Frequency
IOU Whole House Upgrade Program (Energy Upgrade California)	Meetings, communication, participating contractor and QA updates	At least bi-monthly
IOU On-Bill Financing	Meetings	Ongoing, as needed
Local Government Partnership programs	Meetings	Ongoing, as needed
IOU Savings by Design	Savings by Design is a program to encourage high-performance nonresidential building design and construction within the service territories of PG&E, SDG&E, Southern California Edison, or Southern California Gas. The program offers building owners and their design team a wide range of services including design assistance, owner incentives, and design team incentives. Owners and design team members are eligible to participate.	As needed.
IOU Demand Response Programs	IOU DR Programs help qualifying customers reduce their energy usage during peak times while lowering their electricity costs. When electricity demand exceeds supply, when electricity costs are high, or when the state's electrical system is constrained, SCE requests (and pay for) participating customers to help by reducing their electricity use. Various DR Programs, Rates and Offerings are available.	

⁸ "Mechanisms" refers to communication methods (i.e. quarterly meetings; internal list serves; monthly calls, etc.) and/or any cross-program review methods (i.e., feedback on program plans; sign off on policies, etc). or harmonization techniques (i.e. consistent certification requirements across programs, program participant required cross trainings, etc).

⁹ This does not mean there would be mutual understanding of the on the mechanism or a known frequency of coordination; rather, just provide enough information to give a general sense of the coordinate efforts.

California Independent System Operator (ISO)	Demand Response & Proxy Demand Resource (6/24/11) The Proxy Demand Resource product allows end-use customers to work through a Demand Response Provider to bid demand response services directly into the CAISO markets. All resources types are offered into CAISO markets through a Scheduling Coordinator. Thus, to bid proxy demand resources into the CAISO markets, a Demand Response Provider must be a Scheduling Coordinator or hire the services of an ISO certified Scheduling Coordinator to submit bids and schedules on their behalf.	As needed.
Coordination Partners Outside CPUC	Coordination Mechanism	Expected Frequency
Lenders	Meetings, communication	Ongoing, as needed.
Local Financing Programs	Meetings, communication	Ongoing, as needed.
California Commissioning Collaborative (CCC)	The Toolkit includes: <ul style="list-style-type: none"> ● Energy Savings Calculation Tools <ul style="list-style-type: none"> ○ Building Optimization Analysis Tool ○ Pumping System Workbook ○ Fan System Workbook ● Data Analysis Tools <ul style="list-style-type: none"> ○ Energy Charting and Metrics Tool ○ Utility Consumption Analysis Tool ○ Findings Workbook 	As needed.
Consortium for Energy Efficiency (CEE)	State and Local Government Purchasing Initiative: The CEE has conducted extensive research on state and local government purchasing and has developed tools to assist government purchasing officials in procuring energy efficient products. The purchasing tools include: <ul style="list-style-type: none"> ● Procurement guidebooks ● RFP for contractor services ● Interview guide ● Toolkit training modules Energy efficiency training modules	As needed.
DOE's Federal Energy Management Program	Building Life-Cycle Cost (BLCC) program analyzes capital investments in buildings. BLCC conducts economic analyses by evaluating the relative cost effectiveness of alternative buildings and building-related systems or components. Typically, BLCC is used to evaluate alternative designs that have higher initial costs but lower operating costs over the project life than the lowest-initial-cost design. It is especially useful for evaluating the costs and benefits of energy and water conservation and renewable energy projects. The life-cycle cost (LCC) of two or more alternative designs are computed and compared to determine which has the lowest LCC and is therefore more economical in the long run. BLCC also calculates comparative economic measures for alternative designs, including net savings, savings-to-investment ratio, adjusted internal rate of return, and years to payback.	As needed.
DOE's Energy Efficiency & Renewable Energy Weatherization & Intergovernmental Program (WIP)	The U.S. Department of Energy (DOE) Weatherization and Intergovernmental Program provides grants, technical assistance, and information tools to states, local governments, community action agencies, utilities, Indian tribes, and overseas U.S. territories for their energy programs. These programs coordinate with national goals to reduce petroleum consumption and increase the energy efficiency of the U.S. economy. They aim at market transformation	As needed.

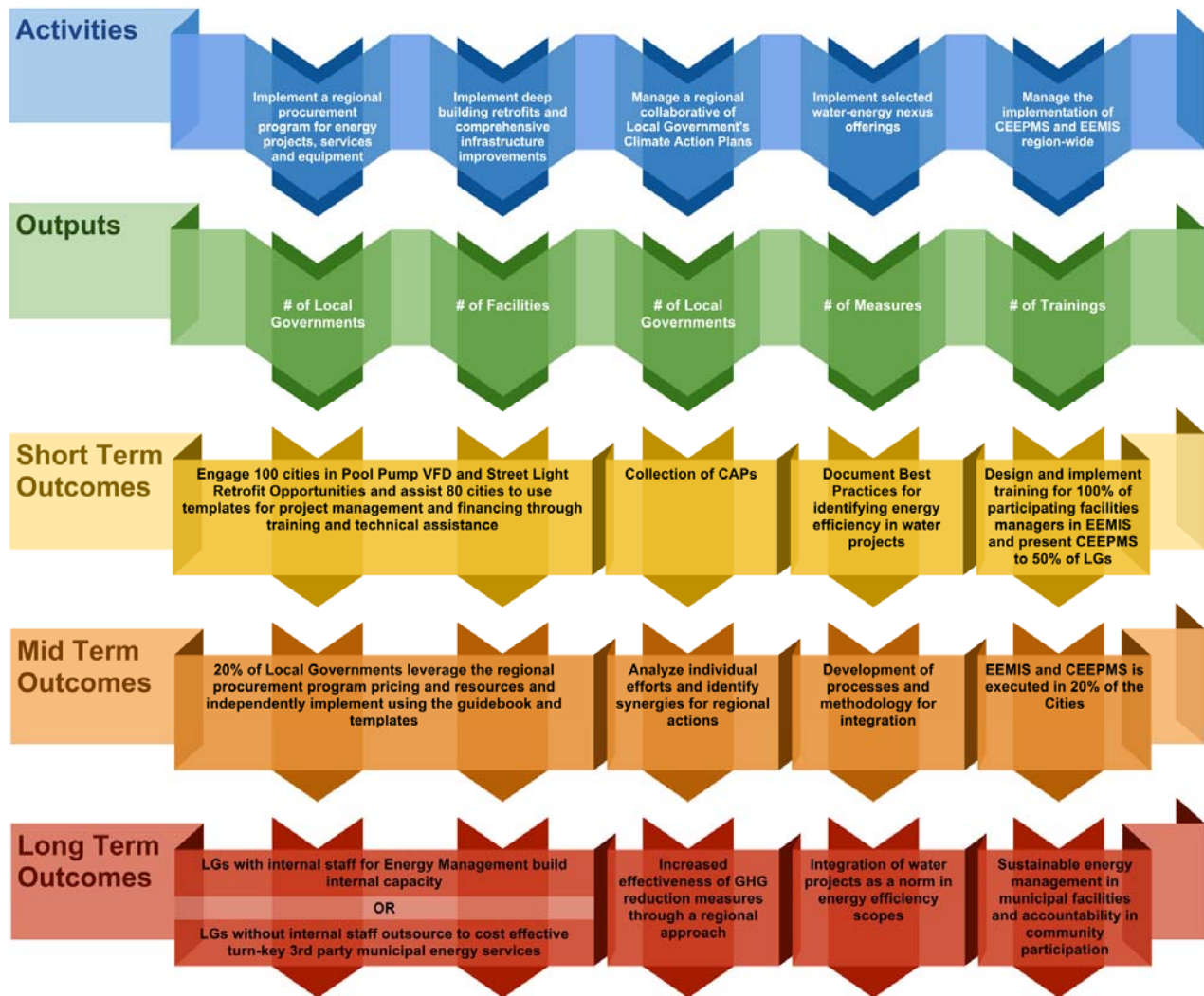
	to reduce market barriers to the cost effective adoption of renewable energy and energy efficiency technologies.	
Collaborative for High Performance Schools (CHPS)	The Collaborative for High Performance Schools provides tools, resources, education and building design standards and facilitate the design, construction and operation of high performance schools to create environments that are not only energy and resource efficient, but also healthy, comfortable, well lit, and containing the amenities for a quality education.	As needed.
Energy Technology Assistance Program (ETAP)	The Energy Technology Assistance Program (ETAP) provides technical support, implementation assistance, rebates, and training to accelerate the uptake of advanced, market-ready energy efficiency technologies in the local government market in California. The program focuses on three energy efficiency technologies: <ol style="list-style-type: none"> 1. Bi-level lighting controls 2. Wireless lighting controls 3. Wireless HVAC controls 	As needed.
California Air Resources Board	The Cool California Local Government Toolkit helps to identify cost saving actions, financial resources, and case studies to assist local governments with achieving GHG emission reductions.	As needed.

- o) **Logic Model:** Please append the logic model for this sub-program to the end of this PIP. Describe here any additional underlying theory supporting the sub-program intervention approach, referring as needed to the relevant literature (e.g., past evaluations, best practices documents, journal articles, books, etc.).

Figure 29 (Subprogram C): SoCaREC Logic Model

Southern California Regional Energy Center
LOGIC MODEL

For Local Governments (LGs), Council of Governments (COGs), and Local Government Partnerships (LGPs) in the SoCalREN region



11) Additional Sub-Program Information

- a) **Advancing Strategic Plan Goals and Objectives:** Describe how sub-program advances the goals, strategies and objectives of the California Long Term Energy Efficiency Strategic Plan (word limit: 150 words)

Figure 30 (Subprogram C): Strategic Plan Alignment

Local Government Goal 4: Community Leadership		
4-1	Local governments commit to clean energy/climate change leadership.	By establishing SoCalREC, local governments will establish a more dynamic regional energy efficiency infrastructure, with benefits that similarly support the sustainability and climate change objectives of local governments.
4-4	Develop local projects that integrate energy efficiency, DSM, and water/wastewater end uses	By structuring its Program to address the water-energy nexus, and to provide incentives and opportunities for commercial, residential, and agricultural players, SoCalREC integrates multiple goals and objectives identified by the Strategic Plan.
Local Government Goal 5: Local Government Energy Efficiency Expertise		
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	SoCalREC is being effectively implemented during this current calendar year to provide local governments with support and options, including a menu of products and services that will further energy efficiency.
5-2	Develop model approaches to assist local governments participating in regional coordinated efforts for energy efficiency, DSM, renewables, green buildings, and zoning.	SoCalREC is being effectively implemented during this current calendar year to provide local governments with support and options, including a menu of products and services that will further energy efficiency.

b) **Integration**

- i. **Integrated/coordinated Demand Side Management:** As applicable, describe how sub-program will promote customer education and sub-program participation across all DSM options. Provide budget information of non-EE sub-programs where applicable.

This program is designed to bring all of its energy savings through the IOU DSM portfolio including, but not limited to: express and customized solutions, on-bill financing, on-bill repayment, and other core utility programs. The design of the SoCalREC program is aimed at aggregating groups of local governments

together for implementation of energy efficiency measures, such that cities will feel more comfortable in minimizing their risk.

However, without an incentive to pay the municipalities for their actions, the SoCalREC team will funnel all projects through the Local Government Partnerships, where applicable, and through Southern California Edison and Southern California Gas Company’s Account Representatives, to help those cities qualify for and obtain as many eligible rebates in the DSM programs as possible.

Table 16 (Subprogram C): Non-EE Sub-Program Information

Non-EE Sub-Program	Budget	Rationale and General Approach for integrating Across Resource Types
On-bill financing	TBC	SoCalREN will assist local governments with OBF-eligible projects with the application and technical processes for obtaining OBF
On-bill repayment	TBC	Same as OBF
California Solar Initiative TBC	TBC	Local Governments that wish to include solar or solar thermal in their building or system retrofits will be assisted with technical calculations and assistance with applications. Furthermore, aggregated solar projects across municipalities may be considered during the period of performance for this pilot.
HVAC Optimization	TBC	Cities that have package units are great candidates for this program, and the SoCalREN team can help the local governments with technical calculations as well as help them find a service provider.
Demand Response	TBC	Demand Response assistance will be available to all cities in the REN. Involving DR conversations and analysis on a municipal-wide level can help the city curtail more peak KW and earn income by participating in a variety of programs offered.
Savings by Design	TBC	SoCalREN can assist cities with program knowledge as well as providing technical assistance and project management assistance as municipal buildings make their way through this program

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

Non-EE Sub-Program	Budget	Rationale and General Approach for integrating Across Resource Types
Water agency coordination	TBC	Link water efficiency to energy efficiency for cities by participating in water-reduction rebate programs as well as community education of both resources
Focus on VFD installations	TBC	Pool pump VFDs save energy but, VFDs on other city water pumps can save both energy and water. Including well pumps measures in the aggregated projects, while coordinating with the water departments, successfully links the two scarce resources.

- c) **Leveraging of Resources:** Please describe if the subprogram will leverage additional investments by market actors or other state, local or federal agencies.

The SoCalREC program has leveraged all of the work done in the previous SoCalREC program using SCE Flight 5.6 funds and U.S. Department of Energy Energy Efficiency and Conservation Block Grant (EECBG) funds. These funds helped the local Southern California team to establish the aggregated procurement process, the demonstration project schedules and timelines, relationships with a variety of cities within both LA County and Orange County that are primed to implement energy efficiency measures already discussed, and templates and guidebooks already drafted and posted.

This iteration of the SoCalREC program leverages existing resources and opportunities created in the current SoCalREC pilot and expands upon that model to cover a six-county region, allowing more cities and other public agencies to take advantage of the project management, procurement, and implementation advantages that have been established this year.

The SoCalREC program will leverage the Local Government Partnership administration and technical assistance dollars, when applicable, and any other existing resources that are available to help municipalities with retrofits including: EEMIS, CEEPMS, EPA Portfolio Manager, and prof-forma calculators which calculate lifecycle and cash flow impacts for cities to make decisions on green-lighting projects.

A variety of other programs and funding is available to help the SoCalREC program achieve its success. Please see Exhibit C4, Resource Plan.

- d) **Trials/ Pilots:** Please describe any trials or pilot projects planned for this sub-program
This program will include 4 pilot efforts:
 - a. Education and guidance assistance of streetlight purchase from IOUs including RCNLD analysis, decoupling, and rate tariff revisions
 - b. Assistance of Series 6.6 re-circuiting from series to multiple circuits
 - c. Integration of Demand Response in conjunction with, ASHRAE Level II audits, to see if more curtailment strategies can be implemented if discussed and planned as part of energy efficiency planning.
 - d. Inclusion of additional public agencies to analyze the differences in needs and outcomes

- e) **Knowledge Transfer:** Describe the strategy that will be used to identify and disseminate best practices and lessons learned from this sub-program
 - a. Case studies developed and disseminated
 - b. Assist public agencies with policy changes aimed at setting up a revolving account and take a portion of saved funds to pay for a high profile project/highlight success
 - c. Highlight major success stories through media
 - d. Draft news and journal articles on city energy savings
 - e. Presentations and participation in conferences to share success/best practices/lessons learned

Please see Exhibit C2 for sample collateral such as newsletters, website screen shot, etc.

- 12) **Market Transformation Information:** For programs identified as market transformation programs, include the following (suggested page limit- five pages):

- i. A summary of the market transformation objectives of the program.
- ii. A description of the market, including identification of the relevant market actors and the relationships among them;
- iii. A market characterization and assessment of the relationships/dynamics among market actors, including identification of the key barriers and opportunities to advance demand side management technologies and strategies;
- iv. A description of the proposed intervention(s) and its/their intended results, and specify which barriers the intervention is intended to address;
- v. A coherent program, or “market,” logic model that ensures a solid causal relationship between the proposed intervention(s) and its/their intended results¹⁰;
- vi. Appropriate evaluation plans and corresponding Market Transformation indicators and Program Performance Metrics based on the program logic model.

Not applicable.

13) **Additional information as required by Commission decision or ruling or as needed:** Include here additional information as required by Commission decision or ruling (As applicable. Indicate decision or ruling and page numbers):

Exhibit C1: Tables

Exhibit C2: SoCalREC collateral

Exhibit C3: Logic Model

Exhibit C4: Resource plan

Exhibit C5: SoCalREC E3 calculations – Due to file size, please download at:

<https://drive.google.com/folderview?id=0B-geqhnadhYHLUR6dEVMRVZMVkE&usp=sharing>

Exhibit C6: List of Subprogram C Figures

¹⁰ If this logic model is the same as that requested in #10.(O), only provide once. As needed, provide a more detailed logic model emphasizing the market transformation elements of the program and/or how such elements integrate with resource acquisition elements.