

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

1) Sub-Program Name:

*Sub-Program B: Develop and Launch Regional Public Agency Led Financing Programs for Energy Projects in Public, Commercial and Residential Buildings*

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 serve<sup>1</sup>:

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 commercial NAIC codes)

c.  Industrial (List applicable NAIC codes:  All industrial 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.

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<sup>1</sup> Check all that apply

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

ELECTRIC: TRC: 0.92 PAC: 2.06  
 GAS: TRC: 1.13 PAC: 1.45

8) Projected Sub-Program Budget

**Table 1 - Electric (Subprogram B): Projected Sub-Program Budget, by Calendar Year<sup>2</sup>**

Sub-Program B: Financing	Program Year		
	2013	2014	Total
Admin (\$)	172,564	172,564	345,128
General overhead (\$)	0	0	0
Incentives (\$)	0	0	0
Direct Install Non-Incentives (\$) *	2,651,905	2,651,905	5,303,810
Marketing & Outreach (\$)	174,906	174,906	349,812
Education & Training	0	0	0
Total Budget	<b>2,999,375</b>	<b>2,999,375</b>	<b>5,998,750</b>

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<sup>2</sup> Individual utility specific information to be provided in this table

**Table 1 - Gas (Subprogram B): Projected Sub-Program Budget, by Calendar Year<sup>3</sup>**

Sub-Program B: Financing	Program Year		
	2013	2014	Total
Admin (\$)	30,511	30,511	61,021
General overhead (\$)	0	0	0
Incentives (\$)	0	0	0
Direct Install Non-Incentives (\$) *	468,496	468,496	936,993
Marketing & Outreach (\$)	30,868	30,868	61,736
Education & Training	0	0	0
Total Budget	529,875	529,875	1,059,750

**Table 1 - Combined (Subprogram B): Projected Sub-Program Budget, by Calendar Year<sup>4</sup>**

Sub-Program B: Financing	Program Year		
	2013	2014	Total
Admin (\$)	203,074	203,074	406,149
General overhead (\$)	0	0	0
Incentives (\$)	0	0	0

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<sup>3</sup> Individual utility specific information to be provided in this table

<sup>4</sup> Individual utility specific information to be provided in this table

Direct Install Non-Incentives (\$) *	3,120,401	3,120,401	6,240,803
Marketing & Outreach (\$)	205,774	205,774	411,548
Education & Training	0	0	0
Total Budget	<b>3,529,250</b>	<b>3,529,250</b>	<b>7,058,500</b>

\* SoCalREN defines Direct Install Non-Incentives (DINI) as Direct Implementation activities.

**9) Sub-Program Description, Objectives and Theory**

**a) Sub-Program Description and Theory:**

***B1: Establish and administer a regional public building loan loss reserve program - \$200,000***

**Introduction**

Local governments play a critical role in furthering the State’s energy efficiency goals by addressing barriers within its own sector as well as those of its constituents. Significant progress has been made in retrofitting municipal facilities and infrastructure due in large part to the 2009 American Recovery and Reinvestment Act (ARRA). The successes and lessons learned from these projects have created a strong foundation and momentum from which local governments can build upon to pursue additional energy efficiency projects. Many opportunities remain for local government and public agencies to invest in energy efficiency.

**Purpose**

The Public Building Loan Loss Reserve Plan Program (PB LLR) description provides detail on PB LLR’s activities, goals, timelines, and deliverables. In addition, this description provides baseline metrics and methods to measure progress and key milestones during the 2013-2014 Transition Period. In the original

PIP, SoCalREN proposed a loan loss reserve for public buildings as part of the program design. Pursuant to D.12-11-015, this final PIP no longer includes this element which was not approved, but does include the marketing and financial analysis of financing mechanisms available to public agencies through a Master Lease which was established with ARRA funding during a pilot period. This program offers public agencies customized technical assistance to obtain financing through a private equity lender. There is no accompanying debt service reserve.

## **Background**

In 2005, SCE funded a comprehensive effort to assess barriers to public agency participation in energy efficiency programs. The effort produced the report titled "Public Agency Participation in Energy Efficiency Programs: Technology Transfer Feasibility Study Prepared for the Southern California Edison – Southern California Gas – County of Los Angeles Energy Efficiency Partnership (December 2, 2005)." The report included the following findings:

- There is a lack of understanding on the part of public agencies about how various energy programs operate and how to best access those programs;
- A majority of public agencies lack sufficient staff resources to actually design and implement energy programs and projects.

In addition, the 2012 SoCalREC pilot program also found that:

- There is limited availability, or understanding, of "turn-key" financing mechanisms. Specifically, the need for financing that follows a standardized underwriting protocol; offers competitive interest rates attractive to cost-conscious jurisdictions; and provides adequate information for agencies to make investments decisions regarding energy efficiency, all with the goal of reducing overall operating costs.

The SoCalREC program was created, in part, to overcome these barriers by offering energy management services at no cost to public agencies. During SCE's Flight 5.6 Strategic Plan period of performance which ran in concert with SCE/SCG's ARRA Continuation Contract, the SoCalREC team

provided marketing and outreach to public agencies, explored financing mechanisms, and ultimately, developed an energy efficiency public financing method.

SoCalREC started by exploring financing models that would be attractive to public agencies based on their cost-effectiveness, streamlined lending processes, and ease of implementation. This resulted in the establishment of the SoCalREC Master Lease financing program that provided options to finance energy efficiency, water efficiency, and renewable projects in Southern California. The Master Lease loan product is a method for financing energy efficiency projects with no impact on a city's General Fund. Princeton Credit was selected as the approved lender to offer loans to public agencies using a standard application process with the determination of interest rates based on the credit rating of the agency and the Treasury Bond index at the time of funding.

Next, SoCalREC created marketing materials that explained the differentiating features of the SoCalREC Master Lease financial product from other existing options such as the Investor-Owned Utilities' (IOU) On-Bill Financing, the available California Energy Commission (CEC) loans, or the use of private equity through energy service companies (ESCO). In addition to providing online resources ([www.socalrec.com](http://www.socalrec.com)) and in anticipation of specific questions and concerns, SoCalREC developed decision trees that illustrate a step-by-step guide to the loan process, customized for a local government audience. This tool, along with the side-by-side loan comparisons, is intended to outline to local governments in clear terms how the SoCalREC Master Lease product works to finance energy efficiency with no upfront costs or impact to a city's general fund.

Lastly, SoCalREC offered assistance in the application and qualification process for the Master Lease financing program which further incentivizes municipalities and special districts to take advantage of available products and implement their energy efficiency projects. By providing centralized project management and technical assistance along with Master Lease financing, SoCalREC will realize efficiencies

in project implementation by the public agencies, resulting in more pipeline projects transformed into completed projects.

## **Objectives**

The objective of the Public Agency Loan Loss Reserve program is to market the Master Lease Finance Program and to help qualify energy efficiency projects. The goal is to help public agencies to secure at least 15 loans through the SoCalREC Master Lease Finance Program during the 2013-2014 funding cycle. SoCalREC will also use the Public Agency Loan Loss Reserve program to help accelerate financing for projects already in the Master Lease program pipeline from the previous funding cycle.

At the close of the 2013–2014 Transition Period, SoCalREC will measure the impact of the PB LLR on the marketplace by answering the following questions:

- 1) From what programs or efforts did the majority of loans originate?
- 2) Did the marketing of financing, as part of a portfolio of services, help public agency decision makers to move toward implementation of their projects?
- 3) Did this financing program fund projects that would not have otherwise been completed?

## **Program Partners known when PIP was filed**

During the 2012 SoCalREC pilot period, the Master Lease program was managed by Los Angeles County through a contract with The Energy Coalition. Other Program Partners included:

- Public Financial Management (PFM). Senior Managing Consultant, Laura Franke, and her team managed the selection of the lender, Princeton Credit, and provided oversight of the screening of eligible projects, the development of loan terms and conditions, and the standardized underwriting criteria, all under the ARRA Continuation Contract with SCE/SCG. PFM has provided financing expertise for local governments and other public agencies since 1975.
- Princeton Credit. CEO, Gordon Lee, met the eligibility criteria and became the Master Lease broker through its response to the SoCalREC solicitation. Princeton Credit will work closely with the

SoCalREC team in the qualification of projects for financing. Projects will require participation in the SoCalREC program as a pre-requisite for financing. Equipment installed will serve as primary security (collateral) until the lease is paid in full. In some cases, where the equipment cost is minimal and labor costs are greater, e.g. retrocommissioning, additional security may be required (for instance, the site or structure for the improvements).

## **Activities**

Program Activities will be divided into two categories:

- 1) Marketing and Outreach of the Master Lease Financing program
- 2) Direct Implementation of the Master Lease Financing Program and Loan Application Process

## **Marketing Master Lease Financing Program**

Pursuant to the Final Decision, this scope of work is primarily an outreach program. The marketing activities in this program are intended to generate enrollment in the Master Lease financing program. These types of activities include:

- Collateral development, creative design, and distribution
- Presentations to stakeholders on Master Lease financing
- Flyers and tools designed to help viewers understand the Master Lease financing program against other financing options
- Website presence.

## **Direct Implementation of the Master Lease Financing Program**

Direct Implementation of the Master Lease Financing will be included in SoCalREN's overall marketing and outreach campaign. Additionally, meetings will be held with the IOU Local Government Partnership

representatives and Business Customer Division Account Managers in order to coordinate and leverage all existing relationships with local government clients.

For all projects more than \$250,000 in projected construction costs, SoCalREC's Direct Implementation of the Master Lease program to public agencies through five distinct strategies:

- 1) Explain how Master Lease Financing is a viable strategy to fund existing shovel-ready energy efficiency projects.
- 2) Demonstrate how public agencies can bundle a variety of projects within one consolidated loan.
- 3) Introduce Master Lease Financing as one of many SoCalREC benefits, including available assistance, to help public agencies complete energy efficiency projects.
- 4) Emphasize program advantage to use the public agency's forecasted energy savings to use "project savings capacity" and realize positive cash flow after project implementation.
- 5) Administration of loan application assistance for public agencies who request financing.

1. Master Lease Financing eliminates the barrier for many public agencies in funding an energy efficiency project since the Master Lease lenders do not require a cash-flow positive formula in order to fund a lease. However, SoCalREC would prefer to identify and promote cash-flow positive projects since they demonstrate how energy savings can produce a positive return on investment from the use of general funds. In addition to paying off the loan payments through the energy savings through the life of the loan, SoCalREC will work with agencies to use rebate incentives and the forecasted surplus as potential seed money for a revolving loan fund within their jurisdiction. Additional information regarding the revolving loan fund can be found in the Public Agency Revolving Loan Fund sub-program description.

2. Bundling projects into one consolidated loan reduces lending fees and optimizes the return on investment through the efficiencies realized from increased economies of scale. Through the Master Lease program, public agencies can reduce their risk and maximize their financial and resource investment. SoCalREC will continue to work with cities and other public agencies to aggregate projects by using

combined energy savings to repay the debt, and to identify any potential cash surplus. This combining of projects will ideally provide overall savings adequate to fund a much-needed project, even if one single project has a less attractive return on investment.

3. The third activity is based on the use of financing as a conversation starter with agencies to promote the Master Lease Program. Using marketing materials created to promote the Master Lease financing, will enable SoCalREC to introduce a financing option that will potentially increase the potential for project implementation. Examples of items already created through prior U.S. Department of Energy (DOE) funding, can be found at [www.socalrec.com](http://www.socalrec.com) (Financing tab). Public agencies interested in learning more about the Master Lease program, by default will also learn about SoCalREC's services, and potentially lead to the development of new projects.

4. SoCalREC will offer services required to quantify the projected energy savings according to standard protocols and coordinate with the appropriate utility rebate and incentive programs. The "Project Savings Capacity" is best understood by illustration of the loan options for a public agency through the Master Lease program. The projected energy savings over the life of the project multiplied against the loan's interest rate will determine the maximum amount that could be borrowed. For example, if a retrofit has a one-year payback period, the period of time required for the return on an investment to "repay" the borrowed sum, and if an agency takes out a loan, repayable in one year's time, then, in this scenario, all of the energy savings would be applied to paying back the debt, leaving no financial surplus.

In a "Project Savings Capacity" scenario, the energy savings create a cash flow surplus that can be set aside or used for other projects. For example, if a lighting retrofit has a five-year equipment life, then the projected energy savings over the life of the equipment determines the maximum amount an agency could afford to "pay back", regardless of the energy savings payback period (e.g., one-year). Therefore, if the agency took out a five-year loan (matching the equipment lifecycle) the agency's cash flow benefit is based

on the projected energy savings minus the cost of the retrofit. This surplus could be used in other energy efficiency projects including the replacement of equipment that doesn't have positive cash-flow, such as series lighting, or a boiler replacement, etc. A "Project Savings Capacity" scenario allows the General Fund budget to remain static through the entire loan term, while utilizing the surplus energy savings to implement additional energy efficiency projects (potentially without having to take out additional loans).

5. SoCalREC will be responsible for overall administration of the loan application process, including the management of the program finance partners. As part of the implementation services, SoCalREC will be the primary point of contact for the public agency client so as to provide seamless project management and efficient communication of the lending process.

When an application is submitted through a non-SoCalREC source, SoCalREC will perform the same quality control procedures as applied to SoCalREC-sourced applications. This includes following a defined protocol for review of any technical data, energy savings calculations, and cash flow impacts. No project will be financed without SoCalREC's review and approval of the energy savings and project scope of work.

### **Deliverables and Timeline**

Deliverables for this program will be centered around identifying whether a not a project is moving forward with implementation due to the existence of the Master Lease financing option. The projects will be tracked as part of the SoCalREC tracking mechanism. The SoCalREC tracking tool will include information about project types, scopes of work, energy savings, and rebates applied for. SoCalREC projects which obtain financing through the Master Lease program will also include information about the loan itself including loan amount, repayment terms, interest rate, and non-rebated measures financed.

Other deliverables and their timelines are included in the table below:

Deliverable	Budget/Timeline
<b>1. Marketing</b>	<b>\$8,000</b>
Promote website content about Master Lease financing	Existing
Develop contact database	Ongoing
E-blast promoting Master Lease financing	Q1, 2013 revised and Sent out twice a year
Collateral material promoting the Master Lease financing	Q1, 2013
Develop SoCalREC tracking tool	Q2, 2013
<b>2. Direct Implementation</b>	<b>\$147,964</b>
Develop loan application form	Existing
Develop financing tracking mechanism within tracking tool	Q2, 2013
New materials for revised REN website	Q4, 2013
Transfer information to REN website	Q4, 2013
<b>3. Reporting</b>	
Quarterly reports on loan activity	Q2, Q3, Q4, 2013 Q1, Q2, Q3, 2014
Yearly report on loan activity, progress, and program design assessment	Q4 2013
Final report for program cycle	Q4, 2014

## Financing Goals

Projected Loan enrollment targets:

The goal is to provide administrative and marketing and outreach support that results in the following:

- 15 loans over \$250,000 each completing their application.
- 5 loans over \$250,000 each in the pipeline for 2015.

Loan enrollment targets: 15 closed, 5 in pipeline

Year	# of loans	Projected loan amounts	
<b>2013</b>	7	Up to \$1,750,000	
<b>2014</b>	8	Up to \$2,000,000	
<b>2015 (in pipeline)</b>	5	Up to \$1,250,000	

The funding associated with this financing program is for administrative and marketing and outreach support for a Public Agency Loan Loss Reserve. LA County's SoCalREC Master Lease Financing loan program for Public Agencies uses private capital and standard underwriting criteria. SoCalREC has gathered feedback from local governments that this type of financial product would be helpful in completing their implementation of energy efficiency projects. A year-end assessment will be made to determine if program design modifications, if any, are necessary, in which case SoCalREN will revise the deliverables, goals, and milestones for review and approval.

**Metrics**

The following table demonstrates the methods for evaluation and measurement as well as the process for tracking the metrics listed

Metric	Data collected
Marketing	# of attendees at workshops, # of e-blasts distributed, click-through rates on email marketing pieces, # of hits to webpages
Direct Implementation	# of public agency informational meetings about financing; # of public agencies for which technical assistance was provided
Project financing initiated	# of Master Lease Financing options initiated
Pipeline projects	# of applications for financing pending at end of 2014

Budget Category	Allowable Expenses
Admin & Overhead	Admin labor, mileage and travel
Direct Implementation	DI labor, Lender fees, closing costs, bond counsel,
Marketing and Outreach	Collateral printing, creative design, web design, conferences, travel
Training and Education	Outreach labor and costs including trade show fees, exhibit costs, signage, etc

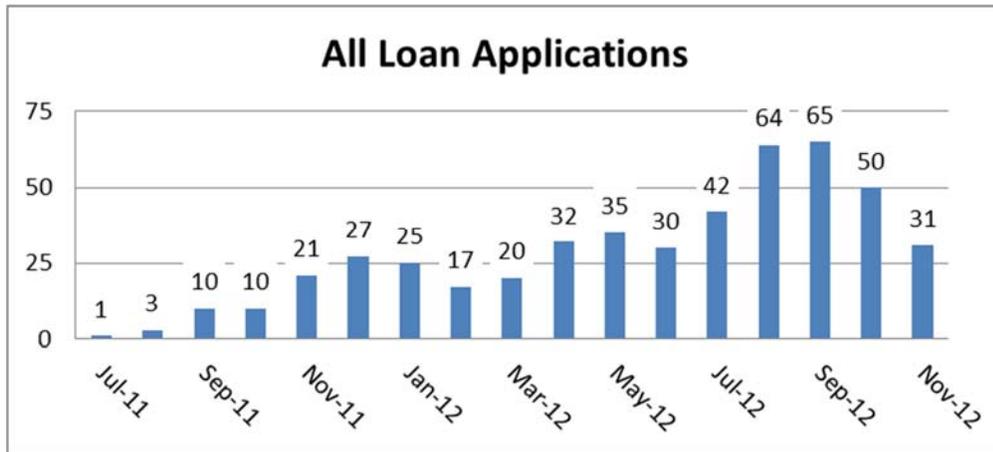
*B2: Continuation and expansion of a residential loan loss reserve program  
in support of Energy Upgrade California projects. - \$3,475,000*

In July 2011, Los Angeles County entered into a contract with Matadors Credit Union (“Matadors”) in which a loan loss reserve (LLR) was created using ARRA funds to provide credit enhancements for loans financing EUC retrofits and CSI qualifying renewable energy systems. The LLR provides 90% default coverage for each qualifying loan, thereby lowering the interest rates on the loan product since the default risk is mitigated. Without the LLR, the interest rate for an unsecured loan is approximately 360 basis points higher.

The \$3.475M in funds designated by the CPUC will enable the LA County energy loan program to be expanded throughout the Southern California region (excluding the Tri-County area) and will facilitate private sector financing for approximately 2,300 energy-related loans worth approximately \$27M. As per the Application decision, these loans would be available for EUC Advanced and Flex Path/Enhanced Basic Path projects. Appropriate restrictions will apply in municipal territories served only by SoCal Edison or only by SoCal Gas and to projects that include renewables such as solar PV or thermal. With LA County’s access to additional LLR funds from the California Energy Commission (“CEC”), the SoCal REN can ensure the single family financing program has continuity and flexibility throughout the region.

Figure 20 depicts statistics to date on EUC loans in LA County, include demand, count, total loan value, and average terms as of November 2012, and demonstrates the type of data and metrics collected for the program.

**Figure 20 (Subprogram B): Statistics to date on EUC Loans in LA County**



### EUCLA Loan Summary

	Count of Applications	Total Loan Value
<b>Funded Loans</b>	191	\$2,723,135.76
<b>Approved Loans</b>	60	\$660,597.72
<b>Total</b>	251	\$3,383,733.48

	Count of Applications	Average Interest Rate	Average Terms (months)	Average Monthly Payment	Average Loan Application
2% Loans	300	2.00%	60	\$272.99	\$15,560.70
Other Loans	7	8.42%	103	\$196.65	\$12,399.87
Defaulted Loans	1	6.99%	60	\$342.00	\$17,148.00

### Financing Product Details

The following is an overview of the financing product and qualifying criteria for the EUC residential loan loss reserve program.

#### Property Owner Eligibility

- Must have a 660 minimum FICO score and meet other credit criteria.

- Cannot have declared bankruptcy in the last 7 years or had a mortgage delinquency of more than 30 days over the last two years.

**Property Eligibility**

- Property must be served by Southern California Edison (SCE) and Southern California Gas Company (SoCalGas) excluding the Tri-County area of Santa Barbara, San Luis Obispo and Ventura.\*
- Property must be an owner-occupied, single-family detached residence.

*\* Ratepayer energy efficiency portfolio funds will not be used in territories served by municipal territories.*

**Project Eligibility**

- Energy efficiency projects must be enrolled in one of the following incentive programs:
  - SoCal REN Flex Path incentive program
  - Energy Upgrade California utility incentive program through Southern California Edison (SCE) and/or Southern California Gas Company (SoCalGas)
- Solar projects must be enrolled in the California Solar Initiative (CSI)\*
  - Solar projects must be installed concurrently or after the installation of energy efficiency measures.

*\*Ratepayer energy efficiency portfolio funds will not be used to provide LLR on solar projects.*

**Financing Terms**

- **Types of Upgrades:** Energy efficiency and solar
- **Types of Energy Loans:** Unsecured (may require a UCC-1 lien).
- **Financing Amounts:** \$2,500 - \$50,000

**Interest Rate Table**

<b>Fixed Interest Rate</b>	<b>4.99%</b>	<b>5.99%</b>	<b>6.99%</b>
<b>Term (Years)</b>	5	10	15

Sample Loan	\$10,000	\$10,000	\$10,000
Sample Monthly Payment	\$188.67	\$110.97	\$89.93

**Other**

- No prepayment penalties or closing costs.
- Loan value may equal full amount of qualifying scope of work (not including rebates and incentives).
- Based on the proposed scope of work, additional review by the Energy Commission Cultural Resources office may be required. Such review would require additional documentation and may cause delays in loan approval.

**Partners**

**Participating Lenders**

At the time of this PIP filing, Matadors is the only participating lender.

**Program Partners**

The following parties will responsible for managing and implementing this program.

Party	Role	Core Responsibilities
Los Angeles County	SoCal REN Lead	Responsible for liaising with utilities regarding contracts and leading the SoCal REN team
Renewable Funding, LLC	Program Administrator	Responsible for working with all parties to ensure smooth operation of the residential loan loss reserve program by performing administration and development work required to adequately support and expand the current program including LLRF management, exception review, audit of loans and monthly reports showing overall loan activity

		and spend of the LLRF.
Bevilacqua-Knight Inc.	Contract Manager and Marketing, Education, & Outreach	Responsible for managing contracts, scopes of work and budget of all parties including invoicing and reporting to the SoCal REN. Also handles the consumer and contractor outreach regarding the residential loan loss reserve program.

**Deliverables and Timeline**

Since the SoCal REN residential loan loss reserve program is already operating in LA County, the activities required to expand the program geographically or by project scope is relatively limited in nature.

The following outlines the core steps necessary to expand the program.

<b>Tasks</b>	<b>Date</b>
Update LLR agreements and terms for expanded territory and/or project scope	Q1 2013
Update materials and website to reflect changes	Q1 2013
Update processes for managing the respective LLRFs	Q1 2013
Launch energy loan program in expanded territory	Q1 2013
Marketing and outreach targeted to homeowners	Ongoing
Outreach and training to Participating Contractors	Ongoing
Regular administration including communicating with lender and relevant parties regarding program changes and loan exceptions, modifications, defaults, etc.	Ongoing
Review and provide monthly reports to appropriate stakeholders	Ongoing

Below is more detailed regarding tasks required for on-going administration and reporting. Typical administration and support of existing financing program with lender includes:

- Manage LLR
- Program management
- Liaise with stakeholders
- Review exceptions, modification, and default claims
- Update the program processes and requirements as needed
- Update program materials and EUC website as needed (includes web content, application packet, etc.)
- Evaluate and execute any changes to the program terms as needed
- Communicate program changes to Matadors
- Support communications to contractors and broader public
- Manage call center to answer questions related to the financing program
- Support SHPO process
- Develop and implement additional trainings or tools to assist contractors with utilizing financing, as appropriate

Typical tasks required of regular reporting include:

- Review monthly report, closed loan documentation, and account statements from lender
- Maintain file of all closing documents
- Provide monthly report with number of applications received, number of closed loans, and spend of the LLRF

### **Proposed Budget**

Please see Exhibit E for budget detail.

### **Financing Goals**

The following details the programs financing goals: 2,307 loans of \$2.768 M.

	Number of loans*	Total LLR Reserved	Total Loan Volume
Q1 2013	187	\$224,804	\$2,248,042
Q2 2013	267	\$320,060	\$3,200,602
Q3 2013	267	\$320,060	\$3,200,602
Q4 2013	267	\$320,060	\$3,200,602
Q1 2014	316	\$379,119	\$3,791,189
Q2 2014	329	\$394,995	\$3,949,949
Q3 2014	337	\$404,838	\$4,048,380
Q4 2014	337	\$404,838	\$4,048,380
<b>Total</b>	<b>2307</b>	<b>\$2,768,774</b>	<b>\$27,687,744</b>

\* Projections based on financing Flex Path, Enhanced Basic, and Advanced loans.

***B3: Establish a multi-family building energy upgrade financing loan loss reserve program - \$1,500,000***

LA County launched a multi-family (MF) EUC retrofit pilot in August 2011. It encourages a whole building approach to multifamily building upgrades by providing technical assistance and incentives to building owners who undertake deep energy efficiency retrofits. The County has already launched a marketing and outreach campaign and has received applications covering over 1,000 MF units. The County proposes to develop a financing program for MF projects that can utilize LLR funds in two ways.

**PACE Option:** The County can offer PACE financing for larger MF projects that are not associated with FNMA or FMAC financing using the existing, non-residential PACE program once this LLR is established. The existing MF retrofit program will be leveraged to reach out to interested qualified MF property owners. This will be limited to larger MF projects for which PACE is more attractive.

**Non-PACE Option (Proposed):** For smaller MF projects, the County can assist MF property owners in finding private financing which can utilize the same LLR fund. The County proposes to solicit financial

institutions interested in MF financing. The LLR account managed by the County can be used for these transactions.

These program funds will be used for credit enhancement, further program development and program administration.

***B4: Promotion and administration for already***

***established non-residential PACE program - \$1,411,500***

**Purpose**

The PACE Implementation Plan (Plan), designed to complement the Southern California Regional Energy Network (SoCalREN) Program Implementation Plan (PIP) submission, is intended to provide greater detail into PACE Financing program activities, goals, timelines, and deliverables. In addition, the Plan provides baseline metrics and methods to measure progress and key milestones during the 2013-14 Program pilot lifecycle.

**Background**

The Property Assessed Clean Energy (PACE) Financing Program was designed to offer low-cost, no money down financing to commercial, industrial and multi-family property owners within Los Angeles County to fund energy efficiency, renewable energy and water-saving improvements on-site. PACE financing provides a solution that addresses three main barriers for non-residential property owners who want to implement improvements to their buildings:

- 1) The need for upfront capital to fund projects;
- 2) Requirement of a personal guarantee to access reasonable financing terms; and,
- 3) Split incentives between property owners and their tenants.

Unlike a traditional commercial loan product, PACE financing is paid back twice a year through an assessment on the property taxes. Since the financing is tied to the property through the property tax system, a personal guarantee is not needed. Access to financing is based on the property's history, and if the property is sold, the repayment obligation transfers to the new owner. Since the financing is paid through the property tax bill, the financing cost is typically paid using an operations budget, rather than a capital expenditure budget. Most commercial leases allow operational expenses to be passed through to the tenants, eliminating the split incentives issue. In addition, PACE financing can fund up to 100% of the project's installed costs, eliminating the need for upfront capital for the project.

The PACE Financing Program in Los Angeles County was initially launched and funded in 2011 as a joint effort between the County and the City of Los Angeles using American Recovery and Reinvestment Act (ARRA) grant funds. At that time, the County acted as the Program administrator creating the legal documents and the assessment district, issuing PACE bonds to investors and providing the payment mechanism through the property tax system. The City marketed the program, provided free audits, and created a Debt Service Reserve Fund for property owners in the City of Los Angeles using its ARRA funds. In July 2012, the ARRA grant funding for the City ended and the County took over all of the Program functions in addition to its previous responsibilities for PACE.

During the 2012 SCE/SCG ARRA Continuation Contract, the PACE team split their time and energy between operational planning and stakeholder outreach. The PACE team issued an RFP for a market research firm and awarded a contract to create a targeted list of identified stakeholders along with a corresponding Marketing and Outreach Plan that would direct a more strategic approach for the outreach team. Administrative and marketing materials, including a website, were created to support outreach with specific messaging to each of the targeted stakeholder groups. In addition, a special team of outreach staff (called "Project Developers") was created to provide project management and technical assistance for

property owners by helping them to apply for PACE financing, complete an energy audit, obtain mortgage lender approval, and identify potential tax benefits, utility rebates and incentives. The goal for PACE financing is to overcome the traditional barriers previously identified resulting in more projects moving from pipeline lists and into realization.

## **Objectives**

The objective of the PUC-funded Non-Residential PACE Financing Program is to fund as many commercial, industrial and large multi-family energy efficiency, renewable energy and water saving projects as possible while taking advantage of all available rebates, incentives and tax benefits. The PACE team will target projects that are shovel-ready and have been delayed or canceled due to one of the three barriers identified earlier. PACE Project Developers will provide project management and technical assistance for property owners by helping them to apply for PACE financing, complete an energy audit if needed, obtain mortgage lender approval, and identify potential tax benefits, utility rebates and incentives. Ultimately, the PACE team will strive to complete projects throughout the region even if the project uses a combination of other financing, such as On-Bill Financing or Repayment, or utility rebates and incentives combined with cash. At the close of the 2013-2014 Transition Period, the program will measure its impact on the marketplace by answering the following questions:

- 1) Did the addition of PACE Project Developers and one-on-one customer assistance increase the number of applications and financed projects?
- 2) Did interest rates and terms become more favorable as the number of financed projects increased?
- 3) What is the average project cost compared to energy and water saved?
- 4) What types of measures are financed most frequently? How does this affect or change the target market?
- 5) Are mortgage lenders and investors more comfortable with PACE financing as a new investment instrument?
- 6) Were properties with tenants able to avoid the split-incentive issue?

## **Program Partners known when PIP was filed**

During the 2012 contract period, the PACE Financing program was managed by Los Angeles County through its contract with Bevilacqua Knight (BKl). Other Program Partners included:

- The Energy Coalition. The Energy Coalition (TEC) was chosen to manage and provide general outreach for the Southern California Regional Energy Center (SoCalREC), a pilot program that included a financing component with many similarities to PACE. Having a focused implementation team for LA County's combined non-residential financing programs allows leveraged opportunities for cross promotion, centralized database management and expertise, and streamlined tracking of program progress. BKl manages third party engineering review and verification of ASHRAE audits for the non-residential PACE financing program.
- Renewable Funding. Since there are many PACE programs across California which often share many of the same regional or national stakeholders (such as large property owners, property managers, construction companies, financial institutions), program consistency is important to maintain in order for PACE to earn broad acceptance in the marketplace. As a major player in affecting PACE legislation, advising PACE programs nationwide, and administering their own PACE program, Renewable Funding provides the LA County PACE team with the national and regional perspective linking the local program to the larger web of programs and stakeholders.
- Sustento Group. Dave Hodgins was the prior program manager for the City of Los Angeles' portion of the initial PACE program, and therefore has a historical understanding of the program. In his role as a Project Developer with the current PACE program, Dave Hodgins works in concert with RenewAll in reaching out to financial institutions to find investors for PACE projects, help property owners finalize their PACE financing agreements, and get lender consent.
- RenewAll. In addition to Sustento Group, RenewAll serves as a PACE Project Developer in Los Angeles County. As an approved agent of SCE and LA City's Department of Water and Power

(LADWP), RenewAll understands utility processes, On Bill financing, and utility rebates and incentives; RenewAll guides property owners through the process of getting an audit, determining the scope of work, and finalizing a type of financing that works with available rebates and incentives.

- O'Rorke. To support the Project Developers and the general outreach, O'Rorke maintains contact databases for potential leads and important stakeholders. They also maintain and update all materials and the public facing website, as well as monitor the lead outreach identified within the market segmentation and outreach plans.

BKi. Working with O'Rorke, BKi will manage the administrative portal of the web site allowing the PACE team to track, collect, and report on data. BKi currently processes the PACE applications and conducts a desktop review to verify eligibility requirements. BKi provides the County with a recommendation to fund for those projects that meet program requirements, and the LA County Board of Supervisors votes to place the debt on the tax role.

**Activities & Budget**

Program Activities will be divided into the following four categories and budget:

Activity	Description	Funding Source	Budget
Marketing PACE financing	Create and maintain website and marketing materials. Staff and support outreach events and general information center.	PUC SoCal REN funding	\$220,978
Project Development	Property owner, contractor, and financial institution assistance for live projects.	PUC SoCal REN funding	\$322,600
Application Processing & Technical Review	Program management and coordination. Perform quality assurance.	PUC SoCal REN funding	\$638,904

	Consult with legal, tax, and engineering experts.		
Program Administration	Contract administration and reporting.	PUC SoCal REN funding	\$229,018
<b>Total Budget</b>			\$1,411,500

### Marketing PACE Financing

PACE financing currently can be used to fund projects for commercial, industrial or non-residential properties in Los Angeles County that are proven to save energy or water or create renewable energy on-site. Within these parameters, ideal properties and projects include some of the following characteristics:

- Upgrade projects with projected construction costs over \$250,000.
- Properties with high energy bills.
- Projects stalled due to funding and/or deferred maintenance projects.
- Properties with tenants such that project costs and savings can be passed through to the tenants.
- Portfolio properties.
- Properties with little capital improvement budget or needing to preserve it for other purchases.

For all non-residential upgrade projects more than \$250,000 in projected construction costs, the PACE team will market PACE financing. Acting as the source program for this financial product, the PACE team, through its Project Developers, offers the services required to assist in identifying a scope of work, reviewing and verifying an ASHRAE audit, coordinating with the utility rebate and incentive programs, acquiring a project financier, and attaining mortgage lender approval as needed.

With the goal of marketing PACE financing and project development services to the properties and project types identified above, four types of stakeholder groups were identified, each requiring their own targeted messages and outreach methods:

- 1) General Outreach (includes local governments, trade organizations and community groups)
- 2) Contractors and trade unions

- 3) Building owners
- 4) Financial institutions

As a result, the PACE team will market the program through four distinct strategies:

- Explain how PACE Financing is a viable strategy to fund existing shovel-ready energy efficiency non-residential projects.
- Demonstrate how commercial properties can bundle a variety of projects within one consolidated financing product.
- Describe the method to overcome the split-incentive issue.
- Explain the method to finance improvements while maintaining positive cash-flow from day one.

Financing will be used as a conversation starter to reawaken stalled or deferred projects. Marketing materials and a website geared towards each of the target stakeholders promoting PACE financing have already been created through previous funding and are currently in use. During the 2013-2014 Transition Period, the marketing materials and website will be updated and new materials will be created to target specific groups. In addition, PACE marketing materials will be bundled with marketing from additional financing programs, such as On Bill Financing, that may also have appeal to a similar target audience causing the need for side-by-side comparisons and other items to be developed.

In accordance with the four major stakeholder groups identified previously, different types of outreach will be used to reach the target audiences. General outreach will include participation in trade shows and events, presentations to cities and other large stakeholder groups, and responding to stakeholder inquiries. Outreach to contractors, property owners and financial institutions will be conducted on a broader scope through webinar trainings and presentation to trade and specialty organizations. As a project is identified, that particular stakeholder will be transferred to a Project Developer if they do not have one already. The project development process is discussed below.

SoCalREN will market and administer the non-residential PACE program through a combination of tactics that include the lapace.org website, webinars, outreach to contractors and trade unions, and project development and technical assistance to property owners. The REN will also work with utility program managers and account managers to maximize incentives applied to non-residential PACE finance projects.

### **Project Development**

In 2012 the PACE team realized that a new role had to be created in order to navigate property owners through the project development and upgrade process. Since energy efficiency projects are new to many property owners, presenting them with the myriad requirements (such as acquiring an energy audit, developing project scope, evaluating energy savings as part of their cash flow, navigating the utility incentive, rebate and quality assurance processes and paperwork, and obtaining innovative financing such as PACE) can be overwhelming. PACE Project Developer positions were therefore created to provide project management and technical assistance support for the property owner.

PACE financing has many benefits over traditional loan financing. However, its property tax-based structure that provides security and repayment of the financing requires additional steps and various parties (property owner, contractor, ASHRAE auditor, mortgage bank, investor, bond counsel, and the County's Treasurer and Tax Collector) to complete a transaction. It is a new process that the PACE Project Developers help property owners and financiers to navigate.

Similarly, energy efficiency financing using PACE is new to banks. Banks typically fund energy efficiency and renewable energy projects as a typical loan, rather than taking into account that the energy savings results in monthly cash flow savings that, if structured correctly, will result in a PACE-funded project that is cash-flow-positive from the first day. Project Developers aid prospective investors in calculating and quantifying energy savings and creating these cash flow diagrams.

### **PACE administration and processing**

Although fees directly associated with processing the Initial Application and the Final Application and closing the PACE financing are incurred by the property owner, the PACE team provides other administrative and processing functions that are not covered by those fees. Some of these functions include third party engineering review of audits as needed, tracking metrics and project information through the administrative portal, getting professional legal and tax advice on PACE financing terms, making program design decisions and maintaining stakeholder databases, and reporting. In addition, a Program Handbook will be created and maintained that will include property owner, audit, project, legal, and other programmatic requirements. It will include a list of eligible measures in order to more quickly determine those that have been pre-qualified as acceptable while at the same time maintaining a tract through which a property owner may submit a custom measure to the program for approval. All measures financed under PACE will be required to submit an audit with proposed energy savings on which approval for applications is contingent.

### **Verification of Energy Savings and Installed Measures**

Under Assembly Bill 811 and subsequent related bills, such as Assembly Bill 474, PACE can be used to finance those measures proven to be energy efficient, water efficient or to produce renewable energy and are located permanently on the property's site. Los Angeles County requires an audit to be submitted with all applications in order to verify the proposed energy and water savings. An ASHRAE level 2 audit is required for energy efficiency measures. A solar audit with the following information is required for solar projects:

#### System Info:

- Solar Panel Type
- Inverter Make/ Model
- System Size (kw-DC)
- Azimuth/ Tilt/ Standoff/ Shading DeRate
- System Warranty
- Production Guarantee (if included)
- Total % of customer's annual energy usage estimated to be offset by the solar system
- Annual Production (kWh)
- Typical Demand (kW)

#### Payback Info

- System Installed Cost
- Price per kWh
- Assumed percentage annual increase in utility energy cost (should be between about 2-7%, preferably on the lower end)
- Assumed annual production degradation (should match system warranty)
- Assumed cost of inverter replacement and when
- Expected Incentives
- Copy of the output from the EPBB calculator that is used to estimate the CSI incentive
- Calculated Payback

If a project installs water-saving measures, the program requires a water audit that follows the conditions outlined in the “Water Efficiency Prerequisite 1” of the US Green Building Council’s Leadership in Energy and Environmental Design (LEED) for Existing Buildings 2009 Manual. This manual outlines a method to calculate a building’s baseline water usage prior to improvements compared to the water usage post improvements and resulting in the number of gallons saved due to the project. When applicable, each measure installed in the project must also apply for the corresponding utility rebate and submit the utility approval application with their PACE application. By requiring this with the PACE application, a project financed through PACE can have its savings verified through the utility’s incentive and rebate system.

### **Deliverables**

Deliverables for this program will be centered around identifying whether or not a project is moving forward with implementation due to the existence of the PACE financing option. The projects will be tracked similarly using the SoCalREC tracking mechanism. The tracking tool will include an online process for submitting the Initial Application, Final Application and all supporting documents. Through this tool, information about eligibility, building characteristics, project type, scope of work, and energy savings will be tracked. To the extent possible, projects that obtain financing through the PACE program will also include information about the loan itself including financier, mortgage holder, loan amount, repayment terms, and interest rate.

Other deliverables and their timelines are included in the table below:

<b>Deliverable</b>	<b>Timeline</b>
Develop online Initial Application, Final Application and User portal for document upload	Q2, 2013
Develop PACE administrative portal and tracking tool	Q2, 2013
Maintain website and marketing materials	Ongoing
Maintain Contact database & call log	Ongoing
Webinars geared to stakeholder groups	Ongoing (Scheduled on regular basis)
Develop and maintain Program Handbook	Q2 (Develop) Ongoing Maintenance
Collateral material inclusive of other financing programs	Q2, 2013
Quarterly reports on PACE application activity	Q2, Q3, Q4, 2013 Q1, Q2, Q3, 2014
Yearly report on PACE activity, progress, and program design assessment	Q4 2013
Final report for program cycle	Q4, 2014

## Goals

### Projected Loan enrollment targets

The goal is to provide administrative and marketing and outreach support to commercial property owners that results in the following:

- 10 loans over \$250,000 each completing the initial PACE application
- 5 loans over \$250,000 each completing the final PACE application
- 5 loans over \$250,000 each completing a PACE-funded project
- 5 loans over \$250,000 each in the pipeline for 2015.

The funding associated with this financing program is for marketing and administration of a PACE financing program for Non-residential properties using private capital and standard underwriting criteria. Although there are PACE programs in operation all over the State, PACE is still a new program with few completed projects; consequently, there is still much to learn regarding to whom and how to properly position PACE for mainstream success. A year-end assessment will be made to determine if program design modifications, if any, are necessary, in which case SoCalREN will revise the deliverables, goals, and milestones for review and approval.

## Metrics

The following table demonstrates the methods for evaluation and measurement as well as the process for tracking the metrics listed

Metric	Data collected
Marketing	# of attendees at workshops, # of e-blasts distributed, click-through rates on email marketing pieces, # of hits to webpages
PACE Projects financed	# of Initial Applications filed, # of Final Applications signed, # of PACE assessments placed
Interest list	# of meetings/ presentation about PACE financing held
Projects influenced by PACE team	# of incentive applications submitted
Project type financed	Measures descriptions for all items included in scope
Pipeline projects	# of Initial applications filed, # of Final Applications pending

### *B5: Establishment of public agency energy upgrade revolving loan fund*

*program - \$ 472,000*

## Introduction

Local governments play a critical role in furthering the State's energy efficiency goals by addressing barriers within its own sector as well as those of its constituents. Significant progress has been made in retrofitting municipal facilities and infrastructure due in large part to the 2009 American Recovery and Reinvestment Act (ARRA). The successes and lessons learned from these projects have created a strong foundation and momentum from which local governments can build upon to pursue additional energy efficiency projects. Many opportunities remain for local government and public agencies to invest in energy efficiency.

## Purpose

The Public Agency Revolving Loan Fund Program (PA RLF) was designed to offer a simplified method for the marketing and administration of financing mechanisms for the Southern California Regional

Energy Center (SoCalREC), a sub-program of the Southern California Regional Energy Network (SoCalREN). In accordance with the November 8, 2013 Final Decision (A.12-07-001), "it may be valuable to have SoCalREN do marketing activities to promote other financing offerings. Therefore, we will approve the funding for administration and marketing, but not for the revolving loan fund itself.". This description provides detail on activities, goals, timelines, and deliverables. In addition, this description provides baseline metrics and methods to measure progress and key milestones during the 2013-2014 Program cycle.

In the original PIP, SoCalREN proposed funding of revolving loans for public agency buildings as part of the program design. Pursuant to D.12-11-015, this final PIP no longer includes this element which was not approved, but does include the marketing of available financing mechanisms such as those funded by the Energy Commission from ARRA sources. Therefore, the administrative as well as marketing and outreach support of all other available financing programs to public agencies falls under the auspices of the Public Agency Revolving Loan Fund.

## **Background**

The PA RLF program was designed to offer marketing and outreach of a specific financing option for public agencies as a component of the SoCalREC, a sub-program of the SoCalREN. Under the SCE/SCG 2009 American Recovery and Reinvestment Act (ARRA) Continuation Program scope of work, Los Angeles County was tasked with exploring the creation of a unified revolving loan fund program that offered short-term loans to public agencies. In a revolving loan fund, energy savings from past energy efficiency projects are used as "seed money" for a fund that provides loans for other energy efficiency projects. However, the revolving loan fund was not considered feasible since each public agency has unique financial considerations, and without seed funding, there is no way to fund initial participants' loans to establish the fund. In addition, the outside lender participation is not efficient for small short-term amounts unless there is seed funding and history of operations. SoCalREC recognized that another solution was to

promote the development of individual revolving loan funds for each public agency with rebate incentive receipts as the seed money for the fund.

During the 2012 ARRA Continuation Contract with the IOUs, SoCalREC began working on two parallel initiatives:

- Promoting all available financing options
- Recommending policy changes for public agencies to help develop internal revolving loan funds.

SoCalREC has held workshops to promote programs such as the SoCalREC Master Lease Financing and the IOU On-Bill Financing (OBF). In addition, SoCalREC also began the development of a guidebook for local governments that outlines steps for the development and administration of internal revolving loan funds. The guidebook (still in process) will illustrate a step-by-step approach for developing policy, obtaining stakeholder support, assessing project eligibility, and “seeding” of the fund. The guidebook should be available for local government use by the end of the first quarter in 2013.

It is critical that marketing, education and outreach be provided to local governments (and all public agencies) regarding financing energy projects as many industry experts agree (including the Commission’s Financing Consultant – Harcourt, Brown and Carey) that many financing options exist for local governments. However, what is preventing greater participation is a better understanding of how and why financing programs will benefit local governments.

## **Objectives**

There are two objectives for the Public Agency RLF Program:

1. Provide financing solutions to help move SoCalREC projects towards implementation; these solutions include awareness of existing programs, understanding of financing program terms and conditions, addressing common misperceptions about financing, overcoming typical challenges with financing.
2. Provide administrative support to agencies for developing Revolving Loan Funds and implementing financing programs into their organizations fiscal management.

## **1. Provide Financing Solutions**

Through public agency feedback, SoCalREC discovered that there was limited availability and understanding of “turn-key” financing mechanisms, such as standardized underwriting criteria, competitive interest rates attractive to cost-conscious jurisdictions, and adequate information for agencies to make investment decisions regarding energy efficiency.

Therefore, a primary objective of this program is to provide administrative support and marketing and outreach about financing solutions that help to move energy efficiency projects towards implementation.

The intent is to promote a menu of financing options to public agencies (e.g. Master Lease Program, On-Bill Financing, etc.), without favoring any one program. SoCalREC will help public agencies to find solutions for specific project types, and provide the knowledge and expertise to public agencies regarding applications, document organization, and technical assistance.

Additionally, this program will address common misperceptions that local governments have regarding financing, including: a lack of knowledge regarding project costs, an inability to measure savings, impacts to jurisdictions’ “debt ceiling,” how loans are secured, that budget commitments cannot be extended over multiple years, to name a few. Very few jurisdictions have invested the time and resources to resolve these issues and take advantage of low-cost financing. This messaging will be developed and delivered to all levels of decision makers within local government including technical, financial, executive and legal.

## **2. Provide Administrative Support to Agencies for Developing Revolving Loan Funds**

Through the program, SoCalREC will provide interested public agencies with guidebooks to help them to establish their own revolving loan fund. Regardless of where a public agency may be on the revolving loan development continuum, SoCalREC will provide the necessary technical assistance to help establish a loan fund. A revolving loan fund is really no different than the existing financing products that are

on the market. Whether through seed funding under a revolving loan fund, or through a traditional financing product, initial funding is provided to initiate a project and the cost of that project must be paid back.

A revolving loan fund provides a unique benefit in that the loan can be managed “internally” and does not necessarily require a third-party agreement. However, the core challenges described above still exist, as do the administrative challenges of understanding how an energy project loan can be integrated into existing fiscal and energy management procedures.

These challenges include:

- Understanding how utilities budgets are ideally managed,
- How utilities budgets can be leveraged to facilitate loans,
- How loan status and repayments can be managed and tracked,
- How loan administrative costs can be managed,
- How to manage loans with “split incentives” for landlord/tenant relationships,
- Handling utility and other incentives under loans,
- How to pay for administration of the loan program, equating project savings and loan payments, and
- Other fundamental questions.

#### **Projected Loan enrollment targets:**

The goal is to provide administrative and marketing and outreach support that results in the following:

- 40 loans that have completed their application.
- 15 loans that have pending applications to be completed in 2015.
- 2013
  - 20 loans
- 2014
  - 20 loans
- Pipeline 2015
  - 15 loans

## **Program Partners known when PIP was filed**

During the 2012 SoCalREC pilot period, the Revolving Loan Fund program was managed by Los Angeles County through a contract with The Energy Coalition, with the participation of Public Financial Management (PFM). PFM was responsible for drafting the initial guidebook that outlined the process for establishing an internal revolving loan fund for public agencies. PFM will continue to assist cities using the guidebook with technical support, templates and documents, and other financial expertise.

In addition, using ARRA funds, Los Angeles County implemented an internal revolving loan fund program for County buildings. This effort included addressing all of the challenges identified above as well as satisfying the requirements of the original seed fund provider – the California Energy Commission and the Department of Energy. This Los Angeles County loan program will generate funds for projects for decades through an initial \$6 million investment. The mechanics of implementing this program into the County's central Utilities Budget, while addressing the County's general accounting principles and budgeting requirements, will also be documented and presented to stakeholder peers in other jurisdictions.

## **Activities and Deliverables**

Program activities will be based on the two objectives in the previous section:

1. **Marketing and Outreach:** Provide financing solutions to help move SoCalREC projects towards implementation; these solutions include awareness of existing programs, understanding of financing program terms and conditions, addressing common misperceptions about financing, overcoming typical challenges with financing.
2. **Direct Implementation:** Provide administrative support to agencies for developing Revolving Loan Funds and implementing financing programs into their organizations fiscal management.

**1. Marketing and Outreach: Provide financing solutions to help move SoCalREC projects towards implementation**

During the last funding cycle, SoCalREC provided general information regarding project financing to local governments through newsletters and workshops. For the 2013-2014 funding cycle, the marketing strategy will build upon these previous efforts to promote financing options to move projects towards implementation. SoCalREC will market all available financing programs to public agencies via newsletters, speaking engagements, and trade shows. The development and promotion of new marketing collateral will help to hold the interest of public agencies and keep them informed.

Through simple clarification of the financing mechanisms and process, public agencies will better understand how to finance their energy efficiency project.

SoCalREC will first develop a series of finance-related marketing materials including collateral information with side-by-side comparisons between the various financing options, an online decision tree, and a financing section on the SoCalREC website.

SoCalREC will also develop education and outreach materials that address the most common misperceptions and challenges that local governments typically raise when considering the adoption of financing. These materials will be developed for different stakeholders within an organization that will be involved in the decision-making process for adopting financing programs.

SoCalREC will then work with strategic partner organizations to obtain speaking engagements while the outreach team attends relevant trade shows aimed at reaching the target market. The team will also include sections on financing opportunities at all public agency focused workshops where city managers, finance directors, and other stakeholders can learn firsthand about the pros and cons of each financial vehicle.

The true benefit of this activity is applying the expertise of the SoCalREC team to help local governments and public agencies find the best financing solution for their unique projects. This type of

“grassroots” expertise will be leveraged through other existing SoCalREC services such as technical assistance, project procurement, and project management through implementation.

### **Deliverables**

- Update current website content about financing
- Update existing contact database for greater outreach
- Develop collateral material comparing financing options, overcoming challenges/misperceptions and administering financing programs for public agencies.
- Develop education, best practice materials
- Acquire information from practicing agencies
- Include slides about financing in public agency presentations
- Post new information on SCREN website
- Attend outreach events and have meetings with key stakeholders
- Create case studies from Actual RLF/Financed Projects
- Assist public agencies with financial analysis on actual energy efficiency projects
  - Educate public agencies on SoCalREC Master Lease financing
  - Educate public agencies on IOU on-bill financing program offerings
  - Educate public agencies on other financing options available for projects
  - Analyze actual energy efficiency projects and present agencies with recommendation mixes of financing
  - Assist the agencies with loan applications
  - Assist the agencies obtain internal stakeholder support
  - Assist the agencies with documentation and energy efficiency calculations necessary to get financing
  - Leveraging SoCalREC technical support, assist agencies with EM&V for repayment set-up and logistics

**2. Direct Implementation: Provide administrative support to agencies for developing Revolving Loan Funds and implementing financing programs into their organizations fiscal management**

SoCalREC will work with local government jurisdictions to increase their understanding of the potential to leverage traditional financing with revolving loans. The idea here is that if a local government fully understands the benefits of innovative energy project financing, they would be more likely to finance the revolving loan fund with cash saved through existing energy efficiency projects as capital for future projects.

Tasks included in this activity would include:

- Revising the existing and somewhat dated revolving loan fund guidebook to address challenges and misconceptions and identify other viable financing programs.
- Providing assistance to local governments to draft policy language for a revolving loan fund, and other financing programs including integration of energy project financing into Local Government internal energy management programs, finance and accounting procedures, and debt management requirements, and
- Helping public agencies through the approval and implementation process to establish a revolving loan fund or other financing program.

### **Deliverables**

- Templates for revolving loan fund or energy project financing implementation
- Revise RLF Guidebook to include, but not limited to:
  - Explain how a Public Agency Energy Management Budget should be structured
    - Centralized utilities budget description/establishment
    - Inter-organizational hierarchy description/establishment
    - Central accounts collection and payment benefits/steps
    - Utilities overhead charge to pay for services (show examples, benefits, economies of scale needs)
  - Explain intricacies of public agency utilities accounting
    - Multiple building "tenants" under one account (single-meter residential account)
    - Multiple accounts on one facility/campus

- Federal/state/other subsidies ("subvention")
- Some subsidies include reimbursements for operating costs (including utilities)
- Split incentives issue
- Public agencies are tenants in some buildings/accounts
- Public agencies are landlords in some buildings/accounts
- Leases treat utilities differently
- Explain Financing Challenges
  - Education: no internal expertise on identifying opportunities, benefits, costs
  - Multiple options: no internal expertise to evaluate options
  - Procurement: no expertise or resources to procure
  - Fear of getting "burned" leads to inactivity
  - Debt limitations: lack of understanding about secured debt and impact on internal limits
  - Public Agency Generally Accepted Accounting Principles must be followed
  - Public Agency Budgeting Procedures may need altering
  - Public Agency financing practices may need altering or clarification
- Show Financing "Flow Paths" for Projects
  - Explain ways for using project savings to "pay for" projects
  - Estimating and measuring savings
  - Impacts on savings (weather, change in operations, structural changes, etc)
  - LA County Energy Savings Investment Program (RLF using CEC funds)
  - CEC Gov't Low Interest Finance Program (CEC RLF for public agencies)
  - Other Financing Programs (financing with no upfront cost)
  - Energy Efficiency Power Purchase Agreements
- Explain How Financing Can Succeed in a Public Agency
  - Use SoCalREC services/EEMIS to Identify Projects and Manage Energy
  - Use SoCalREC to prioritize potential projects
  - Use SoCalREC to implement projects, track savings
  - How to set up a RLF/Financing accounting system
  - Getting agreements with interagency organizations for the RLF

- Establishing agreements with "financers" for RLFs (may be agency itself)
- Assistance for local governments in establishing an internal revolving loan program or adopt internal policies for utilizing traditional energy project financing programs.
  - Look for projects and opportunities that could benefit from a revolving loan or financing program
  - Assist agencies with documentation needs necessary to establish a revolving loan or financing program
  - Assist agencies in obtaining internal stakeholder support
  - Provide technical support and expertise to agencies
  - Coordinate SoCalREC technical support on energy efficiency realization and budget tracking
  - Assist the agency identify seed money for principal for the revolving loan program

<b>Deliverables/Tasks</b>	<b>Budget/Timeline</b>
<b>1. Marketing</b>	<b>\$10,000</b>
Update current website content about financing	Q3, 2013
Update existing contact database for greater outreach	Q3, 2013
Develop collateral material comparing financing options, overcoming challenges/misperceptions and administering financing programs for public agencies.	Q3, 2013
Develop education, best practice materials	Q4, 2013
Acquire information from practicing agencies	Q3, 2013
Include slides about financing in public agency presentations	Q3, 2013
Post new information on SCREN website	Q4, 2013
Attend outreach events and have meetings with key stakeholders	Ongoing
Create case studies from Actual RLF/Financed Projects	Q1, 2014
Assist public agencies with financial analysis on actual energy efficiency projects Ongoing <ul style="list-style-type: none"> <li>• Educate public agencies on SoCalREC Master Lease financing</li> <li>• Educate public agencies on IOU on-bill financing program offerings</li> </ul>	Ongoing

<ul style="list-style-type: none"> <li>• Educate public agencies on other financing options available for projects</li> <li>• Analyze actual energy efficiency projects and present agencies with recommendation mixes of financing</li> <li>• Assist the agencies with loan applications</li> <li>• Assist the agencies obtain internal stakeholder support <ul style="list-style-type: none"> <li>○ Assist the agencies with documentation and energy efficiency calculations necessary to get financing</li> <li>○ Leveraging SoCalREC technical support, assist agencies with EM&amp;V for repayment set-up and logistics</li> </ul> </li> </ul>	
<b>2. Direct Implementation</b>	<b>\$272,088</b>
Templates for revolving loan fund or energy project financing implementation	Q4
<p>Revise RLF Guidebook to include, but not limited to:</p> <ul style="list-style-type: none"> <li>• Explain how a Public Agency Energy Management Budget should be structured <ul style="list-style-type: none"> <li>○ Centralized utilities budget description/establishment</li> <li>○ Inter-organizational hierarchy description/establishment</li> <li>○ Central accounts collection and payment benefits/steps</li> <li>○ Utilities overhead charge to pay for services (show examples, benefits, economies of scale needs)</li> </ul> </li> <li>• Explain intricacies of public agency utilities accounting <ul style="list-style-type: none"> <li>○ Multiple building "tenants" under one account (single-meter residential account)</li> <li>○ Multiple accounts on one facility/campus</li> <li>○ Federal/state/other subsidies ("subvention")</li> <li>○ Some subsidies include reimbursements for operating costs (including utilities)</li> <li>○ Split incentives issue</li> </ul> </li> </ul>	Q1

- Public agencies are tenants in some buildings/accounts
- Public agencies are landlords in some buildings/accounts
- Leases treat utilities differently
- Explain Financing Challenges
  - Education: no internal expertise on identifying opportunities, benefits, costs
  - Multiple options: no internal expertise to evaluate options
  - Procurement: no expertise or resources to procure
  - Fear of getting "burned" leads to inactivity
  - Debt limitations: lack of understanding about secured debt and impact on internal limits
  - Public Agency Generally Accepted Accounting Principles must be followed
  - Public Agency Budgeting Procedures may need altering
  - Public Agency financing practices may need altering or clarification
- Show Financing "Flow Paths" for Projects
  - Explain ways for using project savings to "pay for" projects
  - Estimating and measuring savings
  - Impacts on savings (weather, change in operations, structural changes, etc)
  - LA County Energy Savings Investment Program (RLF using CEC funds)
  - CEC Gov't Low Interest Finance Program (CEC RLF for public agencies)
  - Other Financing Programs (financing with no upfront cost)
  - Energy Efficiency Power Purchase Agreements
- Explain How Financing Can Succeed in a Public Agency
  - Use SoCalREC services/EEMIS to Identify Projects and Manage Energy

<ul style="list-style-type: none"> <li>○ Use SoCalREC to prioritize potential projects</li> <li>○ Use SoCalREC to implement projects, track savings</li> <li>○ How to set up a RLF/Financing accounting system</li> <li>○ Getting agreements with interagency organizations for the RLF</li> <li>○ Establishing agreements with "financers" for RLFs (may be agency itself)</li> </ul>	
<p>Assistance for local governments in establishing an internal revolving loan program or adopt internal policies for utilizing traditional energy project financing programs.</p> <ul style="list-style-type: none"> <li>● Look for projects and opportunities that could benefit from a revolving loan or financing program</li> <li>● Assist agencies with documentation needs necessary to establish a revolving loan or financing program</li> <li>● Assist agencies in obtaining internal stakeholder support</li> <li>● Provide technical support and expertise to agencies</li> <li>● Coordinate SoCalREC technical support on energy efficiency realization and budget tracking</li> <li>● Assist the agency identify seed money for principal for the revolving loan program</li> </ul>	Ongoing

## Reporting

The projects will be tracked utilizing the SoCalREC tracking tool. The SoCalREC tracking tool will include information about project types, scopes of work, energy savings, and rebate applications. SoCalREC projects that obtain financing (through any source) will include pertinent loan data including: loan amount, repayment terms, interest rate, and non-rebated measures financed.

Note: If a project uses the SoCalREC's Master Lease financing for projects over \$250,000, the project will be tracked as part of the Public Agency Loan Loss Reserve Program. This Revolving Loan Fund Program will be used to track all other financing options.

- In addition to monthly narrative and project reporting, SCREN will generate the following additional reports: Quarterly reports on loan activity for SoCalREC related projects
- Quarterly reports on marketing activities including presentations, speaking engagements, and events attended where financing was promoted
  - Number of events
  - Number of attendees at workshops
  - Number of e-blasts distributed
  - Click-through rates on email marketing pieces
  - Number of hits to webpages
- Yearly report on loan activity, progress, and program design assessment
  - Numbers of public agencies informational meetings about financing where SoCalREC technical services were offered
  - Number of project financing mechanisms initiated (what type of financing chosen, specific measures and financing type)
  - Number of applications in the pipeline for financing pending at end of 2014
  - Number of revolving loan fund guidebooks distributed
  - Number of agencies requesting technical assistance with RLF;
  - Number of revolving loan funds initiated
- Final report for program cycle

## Timeline

Deliverables and their timelines are included in the table below:

Deliverable	Tasks	Timeline
<b>Provide financing solutions to help move SoCalREC projects towards implementation</b>	Update current website content about financing	Q2, 2013
	Update existing contact database for greater outreach	Ongoing
	Develop collateral material comparing financing options, overcoming challenges/misperceptions and administering financing programs for public agencies.	Q2, 2013
	Develop education, best practice materials	Q3, 2013
	Acquire information from practicing agencies	Q3, 2013
	Include slides about financing in public agency presentations	Q2, 2013
	Post new information on SCREN website	Q3, 2013
	Attend outreach events and have meetings with key stakeholders	Ongoing
	Create case studies from Actual RLF/Financed Projects	Q3, 2013
	Assist public agencies with financial analysis on actual energy efficiency projects	Ongoing
	<b>Provide administrative support to agencies for developing Revolving Loan Funds and implementing financing programs into their organizations fiscal management</b>	Templates for revolving loan fund or energy project financing implementation
Revise RLF Guidebook		Q3, 2013
Assistance for local governments in establishing an internal revolving loan program or adopt internal policies for utilizing traditional energy project financing programs.		Q3, 2013
<b>Reporting</b>	Quarterly reports on loan activity for SoCalREC related projects	Q3-Q4, 2013. Q1-Q4, 2014
	Quarterly reports on marketing activities including presentations, speaking engagements, and events	Q3-Q4, 2013. Q1-Q4, 2014

	attended where financing was promoted	
	Yearly report on loan activity, progress, and program design assessment	Q1, 2014.
	Final report for program cycle	Q4, 2014

END OF DESCRIPTION OF SUBPROGRAM B: FINANCING

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

**Table 2 (Subprogram B). Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year<sup>5</sup>**

	2013	2014	Total
Sub-program B: Financing			
GWh	0	0	0
Peak MW	0	0	0
Therms (millions)	0	0	0

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

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<sup>5</sup> Individual utility specific information to be provided in this table

This Subprogram B achieves the Guidance Ruling on 2013-2014 Energy Efficiency Portfolios Order (No. 22) requiring continuation of successful financing programs that were originally supported by ARRA funding in 2011 and 2012 and implemented by third parties, local governments, and/or via the California Energy Commission; and development of a set of new financing programs to be designed in 2012, and then offered consistently on a statewide basis, in pilot form in 2013, and on a larger scale in 2014.

This Subprogram B will help achieve the Guidance Ruling on 2013-2014 Energy Efficiency Portfolios Order (No. 23) requiring the IOUs to propose financing programs that include: a credit enhancement strategy for single family residential market, a financing program strategy designed specifically for the multi-family residential market, and a credit enhancement strategy for the small business market.

This Subprogram B will also help achieve the Guidance Ruling on 2013-2014 Energy Efficiency Portfolios Order (No. 21) requiring the IOUs to hire an expert financing consultant to design new pilot financing programs for 2013-14 and to convene working groups on program design and data collection needed to support scalable financing programs in the future. This Sub-program will help to develop loan and project performance data and experience to share with larger capital market players to ensure their confidence in both debt repayment behavior and the cash flow profile of energy savings associated with the projects

**Table 3 (Subprogram B): Quantitative Subprogram Targets (PPMs)**

Target	2013	2014
Number of homes or buildings treated	TBD	TBD
Number of units incented or rebated	TBD	TBD

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

Guidance Ruling on 2013-2014 Energy Efficiency Portfolios Order No. 29 instructs the IOUs to address a strategy for maximizing portfolio cost-effectiveness by offering financing programs in coordination with rebate/incentive programs, either by offering financing in lieu of rebates and/or by lower incentives where financing is also provided. The SoCalREN will provide comments on the IOU strategy relative to the programs proposed here.

If Subprogram B: Financing is determined to be a non-resource program, the need for financing programs in the State are described in the paper created under CPUC guidance: Energy Efficiency Financing in California: Needs and Gaps (July 2011); Harcourt, Brown and Carey.

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

- a. Indicate data source for savings estimates for program measures (DEER, custom measures, etc).
- CPUC approved customized and DEER measures.
  - R.09-11-014 Order 30: In their 2013-2014 energy efficiency program portfolio applications, Pacific Gas & Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall propose a methodology to estimate incremental savings delivered by the statewide financing programs towards their energy savings goals, while avoiding double-counting of savings from other programs.
  - R.09-11-014 Order 31: In 2013-2014 statewide financing programs, Pacific Gas & Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern

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<sup>6</sup> 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.

California Gas Company shall not require that all measures supported by financing programs be part of another utility incentive program.

b. Indicate work paper status for program measures:

**Table 4 (Subprogram B): Work Paper Status**

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	Customized - Indoor Lighting		X	
2	Customized - Indoor Lighting Controls & EMS		X	
3	Customized - Outdoor Lighting		X	
4	Customized - Outdoor Lighting Controls		X	
5	Customized - Motors		X	
6	Customized - VFDs		X	
7	Customized - HVAC EMS		X	
8	Customized - Chillers		X	
9	Customized - HVAC		X	
10	RCx/MBCx		X	
11	Adjust chiller water reset retrocommissioning		X	
12	Chilled water pump motor - VFD		X	
13	Data center air flow management		X	
14	Economizer - air side		X	
15	Fan static pressure reset		X	
16	Hot and cold deck reset		X	
17	Reduce lighting schedule retrocommissioning		X	
18	Revise supply fan schedule retrocommissioning		X	
19	Agricultural pump system overhaul		X	
20	Cooling tower - VFD		X	
21	Right sizing pumps		X	
22	Well pump - VSD		X	
23	Install or repair supply fan VFD retrocommissioning		AC-10166	
24	A-C compressor replacements		AC-12479	
25	Single package vertical air conditioners		AC-13224	
26	Economizer - air side		AC-15142	
27	Chilled water reset		AC-15987	
28	Frictionless compressor retrofit		AC-18574	
29	Condenser water reset		AC-25431	

30	Improved chiller sequencing		AC-32109	
31	Energy Efficient Fan Blade Retrofits		AC-34264	
32	Variable speed chiller plant optimization (Hartman Loop)		AC-39548	
33	Chiller (HVAC) Compressor - VFD		AC-43210	
34	Chiller Compressor - VFD		AC-43210	
35	Programmable thermostat		AC-45213	
36	Carbon Dioxide (CO2) Demand Control Ventilation		AC-50654	
37	Condenser fan - VFD		AC-54069	
38	Other HVAC Systems		AC-59807	
39	Variable air volume for fumehoods		AC-60598	
40	Computer room air handling unit - VFD (retrofit only)		AC-61734	
41	Constant air volume to variable air volume conversions		AC-68030	
42	Economizer - water side		AC-68473	
43	HVAC Occupancy Sensor Thermostat		AC-68796	
44	Hot water pump motor - VFD		AC-69858	
45	Condenser water pump motor - VFD		AC-74984	
46	Pneumatic to DDC controls		AC-75342	
47	HVAC - energy management system (EMS)		AC-75930	
48	Ventilation fan - VFD		AC-78722	
49	HVAC Compressor Controls		AC-79531	
50	High efficiency chillers - air-cooled		AC-85073	
51	Cooling tower upgrade		AC-86944	
52	High efficiency chillers - frictionless		AC-87463	
53	High efficiency chillers - water-cooled frictionless		AC-87463	
54	Fan static pressure reset		AC-96957	
55	High efficiency chillers - water-cooled		AC-98022	
56	Window film or glazing		BE-48901	
57	Building shell improvements		BE-60912	
58	Efficient windows		BE-78594	
59	Exterior HID de-lamping		LT-10901	
60	Interior LED integral lamps - Omnidirectional (A-lamps, etc)		LT-12109	
61	Interior cold cathode fluorescent lamp		LT-13420	
62	Interior LED fixture replacement (utilizing approved luminaries)		LT-17492	
63	Exterior LED pool lighting		LT-23623	
64	Interior LED refrigerated case lighting		LT-32756	
65	Exterior LED outdoor pole/arm-mounted area and roadway luminaires		LT-37654	
66	Exterior linear fluorescent retrofits		LT-39008	
67	Lighting controls -occupancy sensors		LT-43077	

68	Exterior LED advertisement sign/smart sign		LT-46594	
69	Exterior compact fluorescent fixture retrofits - (excluding screw-in CFL)		LT-49472	
70	Lighting controls - energy management system (EMS)		LT-50567	
71	Interior linear fluorescent retrofits		LT-51003	
72	Exterior induction retrofits		LT-55464	
73	Interior LED integral lamps - Directional Lamps ( BR, ER, PAR, MR, etc)		LT-56453	
74	Interior LED recessed, surface and pendant-mounted downlights		LT-58676	
75	Installation of new exterior induction lighting (new construction or added load only)		LT-64209	
76	Other Exterior Linear Fluorescent Lighting		LT-70908	
77	Day lighting systems with dimmable ballast		LT-74751	
78	Interior compact fluorescent fixture retrofits - (excluding screw-in CFL)		LT-76865	
79	Exterior lighting controls - occupancy sensors		LT-76878	
80	Exterior HID retrofits		LT-78723	
81	Interior linear fluorescent lamps		LT-78954	
82	Reduce lighting schedule retrocommissioning		LT-79695	
83	Exterior LED fixture replacements (utilizing approved luminaries)		LT-85834	
84	Interior linear fluorescent de-lamping		LT-86321	
85	Other Exterior Induction Lighting		LT-87643	
86	Day lighting controls		LT-90853	
87	Interior LED track or mono-point directional lighting fixtures		LT-91217	
88	Interior HID retrofits		LT-96977	
89	Motor cycling controls		MT-28473	
90	All motors less than 200 hp		MT-54002	
91	Motor generator set replacements		MT-65483	
92	Motors greater than 200 hp		MT-80691	
93	Thin client		OE-96858	
94	Industrial pump system overhaul		PM-10021	
95	Chilled water pump optimization flow configuration		PM-11099	
96	Pump controls		PM-16109	
97	Nonresidential Pool Pump - VSD		PM-21834	
98	Chilled water pump retrofit		PM-26354	
99	Right sizing pumps		PM-27202	
100	Optimize Fluid Flow System		PM-29644	
101	Well pump - VSD		PM-32978	
102	Fluid Pump - VFD		PM-35845	
103	Agricultural pump system overhaul		PM-45201	

104	Industrial Pump Retrofit		PM-50902	
105	Vacuum pumps - VSD		PM-54502	
106	Heating hot water pumps		PM-59487	
107	Pressure regulating float valves on stand pipes		PM-89013	
108	Fan controls		PM-93090	
109	Other Pumping Controls		PM-98123	
110	Wastewater Pump - VFD		PM-98434	
111	Wastewater Pump - VSD		PM-98434	
112	Heat pump replacing electric resistance block heaters in back-up diesel generators		PR-10295	
113	Right sizing air compressor		PR-10476	
114	Wastewater controls		PR-17464	
115	Efficient Satellite Communication Lab Amplifier		PR-28433	
116	Compressed air distribution modification retrocommissioning		PR-29812	
117	System optimization for compressed air		PR-38572	
118	Compressed air system repair retrocommissioning		PR-39765	
119	Gas separation and liquefaction process retrofits		PR-40970	
120	Waste water treatment - fine bubble aeration		PR-49586	
121	Compressed Air Recovery System		PR-57193	
122	Replace all or portion of compressed air system with high efficiency blower retrocommissioning		PR-61029	
123	Variable volume injection molding machine		PR-61729	
124	Professional wet cleaning equipment		PR-63889	
125	Efficient Battery Charger		PR-69844	
126	New receiver tank for compressed air system (for use in comprehensive compressed air projects only)		PR-83422	
127	Air compressor no-loss drain valves		PR-87504	
128	Molding Machine Controls		PR-89584	
129	Blower - VFD		PR-90435	
130	Reduce Compressed Air Pressure Setting - Retrocommissioning		PR-90548	
131	Refrigeration- energy management system (EMS)		RF-18607	
132	Walk-in ECM motors		RF-20986	
133	Single system to multiplex/parallel system conversion		RF-38743	
134	Low temperature high efficiency reach-in display cases		RF-40976	
135	Refrigerated case doors		RF-42400	
136	Refrigerated Case Doors- Door Miser		RF-42400	
137	High efficiency medium temperature open display cases		RF-45362	
138	Evaporator coil fan control (cycling)		RF-56398	

139	Anti-sweat heater (ASH) controls		RF-60982	
140	Refrigeration fan retrofits		RF-63798	
141	Efficient refrigeration compressors		RF-65700	
142	Low temperature reach-in door - anti fog film		RF-67581	
143	Evaporator coil fan - VFD (AC&R1 for approved use only)		RF-72821	
144	Evaporator coil fan - VFD		RF-87644	
145	Single system to multiplex/parallel system conversion (AC&R1 for approved use only)		RF-89231	
146	Rapid close doors for freezers		RF-89478	
147	Night curtains		RF-94321	
148	Replace electric water heater with heat pump water heater		WH-78213	
149	Install, repair or optimize air handler controls-retrocommissioning		AC-78325	
150	Install, repair or optimize air handler controls-retrocommissioning		AC-78325	
151	New Construction - Above Code Design - Variable Speed Drives		AC-12348	
152	New Construction - Above Code Design - Boilers		AC-49688	
153	New Construction - Above Code Design - Furnaces		AC-59688	
154	New Construction - Above Code Design - HVAC Energy Reduction		AC-59837	
155	New Construction - Above Code Design - Chillers		AC-65241	
156	New Construction - Above Code Systems Design - Parking Garage Exhaust Fan Controls		AC-67281	
157	New Construction - Above Code Design - Heat Pumps		AC-74933	
158	New Construction - Above Code Design - Air-Cooled Package A/C		AC-89604	
159	New Construction - Above Code Design - Premium Efficiency Motors		AC-98043	
160	New Construction - Above Code Design - Low SHGC Glass		BE-29134	
161	New Construction - Above Code Design - Improved Insulation		BE-38506	
162	New Construction - Above Code Design - Commercial Kitchen Appliances		FS-12019	
163	New Construction - Above Code Design - Lighting Controls		LT-16758	
164	New Construction - Above Code Design - Lighting		LT-29786	
165	New Construction - Above Code Design - Sign Lighting		LT-59888	
166	New Construction - Above Code Design - Daylighting Controls		LT-84905	

167	New Construction - Above Code Design - Water Distribution Pumping		PM-29383	
168	New Construction - Above Code Design - Wastewater Treatment Pumping and Aeration		PM-38485	
169	New Construction - Above Code Systems Design - Dairy Process Systems		PR-10743	
170	New Construction - Above Code Design - Data Center UPS Efficiency		PR-38463	
171	New Construction - Above Code Design - Data Center Cooling		PR-46373	
172	New Construction - Above Code Design - Manufacturing & Industrial Process Efficiency		PR-59848	
173	New Construction - Above Code Design - Other System Incentives		PR-66672	
174	New Construction - Above Code Design - Air Compressors		PR-69796	
175	New Construction - Above Code Design - Plastic Molding		PR-74859	
176	New Construction - Above Code Design - Clean Rooms		PR-91030	
177	New Construction - Above Code Design - Food Processing Refrigeration		RF-41934	
178	New Construction - Above Code Design - Supermarket Refrigeration Systems		RF-61872	
179	New Construction - Above Code Design - Overall Refrigeration Systems		WB-59398	
180	New Construction - Above Code Design - Overall Building Performance		WB-78495	
181	New Construction - Above Code Design - Domestic Hot Water		WH-59801	

## 10) Program Implementation Details

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

**Table 5 (Subprogram B): Sub-Program Milestones and Timeline**

Milestone	Date
Project Initiation Meeting	Feb 2013
Complete guidelines	4/1/2013

Issue RFPs	6/1/2013
Develop Marketing materials	6/1/2013
Conclude Subprogram B	12/31/2014
Quarterly Progress Reports	3/31/2013 – 12/8/2014

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

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

Geographic Region	Subprogram B: Financing
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 B): Program Administration of Program Components

Program Name	Program 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)
Financing Portfolio Program	B1: Public Building Loan Loss Reserve				X (LA County)
	B2: Energy Upgrade Loan Loss Reserve				X (LA County through contractor)
	B3: Multifamily Loan Loss Reserve				X (LA County through contractor)
	B4: Non-residential PACE Loan Loss Reserve				X (LA County)
	B5: Public Agency Revolving Loan Fund				X (LA County through contractor)

d) Program Eligibility Requirements:

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

Table 8 (Subprogram B): Customer Eligibility Requirements

Eligibility Requirements	IOU
--------------------------	-----

Public Building LLR: Located in IOU service territory. Others TBD.	X
EUC-LLR: Single-Family Detached Home. Located in IOU service territory. Meets Responsible Lending Criteria. Energy Efficiency Improvement Threshold. Others TBD.	X
Multi-Family LLR: Multi-Family Building of at least 4 Units. Located in IOU service territory. Meets Responsible Lending Criteria. Energy Efficiency Improvement Threshold. Others TBD.	X
Non-residential PACE LLR : Located in IOU service territory. Meets Responsible Lending Criteria. Energy Efficiency Improvement Threshold. Meets Definition of "Commercial" Building/Facility. Others TBD	X
Public Agency RLF: 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 B): Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement	IOU
Must be an SCE/SCG Energy Upgrade California Participating Contractor, including meeting all license and certification requirements. Others TBD.	X

e) **Program Partners:**

- a. **Manufacturer/Retailer/Distributor partners:** For upstream or midstream incentive and/or buy down programs indicate<sup>7</sup>:

**Table 10 (Subprogram B): Manufacturer/Retailer/Distributor Partners**

Manufacturer/Retailer/Distributor Partner Information	SCE/SCG
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<sup>7</sup> 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.

Manufacturers enrolled in program	N/A
Manufacturers targeted for enrollment in program	N/A
Retailers enrolled in program	N/A
Retailers targeted for enrollment in program	N/A
Distributors enrolled in program	N/A
Distributors targeted for enrollment in program	N/A

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

Other key program partners include the following:

- 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
- Metropolitan Water District
- Irvine Ranch Water District
- Santa Ana Watershed Project Authority
- 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 B): Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group		IOU
---------------	--	-----

	Market Actor Receiving Incentive or Rebate	Incentive Level	Installation Sampling Rate
Whole Building Retrofits Detailed list of Measures included in E3 Calcs (Please see SoCalREC 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 B): Additional Services**

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

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

This Subprogram is included in order to overcome market barriers represented by a lack of credit and financing options, combined with marketing, outreach and education (ME&O) for specific stakeholders and partners in residential, commercial and industrial sectors.

Under SoCalREN, ME&O will be targeted to lenders (conventional, credit union, and foundational) who operate in all three sectors to assure them that SoCalREN has undertaken to drive and increase

demand, facilitate streamlined (electronic) processes for loan application and enrollment, and has designed a financing program of multiple options which may cross-cut and leverage each other. ME&O will also target public agency energy managers, building managers, accounting and finance staff and administrative executives to promote the benefits and advantages associated with financing energy projects – especially those that result in utility savings.

Specifically, the Energy Upgrade ME&O will promote: increased inclusiveness under a diversity of Southern California area program options; social and environmental benefits (e.g., improved indoor air quality and improved healthy spaces) as well as economic ones (decreased costs, higher building performance, governmental incentives relating to plan review, permitting and inspection, and new valuations on energy efficiency such as Green MLS ratings); accessible and regionally consistent Financing Portfolio options and contractor/supplier incentives; and energy efficiency achieved through improvements under the water-energy nexus.

Under the Multi-Family and Non-residential PACE options, SoCalREN will implement an ME&O campaign targeted to building owners, operators and managers. Commonly, owners are reluctant to pay for building improvements that appear to only benefit tenants. However, the SoCalREN ME&O program will address this market barrier with a campaign that communicates and advocates for the value of co-benefits and advantages of whole building upgrades that build energy efficiency, financing options and incentives, as well as further demonstrates the possibilities for cash-neutral or cash-positive outcomes.

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

The Financing Portfolio Subprogram will engage skilled consultants, contractors and implementers, and will not require independent training.

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

- a. List all eligible software or similar tools required for sub-program participation.

TBD.

- b. Indicate if pre and/or post implementation audits will be required for the sub-program.

TBD.

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 B): Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
TBD	TBD

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

**Table 14 (Subprogram B): Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
EUC-LLR: Property must meet eligibility requirements.	100%	Credit Application with Property and Property Owner Information
EUC-LLR: Property Owners Must Meet Responsible Lending Criteria	100%	Credit Application with Property and Property Owner Information
EUC-LLR: Contractor holds valid license and meets eligibility requirements (Energy Upgrade Participating Contractor or participant in other qualified program)	100%	Job Scope with Contractor Information

EUC-LLR: Project meets requirements of program	100%	Job Scope with Contractor Information
EUC-LLR: Field Verification of Measures Installed	Dependent upon incentive/financing program	TBD
EUC-LLR: Field Verification of Combustion Safety Test for Air Sealing (relevant projects)	Dependent upon incentive/financing program	TBD
Other financing QA requirements	TBD	TBD

- 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.
  
- 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.

Please see below for a depiction (both narrative and visual – Figures 21 & 22) of LA County's processes for financing programs.

**SoCalREC Financing Program Process Description (in lieu of Flow Chart):**The Internal Services Department of Los Angeles County ("County") has issued the challenge to develop a regional, energy efficiency resources program ("Program") for multiple local governments within the Southern California Edison service territory. This endeavor has precedent-setting importance and the potential to drive significant energy efficiency actions at the local level. The anticipated structure for the Program's primary financing source will be loans made directly to the municipal agency through the Master Lease facility. The Program has created an administration group that is working collaboratively with the County of Los Angeles and the City of Huntington Beach to establish and define parameters for a regional effort under the name Southern California Regional Energy Center ("SoCalREC").

SoCalREC engaged an administration team comprised of The Energy Coalition, as Program Manager, Willdan Energy Services as Program Engineer, and Public Financial Management (PFM), as Program Financial Advisor. The SoCalREC team, engaged at the end of 2011, has spent the first part of 2012 identifying eligible projects and engaging the interest of local agencies throughout the region.

Projects identified as of June 2012 include over 100 "shovel ready" projects in 42 different cities throughout the region. Currently, additional assistance is being provided to establish standardized procurement documents and conformity of information related to project costs, expected savings and available incentives. Identified projects range in cost from approximately \$2,000 to over \$3.2 million and cover a wide range of energy efficiency improvement projects. Program projects will be submitted for funding to Master Lease provider upon completion of a savings analysis to assure savings in excess of anticipated lease payments.

Energy projects will consist of equipment and services that reduce energy consumption or operating costs. Projects may include, but are not limited to: streetlight replacements, insulation, windows and doors, glazing, automatic energy control systems, including related hardware, improvements or retrofits to electrical lighting and auxiliary systems, heating ventilating and air conditioning (HVAC) system modifications or replacements, energy recovery systems, cogeneration systems, renewable energy systems, devices that reduce water consumption, professional and non-professional services relating to the design, installation, training and monitoring of such equipment or systems, and subject to the Lessor's approval.

This Request for Proposals ("RFP") (included as Exhibit C4) is intended to identify lessor(s) capable of providing a Master Lease facility to Program participants for energy projects that meet Program qualifications. Program project qualifications are further detailed herein. Evaluation criteria for selection of Program Lessor(s) will include funding capacity, pricing, terms and any additionally required underwriting

criteria. Depending upon availability of funds and terms provided by the proposing lessors, the Program reserves the right to select a single provider, multiple providers or no providers.

The Program's initial Master Lease Agreement is requested for (i) a period commencing July 1, 2012 through December 31, 2013; and (ii) for an initial amount of \$25,000,000. Upon mutual agreement of the parties, extensions may be granted for subsequent one year periods and additional \$20,000,000 increments under the terms of the original Master Lease Agreement.

The Program's financing structure is intended to outline specific Subprogram project criteria for loans made to the agencies that want to fund projects. The individual agencies, at the time of their loan, will enter into a Lease Agreement in order to evidence the specific terms of borrowing and repayment for their project(s). Respondents submitting proposals must describe their capacity to provide the services defined herein and explicitly state their ability to enter into an agreement with the County, as authorizing lessor.

**Figure 22 (Subprogram B): Private Financing, Residential LLR Program**

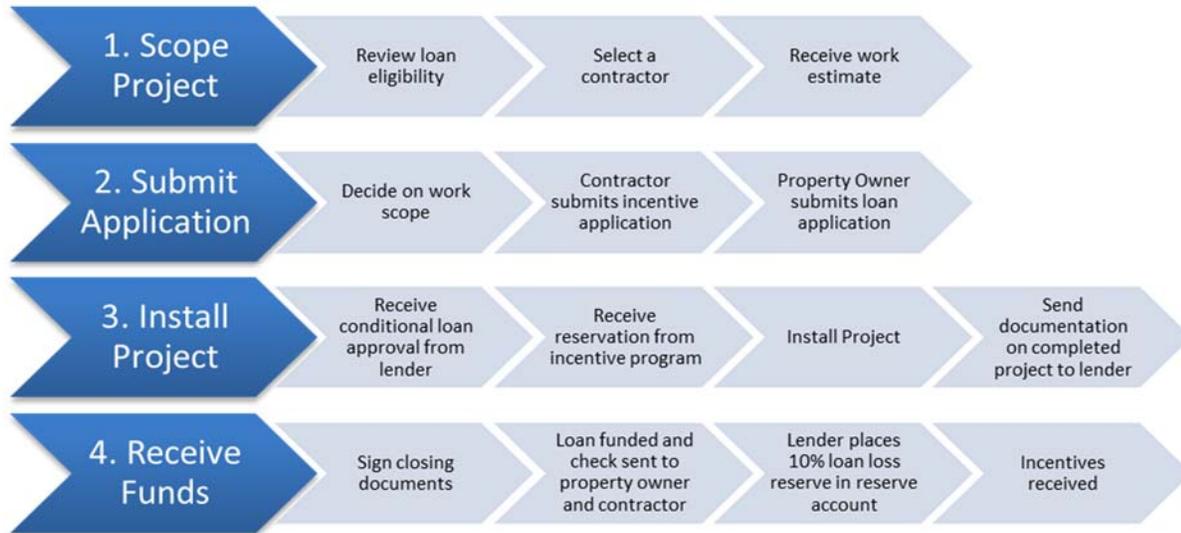


Figure 23 (Subprogram B): PACE Flow Chart



- 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 mechanisms<sup>8</sup> and frequency<sup>9</sup>:

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

Subprogram B: Financing Portfolio		
Other SoCalREN Subprograms	Coordination Mechanism	Expected Frequency
Flex Path	Project referrals	All potential projects
Advanced Path	Project referrals	All potential projects
Multi-Family	Project referrals	All potential projects
SoCalREC	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
Coordination Partners Outside CPUC	Coordination Mechanism	Expected Frequency
Lenders	Meetings, communication	Ongoing, as needed.

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<sup>8</sup> "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).

<sup>9</sup> 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.

Local Financing Programs	Meetings, communication	Ongoing, as needed.
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- 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.).

TBD.

### 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 24 (Subprogram B): Strategic Plan Alignment**

Local Government Goal 1: "Reach" codes		
Strategy Number	Strategy	
1-4	Create assessment districts or other mechanisms so property owners can fund EE through local bonds and pay back on property taxes; develop other local EE financing tools.	The SoCalREN Financing Subprogram directly advances this strategy by developing regional EE financing tools for property owners.
Local Government Goal 3: Lead by Example		
3-3	Improve access to favorable financing terms that create positive cash flow from energy efficiency/DSM savings	The SoCalREN Financing Subprogram directly advances this strategy by developing regional EE financing tools for property owners and local governments.
3-4	Promote local government adoption of policies for a budget line item for energy management or other options that allow energy efficiency cost savings to be returned to the host facility or department and/or as a revolving loan fund for additional energy projects.	The SoCalREN Financing Subprogram directly advances this strategy by developing regional revolving loan fund for local governments.
Local Government Goal 4: Community Leadership		
4-1	Local governments commit to clean energy/climate change leadership.	By establishing a regional energy efficiency Financing Portfolio, and cross-leveraging efficiency subprograms with financing subprograms, SoCalREN will create a dynamic regional energy efficiency infrastructure, with benefits that 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	The SoCalREN Financing Subprogram directly advances this strategy by developing financing programs that will

		integrate energy efficiency, DSM, and water/wastewater end uses
<b>Local Government Goal 5: Local Government Energy Efficiency Expertise</b>		
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 SoCalREN Financing Subprogram directly advances this strategy by developing a menu of financing products, services, approved technologies and implementation channels for local governments.
5-2	Develop model approaches to assist local governments participating in regional coordinated efforts for energy efficiency, DSM, renewables, green buildings, and zoning.	The SoCalREN Financing Subprogram directly advances this strategy by creating a regional approach that will coordinate local government efforts for energy efficiency, DSM, renewables, and green buildings.

**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.

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

Non-EE Subprogram	Budget	Rationale and General Approach for Integrating Across Resource Types
Water Programs	TBC	Cross promotion, integration into Financing

- 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.

Please see above for a description of cross-marketing efforts to be conducted by SoCalREN.

Marketing activities and materials will promote awareness of water conservation, air quality, and other customer offerings such as those related to indoor water conservation and water efficiency.

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

This Subprogram intends on leveraging all available financing tools and templates that would benefit customers.

- d) **Trials/ Pilots:** Please describe any trials or pilot projects planned for this sub-program
  
- 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 cities to set 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 results<sup>10</sup>;
  - vi. Appropriate evaluation plans and corresponding Market Transformation indicators and Program Performance Metrics based on the program logic model.

Not applicable.

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<sup>10</sup> 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.

- 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 B1: Tables

Exhibit B2: Financing E3 calculations – Due to file size, please download at:

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