

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



June 9, 2015

**Advice Letter 4672-A and 4672-B**

Ronald van der Leeden  
Director, Regulatory Affairs  
Southern California Gas  
555 W. Fifth Street, GT14D6  
Los Angeles, CA 90013-1011

**Subject: Supplements – Implementation of Energy Efficiency (EE) Finance  
Program Pilots in Compliance with Resolution E-4663**

Dear Mr. Leeden:

Advice Letter 4672-A and 4672-B are effective May 29, 2015.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph  
Director, Energy Division



**Ronald van der Leeden**  
Director  
Regulatory Affairs

555 W. Fifth Street, GT14D6  
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May 26, 2015

**Advice 4672-B**

(Southern California Gas Company U 904 G)

**Advice 2631-E-B/2312-G-B**

(San Diego Gas & Electric Company U 902 M)

**Advice 3499-G-B/4464-E-B**

(Pacific Gas and Electric Company U 39 M)

**Advice 3085-E-B**

(Southern California Edison Company U 338 E)

Public Utilities Commission of the State of California

**Subject: Supplement: Implementation of Energy Efficiency (EE) Finance Program  
Pilots in Compliance with Resolution E-4663**

Southern California Gas Company (SoCalGas), on behalf of itself, San Diego Gas and Electric Company (SDG&E), Southern California Edison Company (SCE), and Pacific Gas and Electric Company (PG&E) (together the "Investor Owned Utilities", or "IOUs") hereby submit a supplement to SoCalGas Advice No. (AL) 4672-A, SDG&E AL 2631-E-A/2312-G-A, SCE AL 3085-E-A, and PG&E AL 3499-G-A/4464-E-A (AL 4672-A, et al.) for approval by the California Public Utilities Commission (Commission) to implement pilot programs approved in Decision (D.)13-09-044 and clarified through Resolution (Res.) E-4663.

**Purpose**

This filing complies with Ordering Paragraph (OP) 2 of Res. E-4663, regarding D.13-09-044, requiring the IOUs to file a partial supplement to AL 4672-A to revise Program Implementation Plans (PIPs) for the financing pilots and includes additional revisions at the direction of the Commission's Energy Division (Staff).

## **Background**

Res. E-4663, issued on June 27, 2014, approved, as amended with clarifications and compliance information therein, among others, the following:

- SoCalGas AL 4562, SDG&E AL 2545-E/2243-G, PG&E AL 3433-G/4320-E, and SCE AL 2969-E (AL 4562, et al.), filed on November 19, 2013;<sup>1</sup> and
- SoCalGas AL 4581, SDG&E AL 2558-E/2253-G, PG&E AL 3439-G/4327-E, and SCE AL 2989-E (AL 4581, et al.), filed on December 19, 2013.<sup>2</sup>

Res. E-4663 also required that the IOUs file the revised PIPs for the pilot programs within 30 days of approval of Res. E-4663. Res. E-4663 was approved on June 26, 2014, and in compliance with OP 2, on July 28, 2014, the IOUs filed AL 4672, et. al.<sup>3</sup>

At the direction of Staff, the IOUs were instructed to resubmit revised PIPs by a supplemental advice filing, filed as AL 4672-A, et. al. on October 21, 2014.

Upon further direction from Staff, the IOUs herein file new revisions to the PIPs, as noted below.

## **List of Revised PIPs**

The following list of updated PIPs are provided in redline versions with accompanying clean copies which will be uploaded to the Commission's Energy Efficiency Statistics webpage ([www.eestats.cpuc.ca.gov](http://www.eestats.cpuc.ca.gov)) upon approval. The following redline versions are included to facilitate additional understanding of PIP updates; thus, the content shown in redline format only reflects new modifications made under the direction of Staff (and does not repeat the redline changes filed in AL 4672-A et. al.):

- Attachment A contains the Single Family Loan Program (SFLP) PIPs.
- Attachment B contains the Off-Bill Small Business Lease Providers PIPs.
- Attachment C contains the Master-Metered Multifamily Financing Program PIPs.
- Attachment D contains the Small Business Loan Program clean and redline PIPs.
- Attachment E contains the On-Bill Small Business Lease Providers PIPs.
- Attachment F contains the Non-residential -Without Credit Enhancement PIPs.

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<sup>1</sup> SoCalGas AL 4562, et. al., Implementation of Energy Efficiency (EE) Finance Program, "Fast Track" Pilots in Compliance with D.13-09-044.

<sup>2</sup> SoCalGas AL 4581, et. al., Implementation of Energy Efficiency (EE) Finance Program On-Bill Repayment (OBR) Pilots in Compliance with D.13-09-044.

<sup>3</sup> SoCalGas AL 4672, et. al., Implementation of Energy Efficiency (EE) Finance Program Pilots in Compliance with Res. E-4663. The date filed, July 28, 2014, is the next business day associated with the 30-day filing requirement.

### **Summary of PIP Revisions**

Additional modifications to PIPs as directed by Staff, in addition to the modifications deemed appropriate pursuant to AL 4672-A et. al., are described below:

1. The IOUs adjusted the note under the budget tables regarding Direct Implementation Non-Incentive (DINI) costs with the specific language requested by Staff.
2. At the direction of Staff, the IOUs added certain information to enhance the description of Credit Enhancements (e.g., floor, cap).
3. The IOUs added a link to the website location where the final California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) regulations can be accessed for the recently finalized SFLP pilot. Placeholders for adding similar links to the other pilots have been inserted, and the PIPs will be updated through the Commission's PIP Addendum process after final regulations for the other pilots are available.
4. The IOUs added information regarding reporting requirements for the SFLP pilot, including a link to the final regulations and citation to the appropriate sections addressing reporting activities.

The table below describes the changes and PIP location:

PIP*	Description of Changes and PIP Location (Clean PIP)**			
	Adjustment to note under the budget tables regarding DINI costs	Additional information to enhance description of Credit Enhancements	Link / placeholder for links to the website location of pilot regulations	Added information regarding reporting requirements for the SFLP pilot
Off-Bill Small Business Lease Providers Pilot	Pages 2 - 3	Page 6	Pages 4, 6, and 28	n/a
Single Family Loan Program	Pages 2 - 3	n/a (addressed by link to final regulations)	Pages 5, 37	Page 36
Master-Metered Multifamily Financing Pilot	Pages 2 - 3	Pages 6, 34	Pages 6, 8, and 34	n/a
Non-Residential On-Bill Repayment w/o CE	Pages 2 - 3	n/a (no credit enhancement)	Pages 5, 6, and 29	n/a

On-Bill Small Business Lease Providers Pilot	Pages 2 - 3	Page 6	Pages 4, 6, and 30	n/a
Small Business Loan Pilot	Pages 2 - 3	Pages 5 - 6	Pages 5, 6, and 28	n/a

\* Changes to PG&E's approved PIP for its The Energy Financing Line Item Charge (EFLIC) Pilot will be addressed separately through the PIP Addendum process.

\*\* n/a = not applicable.

### **Protest**

In accordance with General Order 96-B, Section 7.5.1 and at the direction of Commission Staff, SoCalGas hereby requests that the protest period be waived, as the updates included in this AL were done strictly to comply with D.13-09-044.

### **Effective Date**

This filing is subject to Energy Division disposition and should be classified as Tier 2 (effective after approval) pursuant to General Order (GO) 96-B. Pursuant to OP 3 of Res. E-4663, the pilots are approved to begin operation under the CHEEF while the IOUs amend the PIPs. The IOUs respectfully request that this filing be approved no later than June 1, 2015 to support the deployment schedule of the pilots.

### **Notice**

A copy of this AL is being sent to SoCalGas' GO 96-B service list and the Commission's service lists in A.12-07-001, et al., and R.13-11-005. Address change requests to the GO 96-B should be directed by electronic mail to [tariffs@socalgas.com](mailto:tariffs@socalgas.com) or call 213-244-3387. For changes to all other service lists, please contact the Commission's Process Office at 415-703-2021 or by electronic mail at [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov).

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Ronald van der Leeden  
Director- Regulatory Affairs

Attachments

# CALIFORNIA PUBLIC UTILITIES COMMISSION

## ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **SOUTHERN CALIFORNIA GAS COMPANY (U 904G)**

Utility type:

ELC     GAS  
 PLC     HEAT     WATER

Contact Person: Sid Newsom

Phone #: (213) 244-2846

E-mail: SNewsom@semprautilities.com

### EXPLANATION OF UTILITY TYPE

ELC = Electric    GAS = Gas  
PLC = Pipeline    HEAT = Heat    WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 4672-B, et al.

Subject of AL : Supplement: SCG-filed Implementation of EE Finance Program Pilots in Compliance with Resolution E-4663

Keywords (choose from CPUC listing): Energy Efficiency

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other \_\_\_\_\_

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

D.13-09-044 and Res.E-4663

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL No

Summarize differences between the AL and the prior withdrawn or rejected AL<sup>1</sup>: N/A

Does AL request confidential treatment? If so, provide explanation: No

Resolution Required?  Yes  No

Tier Designation:  1  2  3

Requested effective date: 6/25/15

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: None

Service affected and changes proposed<sup>1</sup> See Advice Letter

Pending advice letters that revise the same tariff sheets: None

**Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Ave.,  
San Francisco, CA 94102  
[EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Southern California Gas Company  
Attention: Sid Newsom  
555 West 5<sup>th</sup> Street, GT14D6  
Los Angeles, CA 90013-1011  
[SNewsom@semprautilities.com](mailto:SNewsom@semprautilities.com)  
[tariffs@socalgas.com](mailto:tariffs@socalgas.com)

<sup>1</sup> Discuss in AL if more space is needed.

**ATTACHMENT A**

**SINGLE FAMILY LOAN PROGRAM**

**PROGRAM IMPLEMENTATION PLAN**

CLEAN PIP



SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan Template

- 1) Sub-Program Name: Single Family Loan Program
- 2) Sub-Program ID number:
  - a. SoCalGas: SCG 3787
  - b. SDG&E: SDGE 3297
  - c. SCE: SCE-13-SW-007D
  - d. PG&E: PGE 210931
- 3) Type of Sub-Program:  Core  Third Party  Partnership  Pilot
- 4) Market sector or segment that this sub-program is designed to serve:
  - 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)
- 5) Is this sub-program primarily a:
  - a. Non-resource program  Yes  No
  - b. Resource acquisition program  Yes  No
  - c. Market Transformation Program  Yes  No
- 6) Indicate the primary intervention strategies:
  - a. Upstream  Yes  No
  - b. Midstream  Yes  No
  - c. Downstream  Yes  No
  - d. Direct Install  Yes  No.
  - e. Non Resource  Yes  No

*Note:* Customers will take out loans, but it is anticipated that contractors will be heavily involved in presenting and offering those loans to customers.

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

TRC \_\_\_ PAC \_\_\_

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for claiming incremental energy savings for Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information

SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

was not yet available to estimate the proposed energy savings. The CPUC has thus decided to evaluate the energy savings on an *ex post* basis. The Pilot's TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1: Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Single Family Loan Program</b>						
Admin/General Overhead (\$)	\$163,997	\$538,485	\$589,472	TBD	TBD	\$1,291,954
Direct Implementation (\$)	\$426,081	\$1,143,020	\$1,140,032	TBD	TBD	\$2,709,133
Credit Enhancements (CE) (\$)	\$0	\$4,917,170	\$16,081,743	TBD	TBD	\$20,998,913
Marketing & Outreach (\$) *1	\$601	\$1,094,377	\$1,490,221	TBD	TBD	\$2,585,199
<b>Total Statewide Budget (\$)</b>	<b>\$590,679</b>	<b>\$7,693,052</b>	<b>\$19,301,468</b>	<b>TBD</b>	<b>TBD</b>	<b>\$27,585,199</b>

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs' proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEMs portal, c) development of a system interface with Master

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

Servicer, and d) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENs, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations.

SoCalGas	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/ General Overhead (\$)	\$2,611	\$71,036	\$122,023	TBD	TBD	\$195,670
Direct Implementation (\$)	\$30,325	\$100,039	\$97,051	TBD	TBD	\$227,415
Credit Enhancements (CE) (\$)	\$0	\$986,144	\$2,002,171	TBD	TBD	\$2,988,315
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,537	\$1,247,889	\$2,311,915	TBD	TBD	\$3,593,341

SDG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/ General Overhead (\$)	\$80,253	\$160,507	\$160,507	TBD	TBD	\$401,267
Direct Implementation (\$)	\$160,507	\$321,013	\$321,013	TBD	TBD	\$802,533
Credit Enhancements (CE) (\$)	\$0	\$926,926	\$1,881,940	TBD	TBD	\$2,808,866
Marketing & Outreach (\$)	\$0	\$107,005	\$107,005	TBD	TBD	\$214,010
Total IOU Budget (\$)	\$240,760	\$1,515,451	\$2,470,465	TBD	TBD	\$4,226,676

SCE	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/ General Overhead (\$)	\$31,133	\$41,325	\$41,325	TBD	TBD	\$113,783
Direct Implementation (\$)	\$135,249	\$135,613	\$135,613	TBD	TBD	\$406,475
Credit Enhancements (CE) (\$)	\$0	\$217,002	\$6,538,978	TBD	TBD	\$6,755,980
Marketing & Outreach (\$)	\$0	\$384,202	\$780,046	TBD	TBD	\$1,164,248
Total IOU Budget (\$)	\$166,382	\$778,142	\$7,495,962	TBD	TBD	\$8,440,486

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PG&E Sub-Program	Program Year					
	2013	2014	2015	2016	2017	Total
Admin/ General Overhead (\$)	\$50,000	\$265,617	\$265,617	TBD	TBD	\$581,234
Direct Implementation (\$)	\$100,000	\$586,355	\$586,355	TBD	TBD	\$1,272,710
Credit Enhancements (CE) (\$)	\$0	\$2,787,098	\$5,658,654	TBD	TBD	\$8,445,752
Marketing & Outreach (\$)	\$0	\$512,500	\$512,500	TBD	TBD	\$1,025,000
Total IOU Budget (\$)	\$150,000	\$4,151,570	\$7,023,126	TBD	TBD	\$11,324,696

9) Sub-Program Description, Objectives and Theory

a. Program Description

The primary goals of the Single Family Loan Program (SFLP) (Decision 13-09-044, 2013)<sup>2</sup> are:

1. To increase the volume of energy efficiency (EE) financing to attract capital providers and attract new market participants;
2. To increase the number and comprehensiveness of EE projects;
3. To increase the rate at which contractors can close a sale of EE equipment;
4. To reach low- and moderate-income customers;
5. To support the new data base that includes project and financial product performance.

The SFLP will test the premise that the availability of more and better financing options increases the overall adoption of energy efficiency in the single family market segment. The program pre-supposes the idea that many customers choose not to engage in EE when confronted with a product that may be more costly than they have anticipated or budgeted. While the customers may understand the value of a particular energy efficiency enhancement, on many occasions they cannot overcome the financial requirements and simply walk away because the first-cost barrier is too high. This decision is made despite the rebates/incentives and financing options currently available through traditional channels. More attractive financing for EE projects may help overcome the upfront EE project cost barrier by allowing customers to pay for upgrades over time. All single family ratepayers that meet the requirements of participating Financial Institutions (FIs) are eligible to participate; customers would not be required to participate in a utility rebate program to be eligible for financing.

Additionally, this Pilot seeks to attract low-to-moderate income customers to the EE upgrade market.<sup>3</sup> Approximately one-third of the total credit enhancement funds will be

<sup>2</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 31-32.

## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

designated to serve low-to-moderate income single family residents. These customers can also participate in the IOUs' Energy Savings Assistance (ESA) programs, which address easy to install weatherization, lighting, and appliances. The addition of a finance option could encourage deeper market penetration of energy savings measures by providing the means to these consumer segments to achieve more comprehensive changes that are not addressed through the ESA program. Details of this credit enhancement structure were developed in the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) rulemaking process, and are available (along with other program regulations) at the following link (note the program on the CAEATFA website is titled Residential Energy Efficiency Loan Assistance Program):

<http://www.treasurer.ca.gov/caeatfa/cheef/reel/index.asp>.

In the end, the key to a successful pilot program is to create a seamless integration to EE projects that leverage utility Direct Install (DI) funding and EE financing. The benchmark for low and moderate income limits shall be the current annual limits published by the California Department of Housing & Community Development, by county and family size.

Pursuant to the Assigned Commissioner's Ruling issued August 25, 2014, the SFLP will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the loan or lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

This pilot will allow FIs to access credit enhancements for eligible loans that meet program criteria. Eligible loans can be either direct or indirect loans from FIs.

### i. Credit Enhancement Mechanism

Ultimately, the pilot is designed to test the effectiveness of financing and credit enhancements (CEs) to enhance customer and FI uptake.

Guidelines for the authorized CEs are included in (Decision 13-09-044, 2013)<sup>4</sup> The CE funding for the single family market segment is not to exceed a total of \$25 million statewide. The Decision requires that approximately one-third of the CE funds for this pilot be utilized to offer CEs for EE financing for low- and moderate-income households.<sup>5</sup> All financial institutions that participate in the program will have access to the pool of CEs, offered on a first come-first served basis. CAEATFA will be establishing the details of the credit enhancements

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<sup>3</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 33.

<sup>4</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. APPENDIX A page 1-2.

<sup>5</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 33.

## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

through its emergency regulations process, and it is expected that a loan-loss reserve (LLR) will be the primary CE tool used in this market segment:<sup>6</sup>

1. Loan Loss Reserve – is a fund in a trust account established by the California Hub for EE Financing (CHEEF) at the bank or other financial institution, used to cover a portion of defaulted loans. The LLR is expected to be the primary credit enhancement used in the Single Family Loan Program. The details of the LLR will be established in CAEATFA regulations. Pursuant to the Decision, credit enhancements in the SFLP cannot exceed 20% of the total eligible loan value in the portfolio and the lender's loss recovery is limited to no more than 90% of the eligible value of any individual loan's outstanding principal amount. In general, FIs will receive an allocation of credit enhancement only after loans close. CAEATFA rules will establish certain details, such as the possible prefunding of financial institutions for credit enhancements that enable them to receive 90% coverage for early-stage loans that are funded prior to those financial institutions having reached the point at which the 20% cap on their loan portfolio reaches the 90% amount on an individual loan.

### ii. Financing

Although financing is already available to customers through several different instruments, existing instruments are generally not well-suited for some customer segments to finance EE projects. One of the most common methods of financing efficiency projects in the single family sector is the credit card. For example, credit card-based revolving products are convenient and inexpensive to originate but, due to extremely high interest rates, generally come at a high long-term cost. Base interest rates on most revolving credit card instruments generally exceed 20%; the only reason that consumer might see lower rates is when contractors or manufacturers buy down the interest rate to more attractive levels. Buy-down costs are typically approximately 8-10% of the project cost. The costs of this buy-down may be hidden in the form of a higher project cost.

The financing approach supported through the SFLP is to use both direct and indirect loans:

#### Indirect vs. Direct Lending

This pilot allows the testing and comparison of two types of single family financing products: indirect financing and direct loans.

Indirect financing, also known as dealer financing, incorporates the contractor tightly into the financing process – meaning that the customer gives the contractor

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<sup>6</sup> The Decision did not preclude the use of a “debt service reserve” CE.

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a credit application and the contractor transmits the application to a finance company for credit review, loan documentation and closing. After the customer signs a completion certificate, the finance company pays the contractor directly. That finance company then transmits that closed loan to an investor, who either holds that loan through the loan term, or bundles that loan with other loans and sells to another investor. The direct involvement of contractors in the financing process exposes investors to certain financial and regulatory risks that do not exist for direct loans (described below). Investors and finance companies manage these risks by controlling contractor networks tightly to control the representations that contractors make to customers, the quality of work performed, customer satisfaction and other elements of bringing energy efficiency jobs to completion. The credit performance of indirect financing has not shown any marked difference from the credit performance of direct lending.

Direct loans are the more typical type of financing product offered to consumers through credit unions or banks in California. Direct loans differ from indirect financing in that the contractor is minimally involved in the financing process, primarily encouraging the consumer to contact a designated financial institution such as a credit union or bank.

In many cases, the loan origination process is somewhat longer for a direct loan than for indirect financing, and the direct loan process may not be as convenient for the customer or contractor. As a result, it is likely that indirect financing may be most appropriate for single-measure efficiency projects that are typically quite time-sensitive. Direct loans, with somewhat longer origination times, may be more appropriate for multi-measure or whole-house retrofits. In addition, direct loans rely on credit union or bank depositor capital which is currently available at rates that are near historic lows. This means that direct loans may tend to have easier access to extremely low cost capital, although the availability of such capital will be more limited than other investor capital available through the investor markets that typically fund indirect financing.

### iii. Lenders

The pilot stimulates financial institutions to offer attractively priced, fast-origination direct and indirect loans that are appropriate for the single family market. The pilot will provide a credit enhancement and other offerings (contractor networks, marketing, etc.) to attract private capital and to progressively build loan volumes.

The lenders who are expected to participate in this program fall in to five major categories.

1. Credit Unions that have been well-engaged already in financing programs through American Recovery and Reinvestment Act (ARRA)-supported programs, offering direct loans.
2. Banks, including (1) local or statewide community banks, some of which have engaged in financing programs, particularly through the efforts of the

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California Housing Partnership (CHP), offering direct loans (2) larger regional or national, banks that may participate as retail lenders offering direct loans, but are more likely to participate as investors that purchase portfolios of loans originated by others.

3. Non-profit lenders and their funders, who may focus on hard-to - reach populations.
4. Community Development lenders, offering direct loans to hard-to-reach populations.
5. Other Finance companies, many of which have been heavily engaged in California and nationally in financing energy efficiency, offering indirect loans.

**Sub-Program Energy and Demand Objectives**

**Note:** As noted in Section 7, above, the workpaper submitted by the IOUs was not accepted. The CPUC determined sufficient information was not yet available to estimate the proposed energy savings, and will evaluate the savings on an *ex post* basis.

**Table 2: Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year<sup>7</sup>**

SoCalGas		Program Years			Total
		2013	2014	2015	
Sub-program Name					
GWh	*TBD	*TBD	*TBD	*TBD	*TBD
Peak MW	*TBD	*TBD	*TBD	*TBD	*TBD
Therms (millions)	*TBD	*TBD	*TBD	*TBD	*TBD

SDG&E		Program Years			Total
		2013	2014	2015	
Sub-program Name					
GWh	*TBD	*TBD	*TBD	*TBD	*TBD
Peak MW	*TBD	*TBD	*TBD	*TBD	*TBD
Therms (millions)	*TBD	*TBD	*TBD	*TBD	*TBD

SCE		Program Years			Total
		2013	2014	2015	
Sub-program Name					
GWh	*TBD	*TBD	*TBD	*TBD	*TBD
Peak MW	*TBD	*TBD	*TBD	*TBD	*TBD
Therms (millions)	*TBD	*TBD	*TBD	*TBD	*TBD

<sup>7</sup> Individual utility specific information to be provided in this table



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PG&E	Program Years			Total
	2013	2014	2015	
Sub-program Name				
GWh	*TBD	*TBD	*TBD	*TBD
Peak MW	*TBD	*TBD	*TBD	*TBD
Therms (millions)	*TBD	*TBD	*TBD	*TBD

\* TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

The primary goals of the Single Family pilot program are to (i) increase the volume of EE financing to attract capital providers and attract new market participants; (ii) provide a reliable, one-stop mechanism which provides attractive rates and terms for consumers; (iii) a relatively quick turn-around for payments to contractors; and (iv) develop a robust and consistent data set on the energy and financial performance of loans in the single family market.

Successful implementation of the pilot will help improve consumer home comfort. Through reduced energy consumption, installations will also contribute to a reduction in greenhouse gas emissions and will help conserve natural resources that would otherwise be necessary to produce energy used by the consumer

One sub-goal of the SFLP is to compare how well indirect and direct financing offerings perform in the marketplace, and to test how well each of the two products serves the whole house or the single-measure markets.

The pilot results will offer useful perspectives on the effectiveness of these approaches, best practices, lessons learned, and expected benefits of expanding the pilots to become full-scale programs.

**c) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

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

Data sources for these measures are consistent with the rebate/incentive programs the measures are offered through.

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ii. Indicate work paper status for program measures:

See section 7, above.

Table 3: Workpaper Status

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

10) Program Implementation Details

a) Timelines:

Table 4: Sub-Program Milestones and Timeline

**Note:** The expected dates for several of these milestones are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays beyond the IOU's direct control.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>8</sup>
Lender recruitment and contractor training	Ongoing
CAEATFA develops emergency regulations (which will include credit enhancement protocols)	C + 30
CAEATFA Board approves emergency regulations	C + 30
Office of Administrative Law (OAL) approves emergency regulations	C + 60
Lenders seek/receive internal board or management sign-off to offer loan product	C + 60 and ongoing
CE funds for pilot transferred to trustee	C + 90
Integration of financing with IOU incentive program delivery defined and implemented (see ME&O)	C + 120
First loan funds	C + 120

<sup>8</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

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b) **Geographic Scope:**

Table 5: Geographic Regions Where the Program Will Operate

Geographic Region	SDG&E	SCG	SCE	PG&E
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

c) **Program Administration**

The IOUs will enter into a contract with CAEATFA who will serve as the California Hub for Energy Efficiency Finance (CHEEF) for the pilot programs.

As CHEEF, CAEATFA will develop regulations to provide specific details on the credit enhancement structure and other requirements for program participation. CAEATFA will also subcontract with a Trustee bank to facilitate the transfer of credit enhancement funds to Financial Institutions participating in the pilot.

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Table 6: 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 (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity [CAEATFA] (X = Yes)
SFLP	Program Application Process		X (Master Servicer)	X	X
SFLP	IOU Participant*	X			X
SFLP	IOU Non-Participants				
SFLP	Credit Review			X (participating financial institutions - enrolled through CAEATFA regulations)	
SFLP	Loan Origination			X (participating financial institutions - enrolled through CAEATFA regulations)	
SFLP	Loan Payments			X (participating financial institutions - enrolled through CAEATFA regulations)	
SFLP	Credit Enhancements				X
SFLP	Marketing, Education, & Outreach (ME&O)	TBD		X (contractors and participating financial institutions - enrolled through CAEATFA regulations; CCSE)	X (CAEATFA to coordinate outreach efforts for contractors and financial institutions)
SFLP	Evaluation, Measurement, & Verification (EM&V)	X			

Note: IOU participant reflects customer that received a rebate / incentive.

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

d) **Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

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i. Customers:

This program is designed to support the single family residential market and is available to residential customers on a residential rate. Customers must install measures that are eligible for IOU/RENs rebate/incentive programs (as defined below), but participation in an IOU/REN program is not required to be eligible for the SFLP. Eligible EE measures that are financed must be installed on a fully-constructed single family residential dwelling within the IOU service area (i.e. this is not a new construction program). Also see Section 10.f, below.

Low- and moderate-income utility customers are also eligible to participate in this pilot. D.13-09-044 requires that the benchmark for low and moderate income limits align with the current annual limits published by the California Department of Housing & Community Development, by county and family size.<sup>9 10</sup>

CAEATFA may further define or clarify customer eligibility requirements within its public process for developing regulations.

Table 7: Customer Eligibility Requirements (Joint Utility Table)

Customer Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
Single Family Residence	X	X	X	X
Fully Constructed dwellings	X	X	X	X
Residential customers on a residential rate	X	X	X	X
Low- and moderate- income that meet the California Department of Housing & Community Development current annual limit, by county and family size	X	X	X	X

ii. Contractors/Participants:

Qualified Contractors must hold active licenses with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project participating in a CPUC-approved IOU/RENs incentive program(s), the contractor must meet any specific requirements laid out by that program.
- (2) For any project not participating in a CPUC-approved IOU/RENs incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility

<sup>9</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 33.

<sup>10</sup> <http://www.hcd.ca.gov/hpd/hrc/rep/state/incNote.html>

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requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications..

### Contractor Participation Requirements

Contractors will provide in writing a bill impact estimate for the proposed energy efficiency project to the customer before the customer makes a decision about whether to pursue the project.

**Table 8: Contractor Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
For any project participating in a CPUC-approved IOU incentive program(s), the contractor must meet any specific requirements laid out by that program.	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will provide in writing a bill impact estimate for the proposed energy efficiency project to the customer at the time that the customer is making a decision about the project.	X	X	X	X

### iii. Financial Institutions:

Pursuant to D.13-09-044, both direct and indirect lending will be eligible for this pilot. Additional eligibility requirements for FIs participating in this program will be determined through CAEATFA's public process for developing program regulations. These requirements will establish minimum qualifications, set standards for financial products, and ensure FIs conform with the terms of the pilot program in which they are participating (including data collection and privacy requirements), and for any additional requirements related to the use of CEs.

Minimum qualifications for FIs are they: a) possess all required state and federal licenses, and b) be in good standing with regulators. FIs will also be required to conform to pilot program requirements, CE protocols, and data collection and sharing requirements.

Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)

Financial Institution Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
Pursuant to D.13-09-044, both direct and indirect lenders will be eligible to participate in this pilot. Additional eligibility requirements for financial institutions (FIs) participating in this program will be determined through CAEATFA's public process for developing program regulations.	X	X	X	X

e) **Program Partners:**

a. **Program coordination partners:**

- Contractors – Numerous types of contractors are expected to participate in the program including: HVAC, insulation, weatherization, refrigeration, lighting, energy management systems, water efficiency, and electrical and home performance/whole house. The contractors will propose a scope of work to a customer, often based on the results of a home audit, and will provide information on payment options according to the financing terms.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools. Distributors can be more knowledgeable of financing and may review financing programs for their member contractors. Distributors may be supportive of financing and could be helpful in promoting the program.
- Retailers – Single family residents often procure major appliances directly from retailers or home improvement stores. These retailers are partners to existing rebate programs through mechanisms such as Point-of-Sales Rebates. This could also be a channel for the finance program if the same customer is purchasing multiple major appliances at the same time.
- California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) – CAEATFA as CHEEF will serve as the interface between the utilities and FIs. CAEATFA will also subcontract with a Trustee to hold credit enhancement funds. CAEATFA will direct the transfer of CE funds between program and FI accounts in order to process loan enrollment requests and pay loss claims to the FIs.
- Financial Institutions – The FIs will fund and service loans under the CE terms. FIs will originate either direct loans (loans made to the customer) or indirect financing (an alternative option where the contractor/dealer acts as an intermediary between the customer and FI, which is assigned to a finance company). The FIs may include the following types of entities.

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- Credit Unions: non-profit financial institutions that exist for the benefit of their members. Credit unions have been well-engaged already in financing programs through ARRA-supported programs, offering direct loans.
  - Banks, including (1) community banks: local, for-profit financial institutions that serve certain communities. Some community banks have engaged in financing programs, particularly through the efforts of the California Housing Partnership (CHP), offering direct loans; (2) Large, multi-state banks that operate on a regional or national basis, often described as money center banks, will be eligible to participate in the program, although the expectation is that they are unlikely to participate in large numbers as direct lenders and will participate largely as investors in loan portfolios originated by other.
  - Community Development lenders: offering direct loans to hard-to-reach populations.
  - Other Finance companies: local, regional or national FIs that finance retail transactions (e.g., home improvements, automobile purchases, etc.) and their investors. Many finance companies have been heavily engaged in California and nationally in financing energy efficiency, offering indirect loans.
- Local Government Partnerships – The local governments will assist with engaging their residential constituents to utilize the program’s financing offerings.
  - Community Based Organizations (CBOs) – The CBOs will assist with engaging low- and moderate-income customers that will utilize the program’s financing offerings for the sector.
  - California Center for Sustainable Energy (CCSE) – CCSE and program implementers will coordinate to ensure the marketing of financial products is done in coordination with the larger umbrella platform the Commission is expected to adopt in the Statewide ME&O proceeding.

**Table 10: Program Coordination Partners**

Coordination Partner Information	PGE	SCE	SDGE	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Financial Institutions	X	X	X	X
Community-based Organizations	X	X	X	X
CCSE	X	X	X	X

f) **Measures and incentive levels:**

To be eligible to access a credit enhancement under this pilot, Eligible Loans must consist of Eligible Measures.



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Eligible Measures can consist of Eligible Energy Efficiency Measures (EEEMs) and may include Non-EEEMs, each of which are both defined herein.

EEEMs are measures that have been approved by the Commission for an IOU/REN EE rebate/incentive program, although the customer need not receive an incentive or rebate to qualify for the loan.<sup>11</sup> EEEMs will be inclusive of measures that are approved as part of the utility EE programs. Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>  
and <http://www.socalgas.com/for-your-business/energy-savings/>  
SCE - <https://www.sce.com/wps/portal/home/residential/rebates-savings/rebates>  
SDG&E - <http://www.sdge.com/buyers-guide/>  
PG&E - <http://www.pge.com/obf>

D.13-09-044 determined that customers may be more likely to add EE projects while undertaking other improvement activities. For the 2013 – 2017 pilot period, the Commission deemed it reasonable and adopted a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to EEEMs. Financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

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<sup>11</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 30.

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Table 11: Summary Table of Measures, Incentive Levels and Verification Rates

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
Water Heater - Gas			\$200	2%*	n/a	see note	\$100	5%	\$30-75	5% random inspection
Water Heater - Electric .93			n/a	2%*	\$30	see note	\$100	5%	n/a	n/a
Tankless Water Heater			n/a	n/a	n/a	see note	n/a	n/a	\$150-\$200	5% random inspection
Thermostatic Valve and 1.6 GPM SH									\$15	5% random inspection
Water Saving Kit									\$12.11	5% random inspection
Hybrid electric Heat Pump =2.0			\$500	2%*	\$200	see note	\$250	5%	n/a	n/a
Attic/Wall Insulation			n/a	n/a	n/a	see note	\$0.15/SF	5% or 100% if self-installed	\$0.15/SF	5% random inspection
Refrigerator Tier 2 & 3			\$75 only Tier 3	2%*	n/a	see note	\$50	5%	n/a	n/a

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Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
Energy Star Refrigerator (PG&E)			n/a	n/a	\$35	see note	n/a	n/a	n/a	n/a
Energy Star Most Efficient Refrigerator			n/a	n/a	\$75	see note	n/a	n/a	n/a	n/a
Clothes Washer			\$50	2%*	\$50	see note	\$50	5%	\$35-50	5% random inspection
Furnace			n/a	n/a	n/a	see note	\$100	5%	\$38-200	5% random inspection
Variable speed pump (Customer)			\$100	2%*	\$200	see note	\$200	5%	n/a	n/a
Appliance Recycling Refrigerator 10ft <sup>3</sup> < size < 32ft <sup>3</sup>			\$35	2%*	\$35	see note	\$35	5%	n/a	n/a
Appliance Recycling Freezer 10ft <sup>3</sup> < size < 32ft <sup>3</sup>			\$35	2%*	\$35	see note	\$35	5%	n/a	n/a
Whole House Fan			n/a	n/a	\$35	see note			n/a	n/a

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Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
Ducted Evaporative Cooler			n/a	n/a	up to \$400	see note			n/a	n/a
Energy Upgrade California			\$1000-4500	Tiered by contractor (5%-60%)	\$1,000 - \$4,500	see note	\$2500-4500	100% initially	\$1000-\$4500	Varies depending on measure and contractor performance
Middle Income Direct Install Program			n/a	n/a	n/a	see note	N/A	10%	n/a	Varies depending on measure and contractor performance

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Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
Energy Savings Assistance Program			n/a	n/a	n/a	see note	N/A	10%	n/a	Varies depending on measure and contractor performance

All measure rebates/incentives are subject to change. Please refer to each IOU's website to view the EEEM list. Inspection rates may vary based on project cost / measure.

- SoCalGas - <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>
- SCE - <https://www.sce.com/wps/portal/home/residential/rebates-savings/rebates>
- SDG&E - <http://www.sdge.com/buyers-guide/>
- PG&E - <http://www.pge.com/obf>

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**g) Additional Services:**

The single family financing pilot will offer a series of additional services that will benefit a variety of market actors. These will include:

- Outreach, education and training for consumers and contractors will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lender education and training: The education, and outreach component of the pilot will include training events and materials for FIs and lenders that will assist them in participating in this pilot. Additional information on lender training plans will be provided in the CHEEF PIP.
- Call center support: IOU’s call center will be able to provide general information about the SFLP.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PGE</b>	<b>SCE</b>	<b>SDGE</b>	<b>SCG</b>
Consumer education and training	Consumers	See CHEEF PIP	TBD	TBD	TBD	TBD
Contractor education and training	Contractors	See CHEEF PIP	TBD	TBD	TBD	TBD
Lender education and training	Lenders	See CHEEF PIP	TBD	TBD	TBD	TBD
Call center support	IOU call center employees	See CHEEF PIP	TBD	TBD	TBD	TBD

\* CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is

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also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

### CCSE Timeline for Finance ME&O Plan & Concurrent Activities

Activity	Estimated Timing
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

#### i) Sub-Program Specific Training:

See Section 10.h. above for description of training including engaging FIs, contractors, and other market participants and borrowers.

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- j) **Sub-Program Software and/or Additional Tools:**
- a. Contractors with a customer participating in an IOU program will be required to use the software and additional tools when applicable. Software and tool requirements for customers not participating in an IOU/REN incentive program will be identified during CAEATFA's rulemaking process.
  - b. Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See a, above.)  
Post-implementation audit required \_\_\_ Yes \_\_\_ No (See a, above.)
  - 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)?

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process. The SFLP Pilot program will incorporate audit protocols for single family properties by leveraging the existing IOU/REN programs. CAEATFA, with support from the IOUs, will address specific audit requirements and procedure for financing-only projects during its rulemaking process.

Table 13: Program Related Audits

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
N/A – Residential programs do not provide rebates for audits	N/A

- k) **Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by the relevant rebate/incentive program requirements. CAEATFA will address quality assurance requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

Table 14: Quality Assurance Provisions

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements #1 - Refer to existing utility program	Refer to existing utility program	Refer to existing utility program
QA requirements –non utility program	Refer to CAEATFA	Refer to CAEATFA



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### l) Sub-program Delivery Method and Measure Installation /Marketing or Training:

The following sequence illustrates how this program could be delivered to customers<sup>12</sup>.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor training.
3. Contractor and customer meet, driven by contractor marketing or customer inquiry.
4. Contractor interviews customer, collects site information (including results of energy audit).
5. Contractor proposes a project scope, price, and incentives (typically utility or manufacturer rebates) and provides payment options.
6. Customer makes purchase and payment decision.
7. If Customer selects financing option, customer or contractor contacts source of financing with or without assistance of contractor.
8. FI collects application information from Customer, makes underwriting decision and informs Customer and/or contractor depending on direct versus dealer financing process.
9. Contractor installs improvements.
10. Customer signs completion certificate.
11. Inspections performed (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
12. FI receives completion certificate and any other required documents.
13. FI funds loan to Customer, Contractor or both (two-party check).
14. FI provides appropriate documentation to CAEATFA.
15. CAEATFA directs trustee to transfer credit enhancement from IOU account to FI's account at the Trustee.
16. A verification of the customer IOU account will be conducted to verify status. This step could be part of the approval process or may be streamlined to be verified in batches at a later stage.

### m) Sub-program Process Flow Chart:

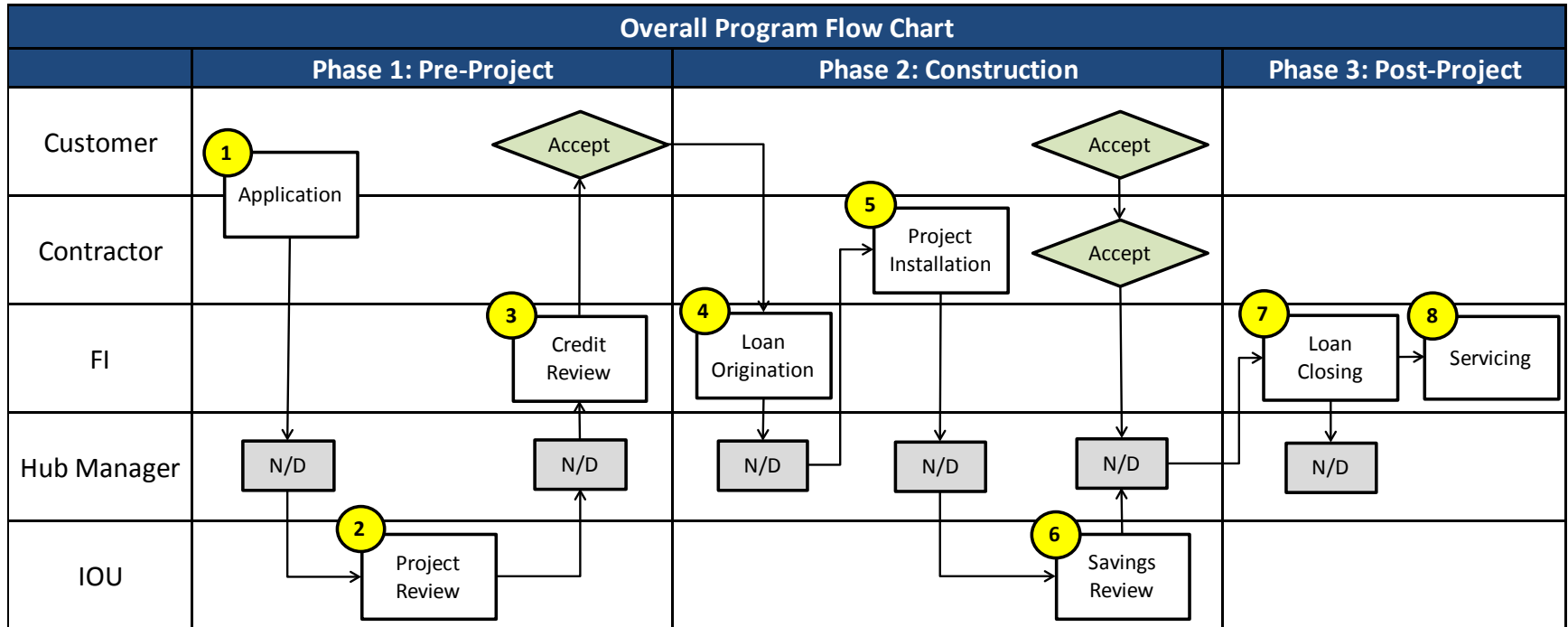
The process flowcharts below illustrate the process flow for the indirect and direct single family loan programs are expected to operate. The first of the Flow Charts illustrates how the program is expected to operate for multi-measure retrofits (e.g. Home Upgrade) and the second two illustrate how the single family direct and indirect financing is expected to operate. Specific details of how the programs will operate will vary in actual implementation. Note that in each of these programs, that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the financial institution. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.

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<sup>12</sup> Credit enhancement funds will be allocated to appropriate financial institution trustee account at the point of loan closing (7).

# SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

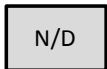
Single Family Direct Loan Program Flow Chart



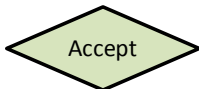
**Key**



**Stage Indicator** = Designates Process Flow Stage



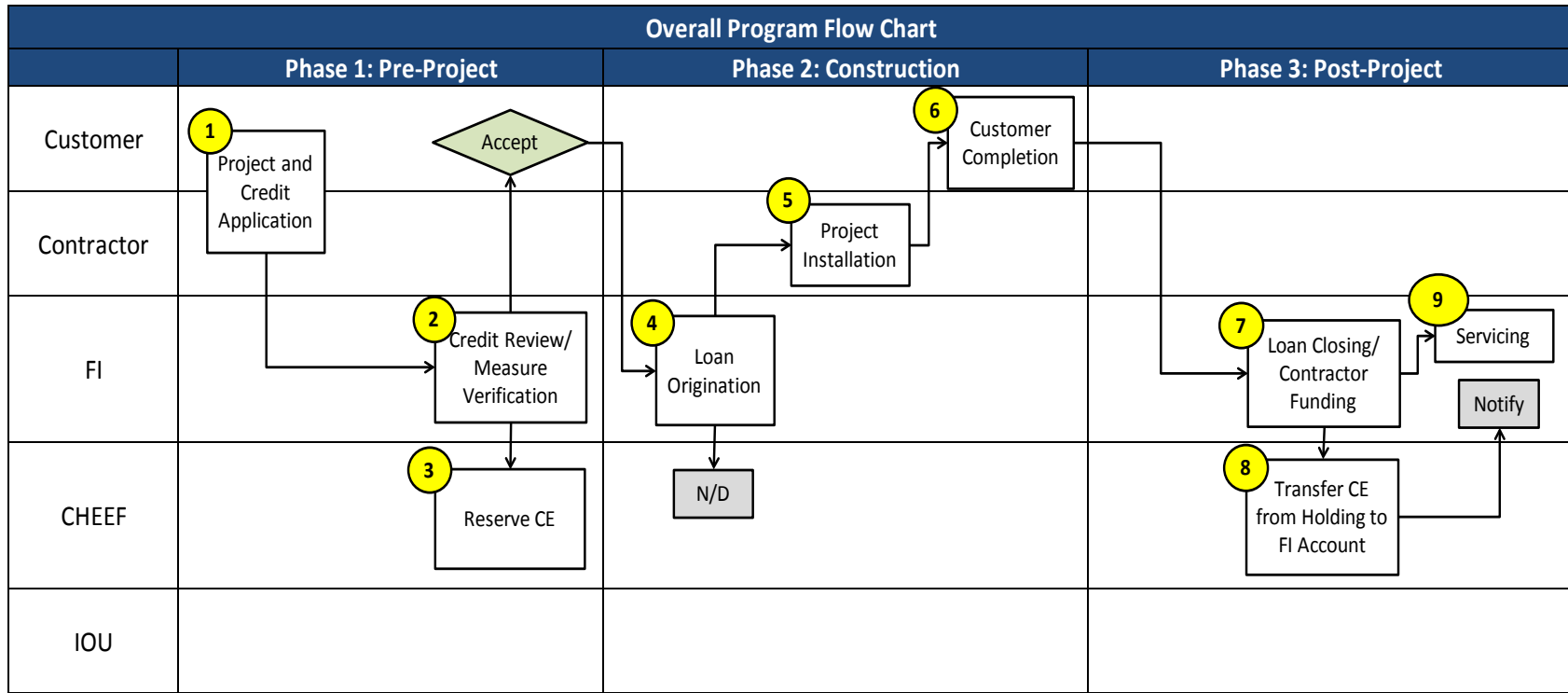
**Notify/Data** = Hub notified of Stage completion and data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

# SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

## Direct Financing - Single Measure - Single Family Loan Program

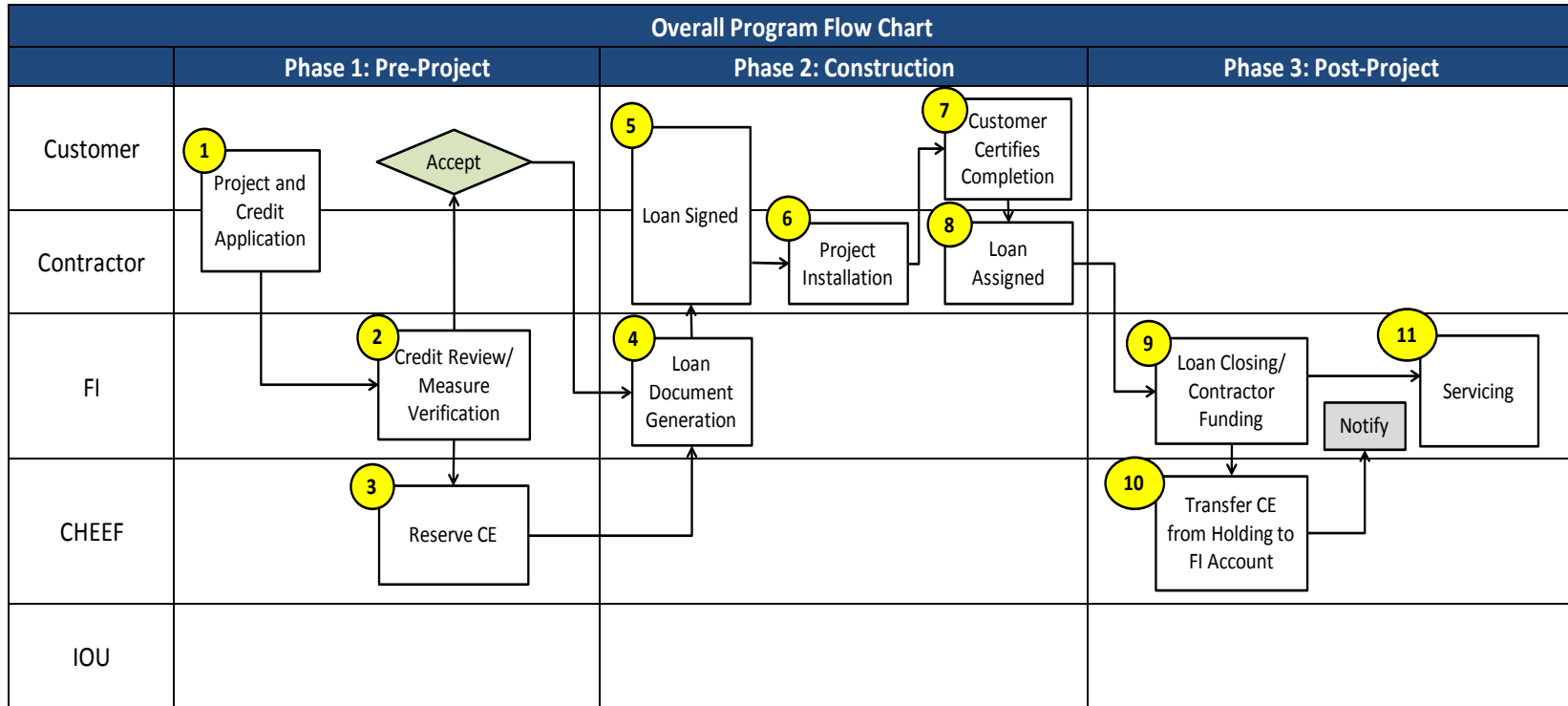


### Key

- Stage Indicator** = Designates Process Flow Stage
- Notify/Data** = CHEEF notified of Stage completion and applicable energy and finance data normalized
- Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

# SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

## Indirect Financing - Single Measure - Single Family Loan Program



### Key



**Stage Indicator** = Designates Process Flow Stage



**Notify/Data** = CHEEF notified of Stage completion and applicable energy and finance data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**<sup>13</sup>:

The Single Family Loan Program will coordinate with all IOU/REN residential rebate/incentive programs, as well as the Statewide ME&O Program.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

Sub-Program Name		
Other IOU Sub-program Name	Coordination Mechanism	Expected Frequency
<b>Coordination Partners Outside CPUC</b>		
Contractors	ME&O	Quarterly
Distributors	ME&O	Quarterly
CAEATFA	ME&O	Quarterly
Financial Institutions	ME&O	Quarterly
Community Based Organizations	ME&O	Quarterly
CCSE	Meetings/Emails/Calls	As Needed

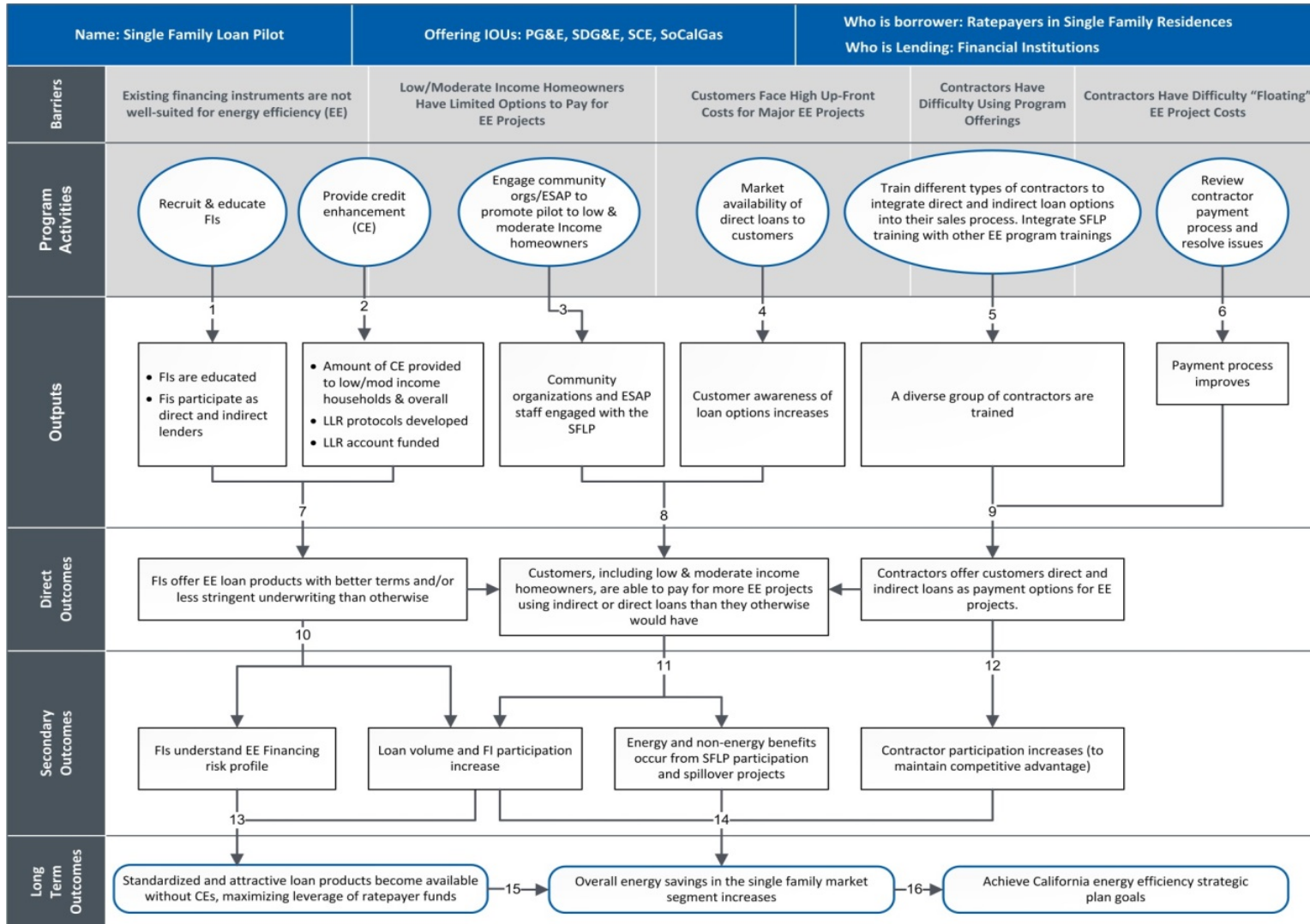
Note: "Mechanisms" refers to communication methods (i.e. quarterly meetings; internal list serves; monthly calls, etc.) and/or any cross-program review methods (i.e., feedback on program plans; sign off on policies, etc.) or harmonization techniques (i.e. consistent certification requirements across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

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<sup>13</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.

# SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

## o) Logic Model:



SFLP = Single Family Loan Pilot ESAP = Energy Savings Assistance Program FI = Financial Institution CE = Credit Enhancement LLR = Loan Loss Reserve EE = Energy Efficiency  
 Direct loans are made by the FI to the customer. Indirect loans are offered by contractors.

11) Additional Sub-Program Information

a) **Advancing Strategic Plan Goals and Objectives:**

As underscored by the California Long Term Energy Efficiency Strategic Plan (the “Strategic Plan”), innovative financing is a major EE strategy for California’s single family sector. A key strategy in the Strategic Plan’s Residential and Low Income section is “5. **Financing:** Work with the financial community to develop innovative and affordable financing options for [EE] buildings and retrofits” (p. 2-12), a goal that is directly advanced by this sub-program. Furthermore, this sub-program makes important contributions to the Strategic Plan’s call to:

- Identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “[D]evelop financial products and programs...to encourage demand for energy efficiency building products, home systems and appliances” (strategy #2-4, p. 2-21),
- “Investigate the feasibility of [EE] lending products”(p. 2-21), and
- Use EE financing to meet closely related goals, namely HVAC and lighting efficiency.

b) **Leveraging of Resources:**

- See Sub-Program Specific Marketing and Outreach

c) **Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs, CAEATFA, and other stakeholders. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilot programs will monitor developments in other EE Financing programs nation-wide and outside of the U.S. The IOUs will also work with industry experts on a quarterly basis to ensure that program partners provide feedback concerning best practices and lessons learned.

Commission Decision (D.)13-09-044 also requires CAEATFA, with assistance from the Southern California Gas Company, to submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

12) Additional information as required by Commission decision or ruling or as needed:

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the 10 criteria required for pilot programs.

- a. **A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

The pilot seeks to overcome the first-cost barrier of acquiring EE in the Single Family residential market and, therefore, to increase overall savings from EE. Current rebate programs pay a portion of the cost of the EE upgrade. Financing pilots, on the other hand, help a customer finance 100% of the initial EE cost of the upgrade, net of any applicable and selected rebates, and subject to repayment. As a result, it is anticipated that customers who do not otherwise have the funds readily available will be able to use financing to pay for EE upgrades.

The areas of concern for the pilot are:

- *Financial institutions may not participate in large numbers.*

To mitigate this concern, the IOUs reached out to financial institutions at the very early developmental stages of the program to build a program that will be attractive to them.

- *Customers may not use the pilot offering.*

The pilot is designed to invite loans with attractive interest rates and terms from FIs to customers through CEs. Further, this pilot includes a marketing and outreach campaign that is well integrated with existing rebate/incentive programs and contractor networks.

- b. **Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The SFLP significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11 A., EE financing is a very important pillar of the Strategic Plan's approach, specifically including the Single Family residential sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "**Customer Incentives** including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

- c. **Specific goals, objectives and end points for the project.**

The SFLP seeks to:

- a. Stimulate financial institutions to provide capital to EE upgrade markets in the Single Family sector.
- b. Increase overall energy savings from EE via EE financing.
- c. Leverage with private capital.
- d. Provide for specific outreach and CE funding for low and moderate income customers; approximately one-third of authorized LLR funds should be used to offer higher credit enhancements for these single family residents.

The pilot seeks to deploy CEs during the program period. These credit enhancements will come in the form of a loan loss reserve for the single family residential market, meaning that



## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

for every loan closed, no more than 20% of the outstanding value of that loan will be held in reserve for the life of that loan.

Lenders will be able to recover at least 70%, but no more than 90%, of the total principal amount of the eligible loan value, with the specific percentage to be determined through CAEATFA's regulations.

- d. **New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

Financing is a well-established method to boost purchases of many types of products including real estate, vehicles and other equipment, and other upgrades to homes such as windows and kitchen upgrades.

The pilot relies on several innovative design features that have not been extensively tested in California. These include:

- **Credit enhancements:** Credit enhancements can reduce interest rates, increase the duration of loans, or make credit underwriting terms more flexible than they otherwise would be. The pilot will enable testing of the effect of credit enhancements on loan features.
- **Contractor engagement in financing:** Several financing programs have operated in California to support EE, although many of them have operated through a direct loan process, whereby consumers apply directly to a financial institution for loan financing. By contrast, this pilot allows an indirect loan financing mechanism, whereby contractors can take a loan application and submit it on behalf of the consumer to a financial institution for approval.

Home improvements are traditionally sold using this indirect loan process, and this pilot will test the relative effectiveness of these indirect and direct lending processes for EE.

- **Integration of financing and incentive programs:** This pilot will help test the most effective ways for customer rebate/incentive programs to be integrated effectively with third party financing. The pilot is designed to leverage requirements from existing rebate/incentive programs to help streamline the process for customers seeking to access both rebates and financing for installed EE measures.
- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See Table 1 and Item 10a.

SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

f. Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.

The Statewide Research Roadmap specifies the mechanism for which energy and demand savings will be determined for the Finance Pilots. In addition, the IOUs are conducting research to develop various requirements of the Pilots including logic models, Program Performance Metrics and related design parameters.

g. Program performance metrics.

Table 16: Single Family Loan Program Performance Metrics

Short-term Program PPMs:	Measurement Approach	Data Source	D. 13-09-044 Considerations	Metric Type												
<p>PPM 1:</p> <ul style="list-style-type: none"> <li>• Loan principal outstanding</li> <li>• Total lent</li> </ul>	<p>The data working group will determine how to track total lent and total principal outstanding at all times for two customer categories*</p> <ul style="list-style-type: none"> <li>• Low to Moderate Income</li> <li>• Greater than Moderate Income</li> </ul>	<p>CHEEF and/or Data working group</p>	<p>Page 31 “increase the volume of EE financing”</p>	<p>2a</p>												
<p>PPM 2: Types of measures installed in projects getting financing</p>	<p>Project information should be tracked by the pilot or applicable rebate program. For purposes of reporting this PPM, program managers should consider categories such as:</p> <ul style="list-style-type: none"> <li>• HVAC (central heating and cooling, fans, motors)</li> <li>• Envelope (air seal, insulation)</li> <li>• Plug Load (Washer)</li> </ul> <p>The table below shows an example of a project tracking table for this PPM. When reporting this metric, the aggregated distribution of measure types can be provided.</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Project 1</th> <th>Project 2</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>✓</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td>✓</td> </tr> <tr> <td>3</td> <td></td> <td>✓</td> </tr> </tbody> </table>	Category	Project 1	Project 2	1	✓		2		✓	3		✓	<p>Leverage existing program tracking systems, or require as part of the loan application.</p>	<p>Page 10 “In the Guidance decision, we committed to developing scalable and leveraged financing products to lead consumers to engage in deeper, more comprehensive EE projects than available through current programs</p>	<p>2a</p>
Category	Project 1	Project 2														
1	✓															
2		✓														
3		✓														

\* <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>

## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

On June 3, 2013, the IOUs filed Advice Letter (AL) 3389-G/4234-E which advised the Commission that the IOUs are working to assess financing utilization in the EE portfolio and developing PPM recommendations. The pilot metrics shown above were designed to meet criteria defined by the CPUC as fulfilling the EE Strategic Plan, portfolio development, and program specific evaluation efforts.

The IOU's will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into "mainstream" programs. As such, the IOUs do not establish targets for these PPMs at this time.

### **h. Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

### **i. A proposed EM&V plan.**

The Statewide Research Roadmap specifies the mechanism for which energy and demand savings will be determined for the Finance Pilots. The Research Roadmap is a detailed plan which describes each of the studies being conducted on the financing pilots by each of the IOUs. Included in the plan are allocated budgets, key research questions and information needs of the program managers and other stakeholders. In addition, the IOUs are conducting research to develop various requirements of the Pilots including logic models, Program Performance Metrics and related design parameters.

### **j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.e.

## **Decision 13-09-044, Fast-Track / OBR PIPs**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the Single Family Loan Program Pilot and will be further addressed in CAEATFA's regulations.

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.).

## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

See Table 1 for the portion of the \$8 million allocated by the IOUs to the Single Family Loan Program “Fast Track” pilot. As directed, the IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time they are making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program.

- The PIP should establish appropriate program reporting by FIs and marketing steps, particularly with experienced community-based organizations, designed to achieve this goal (p. 33).

See Section 10.h. for marketing steps. For appropriate program reporting, the CHEEF PIP explains that CAEATFA will include reporting requirements for participating FIs within its program regulations, and identify information to be reported, frequency of reporting, and methods of submitting reports to CAEATFA. The regulations for the Single Family Loan Program, called the Residential Energy Efficiency Loan Assistance Program, can be found at the following link on the CAEATFA website:

<http://www.treasurer.ca.gov/caeatfa/cheef/reel/index.asp>

Please see Sections including, but not limited to, 10091.11. Reporting, and 10091.15 California Hub for Energy Efficiency Financing Privacy Rights Disclosure, for detailed requirements. This data will include data on low- and moderate-income borrowers served by the pilot.

- CAEATFA/SoCalGas reference the data protocols (from the DWG final report) in the pilot PIPs since the data fields could differ by pilot (D.13-09-044, Appendix D).

Pursuant to D.13-09-044, the data protocols subject to the Data Working Group (DWG) report were submitted in a final report and approved by the Commission, with an effective date of December 16, 2013. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. See SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E.

## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

More detailed data requirements for the pilot are available in the Single Family Loan Program (called the Residential Energy Efficiency Loan Assistance Program) regulations at this link

<http://www.treasurer.ca.gov/caeatfa/cheef/reel/index.asp>

ATTACHMENT 1

Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>14</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

The SFLP will evaluate its influence on the market actors that support single family loans. This includes examining the number of educated and trained contractors that are participating in the program, in addition to FIs and other market actors. This pilot will also evaluate processing time for receiving a loan (from start to finish) as well as loan values based on EE work. The pilot participation results will offer useful perspectives on the effectiveness of these pilot approaches, best practices, and lessons learned, and expected benefits of expanding the pilot to become a full-scale program.

This pilot introduces a mechanism to test and compare two types of single family financing products: indirect financing and direct loans. Training will be conducted to educate both FI's and contractors on overcoming financing barriers.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.**<sup>15</sup>

The IOUs will work to determine the baseline for existing participation within the statewide financing programs. This will allow for the IOUs to measure incremental single family loan participation. The IOU's will analyze the data collected during the 2013-2017 pilot period to better assess future projections for non-energy objectives if the pilots are converted into "mainstream" programs. As such, the IOUs do not establish targets at this time.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and

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<sup>14</sup> A SMART objective is one that is **S**pecific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), **M**easurable, **A**mbitious, **R**ealistic, and **T**ime-bound.

<sup>15</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.

## SINGLE FAMILY LOAN PROGRAM PIP – CLEAN VERSION

administer studies to gather and track consistent, reliable and valid baseline and market effects data.

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

On June 3, 2013, the IOUs filed Advice Letter (AL) 3389-G/4234-E which advised the Commission that the IOUs are working to assess financing utilization in the EE portfolio and developing PPM recommendations. The pilot metrics shown above were designed to meet criteria defined by the CPUC as fulfilling the EE Strategic Plan, portfolio development, and program specific evaluation efforts. The IOU's will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs.

REDLINE PIP



SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan Template

- 1) Sub-Program Name: Single Family Loan Program
- 2) Sub-Program ID number:
  - a. SoCalGas: SCG 3787
  - b. SDG&E: SDGE 3297
  - c. SCE: SCE-13-SW-007D
  - d. PG&E: PGE 210931
- 3) Type of Sub-Program:  Core  Third Party  Partnership  Pilot
- 4) Market sector or segment that this sub-program is designed to serve:
  - 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)
- 5) Is this sub-program primarily a:
  - a. Non-resource program  Yes  No
  - b. Resource acquisition program  Yes  No
  - c. Market Transformation Program  Yes  No
- 6) Indicate the primary intervention strategies:
  - a. Upstream  Yes  No
  - b. Midstream  Yes  No
  - c. Downstream  Yes  No
  - d. Direct Install  Yes  No.
  - e. Non Resource  Yes  No

*Note:* Customers will take out loans, but it is anticipated that contractors will be heavily involved in presenting and offering those loans to customers.

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

TRC \_\_\_ PAC \_\_\_

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for claiming incremental energy savings for Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information

SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

was not yet available to estimate the proposed energy savings. The CPUC has thus decided to evaluate the energy savings on an *ex post* basis. The Pilot’s TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1: Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Single Family Loan Program</b>						
Admin/General Overhead (\$)	\$163,997	\$538,485	\$589,472	TBD	TBD	\$1,291,954
Direct Implementation (\$)	\$426,081	\$1,143,020	\$1,140,032	TBD	TBD	\$2,709,133
Credit Enhancements (CE) (\$)	\$0	\$4,917,170	\$16,081,743	TBD	TBD	\$20,998,913
Marketing & Outreach (\$) *1	\$601	\$1,094,377	\$1,490,221	TBD	TBD	\$2,585,199
<b>Total Statewide Budget (\$)</b>	<b>\$590,679</b>	<b>\$7,693,052</b>	<b>\$19,301,468</b>	<b>TBD</b>	<b>TBD</b>	<b>\$27,585,199</b>

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs’ proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - o Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

Servicer, and ~~ed~~) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENs, LGPs, WET, low-income programs, solar providers, water agencies, etc.) f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations.~~b) leveraging existing and developing new contractor networks in conjunction with the CHEEF, c) coordinating training of internal and external stakeholders with CAEATFA and other parties, d) integration of financing with existing programs, reacting to market conditions, monitoring of program progress and addressing implementation issues, e) on-going support to Billing, IT, and Call Center operations, and f) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account processing, Energy Auditors for projects not participating in rebates/incentives programs, and multifamily audits/technical assistance.~~

SoCalGas	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$2,611	\$71,036	\$122,023	TBD	TBD	\$195,670
Direct Implementation (\$)	\$30,325	\$100,039	\$97,051	TBD	TBD	\$227,415
Credit Enhancements (CE) (\$)	\$0	\$986,144	\$2,002,171	TBD	TBD	\$2,988,315
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,537	\$1,247,889	\$2,311,915	TBD	TBD	\$3,593,341

SDG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$80,253	\$160,507	\$160,507	TBD	TBD	\$401,267
Direct Implementation (\$)	\$160,507	\$321,013	\$321,013	TBD	TBD	\$802,533
Credit Enhancements (CE) (\$)	\$0	\$926,926	\$1,881,940	TBD	TBD	\$2,808,866
Marketing & Outreach (\$)	\$0	\$107,005	\$107,005	TBD	TBD	\$214,010
Total IOU Budget (\$)	\$240,760	\$1,515,451	\$2,470,465	TBD	TBD	\$4,226,676

SCE	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						

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Admin/ General Overhead (\$)	\$31,133	\$41,325	\$41,325	TBD	TBD	\$113,783
Direct Implementation (\$)	\$135,249	\$135,613	\$135,613	TBD	TBD	\$406,475
Credit Enhancements (CE) (\$)	\$0	\$217,002	\$6,538,978	TBD	TBD	\$6,755,980
Marketing & Outreach (\$)	\$0	\$384,202	\$780,046	TBD	TBD	\$1,164,248
Total IOU Budget (\$)	\$166,382	\$778,142	\$7,495,962	TBD	TBD	\$8,440,486

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PG&E Sub-Program	Program Year					
	2013	2014	2015	2016	2017	Total
Admin/ General Overhead (\$)	\$50,000	\$265,617	\$265,617	TBD	TBD	\$581,234
Direct Implementation (\$)	\$100,000	\$586,355	\$586,355	TBD	TBD	\$1,272,710
Credit Enhancements (CE) (\$)	\$0	\$2,787,098	\$5,658,654	TBD	TBD	\$8,445,752
Marketing & Outreach (\$)	\$0	\$512,500	\$512,500	TBD	TBD	\$1,025,000
Total IOU Budget (\$)	\$150,000	\$4,151,570	\$7,023,126	TBD	TBD	\$11,324,696

9) Sub-Program Description, Objectives and Theory

a. Program Description

The primary goals of the Single Family Loan Program (SFLP) (Decision 13-09-044, 2013)<sup>2</sup> are:

1. To increase the volume of energy efficiency (EE) financing to attract capital providers and attract new market participants;
2. To increase the number and comprehensiveness of EE projects;
3. To increase the rate at which contractors can close a sale of EE equipment;
4. To reach low- and moderate-income customers;
5. To support the new data base that includes project and financial product performance.

The SFLP will test the premise that the availability of more and better financing options increases the overall adoption of energy efficiency in the single family market segment. The program pre-supposes the idea that many customers choose not to engage in EE when confronted with a product that may be more costly than they have anticipated or budgeted. While the customers may understand the value of a particular energy efficiency enhancement, on many occasions they cannot overcome the financial requirements and simply walk away because the first-cost barrier is too high. This decision is made despite the rebates/incentives and financing options currently available through traditional channels. More attractive financing for EE projects may help overcome the upfront EE project cost barrier by allowing customers to pay for upgrades over time. All single family ratepayers that meet the requirements of participating Financial Institutions (FIs) are eligible to participate; customers would not be required to participate in a utility rebate program to be eligible for financing.

Additionally, this Pilot seeks to attract low-to-moderate income customers to the EE upgrade market.<sup>3</sup> Approximately one-third of the total credit enhancement funds will be

<sup>2</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 31-32.

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designated to serve low-to-moderate income single family residents. These customers can also participate in the IOUs' Energy Savings Assistance (ESA) programs, which address easy to install weatherization, lighting, and appliances. The addition of a finance option could encourage deeper market penetration of energy savings measures by providing the means to these consumer segments to achieve more comprehensive changes that are not addressed through the ESA program. Details of this credit enhancement structure ~~will be were~~ developed in the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) rulemaking process, and are available (along with other program regulations) at the following link (note the program on the CAEATFA website is titled Residential Energy Efficiency Loan Assistance Program):

<http://www.treasurer.ca.gov/caeatfa/cheef/reel/index.asp>.

In the end, the key to a successful pilot program is to create a seamless integration to EE projects that leverage utility Direct Install (DI) funding and EE financing. The benchmark for low and moderate income limits shall be the current annual limits published by the California Department of Housing & Community Development, by county and family size.

Pursuant to the Assigned Commissioner's Ruling issued August 25, 2014, the SFLP will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the loan or lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

This pilot will allow FIs to access credit enhancements for eligible loans that meet program criteria. Eligible loans can be either direct or indirect loans from FIs.

### i. Credit Enhancement Mechanism

Ultimately, the pilot is designed to test the effectiveness of financing and credit enhancements (CEs) to enhance customer and FI uptake.

Guidelines for the authorized CEs are included in (Decision 13-09-044, 2013)<sup>4</sup> The CE funding for the single family market segment is not to exceed a total of \$25 million statewide. The Decision requires that approximately one-third of the CE funds for this pilot be utilized to offer CEs for EE financing for low- and moderate-income households.<sup>5</sup> All financial institutions that participate in the program will have access to the pool of CEs, offered on a first come-first served basis. CAEATFA will be establishing the details of the credit enhancements

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<sup>3</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 33.

<sup>4</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. APPENDIX A page 1-2.

<sup>5</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 33.

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through its emergency regulations process, and it is expected that a loan-loss reserve (LLR) will be the primary CE tool used in this market segment:<sup>6</sup>

1. Loan Loss Reserve – is a fund in a trust account established by the California Hub for EE Financing (CHEEF) at the bank or other financial institution, used to cover a portion of defaulted loans. The LLR is expected to be the primary credit enhancement used in the Single Family Loan Program. The details of the LLR will be established in CAEATFA regulations. Pursuant to the Decision, credit enhancements in the SFLP cannot exceed 20% of the total eligible loan value in the portfolio and the lender's loss recovery is limited to no more than 90% of the eligible value of any individual loan's outstanding principal amount. In general, FIs will receive an allocation of credit enhancement only after loans close. CAEATFA rules will establish certain details, such as the possible prefunding of financial institutions for credit enhancements that enable them to receive 90% coverage for early-stage loans that are funded prior to those financial institutions having reached the point at which the 20% cap on their loan portfolio reaches the 90% amount on an individual loan.

### ii. Financing

Although financing is already available to customers through several different instruments, existing instruments are generally not well-suited for some customer segments to finance EE projects. One of the most common methods of financing efficiency projects in the single family sector is the credit card. For example, credit card-based revolving products are convenient and inexpensive to originate but, due to extremely high interest rates, generally come at a high long-term cost. Base interest rates on most revolving credit card instruments generally exceed 20%; the only reason that consumer might see lower rates is when contractors or manufacturers buy down the interest rate to more attractive levels. Buy-down costs are typically approximately 8-10% of the project cost. The costs of this buy-down may be hidden in the form of a higher project cost.

The financing approach supported through the SFLP is to use both direct and indirect loans:

#### Indirect vs. Direct Lending

This pilot allows the testing and comparison of two types of single family financing products: indirect financing and direct loans.

Indirect financing, also known as dealer financing, incorporates the contractor tightly into the financing process – meaning that the customer gives the contractor

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<sup>6</sup> The Decision did not preclude the use of a “debt service reserve” CE.

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a credit application and the contractor transmits the application to a finance company for credit review, loan documentation and closing. After the customer signs a completion certificate, the finance company pays the contractor directly. That finance company then transmits that closed loan to an investor, who either holds that loan through the loan term, or bundles that loan with other loans and sells to another investor. The direct involvement of contractors in the financing process exposes investors to certain financial and regulatory risks that do not exist for direct loans (described below). Investors and finance companies manage these risks by controlling contractor networks tightly to control the representations that contractors make to customers, the quality of work performed, customer satisfaction and other elements of bringing energy efficiency jobs to completion. The credit performance of indirect financing has not shown any marked difference from the credit performance of direct lending.

Direct loans are the more typical type of financing product offered to consumers through credit unions or banks in California. Direct loans differ from indirect financing in that the contractor is minimally involved in the financing process, primarily encouraging the consumer to contact a designated financial institution such as a credit union or bank.

In many cases, the loan origination process is somewhat longer for a direct loan than for indirect financing, and the direct loan process may not be as convenient for the customer or contractor. As a result, it is likely that indirect financing may be most appropriate for single-measure efficiency projects that are typically quite time-sensitive. Direct loans, with somewhat longer origination times, may be more appropriate for multi-measure or whole-house retrofits. In addition, direct loans rely on credit union or bank depositor capital which is currently available at rates that are near historic lows. This means that direct loans may tend to have easier access to extremely low cost capital, although the availability of such capital will be more limited than other investor capital available through the investor markets that typically fund indirect financing.

### iii. Lenders

The pilot stimulates financial institutions to offer attractively priced, fast-origination direct and indirect loans that are appropriate for the single family market. The pilot will provide a credit enhancement and other offerings (contractor networks, marketing, etc.) to attract private capital and to progressively build loan volumes.

The lenders who are expected to participate in this program fall in to five major categories.

1. Credit Unions that have been well-engaged already in financing programs through American Recovery and Reinvestment Act (ARRA)-supported programs, offering direct loans.
2. Banks, including (1) local or statewide community banks, some of which have engaged in financing programs, particularly through the efforts of the



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California Housing Partnership (CHP), offering direct loans (2) larger regional or national, banks that may participate as retail lenders offering direct loans, but are more likely to participate as investors that purchase portfolios of loans originated by others.

3. Non-profit lenders and their funders, who may focus on hard-to - reach populations.
4. Community Development lenders, offering direct loans to hard-to-reach populations.
5. Other Finance companies, many of which have been heavily engaged in California and nationally in financing energy efficiency, offering indirect loans.

**Sub-Program Energy and Demand Objectives**

**Note:** As noted in Section 7, above, the workpaper submitted by the IOUs was not accepted. The CPUC determined sufficient information was not yet available to estimate the proposed energy savings, and will evaluate the savings on an *ex post* basis.

**Table 2: Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year<sup>7</sup>**

SoCalGas		Program Years			Total
		2013	2014	2015	
Sub-program Name					
GWh	*TBD	*TBD	*TBD	*TBD	*TBD
Peak MW	*TBD	*TBD	*TBD	*TBD	*TBD
Therms (millions)	*TBD	*TBD	*TBD	*TBD	*TBD

SDG&E		Program Years			Total
		2013	2014	2015	
Sub-program Name					
GWh	*TBD	*TBD	*TBD	*TBD	*TBD
Peak MW	*TBD	*TBD	*TBD	*TBD	*TBD
Therms (millions)	*TBD	*TBD	*TBD	*TBD	*TBD

SCE		Program Years			Total
		2013	2014	2015	
Sub-program Name					
GWh	*TBD	*TBD	*TBD	*TBD	*TBD
Peak MW	*TBD	*TBD	*TBD	*TBD	*TBD
Therms (millions)	*TBD	*TBD	*TBD	*TBD	*TBD

<sup>7</sup> Individual utility specific information to be provided in this table

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PG&E	Program Years			Total
	2013	2014	2015	
Sub-program Name				
GWh	*TBD	*TBD	*TBD	*TBD
Peak MW	*TBD	*TBD	*TBD	*TBD
Therms (millions)	*TBD	*TBD	*TBD	*TBD

\* TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

The primary goals of the Single Family pilot program are to (i) increase the volume of EE financing to attract capital providers and attract new market participants; (ii) provide a reliable, one-stop mechanism which provides attractive rates and terms for consumers; (iii) a relatively quick turn-around for payments to contractors; and (iv) develop a robust and consistent data set on the energy and financial performance of loans in the single family market.

Successful implementation of the pilot will help improve consumer home comfort. Through reduced energy consumption, installations will also contribute to a reduction in greenhouse gas emissions and will help conserve natural resources that would otherwise be necessary to produce energy used by the consumer

One sub-goal of the SFLP is to compare how well indirect and direct financing offerings perform in the marketplace, and to test how well each of the two products serves the whole house or the single-measure markets.

The pilot results will offer useful perspectives on the effectiveness of these approaches, best practices, lessons learned, and expected benefits of expanding the pilots to become full-scale programs.

**c) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

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

Data sources for these measures are consistent with the rebate/incentive programs the measures are offered through.

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- ii. Indicate work paper status for program measures:

See section 7, above.

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Table 3: Workpaper Status

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

10) Program Implementation Details

a) Timelines:

Table 4: Sub-Program Milestones and Timeline

**Note:** The expected dates for several of these milestones are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays beyond the IOU's direct control.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>8</sup>
Lender recruitment and contractor training	Ongoing
CAEATFA develops emergency regulations (which will include credit enhancement protocols)	C + 30
CAEATFA Board approves emergency regulations	C + 30
Office of Administrative Law (OAL) approves emergency regulations	C + 60
Lenders seek/receive internal board or management sign-off to offer loan product	C + 60 and ongoing
CE funds for pilot transferred to trustee	C + 90
Integration of financing with IOU incentive program delivery defined and implemented (see ME&O)	C + 120
First loan funds	C + 120

<sup>8</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

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b) **Geographic Scope:**

Table 5: Geographic Regions Where the Program Will Operate

Geographic Region	SDG&E	SCG	SCE	PG&E
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

c) **Program Administration**

The IOUs will enter into a contract with CAEATFA who will serve as the California Hub for Energy Efficiency Finance (CHEEF) for the pilot programs.

As CHEEF, CAEATFA will develop regulations to provide specific details on the credit enhancement structure and other requirements for program participation. CAEATFA will also subcontract with a Trustee bank to facilitate the transfer of credit enhancement funds to Financial Institutions participating in the pilot.

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Table 6: 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 (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity [CAEATFA] (X = Yes)
SFLP	Program Application Process		X (Master Servicer)	X	X
SFLP	IOU Participant*	X			X
SFLP	IOU Non-Participants				
SFLP	Credit Review			X (participating financial institutions - enrolled through CAEATFA regulations)	
SFLP	Loan Origination			X (participating financial institutions - enrolled through CAEATFA regulations)	
SFLP	Loan Payments			X (participating financial institutions - enrolled through CAEATFA regulations)	
SFLP	Credit Enhancements				X
SFLP	Marketing, Education, & Outreach (ME&O)	TBD		X (contractors and participating financial institutions - enrolled through CAEATFA regulations; CCSE)	X (CAEATFA to coordinate outreach efforts for contractors and financial institutions)
SFLP	Evaluation, Measurement, & Verification (EM&V)	X			

Note: IOU participant reflects customer that received a rebate / incentive.

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

d) **Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

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i. Customers:

This program is designed to support the single family residential market and is available to residential customers on a residential rate. Customers must install measures that are eligible for IOU/RENs rebate/incentive programs (as defined below), but participation in an IOU/REN program is not required to be eligible for the SFLP. Eligible EE measures that are financed must be installed on a fully-constructed single family residential dwelling within the IOU service area (i.e. this is not a new construction program). Also see Section 10.f, below.

Low- and moderate-income utility customers are also eligible to participate in this pilot. D.13-09-044 requires that the benchmark for low and moderate income limits align with the current annual limits published by the California Department of Housing & Community Development, by county and family size.<sup>9 10</sup>

CAEATFA may further define or clarify customer eligibility requirements within its public process for developing regulations.

Table 7: Customer Eligibility Requirements (Joint Utility Table)

Customer Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
Single Family Residence	X	X	X	X
Fully Constructed dwellings	X	X	X	X
Residential customers on a residential rate	X	X	X	X
Low- and moderate- income that meet the California Department of Housing & Community Development current annual limit, by county and family size	X	X	X	X

ii. Contractors/Participants:

Qualified Contractors must hold active licenses with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project participating in a CPUC-approved IOU/RENs incentive program(s), the contractor must meet any specific requirements laid out by that program.
- (2) For any project not participating in a CPUC-approved IOU/RENs incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility

<sup>9</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 33.

<sup>10</sup> <http://www.hcd.ca.gov/hpd/hrc/rep/state/incNote.html>

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requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications..

**Contractor Participation Requirements**

Contractors will provide in writing a bill impact estimate for the proposed energy efficiency project to the customer before the customer makes a decision about whether to pursue the project.

**Table 8: Contractor Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
For any project participating in a CPUC-approved IOU incentive program(s), the contractor must meet any specific requirements laid out by that program.	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will provide in writing a bill impact estimate for the proposed energy efficiency project to the customer at the time that the customer is making a decision about the project.	X	X	X	X

**iii. Financial Institutions:**

Pursuant to D.13-09-044, both direct and indirect lending will be eligible for this pilot. Additional eligibility requirements for FIs participating in this program will be determined through CAEATFA's public process for developing program regulations. These requirements will establish minimum qualifications, set standards for financial products, and ensure FIs conform with the terms of the pilot program in which they are participating (including data collection and privacy requirements), and for any additional requirements related to the use of CEs.

Minimum qualifications for FIs are they: a) possess all required state and federal licenses, and b) be in good standing with regulators. FIs will also be required to conform to pilot program requirements, CE protocols, and data collection and sharing requirements.



Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)

Financial Institution Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
Pursuant to D.13-09-044, both direct and indirect lenders will be eligible to participate in this pilot. Additional eligibility requirements for financial institutions (FIs) participating in this program will be determined through CAEATFA's public process for developing program regulations.	X	X	X	X

e) **Program Partners:**

a. **Program coordination partners:**

- Contractors – Numerous types of contractors are expected to participate in the program including: HVAC, insulation, weatherization, refrigeration, lighting, energy management systems, water efficiency, and electrical and home performance/whole house. The contractors will propose a scope of work to a customer, often based on the results of a home audit, and will provide information on payment options according to the financing terms.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools. Distributors can be more knowledgeable of financing and may review financing programs for their member contractors. Distributors may be supportive of financing and could be helpful in promoting the program.
- Retailers – Single family residents often procure major appliances directly from retailers or home improvement stores. These retailers are partners to existing rebate programs through mechanisms such as Point-of-Sales Rebates. This could also be a channel for the finance program if the same customer is purchasing multiple major appliances at the same time.
- California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) – CAEATFA as CHEEF will serve as the interface between the utilities and FIs. CAEATFA will also subcontract with a Trustee to hold credit enhancement funds. CAEATFA will direct the transfer of CE funds between program and FI accounts in order to process loan enrollment requests and pay loss claims to the FIs.
- Financial Institutions – The FIs will fund and service loans under the CE terms. FIs will originate either direct loans (loans made to the customer) or indirect financing (an alternative option where the contractor/dealer acts as an intermediary between the customer and FI, which is assigned to a finance company). The FIs may include the following types of entities.

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- Credit Unions: non-profit financial institutions that exist for the benefit of their members. Credit unions have been well-engaged already in financing programs through ARRA-supported programs, offering direct loans.
  - Banks, including (1) community banks: local, for-profit financial institutions that serve certain communities. Some community banks have engaged in financing programs, particularly through the efforts of the California Housing Partnership (CHP), offering direct loans; (2) Large, multi-state banks that operate on a regional or national basis, often described as money center banks, will be eligible to participate in the program, although the expectation is that they are unlikely to participate in large numbers as direct lenders and will participate largely as investors in loan portfolios originated by other.
  - Community Development lenders: offering direct loans to hard-to-reach populations.
  - Other Finance companies: local, regional or national FIs that finance retail transactions (e.g., home improvements, automobile purchases, etc.) and their investors. Many finance companies have been heavily engaged in California and nationally in financing energy efficiency, offering indirect loans.
- Local Government Partnerships – The local governments will assist with engaging their residential constituents to utilize the program’s financing offerings.
  - Community Based Organizations (CBOs) – The CBOs will assist with engaging low- and moderate-income customers that will utilize the program’s financing offerings for the sector.
  - California Center for Sustainable Energy (CCSE) – CCSE and program implementers will coordinate to ensure the marketing of financial products is done in coordination with the larger umbrella platform the Commission is expected to adopt in the Statewide ME&O proceeding.

**Table 10: Program Coordination Partners**

Coordination Partner Information	PGE	SCE	SDGE	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Financial Institutions	X	X	X	X
Community-based Organizations	X	X	X	X
CCSE	X	X	X	X

f) **Measures and incentive levels:**

To be eligible to access a credit enhancement under this pilot, Eligible Loans must consist of Eligible Measures.

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Eligible Measures can consist of Eligible Energy Efficiency Measures (EEEMs) and may include Non-EEEMs, each of which are both defined herein.

EEEMs are measures that have been approved by the Commission for an IOU/REN EE rebate/incentive program, although the customer need not receive an incentive or rebate to qualify for the loan.<sup>11</sup> EEEMs will be inclusive of measures that are approved as part of the utility EE programs. Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>  
and <http://www.socalgas.com/for-your-business/energy-savings/>  
SCE - <https://www.sce.com/wps/portal/home/residential/rebates-savings/rebates>  
SDG&E - <http://www.sdge.com/buyers-guide/>  
PG&E - <http://www.pge.com/obf>

D.13-09-044 determined that customers may be more likely to add EE projects while undertaking other improvement activities. For the 2013 – 2017 pilot period, the Commission deemed it reasonable and adopted a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to EEEMs. Financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

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<sup>11</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 30.

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Table 11: Summary Table of Measures, Incentive Levels and Verification Rates

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
Water Heater - Gas			\$200	2%*	n/a	see note	\$100	5%	\$30-75	5% random inspection
Water Heater - Electric .93			n/a	2%*	\$30	see note	\$100	5%	n/a	n/a
Tankless Water Heater			n/a	n/a	n/a	see note	n/a	n/a	\$150-\$200	5% random inspection
Thermostatic Valve and 1.6 GPM SH									\$15	5% random inspection
Water Saving Kit									\$12.11	5% random inspection
Hybrid electric Heat Pump =2.0			\$500	2%*	\$200	see note	\$250	5%	n/a	n/a
Attic/Wall Insulation			n/a	n/a	n/a	see note	\$0.15/SF	5% or 100% if self-installed	\$0.15/SF	5% random inspection
Refrigerator Tier 2 & 3			\$75 only Tier 3	2%*	n/a	see note	\$50	5%	n/a	n/a

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Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
Energy Star Refrigerator (PG&E)			n/a	n/a	\$35	see note	n/a	n/a	n/a	n/a
Energy Star Most Efficient Refrigerator			n/a	n/a	\$75	see note	n/a	n/a	n/a	n/a
Clothes Washer			\$50	2%*	\$50	see note	\$50	5%	\$35-50	5% random inspection
Furnace			n/a	n/a	n/a	see note	\$100	5%	\$38-200	5% random inspection
Variable speed pump (Customer)			\$100	2%*	\$200	see note	\$200	5%	n/a	n/a
Appliance Recycling Refrigerator 10ft <sup>3</sup> < size < 32ft <sup>3</sup>			\$35	2%*	\$35	see note	\$35	5%	n/a	n/a
Appliance Recycling Freezer 10ft <sup>3</sup> < size < 32ft <sup>3</sup>			\$35	2%*	\$35	see note	\$35	5%	n/a	n/a
Whole House Fan			n/a	n/a	\$35	see note			n/a	n/a

SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
Ducted Evaporative Cooler			n/a	n/a	up to \$400	see note			n/a	n/a
Energy Upgrade California			\$1000-4500	Tiered by contractor (5%-60%)	\$1,000 - \$4,500	see note	\$2500-4500	100% initially	\$1000-\$4500	Varies depending on measure and contractor performance
Middle Income Direct Install Program			n/a	n/a	n/a	see note	N/A	10%	n/a	Varies depending on measure and contractor performance

SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
Energy Savings Assistance Program			n/a	n/a	n/a	see note	N/A	10%	n/a	Varies depending on measure and contractor performance

All measure rebates/incentives are subject to change. Please refer to each IOU's website to view the EEEM list. Inspection rates may vary based on project cost / measure.

- SoCalGas - <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>
- SCE - <https://www.sce.com/wps/portal/home/residential/rebates-savings/rebates>
- SDG&E - <http://www.sdge.com/buyers-guide/>
- PG&E - <http://www.pge.com/obf>

**SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION**

**g) Additional Services:**

The single family financing pilot will offer a series of additional services that will benefit a variety of market actors. These will include:

- Outreach, education and training for consumers and contractors will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lender education and training: The education, and outreach component of the pilot will include training events and materials for FIs and lenders that will assist them in participating in this pilot. Additional information on lender training plans will be provided in the CHEEF PIP.
- Call center support: IOU’s call center will be able to provide general information about the SFLP.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PGE</b>	<b>SCE</b>	<b>SDGE</b>	<b>SCG</b>
Consumer education and training	Consumers	See CHEEF PIP	TBD	TBD	TBD	TBD
Contractor education and training	Contractors	See CHEEF PIP	TBD	TBD	TBD	TBD
Lender education and training	Lenders	See CHEEF PIP	TBD	TBD	TBD	TBD
Call center support	IOU call center employees	See CHEEF PIP	TBD	TBD	TBD	TBD

\* CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is



## SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

### CCSE Timeline for Finance ME&O Plan & Concurrent Activities

Activity	Estimated Timing
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

#### i) Sub-Program Specific Training:

See Section 10.h. above for description of training including engaging FIs, contractors, and other market participants and borrowers.

SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

- j) **Sub-Program Software and/or Additional Tools:**
- a. Contractors with a customer participating in an IOU program will be required to use the software and additional tools when applicable. Software and tool requirements for customers not participating in an IOU/REN incentive program will be identified during CAEATFA's rulemaking process.
  - b. Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See a, above.)  
Post-implementation audit required \_\_\_ Yes \_\_\_ No (See a, above.)
  - 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)?

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process. The SFLP Pilot program will incorporate audit protocols for single family properties by leveraging the existing IOU/REN programs. CAEATFA, with support from the IOUs, will address specific audit requirements and procedure for financing-only projects during its rulemaking process.

Table 13: Program Related Audits

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
N/A – Residential programs do not provide rebates for audits	N/A

- k) **Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by the relevant rebate/incentive program requirements. CAEATFA will address quality assurance requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

Table 14: Quality Assurance Provisions

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements #1 - Refer to existing utility program	Refer to existing utility program	Refer to existing utility program
QA requirements –non utility program	Refer to CAEATFA	Refer to CAEATFA

## SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

### l) Sub-program Delivery Method and Measure Installation /Marketing or Training:

The following sequence illustrates how this program could be delivered to customers<sup>12</sup>.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor training.
3. Contractor and customer meet, driven by contractor marketing or customer inquiry.
4. Contractor interviews customer, collects site information (including results of energy audit).
5. Contractor proposes a project scope, price, and incentives (typically utility or manufacturer rebates) and provides payment options.
6. Customer makes purchase and payment decision.
7. If Customer selects financing option, customer or contractor contacts source of financing with or without assistance of contractor.
8. FI collects application information from Customer, makes underwriting decision and informs Customer and/or contractor depending on direct versus dealer financing process.
9. Contractor installs improvements.
10. Customer signs completion certificate.
11. Inspections performed (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
12. FI receives completion certificate and any other required documents.
13. FI funds loan to Customer, Contractor or both (two-party check).
14. FI provides appropriate documentation to CAEATFA.
15. CAEATFA directs trustee to transfer credit enhancement from IOU account to FI's account at the Trustee.
16. A verification of the customer IOU account will be conducted to verify status. This step could be part of the approval process or may be streamlined to be verified in batches at a later stage.

### m) Sub-program Process Flow Chart:

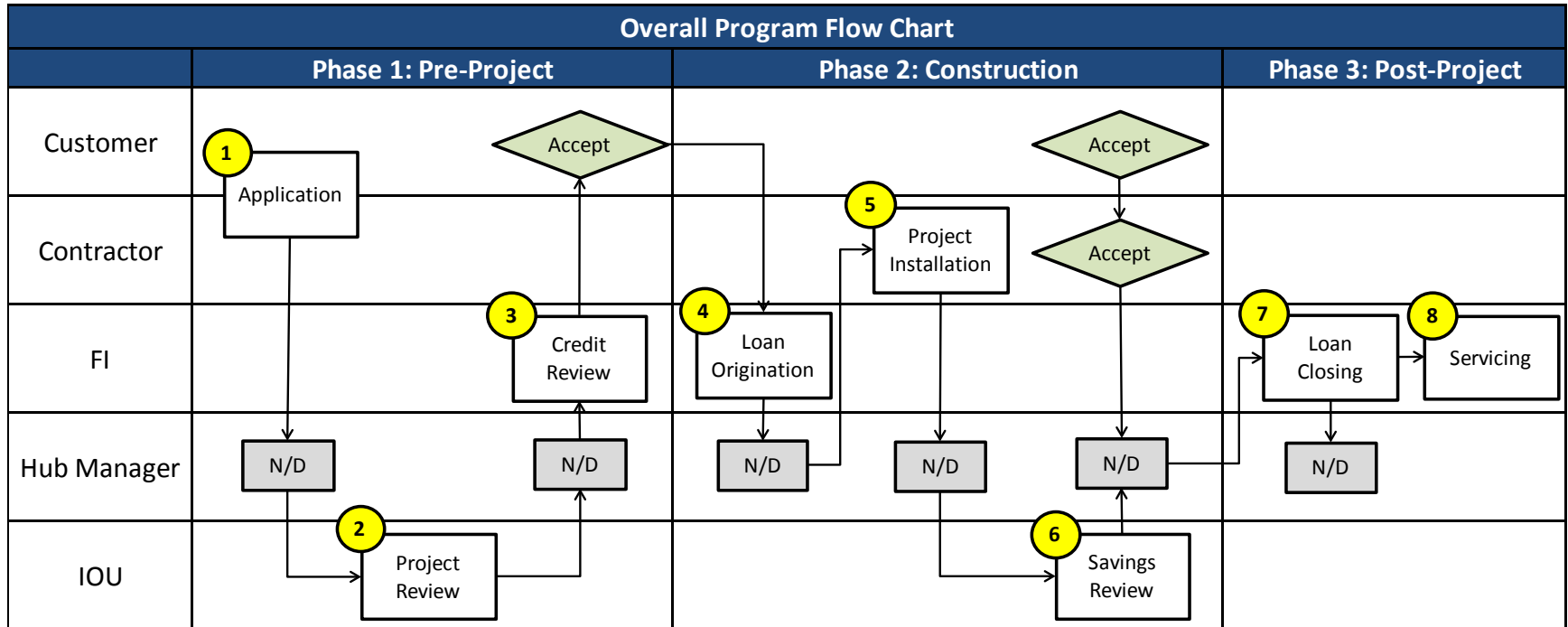
The process flowcharts below illustrate the process flow for the indirect and direct single family loan programs are expected to operate. The first of the Flow Charts illustrates how the program is expected to operate for multi-measure retrofits (e.g. Home Upgrade) and the second two illustrate how the single family direct and indirect financing is expected to operate. Specific details of how the programs will operate will vary in actual implementation. Note that in each of these programs, that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the financial institution. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.

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<sup>12</sup> Credit enhancement funds will be allocated to appropriate financial institution trustee account at the point of loan closing (7).

SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

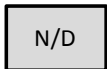
Single Family Direct Loan Program Flow Chart



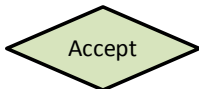
Key



**Stage Indicator** = Designates Process Flow Stage



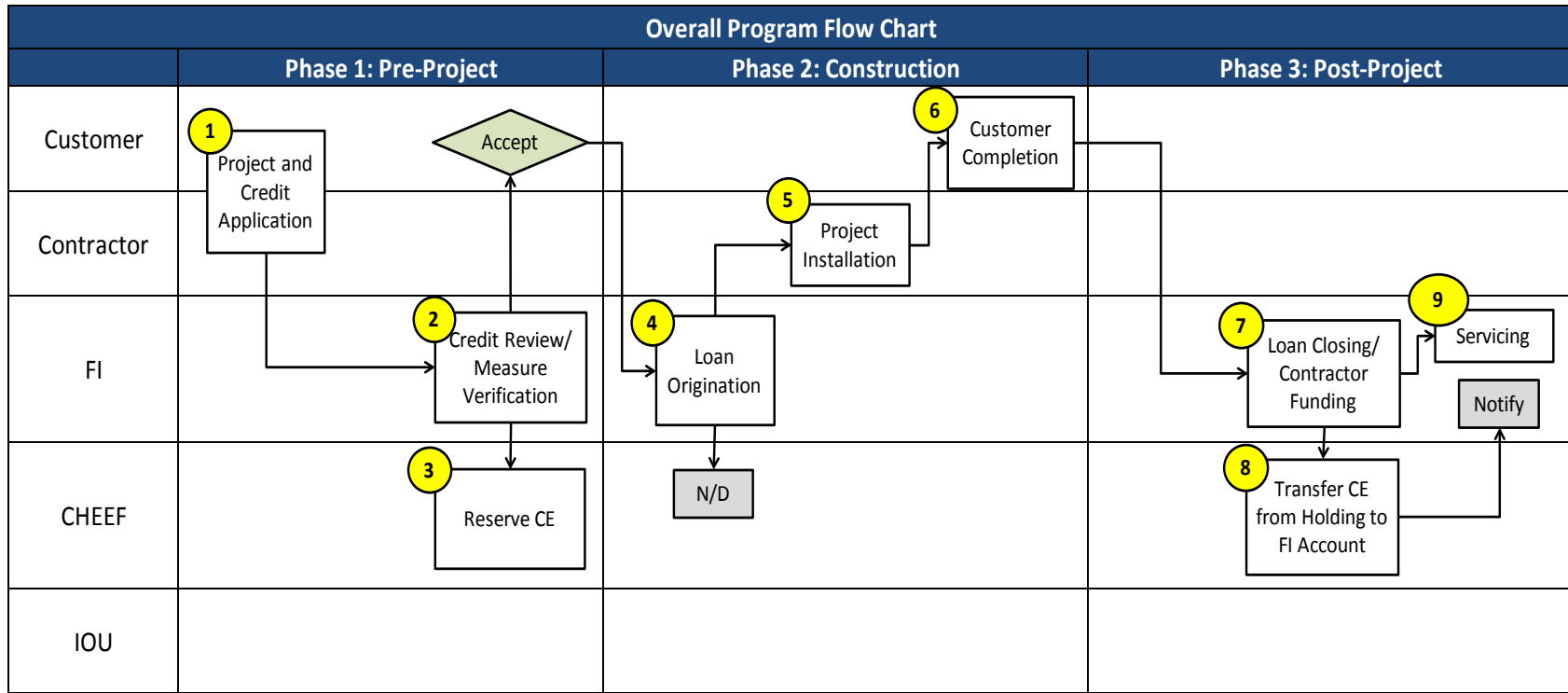
**Notify/Data** = Hub notified of Stage completion and data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

# SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

## Direct Financing - Single Measure - Single Family Loan Program



### Key



**Stage Indicator** = Designates Process Flow Stage



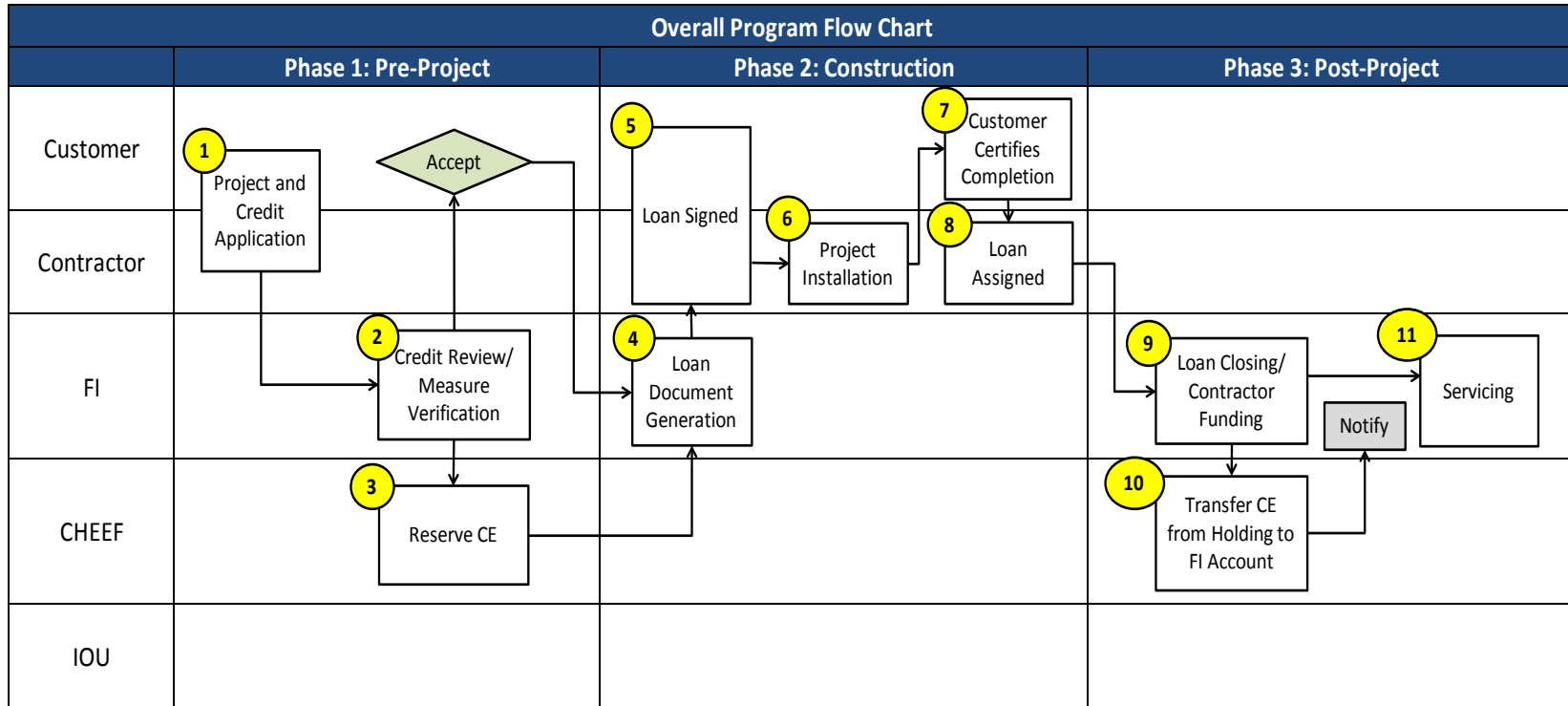
**Notify/Data** = CHEEF notified of Stage completion and applicable energy and finance data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

# SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

## Indirect Financing - Single Measure - Single Family Loan Program



### Key



**Stage Indicator** = Designates Process Flow Stage



**Notify/Data** = CHEEF notified of Stage completion and applicable energy and finance data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**<sup>13</sup>:

The Single Family Loan Program will coordinate with all IOU/REN residential rebate/incentive programs, as well as the Statewide ME&O Program.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

Sub-Program Name		
Other IOU Sub-program Name	Coordination Mechanism	Expected Frequency
<b>Coordination Partners Outside CPUC</b>		
Contractors	ME&O	Quarterly
Distributors	ME&O	Quarterly
CAEATFA	ME&O	Quarterly
Financial Institutions	ME&O	Quarterly
Community Based Organizations	ME&O	Quarterly
CCSE	Meetings/Emails/Calls	As Needed

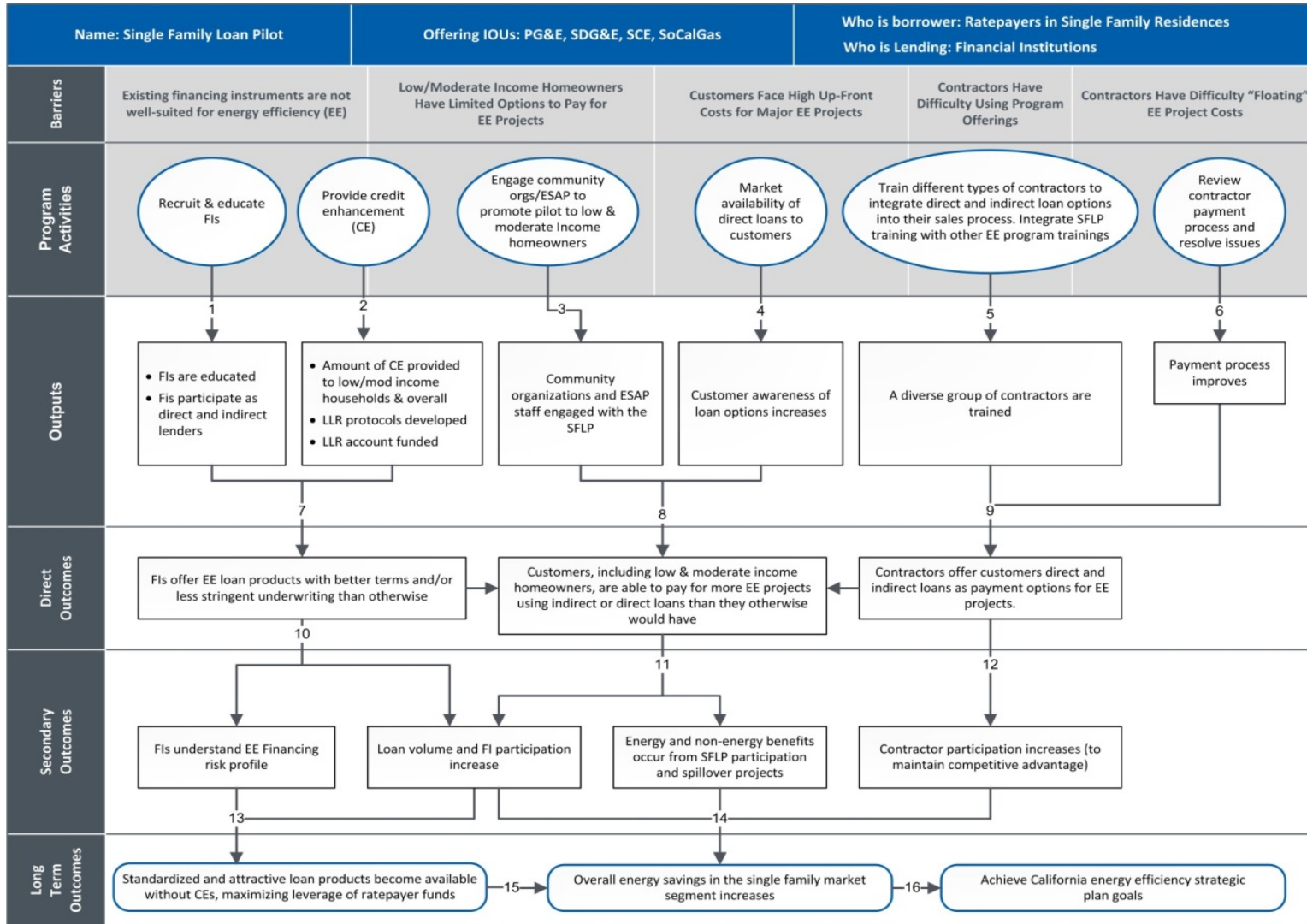
Note: "Mechanisms" refers to communication methods (i.e. quarterly meetings; internal list serves; monthly calls, etc.) and/or any cross-program review methods (i.e., feedback on program plans; sign off on policies, etc.) or harmonization techniques (i.e. consistent certification requirements across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

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<sup>13</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.

# SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

## o) Logic Model:



SFLP = Single Family Loan Pilot ESAP = Energy Savings Assistance Program FI = Financial Institution CE = Credit Enhancement LLR = Loan Loss Reserve EE = Energy Efficiency  
 Direct loans are made by the FI to the customer. Indirect loans are offered by contractors.



11) Additional Sub-Program Information

a) **Advancing Strategic Plan Goals and Objectives:**

As underscored by the California Long Term Energy Efficiency Strategic Plan (the “Strategic Plan”), innovative financing is a major EE strategy for California’s single family sector. A key strategy in the Strategic Plan’s Residential and Low Income section is “5. **Financing:** Work with the financial community to develop innovative and affordable financing options for [EE] buildings and retrofits” (p. 2-12), a goal that is directly advanced by this sub-program. Furthermore, this sub-program makes important contributions to the Strategic Plan’s call to:

- Identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “[D]evelop financial products and programs...to encourage demand for energy efficiency building products, home systems and appliances” (strategy #2-4, p. 2-21),
- “Investigate the feasibility of [EE] lending products”(p. 2-21), and
- Use EE financing to meet closely related goals, namely HVAC and lighting efficiency.

b) **Leveraging of Resources:**

- See Sub-Program Specific Marketing and Outreach

c) **Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs, CAEATFA, and other stakeholders. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilot programs will monitor developments in other EE Financing programs nation-wide and outside of the U.S. The IOUs will also work with industry experts on a quarterly basis to ensure that program partners provide feedback concerning best practices and lessons learned.

Commission Decision (D.)13-09-044 also requires CAEATFA, with assistance from the Southern California Gas Company, to submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

12) Additional information as required by Commission decision or ruling or as needed:

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the 10 criteria required for pilot programs.

- a. **A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

## SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

The pilot seeks to overcome the first-cost barrier of acquiring EE in the Single Family residential market and, therefore, to increase overall savings from EE. Current rebate programs pay a portion of the cost of the EE upgrade. Financing pilots, on the other hand, help a customer finance 100% of the initial EE cost of the upgrade, net of any applicable and selected rebates, and subject to repayment. As a result, it is anticipated that customers who do not otherwise have the funds readily available will be able to use financing to pay for EE upgrades.

The areas of concern for the pilot are:

- *Financial institutions may not participate in large numbers.*

To mitigate this concern, the IOUs reached out to financial institutions at the very early developmental stages of the program to build a program that will be attractive to them.

- *Customers may not use the pilot offering.*

The pilot is designed to invite loans with attractive interest rates and terms from FIs to customers through CEs. Further, this pilot includes a marketing and outreach campaign that is well integrated with existing rebate/incentive programs and contractor networks.

- b. **Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The SFLP significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11 A., EE financing is a very important pillar of the Strategic Plan's approach, specifically including the Single Family residential sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "**Customer Incentives** including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

- c. **Specific goals, objectives and end points for the project.**

The SFLP seeks to:

- a. Stimulate financial institutions to provide capital to EE upgrade markets in the Single Family sector.
- b. Increase overall energy savings from EE via EE financing.
- c. Leverage with private capital.
- d. Provide for specific outreach and CE funding for low and moderate income customers; approximately one-third of authorized LLR funds should be used to offer higher credit enhancements for these single family residents.

The pilot seeks to deploy CEs during the program period. These credit enhancements will come in the form of a loan loss reserve for the single family residential market, meaning that

## SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

for every loan closed, no more than 20% of the outstanding value of that loan will be held in reserve for the life of that loan.

Lenders will be able to recover at least 70%, but no more than 90%, of the total principal amount of the eligible loan value, with the specific percentage to be determined through CAEATFA's regulations.

d. **New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

Financing is a well-established method to boost purchases of many types of products including real estate, vehicles and other equipment, and other upgrades to homes such as windows and kitchen upgrades.

The pilot relies on several innovative design features that have not been extensively tested in California. These include:

- **Credit enhancements:** Credit enhancements can reduce interest rates, increase the duration of loans, or make credit underwriting terms more flexible than they otherwise would be. The pilot will enable testing of the effect of credit enhancements on loan features.
- **Contractor engagement in financing:** Several financing programs have operated in California to support EE, although many of them have operated through a direct loan process, whereby consumers apply directly to a financial institution for loan financing. By contrast, this pilot allows an indirect loan financing mechanism, whereby contractors can take a loan application and submit it on behalf of the consumer to a financial institution for approval.

Home improvements are traditionally sold using this indirect loan process, and this pilot will test the relative effectiveness of these indirect and direct lending processes for EE.

- **Integration of financing and incentive programs:** This pilot will help test the most effective ways for customer rebate/incentive programs to be integrated effectively with third party financing. The pilot is designed to leverage requirements from existing rebate/incentive programs to help streamline the process for customers seeking to access both rebates and financing for installed EE measures.

e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See Table 1 and Item 10a.

SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

f. Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.

The Statewide Research Roadmap specifies the mechanism for which energy and demand savings will be determined for the Finance Pilots. In addition, the IOUs are conducting research to develop various requirements of the Pilots including logic models, Program Performance Metrics and related design parameters.

g. Program performance metrics.

Table 16: Single Family Loan Program Performance Metrics

Short-term Program PPMs:	Measurement Approach	Data Source	D. 13-09-044 Considerations	Metric Type												
<p>PPM 1:</p> <ul style="list-style-type: none"> <li>Loan principal outstanding</li> <li>Total lent</li> </ul>	<p>The data working group will determine how to track total lent and total principal outstanding at all times for two customer categories*</p> <ul style="list-style-type: none"> <li>Low to Moderate Income</li> <li>Greater than Moderate Income</li> </ul>	CHEEF and/or Data working group	Page 31 "increase the volume of EE financing"	2a												
<p>PPM 2: Types of measures installed in projects getting financing</p>	<p>Project information should be tracked by the pilot or applicable rebate program. For purposes of reporting this PPM, program managers should consider categories such as:</p> <ul style="list-style-type: none"> <li>HVAC (central heating and cooling, fans, motors)</li> <li>Envelope (air seal, insulation)</li> <li>Plug Load (Washer)</li> </ul> <p>The table below shows an example of a project tracking table for this PPM. When reporting this metric, the aggregated distribution of measure types can be provided.</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Project 1</th> <th>Project 2</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>✓</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td>✓</td> </tr> <tr> <td>3</td> <td></td> <td>✓</td> </tr> </tbody> </table>	Category	Project 1	Project 2	1	✓		2		✓	3		✓	Leverage existing program tracking systems, or require as part of the loan application.	Page 10 "In the Guidance decision, we committed to developing scalable and leveraged financing products to lead consumers to engage in deeper, more comprehensive EE projects than available through current programs"	2a
Category	Project 1	Project 2														
1	✓															
2		✓														
3		✓														

\* <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>

## SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

On June 3, 2013, the IOUs filed Advice Letter (AL) 3389-G/4234-E which advised the Commission that the IOUs are working to assess financing utilization in the EE portfolio and developing PPM recommendations. The pilot metrics shown above were designed to meet criteria defined by the CPUC as fulfilling the EE Strategic Plan, portfolio development, and program specific evaluation efforts.

The IOU's will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into "mainstream" programs. As such, the IOUs do not establish targets for these PPMs at this time.

### **h. Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

### **i. A proposed EM&V plan.**

The Statewide Research Roadmap specifies the mechanism for which energy and demand savings will be determined for the Finance Pilots. The Research Roadmap is a detailed plan which describes each of the studies being conducted on the financing pilots by each of the IOUs. Included in the plan are allocated budgets, key research questions and information needs of the program managers and other stakeholders. In addition, the IOUs are conducting research to develop various requirements of the Pilots including logic models, Program Performance Metrics and related design parameters.

### **j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.e.

## **Decision 13-09-044, Fast-Track / OBR PIPs**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the Single Family Loan Program Pilot and will be further addressed in CAEATFA's regulations.

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.).

## SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

See Table 1 for the portion of the \$8 million allocated by the IOUs to the Single Family Loan Program “Fast Track” pilot. As directed, the IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time they are making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program.

- The PIP should establish appropriate program reporting by FIs and marketing steps, particularly with experienced community-based organizations, designed to achieve this goal (p. 33).

See Section 10.h. for marketing steps. For appropriate program reporting, the CHEEF PIP explains that CAEATFA will include reporting requirements for participating FIs within its program regulations, and identify information to be reported, frequency of reporting, and methods of submitting reports to CAEATFA. The regulations for the Single Family Loan Program, called the Residential Energy Efficiency Loan Assistance Program, can be found at the following link on the CAEATFA website:

<http://www.treasurer.ca.gov/caeatfa/cheef/reel/index.asp>

Please see Sections including, but not limited to, 10091.11. Reporting, and 10091.15 California Hub for Energy Efficiency Financing Privacy Rights Disclosure, for detailed requirements. This data will include data on low- and moderate-income borrowers served by the pilot.

- CAEATFA/SoCalGas reference the data protocols (from the DWG final report) in the pilot PIPs since the data fields could differ by pilot (D.13-09-044, Appendix D).

Pursuant to D.13-09-044, the data protocols subject to the Data Working Group (DWG) report were submitted in a final report and approved by the Commission, with an effective date of December 16, 2013. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. See SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E.

## SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

[More detailed data requirements for the pilot are available in the Single Family Loan Program \(called the Residential Energy Efficiency Loan Assistance Program\) regulations at this link](#)

<http://www.treasurer.ca.gov/caeatfa/cheef/reel/index.asp>

ATTACHMENT 1

Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>14</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

The SFLP will evaluate its influence on the market actors that support single family loans. This includes examining the number of educated and trained contractors that are participating in the program, in addition to FIs and other market actors. This pilot will also evaluate processing time for receiving a loan (from start to finish) as well as loan values based on EE work. The pilot participation results will offer useful perspectives on the effectiveness of these pilot approaches, best practices, and lessons learned, and expected benefits of expanding the pilot to become a full-scale program.

This pilot introduces a mechanism to test and compare two types of single family financing products: indirect financing and direct loans. Training will be conducted to educate both FI's and contractors on overcoming financing barriers.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.**<sup>15</sup>

The IOUs will work to determine the baseline for existing participation within the statewide financing programs. This will allow for the IOUs to measure incremental single family loan participation. The IOU's will analyze the data collected during the 2013-2017 pilot period to better assess future projections for non-energy objectives if the pilots are converted into "mainstream" programs. As such, the IOUs do not establish targets at this time.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

The utilities will develop meaningful baseline and market transformation concepts and metrics for programs that do not currently have them, and then propose to design and

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<sup>14</sup> A SMART objective is one that is **S**pecific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), **M**easurable, **A**mbitious, **R**ealistic, and **T**ime-bound.

<sup>15</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.



## SINGLE FAMILY LOAN PROGRAM PIP – REDLINE VERSION

administer studies to gather and track consistent, reliable and valid baseline and market effects data.

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

On June 3, 2013, the IOUs filed Advice Letter (AL) 3389-G/4234-E which advised the Commission that the IOUs are working to assess financing utilization in the EE portfolio and developing PPM recommendations. The pilot metrics shown above were designed to meet criteria defined by the CPUC as fulfilling the EE Strategic Plan, portfolio development, and program specific evaluation efforts. The IOU's will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs.

**ATTACHMENT B**

**OFF-BILL SMALL BUSINESS LEASE**

**PROVIDERS PROGRAM**

**PROGRAM IMPLEMENTATION PLAN**

CLEAN PIP

2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan Template

- 1) Sub-Program Name: Off-Bill Small Business Lease Providers Pilot
- 2) Sub-Program ID number:
  - a. SoCalGas: SCG3788
  - b. SDG&E: SDGE 3296
  - c. SCE: SCE-13-SW-007F
  - d. PG&E: PGE\_210936
- 3) Type of Sub-Program:  Core  Third Party  Partnership  Pilot
- 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)  
*Note: No NAICS codes included because this pilot applies across the full commercial, industrial, and agricultural sectors.*
- 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
- 7) Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC) TRC \_\_\_ PAC \_\_\_

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for calculating incremental energy savings for the Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information

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

OFF-BILL SM. BUSINESS LEASE PROVIDERS PILOT PIP – CLEAN VERSION

was not yet available to estimate the proposed energy savings. The CPUC has thus decided to evaluate the energy savings on an *ex post* basis. The Pilot's TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1: Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Off-Bill Small Business Lease</b>						
Admin/General Overhead (\$)	\$35,394	\$82,294	\$88,206	TBD	TBD	\$205,894
Direct Implementation (\$)	\$216,446	\$387,037	\$377,283	TBD	TBD	\$980,766
Credit Enhancements (CE) (\$)	\$0	\$858,532	\$2,555,573	TBD	TBD	\$3,414,105
Marketing & Outreach (\$)* <sup>2</sup>	\$21,713	\$489,827	\$461,885	TBD	TBD	\$973,425
<b>Total Statewide Budget (\$)</b>	<b>\$273,553</b>	<b>\$1,817,690</b>	<b>\$3,482,947</b>	<b>TBD</b>	<b>TBD</b>	<b>\$5,574,190</b>

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs' proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master Servicer, and d) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

<sup>2</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

OFF-BILL SM. BUSINESS LEASE PROVIDERS PILOT PIP – CLEAN VERSION

- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENs, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations.

SoCalGas	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$2,611	\$23,709	\$29,621	TBD	TBD	\$55,941
Direct Implementation (\$)	\$30,325	\$68,032	\$64,070	TBD	TBD	\$162,427
Credit Enhancements (CE) (\$)	\$0	\$113,293	\$230,018	TBD	TBD	\$343,311
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,537	\$295,704	\$414,379	TBD	TBD	\$743,620

SDG&E	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$11,235	\$22,471	\$22,471	TBD	TBD	\$56,177
Direct Implementation (\$)	\$22,471	\$44,942	\$44,942	TBD	TBD	\$112,355
Credit Enhancements (CE) (\$)	\$0	\$178,269	\$346,052	TBD	TBD	\$524,321
Marketing & Outreach (\$)	\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)	\$33,706	\$352,687	\$520,471	TBD	TBD	\$906,864

SCE	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$10,378	\$13,775	\$13,775	TBD	TBD	\$37,928
Direct Implementation (\$)	\$105,606	\$157,974	\$152,182	TBD	TBD	\$415,762
Credit Enhancements (CE) (\$)	\$0	\$46,712	\$923,221	TBD	TBD	\$969,933
Marketing & Outreach (\$)	\$0	\$38,808	\$116,425	TBD	TBD	\$155,233
Total IOU Budget (\$)	\$115,984	\$257,269	\$1,205,603	TBD	TBD	\$1,578,856

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PG&E Sub-Program	Program Year					
	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)	\$11,170	\$22,339	\$22,339	TBD	TBD	\$55,848
Direct Implementation (\$)	\$58,044	\$116,089	\$116,089	TBD	TBD	\$290,222
Credit Enhancements (CE) (\$)	\$0	\$520,258	\$1,056,282	TBD	TBD	\$1,576,540
Marketing & Outreach (\$)	\$21,112	\$253,344	\$147,784	TBD	TBD	\$422,240
Total IOU Budget (\$)	\$90,326	\$912,030	\$1,342,494	TBD	TBD	\$2,344,850

9) Sub-Program Description, Objectives and Theory

a) Sub-Program Description and Theory:

i. Financing

The goal of the Off-Bill Small Business Lease Providers Pilot (Pilot) is to test the premise that a lease option with a credit enhancement will increase the number and comprehensiveness of energy efficiency (EE) projects in the small business market segment. Offering Equipment Leases as an off-bill option allows for the launch of the Pilot prior to the availability of the On-Bill Repayment option and will test the premise that some leases for small business customers, due to their small size will be more effectively administered through traditional, off-bill methods.

The pilot is premised upon the idea that, despite the incentives and general financing options currently available, many customers choose not to engage in EE because the first-cost barrier is still too high. The Pilot will test whether a more attractive lease option can help overcome barriers to financing EE projects.

The leases allowed under this pilot will be defined by CAEATFA in its rulemaking for equipment leases. A website link to the final program rulemaking (with detail on leases and other regulations) will be provided herein when available.

Pursuant to the Assigned Commissioner’s Ruling issued August 25, 2014, the Off-Bill Small Business Lease Providers Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

ii. Market Gaps and Means to Address Gaps

Small business customers often rent/lease their space and can be cash constrained. Although financing tools are already available in the market to customers through several

different financial instruments, these existing instruments may not be well-suited to financing for EE for some customers. For example, credit card-based revolving products are convenient and inexpensive to originate but generally come at a high cost to the business owner. Some business owners may have access to lines of credit through their banks, or to other bank-based small business lending products, however, they tend to be used primarily for core business activities such as equipment used in the course of revenue-generating business, and are infrequently used for EE upgrades. Business loans are available to some businesses, but the size of most EE upgrades – often less than \$50,000 -- are often too small to incent most lessors to offer loans for these types of projects. As a result, these basic finance products tend to add too much cost to an EE project and create a disincentive for customers to do EE upgrades.

The commercial lease offering that this pilot is testing offers several features that are well-suited to the small business market. This sector is often characterized by small deal sizes, which require streamlined and efficient origination processes.

A key goal of the Pilot is to stimulate lease originators to offer attractively priced, fast-origination equipment leases off the utility bill (off-bill) that are appropriate for the small business market. Leases may be attractive to customers because of the following characteristics of lease originators:

- Lease originators operate a streamlined lease origination process, typically involving a single-page application and fast approval times for those applications that are less than approximately \$100,000. These sub-\$100,000 projects are typical of the small business EE market.
- In many cases, lease companies are able to close financing on the basis of simpler documentation than is possible in other financing structures, thus reducing transaction costs and time for the applicants.
- The streamlined and standardized application processes for lease originators should enable them to originate financing at a low cost – and thus to fund small projects that are challenging for more typical bank lessors.
- Lease originators often have access to sources of capital that can enable greater flexibility in financing terms than are available for other financial products.
- Lease originators are able to match equipment leases to the expected useful life of the EE measures being installed by the customer.

iii. Credit Enhancement Mechanism

The Pilot will provide a credit enhancement and a variety of programmatic supports (contractor networks, marketing, etc.) to attract private capital and to build lease volumes. These credit enhancements are expected to come in the form of a “loan loss reserve” (LLR) of up to 20%. Details of the credit enhancement structure are to be developed through the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) public rulemaking process.



## OFF-BILL SM. BUSINESS LEASE PROVIDERS PILOT PIP – CLEAN VERSION

Ultimately, all of the Finance Program pilots are designed to test the effectiveness of financing and credit enhancements that are integrated with utility incentive programs to enhance customer and financial institution uptake. The pilot results will offer useful perspectives on the effectiveness of these approaches and on the usefulness of potentially expanding the pilots to become full-scale programs.

Per D.13-09-044, the Commission expressed an expectation to include additional Credit Enhancement guidance for Fast Track pilots, which include the Off-Bill Small Business Lease Providers Program. In consultation with the CHEEF, the floor and cap for Credit Enhancements are provided below:

Credit Enhancement Floor (Percent of Principal Amount): 5%  
Credit Enhancement Cap (Percent of Principal Amount): 20%

#### iv. Data collection

Pursuant to D.13-09-044, the data protocols subject to the data Working Group (WG) report were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

#### v. The following are areas of concern for this Pilot:

- *Will financial institutions participate in the pilot?*

This concern has been addressed by reaching out to financial institutions at the development stages of the program to build a program that will be attractive to them. The Pilot is designed to attract two to four financial institutions to create a viable pilot that tests the premise described above.

- *Will customers use the pilot offering?*

It is important to note that the lease Pilot is a market-based financial offering, in contrast to the 0% loans available through the On-Bill Financing (OBF) sub-program. As a result, the Pilot may have less participation than OBF. A credit enhancement to reduce rates and improve terms, broader terms than OBF, and a marketing and

OFF-BILL SM. BUSINESS LEASE PROVIDERS PILOT PIP – CLEAN VERSION

outreach campaign that is well integrated with existing IOU rebate/incentive programs and contractor networks, are included to address this issue.

- b) **Sub-Program Energy and Demand Objectives** - The IOUs will submit a work paper containing a proposed methodology for claiming energy savings for Finance Program pilots in the fourth quarter of 2013. Demand impacts will be evaluated during the pilot period and assessed ex-post.

**Table 2: Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year**

SoCalGas	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	TBD	TBD	TBD	TBD
Peak MW	TBD	TBD	TBD	TBD
Therms (millions)	TBD	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	TBD	TBD	TBD	TBD
Peak MW	TBD	TBD	TBD	TBD
Therms (millions)	TBD	TBD	TBD	TBD

SCE	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	TBD	TBD	TBD	TBD
Peak MW	TBD	TBD	TBD	TBD
Therms (millions)	TBD	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	TBD	TBD	TBD	TBD
Peak MW	TBD	TBD	TBD	TBD
Therms (millions)	TBD	TBD	TBD	TBD

\* TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

The Pilot's main Non-Energy Objective is to test the premise that an equipment lease option with a credit enhancement will drive increased uptake of energy efficiency (EE) projects in the small business market segment.

## OFF-BILL SM. BUSINESS LEASE PROVIDERS PILOT PIP – CLEAN VERSION

The Pilot intends on accomplishing this goal by stimulating financial institutions to provide capital to EE upgrade markets in the small business market segment. These objectives will be monitored through the collection of data on lease transaction volume, both dollar amount and number of leases.

An additional Non-Energy Objective for this Pilot is to decrease EE implementation costs for small businesses by providing a way for Lease Originators to provide more attractive leases by gaining a better understanding of the EE lease risk profile and through more deal volume.

d) **Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

**Table 3: Workpaper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

10) Program Implementation Details

a) Timelines:

**Table 4: Sub-Program Milestones and Timeline**

*Note:* The expected dates for several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays beyond the IOUs' control.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>3</sup>
Lessor recruitment and contractor training begin	Ongoing
Development of marketing program begins	C + 0
CAEATFA develops emergency regulations	C + 30
CAEATFA issues Request for Proposal (RFP) to select lease companies	C + 30
CAEATFA Board approves emergency regulations	C + 30
RFP response period deadline	C + 60
Office of Administrative Law (OAL) approves emergency regulations	C + 60
CAEATFA reviews RFP responses from lease companies	C + 90
CAEATFA Board considers contracts with lease companies for approval	C + 90
Integration of financing with IOU incentive program delivery defined and implemented	C + 120
Department of General Services (DGS) approves CAEATFA contracts with lease companies	C + 120
CAEATFA directs trustee to establish accounts for lease companies	C + 120
First lease funds	C + 150
Mid-Term CPUC Pilot Review <sup>4</sup>	TBD

<sup>3</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>4</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

b) Geographic Scope:

Table 5: Geographic Regions Where the Program Will Operate

Geographic Region	SDG&E	SCG	SCE	PG&E
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

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c) Program Administration

Table 6: 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 (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity [CAEATFA] (X = Yes)
Off-Bill Sm. Bus. Lease Providers Pilot	Program Application Process				X
Off-Bill Sm. Bus. Lease Providers Pilot	IOU Participant	X			X
Off-Bill Sm. Bus. Lease Providers Pilot	IOU Non-Participants				
Off-Bill Sm. Bus. Lease Providers Pilot	Credit Review		Lease Originators		
Off-Bill Sm. Bus. Lease Providers Pilot	Lease Origination		Lease Originators		
Off-Bill Sm. Bus. Lease Providers Pilot	Lease Payments		Lease Originators		
Off-Bill Sm. Bus. Lease Providers Pilot	Credit Enhancements	X			X
Off-Bill Sm. Bus. Lease Providers Pilot	Local Marketing, Education, & Outreach (ME&O) (See note below)	TBD	Lease Originators	CCSE	X
Off-Bill Sm. Bus. Lease Providers Pilot	Evaluation, Measurement, & Verification (EM&V)	X			

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

d) **Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

i. **Customers:**

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Small business customer as defined by the Small Business Administration found at 13 C.F.R. 121	X	X	X	X
Project site within utility territory on a non-residential meter/rate	X	X	X	X

ii. **Contractors/Participants:**

**Contractor Eligibility Requirements**

Qualified contractors must hold an active license with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications..

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

<b>Contractor Eligibility Requirement (list of requirements)</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process..	X	X	X	X
Contractors will be required to provide an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.	X	X	X	X

**Contractor Participation Requirements**

Contractors will be required to provide and document an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.

**iii. Lease Originators**

Only Lease Originators selected through CAEATFA’s competitive process will be eligible to participate in the Pilot. D.13-09-044 requires that CAEATFA enter into contracts with a minimum of two, and no more than four, Lease Originators. Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA’s Lease Originator Request for Proposal.

**Table 9: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

<b>Financial Institution Eligibility Requirement (list of requirements)</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Only Lease Originators selected through CAEATFA’s competitive process will be eligible to participate in the Pilot. D.13-09-044 requires that CAEATFA enter into contracts with a minimum of two, and no more than four, Lease Originators.	X	X	X	X
Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA’s Lease Originator Request for Proposal.	X	X	X	X



e) **Program Partners:**

a. **Program coordination partners:**

- CAEATFA – CAEATFA will serve as the interface between the lease originators and the credit enhancement fund. Since this program is off-bill, CAEATFA's role will be to receive data information from the Lessors on projects funded, to administer the credit enhancement funds and to report on the Pilot.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Trustee Bank to hold credit enhancement funds allocated to this pilot program.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Data Manager to aggregate data from the Finance Program pilots and prepare it for public consumption and program evaluation.

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

- Contractors – Various types of contractors will participate in the program including: HVAC, insulation, mechanical, electrical, and plumbing. The contractor will propose a scope of work to a business owner, and will provide payment options including financing. The IOUs will leverage existing channels working with contractor partners.
- Distributors – Contractors acquire products from manufacturers though distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and will review financing programs for their contractor customers. Distributors are expected to be supportive of credit enhanced, state-wide lease financing and will be helpful in promoting the pilot.
- Lease Originators – Two to four Lease Originators will be selected to participate in this Pilot. The Lease Originators will originate and service leases. The Lease Originators will be selected by CAEATFA's competitive RFP process, and will be further governed by the regulations CAEATFA will develop.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure marketing financial products is done in coordination with the Energy Upgrade California statewide marketing brand campaign.

Table 10: Program coordination Partners

Coordination Partner Information	PG&E	SCE	SDG&E	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Lease Originators	X	X	X	X
CCSE	X	X	X	X

f) **Measures and incentive levels:**

To be eligible to access a credit enhancement under this pilot, **Eligible Leases** must consist of **Eligible Measures**.

**Eligible Measures** can consist of Eligible Energy Efficiency Measures (EEEMs) and Non-EEEM's which are both defined herein.

**EEEMs** are measures that have been approved by the Commission for a utility's EE rebate / incentive program, although the customer need not participate in the rebate / incentive program or receive an incentive or rebate to qualify for the lease.<sup>5</sup> EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-business/energy-savings/>  
and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>

SCE – <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>

SDG&E – <http://www.sdge.com/buyers-guide/>

PG&E – <http://www.pge.com/eef>

D.13-09-044 determined that customers may be more likely to add EE projects while undertaking other improvement activities. For the 2013 – 2017 pilot period, the Commission deemed it reasonable and adopted a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to EEEMs. Financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.

<sup>5</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 30.

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Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Table 11: Summary Table of Measures, Incentive Levels and Verification Rates

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The categories shown in Table 11 do not apply to the broad grouping of EEEMs and non-EEEMs. Please refer to the IOU EEEMs lists at the company website addresses provided above.

g) **Additional Services:**

The Pilot will include a series of additional services.

- Outreach, education and training for customers and contractors will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lessor education: The education and outreach component of the Pilot will include training events and materials for financial institutions and lease originators that will assist them in participating in this pilot. The education and outreach will help lease originators understand the EE market, EE investments, project QA/QC requirements, and data on lease performance. Additional information on lessor training plans will be provided in the CHEEF PIP.

Table 12: Additional Services \*

Additional Services	To Which Market Actors	CAEATFA	PG&E	SCE	SDG&E	SCG
Customer education	Customers	See CHEEF PIP	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan
Contractor education	Contractors	See CHEEF PIP	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan
Lessor education	Lessors	See CHEEF PIP	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan

\*CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot

participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

Activity	Estimated Timing
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging Lease Originators, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

b. Indicate if pre and/or post implementation audits will be required for the sub-program. \_\_\_ Yes \_\_\_ No (See note.)

Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

- 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).

There will not be any additional audit requirements from the financing program if the customer is participating in a CPUC-approved IOU incentive program(s). CAEATFA will address audit requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process.

**Table 13: Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Auditing requirements and funding are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Customer

k) **Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

There may be some opportunity to track and monitor expenditures related to non-EEEM project costs (which are limited to 30% of the total eligible lease amount). The extent to which such expenditures may be included in the tracking and monitoring efforts will depend upon: 1) the capability of software modeling systems to include assumptions around these non-EEEMs; 2) the accuracy of those modeled estimates; and 3) the ability to collect this information from the participating contractor who will issue these modeling estimates.

**Table 14: Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

l) **Sub-program Delivery Method and Measure Installation /Marketing or Training:**

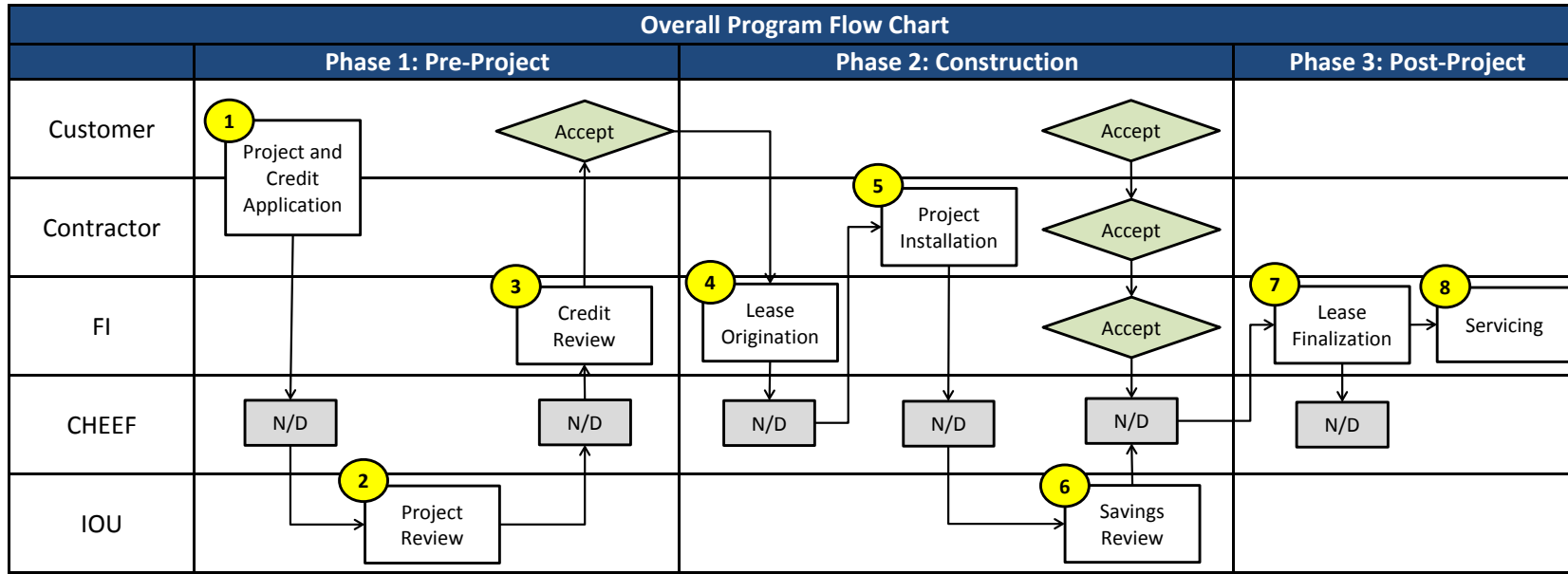
The following sequence illustrates how this program will be delivered to customers.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor training.
3. IOU Customer Relationship Manager (CRM)/Contractor and customer meet, driven by IOU/contractor marketing or customer inquiry.
4. CRM/Contractor interviews customer, collects site information (possibly including results of energy audit).
5. Contractor proposes a project scope, estimated cost, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including the lease.
6. Customer makes lease and payment decision.
7. If customer selects leasing option, CRM/contractor collects application information and provides to lease company.
8. Lease company collects application information from customer, makes underwriting decision and informs customer and/or contractor.
9. Customer executes lease agreement.
10. Contractor installs improvements.
11. Customer signs completion certificate.
12. IOU performs inspection (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
13. Lease company receives completion certificate and other required documents.
14. Lease company funds contractor.
15. Lease company provides appropriate documentation to CAEATFA.
16. CAEATFA directs trustee to transfer credit enhancement from IOU account to lease company's account at the trustee.

m) **Sub-program Process Flow Chart:**

The flowchart below illustrates the process flow for how the lease pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.

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**Key**

**#** Stage Indicator = Designates Process Flow Stage

**N/D** Notify/Data = Hub notified of Stage completion and data normalized

**Accept** Accept and Move to Next Phase = Acceptance required before project moves to next Phase



n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**

IOU financing programs will leverage the existing incentive and rebate programs.

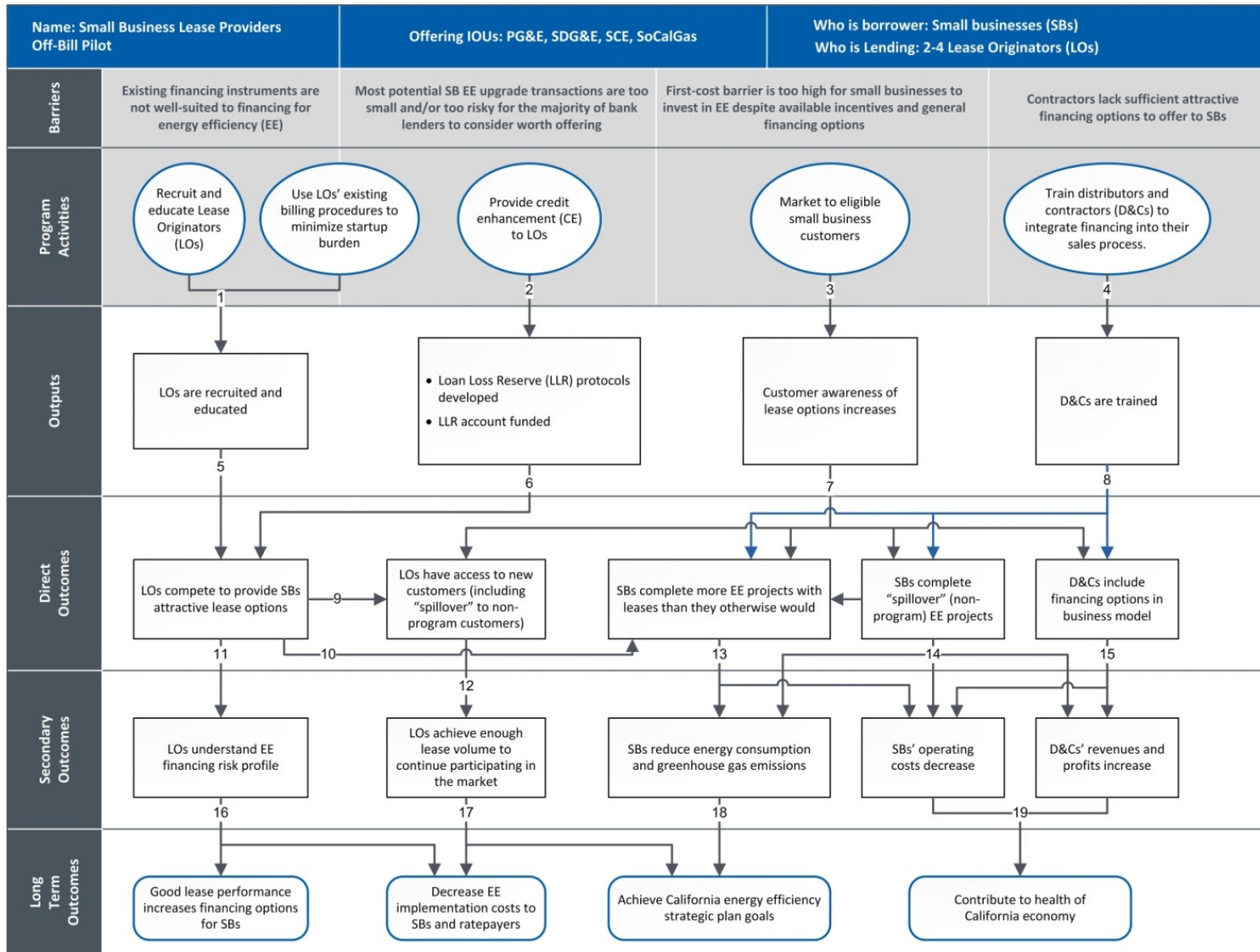
**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>Off-Bill Small Business Lease Providers Pilot</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Statewide Commercial, Industrial, and Agriculture Programs	Meetings/Emails/Calls	As Needed
Emerging Technology	Meetings/Emails/Calls	As Needed
Third Party Programs	Meetings/Emails/Calls	As Needed
Institutional Partnerships	Meetings/Emails/Calls	As Needed
Local Government Partnerships	Meetings/Emails/Calls	As Needed
On Bill Financing	Meetings/Emails/Calls	As Needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As Needed
Master Servicer *	Data Exchange	Daily
CCSE	Meetings/Emails/Calls	As Needed

Note: Coordination will not occur until Master Servicer is fully functional.

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o) Logic Model:



SB = Small Business D&Cs = Distributors and Contractors LO = Lease Originator CE = Credit Enhancement LLR = Loan Loss Reserve EE = Energy Efficiency

11) Additional Sub-Program Information

a) **Advancing Strategic Plan Goals and Objectives:**

Innovative financing is a major Strategic Plan strategy for non-residential sectors. One key commercial sector strategy in the Strategic Plan is “Financing: Target financing ...[including] increased availability and use of innovative and expanded financing...” (p. 3-29), which is directly advanced by this sub-program. Furthermore, this sub-program contributes to the Strategic Plan’s call to:

- “ensure access to financing mechanisms that effectively surmount capital limitations and cash flow requirements. This means attracting the interest of banking and capital industries to the magnitude of investment and borrowing needs, and identifying finance mechanisms...” (p. 3-35)
- identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “pilot innovative financial tools [and e]xpand implementation of innovative financing mechanisms” (strategy #1-4, p. 3-32),
- “Develop effective financial tools for EE improvements to existing buildings” (strategy #2-6, p. 3-34)
- Use financing for closely related goals, HVAC and lighting.

b) **Leveraging of Resources:**

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of the EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot the rebate/incentive will decrease the total cost of the project that is eligible for credit enhancement funds. For projects in which the customer is receiving a rebate or incentive, in order to receive that benefit, leases will have to comply with IOU rebate and incentive guidelines.<sup>6</sup>

The Pilot will leverage current equipment lease financing offered by a multitude of equipment leasing companies and capital providers. This program will build on a mature commercial market that has extensive experience in providing equipment leases for energy improvements. This program will provide a credit enhancement to leverage this current market and expand it to currently underserved Small Business customers.

The IOUs’ OBF programs can also be leveraged to provide financing for certain projects that may be a better fit for that program. Coordination with OBF will be required to determine the types of projects that are better suited for OBF or this

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<sup>6</sup> For example, the Statewide Customized Retrofit Manual specifies that “new equipment or system retrofit must guarantee energy savings for the effective useful life of the product or for a period of five years, whichever is less.”

Pilot. Coordination specifics will be developed by IOU program and marketing teams to help guide customers to the right EE financing program for their project.

c) **Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilots will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, to submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

12) **Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the criteria required for pilot programs.

a. **A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

The Pilot seeks to overcome the first-cost barrier of implementing EE improvements in the non-residential market and to increase overall energy savings from EE. Current IOU-based programs rely on a rebate structure to pay a portion of the cost of the EE upgrade. Financing pilots, on the other hand, cover 100% of the initial cost of the upgrade, net of any applicable rebates, and subject to repayment. As a result, it is anticipated customers who do not otherwise have the capital readily available will be able to use lease financing to pay for EE upgrades.

b. **Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.a., EE financing is a very important pillar of the Strategic Plan's approach, specifically including the non-residential sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "*Customer Incentives* including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

c. **Specific goals, objectives and end points for the project.**

The Pilot program seeks to:

- a. Stimulate financial institutions to provide capital to EE upgrade markets in the small business market segment.
- b. Lead to incremental energy savings from EE projects in the small business market segment.
- c. Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates.

Further details of the credit enhancement structure will be developed through CAEATFA regulations.

- d. **New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

This Pilot will test how effective financing will be at stimulating either more comprehensive EE projects or a greater number of EE projects. Furthermore, the Pilot provides mechanisms to test specific elements of financing such as the effect of lowering the costs through lower lease payments, expedited lease approvals by Lease Originators, and differing levels of contractor engagement in the financing process.

The Pilot relies on several innovative design features that have not been extensively tested in California. These include:

- **Credit enhancements:** Credit enhancements can reduce financing costs, increase the duration of leases, or make credit underwriting terms more flexible than they otherwise would be. The Pilot will enable testing of the effect of credit enhancements on these features.
  - **Integration of financing and incentive programs:** This pilot will help test the most effective ways for IOU customer rebate/incentive programs to be integrated effectively with third party financing. To this point, these rebate/incentive programs have operated in concert with IOU-run OBF programs.
- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See Attachment 2, Table 1 and Section 10.a.

- f. **Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Financing Evaluation Research Plan includes a “Market Characterization” project that is managed by the Energy Division and expected to be fielded early in the program cycle.

g. Program performance metrics.

Table 16: Program Performance Metrics

Short-Term PPMs:	IOU Target	Metric Type
PPM 1: Lease transaction volume (dollar amount and number of leases) by IOU	Track and report total dollar amount of lease transactions completed (Decision, p. 62)	2a
PPM 2: End-use categories (HVAC, lighting, etc.) of measures installed through pilot	Track and report end use for each program measure and group end uses by category	2a

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

h. Methodologies to test the cost-effectiveness of the project.

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

i. A proposed Evaluation, Measurement, and Verification (EM&V) plan.

For finance pilot program EM&V plan, please refer to the revised 2013-2014 M&E Long-term Roadmap. This roadmap is being updated by the statewide M&E team and will not be available at the time IOUs file this PIP.

j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.

See Section 11.e.

**Additional Information Regarding Fast-Track / OBR PIP Requirements in Decision 13-09-044**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the Off-Bill Small Business Lease Providers Pilot and will be further addressed in CAEATFA's regulations.

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- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.)

See Table 1 for the portion of the \$8 million allocated by the IOUs to the Single Family Loan Program “Fast Track” pilot. As directed, the IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- The CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time the customer is making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions (including lease originators) and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas to reference the data protocols (from the DWG final report) in the pilot PIPs since the data fields could differ by pilot (Appendix D).

This is addressed in Section 9.a.iv. Pursuant to D.13-09-044, the data protocols subject to the WG report are incorporated by reference to that report, which is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: CalEEFinance.com.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

ATTACHMENT 1

**Program Non-Energy Objectives**

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>7</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

Test the premise that an equipment lease option with a credit enhancement will drive increased uptake of energy efficiency (EE) projects in the small business market segment. Credit enhancement aim to lower lease originators risks in entering an asset class that does not have a lot of historical data.

Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates. Private capital in the EE lease market can help overcome the up-front cost barrier in a way that limited ratepayer funds are unable to.

Decrease EE implementation costs for small businesses by providing a way for lease originators to get a better understanding of the EE lease risk profile and to achieve enough lease volume to interest lease originators to continue participating in the market. Creating a long term, standardized, and low cost EE lease instrument can help overcome the up-front cost and time barrier for small businesses.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>8</sup>**

The IOUs will not be providing any quantitative targets for these (or any) pilots.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

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<sup>7</sup> A SMART objective is one that is Specific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), Measurable, Ambitious, Realistic, and Time-bound.

<sup>8</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.



- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs. The IOUs do not project PPM's for these (or any) pilots.

REDLINE PIP

2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan Template

- 1) Sub-Program Name: Off-Bill Small Business Lease Providers Pilot
- 2) Sub-Program ID number:
  - a. SoCalGas: SCG3788
  - b. SDG&E: SDGE 3296
  - c. SCE: SCE-13-SW-007F
  - d. PG&E: PGE\_210936
- 3) Type of Sub-Program:  Core  Third Party  Partnership  Pilot
- 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)

*Note:* No NAICS codes included because this pilot applies across the full commercial, industrial, and agricultural sectors.
- 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
- 7) Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC) TRC \_\_\_ PAC \_\_\_

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for calculating incremental energy savings for the Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information

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

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was not yet available to estimate the proposed energy savings. The CPUC has thus decided to evaluate the energy savings on an *ex post* basis. The Pilot’s TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1: Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Off-Bill Small Business Lease</b>						
Admin/General Overhead (\$)	\$35,394	\$82,294	\$88,206	TBD	TBD	\$205,894
Direct Implementation (\$)	\$216,446	\$387,037	\$377,283	TBD	TBD	\$980,766
Credit Enhancements (CE) (\$)	\$0	\$858,532	\$2,555,573	TBD	TBD	\$3,414,105
Marketing & Outreach (\$)* <sup>2</sup>	\$21,713	\$489,827	\$461,885	TBD	TBD	\$973,425
<b>Total Statewide Budget (\$)</b>	<b>\$273,553</b>	<b>\$1,817,690</b>	<b>\$3,482,947</b>	<b>TBD</b>	<b>TBD</b>	<b>\$5,574,190</b>

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs’ proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master Servicer, and ed) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

<sup>2</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

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- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENS, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations~~b) leveraging existing and developing new contractor networks in conjunction with the CHEEF, c) coordinating training of internal and external stakeholders with CAEATFA and other parties, d) integration of financing with existing programs, reacting to market conditions, monitoring of program progress and addressing implementation issues, e) on-going support to Billing, IT, and Call Center operations, and f) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account processing, Energy Auditors for projects not participating in rebates/incentives programs, and multifamily audits/technical assistance.~~

SoCalGas	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$2,611	\$23,709	\$29,621	TBD	TBD	\$55,941
Direct Implementation (\$)	\$30,325	\$68,032	\$64,070	TBD	TBD	\$162,427
Credit Enhancements (CE) (\$)	\$0	\$113,293	\$230,018	TBD	TBD	\$343,311
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,537	\$295,704	\$414,379	TBD	TBD	\$743,620

SDG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$11,235	\$22,471	\$22,471	TBD	TBD	\$56,177
Direct Implementation (\$)	\$22,471	\$44,942	\$44,942	TBD	TBD	\$112,355
Credit Enhancements (CE) (\$)	\$0	\$178,269	\$346,052	TBD	TBD	\$524,321
Marketing & Outreach (\$)	\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)	\$33,706	\$352,687	\$520,471	TBD	TBD	\$906,864

SCE	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$10,378	\$13,775	\$13,775	TBD	TBD	\$37,928
Direct Implementation (\$)	\$105,606	\$157,974	\$152,182	TBD	TBD	\$415,762

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Credit Enhancements (CE) (\$)	\$0	\$46,712	\$923,221	TBD	TBD	\$969,933
Marketing & Outreach (\$)	\$0	\$38,808	\$116,425	TBD	TBD	\$155,233
Total IOU Budget (\$)	\$115,984	\$257,269	\$1,205,603	TBD	TBD	\$1,578,856

PG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$11,170	\$22,339	\$22,339	TBD	TBD	\$55,848
Direct Implementation (\$)	\$58,044	\$116,089	\$116,089	TBD	TBD	\$290,222
Credit Enhancements (CE) (\$)	\$0	\$520,258	\$1,056,282	TBD	TBD	\$1,576,540
Marketing & Outreach (\$)	\$21,112	\$253,344	\$147,784	TBD	TBD	\$422,240
Total IOU Budget (\$)	\$90,326	\$912,030	\$1,342,494	TBD	TBD	\$2,344,850

9) Sub-Program Description, Objectives and Theory

a) Sub-Program Description and Theory:

i. Financing

The goal of the Off-Bill Small Business Lease Providers Pilot (Pilot) is to test the premise that a lease option with a credit enhancement will increase the number and comprehensiveness of energy efficiency (EE) projects in the small business market segment. Offering Equipment Leases as an off-bill option allows for the launch of the Pilot prior to the availability of the On-Bill Repayment option and will test the premise that some leases for small business customers, due to their small size will be more effectively administered through traditional, off-bill methods.

The pilot is premised upon the idea that, despite the incentives and general financing options currently available, many customers choose not to engage in EE because the first-cost barrier is still too high. The Pilot will test whether a more attractive lease option can help overcome barriers to financing EE projects.

The leases allowed under this pilot will be defined by CAEATFA in its rulemaking for equipment leases. [A website link to the final program rulemaking \(with detail on leases and other regulations\) will be provided herein when available.](#)

Pursuant to the Assigned Commissioner’s Ruling issued August 25, 2014, the Off-Bill Small Business Lease Providers Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

ii. Market Gaps and Means to Address Gaps

Small business customers often rent/lease their space and can be cash constrained. Although financing tools are already available in the market to customers through several different financial instruments, these existing instruments may not be well-suited to financing for EE for some customers. For example, credit card-based revolving products are convenient and inexpensive to originate but generally come at a high cost to the business owner. Some business owners may have access to lines of credit through their banks, or to other bank-based small business lending products, however, they tend to be used primarily for core business activities such as equipment used in the course of revenue-generating business, and are infrequently used for EE upgrades. Business loans are available to some businesses, but the size of most EE upgrades – often less than \$50,000 -- are often too small to incent most lessors to offer loans for these types of projects. As a result, these basic finance products tend to add too much cost to an EE project and create a disincentive for customers to do EE upgrades.

The commercial lease offering that this pilot is testing offers several features that are well-suited to the small business market. This sector is often characterized by small deal sizes, which require streamlined and efficient origination processes.

A key goal of the Pilot is to stimulate lease originators to offer attractively priced, fast-origination equipment leases off the utility bill (off-bill) that are appropriate for the small business market. Leases may be attractive to customers because of the following characteristics of lease originators:

- Lease originators operate a streamlined lease origination process, typically involving a single-page application and fast approval times for those applications that are less than approximately \$100,000. These sub-\$100,000 projects are typical of the small business EE market.
- In many cases, lease companies are able to close financing on the basis of simpler documentation than is possible in other financing structures, thus reducing transaction costs and time for the applicants.
- The streamlined and standardized application processes for lease originators should enable them to originate financing at a low cost – and thus to fund small projects that are challenging for more typical bank lessors.
- Lease originators often have access to sources of capital that can enable greater flexibility in financing terms than are available for other financial products.
- Lease originators are able to match equipment leases to the expected useful life of the EE measures being installed by the customer.

iii. Credit Enhancement Mechanism

The Pilot will provide a credit enhancement and a variety of programmatic supports (contractor networks, marketing, etc.) to attract private capital and to build lease volumes. These credit enhancements are expected to come in the form of a “loan loss reserve” (LLR) of up to 20%. Details of the credit enhancement structure are to be developed through the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) public rulemaking process.

Ultimately, all of the Finance Program pilots are designed to test the effectiveness of financing and credit enhancements that are integrated with utility incentive programs to enhance customer and financial institution uptake. The pilot results will offer useful perspectives on the effectiveness of these approaches and on the usefulness of potentially expanding the pilots to become full-scale programs.

Per D.13-09-044, the Commission expressed an expectation to include additional Credit Enhancement guidance for Fast Track pilots, which include the Off-Bill Small Business Lease Providers Program. In consultation with the CHEEF, the floor and cap for Credit Enhancements are provided below:

Credit Enhancement Floor (Percent of Principal Amount): 5%

Credit Enhancement Cap (Percent of Principal Amount): 20%

iv. Data collection

Pursuant to D.13-09-044, the data protocols subject to the data Working Group (WG) report were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

v. The following are areas of concern for this Pilot:

- *Will financial institutions participate in the pilot?*

This concern has been addressed by reaching out to financial institutions at the development stages of the program to build a program that will be attractive to them.



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The Pilot is designed to attract two to four financial institutions to create a viable pilot that tests the premise described above.

- *Will customers use the pilot offering?*

It is important to note that the lease Pilot is a market-based financial offering, in contrast to the 0% loans available through the On-Bill Financing (OBF) sub-program. As a result, the Pilot may have less participation than OBF. A credit enhancement to reduce rates and improve terms, broader terms than OBF, and a marketing and outreach campaign that is well integrated with existing IOU rebate/incentive programs and contractor networks, are included to address this issue.

- b) **Sub-Program Energy and Demand Objectives** - The IOUs will submit a work paper containing a proposed methodology for claiming energy savings for Finance Program pilots in the fourth quarter of 2013. Demand impacts will be evaluated during the pilot period and assessed ex-post.

Table 2: Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year

SoCalGas	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	TBD	TBD	TBD	TBD
Peak MW	TBD	TBD	TBD	TBD
Therms (millions)	TBD	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	TBD	TBD	TBD	TBD
Peak MW	TBD	TBD	TBD	TBD
Therms (millions)	TBD	TBD	TBD	TBD

SCE	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	TBD	TBD	TBD	TBD
Peak MW	TBD	TBD	TBD	TBD
Therms (millions)	TBD	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	TBD	TBD	TBD	TBD
Peak MW	TBD	TBD	TBD	TBD
Therms (millions)	TBD	TBD	TBD	TBD

\* TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

The Pilot's main Non-Energy Objective is to test the premise that an equipment lease option with a credit enhancement will drive increased uptake of energy efficiency (EE) projects in the small business market segment.

The Pilot intends on accomplishing this goal by stimulating financial institutions to provide capital to EE upgrade markets in the small business market segment. These objectives will be monitored through the collection of data on lease transaction volume, both dollar amount and number of leases.

An additional Non-Energy Objective for this Pilot is to decrease EE implementation costs for small businesses by providing a way for Lease Originators to provide

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more attractive leases by gaining a better understanding of the EE lease risk profile and through more deal volume.

d) **Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

**Table 3: Workpaper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

|

10) Program Implementation Details

a) Timelines:

**Table 4: Sub-Program Milestones and Timeline**

*Note:* The expected dates for several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays beyond the IOUs' control.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>3</sup>
Lessor recruitment and contractor training begin	Ongoing
Development of marketing program begins	C + 0
CAEATFA develops emergency regulations	C + 30
CAEATFA issues Request for Proposal (RFP) to select lease companies	C + 30
CAEATFA Board approves emergency regulations	C + 30
RFP response period deadline	C + 60
Office of Administrative Law (OAL) approves emergency regulations	C + 60
CAEATFA reviews RFP responses from lease companies	C + 90
CAEATFA Board considers contracts with lease companies for approval	C + 90
Integration of financing with IOU incentive program delivery defined and implemented	C + 120
Department of General Services (DGS) approves CAEATFA contracts with lease companies	C + 120
CAEATFA directs trustee to establish accounts for lease companies	C + 120
First lease funds	C + 150
Mid-Term CPUC Pilot Review <sup>4</sup>	TBD

<sup>3</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>4</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

b) Geographic Scope:

Table 5: Geographic Regions Where the Program Will Operate

Geographic Region	SDG&E	SCG	SCE	PG&E
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

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c) Program Administration

Table 6: 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 (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity [CAEATFA] (X = Yes)
Off-Bill Sm. Bus. Lease Providers Pilot	Program Application Process				X
Off-Bill Sm. Bus. Lease Providers Pilot	IOU Participant	X			X
Off-Bill Sm. Bus. Lease Providers Pilot	IOU Non-Participants				
Off-Bill Sm. Bus. Lease Providers Pilot	Credit Review		Lease Originators		
Off-Bill Sm. Bus. Lease Providers Pilot	Lease Origination		Lease Originators		
Off-Bill Sm. Bus. Lease Providers Pilot	Lease Payments		Lease Originators		
Off-Bill Sm. Bus. Lease Providers Pilot	Credit Enhancements	X			X
Off-Bill Sm. Bus. Lease Providers Pilot	Local Marketing, Education, & Outreach (ME&O) (See note below)	TBD	Lease Originators	CCSE	X
Off-Bill Sm. Bus. Lease Providers Pilot	Evaluation, Measurement, & Verification (EM&V)	X			

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

d) **Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

i. **Customers:**

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Small business customer as defined by the Small Business Administration found at 13 C.F.R. 121	X	X	X	X
Project site within utility territory on a non-residential meter/rate	X	X	X	X

ii. **Contractors/Participants:**

**Contractor Eligibility Requirements**

Qualified contractors must hold an active license with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications..

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

<b>Contractor Eligibility Requirement (list of requirements)</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process..	X	X	X	X
Contractors will be required to provide an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.	X	X	X	X

**Contractor Participation Requirements**

Contractors will be required to provide and document an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.

**iii. Lease Originators**

Only Lease Originators selected through CAEATFA's competitive process will be eligible to participate in the Pilot. D.13-09-044 requires that CAEATFA enter into contracts with a minimum of two, and no more than four, Lease Originators. Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA's Lease Originator Request for Proposal.

**Table 9: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

<b>Financial Institution Eligibility Requirement (list of requirements)</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Only Lease Originators selected through CAEATFA's competitive process will be eligible to participate in the Pilot. D.13-09-044 requires that CAEATFA enter into contracts with a minimum of two, and no more than four, Lease Originators.	X	X	X	X
Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA's Lease Originator Request for Proposal.	X	X	X	X



e) **Program Partners:**

a. **Program coordination partners:**

- CAEATFA – CAEATFA will serve as the interface between the lease originators and the credit enhancement fund. Since this program is off-bill, CAEATFA's role will be to receive data information from the Lessors on projects funded, to administer the credit enhancement funds and to report on the Pilot.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Trustee Bank to hold credit enhancement funds allocated to this pilot program.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Data Manager to aggregate data from the Finance Program pilots and prepare it for public consumption and program evaluation.

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

- Contractors – Various types of contractors will participate in the program including: HVAC, insulation, mechanical, electrical, and plumbing. The contractor will propose a scope of work to a business owner, and will provide payment options including financing. The IOUs will leverage existing channels working with contractor partners.
- Distributors – Contractors acquire products from manufacturers though distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and will review financing programs for their contractor customers. Distributors are expected to be supportive of credit enhanced, state-wide lease financing and will be helpful in promoting the pilot.
- Lease Originators – Two to four Lease Originators will be selected to participate in this Pilot. The Lease Originators will originate and service leases. The Lease Originators will be selected by CAEATFA's competitive RFP process, and will be further governed by the regulations CAEATFA will develop.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure marketing financial products is done in coordination with the Energy Upgrade California statewide marketing brand campaign.

Table 10: Program coordination Partners

Coordination Partner Information	PG&E	SCE	SDG&E	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Lease Originators	X	X	X	X
CCSE	X	X	X	X

f) **Measures and incentive levels:**

To be eligible to access a credit enhancement under this pilot, **Eligible Leases** must consist of **Eligible Measures**.

**Eligible Measures** can consist of Eligible Energy Efficiency Measures (EEEMs) and Non-EEEM's which are both defined herein.

**EEEMs** are measures that have been approved by the Commission for a utility's EE rebate / incentive program, although the customer need not participate in the rebate / incentive program or receive an incentive or rebate to qualify for the lease.<sup>5</sup> EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-business/energy-savings/>  
and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>

SCE – <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>

SDG&E – <http://www.sdge.com/buyers-guide/>

PG&E – <http://www.pge.com/eef>

D.13-09-044 determined that customers may be more likely to add EE projects while undertaking other improvement activities. For the 2013 – 2017 pilot period, the Commission deemed it reasonable and adopted a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to EEEMs. Financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.

<sup>5</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 30.

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The categories shown in Table 11 do not apply to the broad grouping of EEEMs and non-EEEMs. Please refer to the IOU EEEMs lists at the company website addresses provided above.

**g) Additional Services:**

The Pilot will include a series of additional services.

- Outreach, education and training for customers and contractors will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lessor education: The education and outreach component of the Pilot will include training events and materials for financial institutions and lease originators that will assist them in participating in this pilot. The education and outreach will help lease originators understand the EE market, EE investments, project QA/QC requirements, and data on lease performance. Additional information on lessor training plans will be provided in the CHEEF PIP.

Table 12: Additional Services \*

Additional Services	To Which Market Actors	CAEATFA	PG&E	SCE	SDG&E	SCG
Customer education	Customers	See CHEEF PIP	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan
Contractor education	Contractors	See CHEEF PIP	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan
Lessor education	Lessors	See CHEEF PIP	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan	TBD by ME&O Plan

\*CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot

participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

Activity	Estimated Timing
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging Lease Originators, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

b. Indicate if pre and/or post implementation audits will be required for the sub-program. \_\_\_ Yes \_\_\_ No (See note.)

Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

- 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).

There will not be any additional audit requirements from the financing program if the customer is participating in a CPUC-approved IOU incentive program(s). CAEATFA will address audit requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process.

**Table 13: Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Auditing requirements and funding are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Customer

k) **Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

There may be some opportunity to track and monitor expenditures related to non-EEEM project costs (which are limited to 30% of the total eligible lease amount). The extent to which such expenditures may be included in the tracking and monitoring efforts will depend upon: 1) the capability of software modeling systems to include assumptions around these non-EEEMs; 2) the accuracy of those modeled estimates; and 3) the ability to collect this information from the participating contractor who will issue these modeling estimates.

**Table 14: Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

l) **Sub-program Delivery Method and Measure Installation /Marketing or Training:**

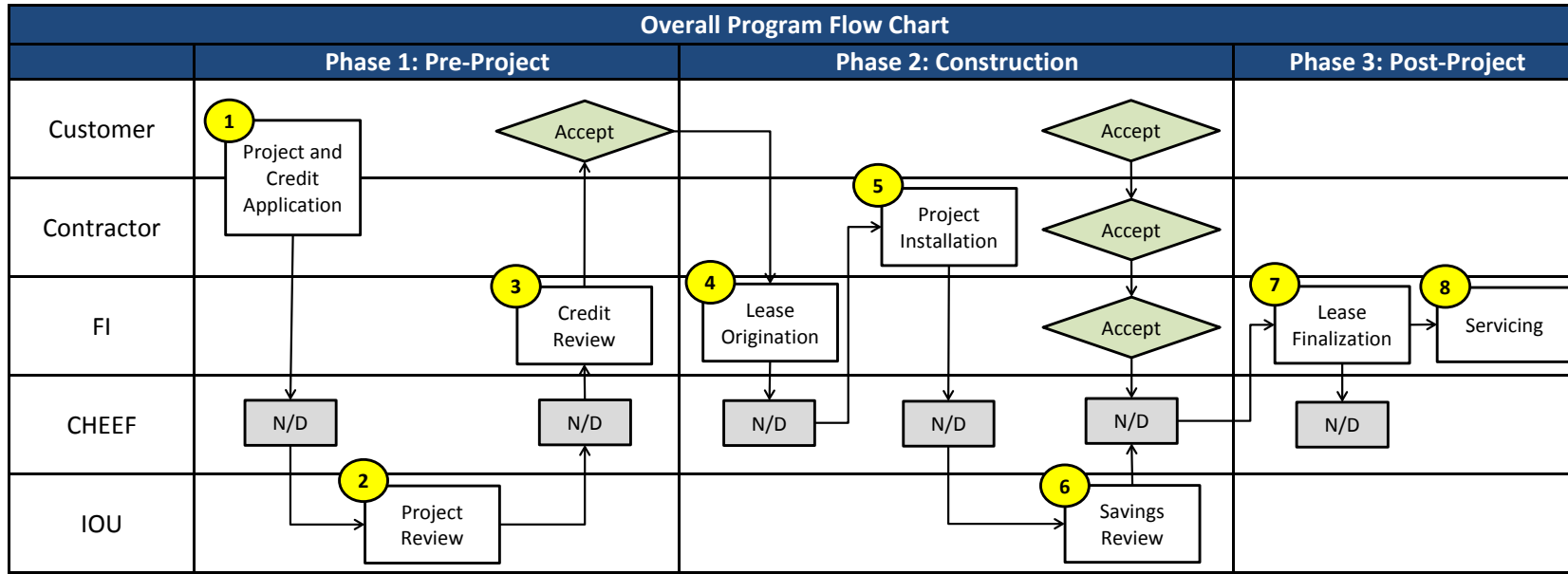
The following sequence illustrates how this program will be delivered to customers.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor training.
3. IOU Customer Relationship Manager (CRM)/Contractor and customer meet, driven by IOU/contractor marketing or customer inquiry.
4. CRM/Contractor interviews customer, collects site information (possibly including results of energy audit).
5. Contractor proposes a project scope, estimated cost, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including the lease.
6. Customer makes lease and payment decision.
7. If customer selects leasing option, CRM/contractor collects application information and provides to lease company.
8. Lease company collects application information from customer, makes underwriting decision and informs customer and/or contractor.
9. Customer executes lease agreement.
10. Contractor installs improvements.
11. Customer signs completion certificate.
12. IOU performs inspection (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
13. Lease company receives completion certificate and other required documents.
14. Lease company funds contractor.
15. Lease company provides appropriate documentation to CAEATFA.
16. CAEATFA directs trustee to transfer credit enhancement from IOU account to lease company's account at the trustee.

m) **Sub-program Process Flow Chart:**

The flowchart below illustrates the process flow for how the lease pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.

OFF-BILL SM. BUSINESS LEASE PROVIDERS PILOT PIP – REDLINE VERSION



**Key**

**#** Stage Indicator = Designates Process Flow Stage

**N/D** Notify/Data = Hub notified of Stage completion and data normalized

**Accept** Accept and Move to Next Phase = Acceptance required before project moves to next Phase



n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**

IOU financing programs will leverage the existing incentive and rebate programs.

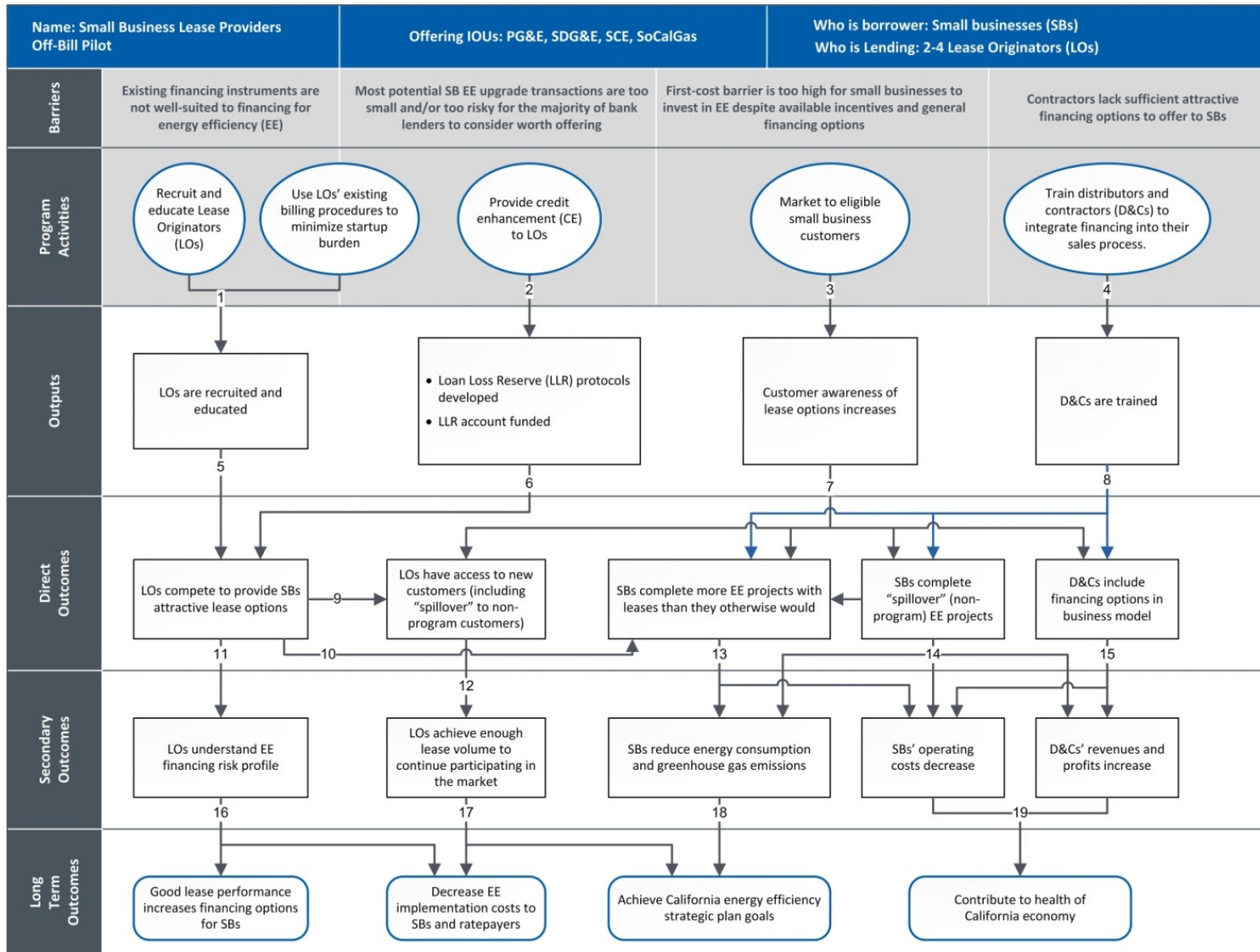
**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>Off-Bill Small Business Lease Providers Pilot</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Statewide Commercial, Industrial, and Agriculture Programs	Meetings/Emails/Calls	As Needed
Emerging Technology	Meetings/Emails/Calls	As Needed
Third Party Programs	Meetings/Emails/Calls	As Needed
Institutional Partnerships	Meetings/Emails/Calls	As Needed
Local Government Partnerships	Meetings/Emails/Calls	As Needed
On Bill Financing	Meetings/Emails/Calls	As Needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As Needed
Master Servicer *	Data Exchange	Daily
CCSE	Meetings/Emails/Calls	As Needed

Note: Coordination will not occur until Master Servicer is fully functional.

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o) Logic Model:



SB = Small Business D&Cs = Distributors and Contractors LO = Lease Originator CE = Credit Enhancement LLR = Loan Loss Reserve EE = Energy Efficiency

## 11) Additional Sub-Program Information

### a) **Advancing Strategic Plan Goals and Objectives:**

Innovative financing is a major Strategic Plan strategy for non-residential sectors. One key commercial sector strategy in the Strategic Plan is “Financing: Target financing ...[including] increased availability and use of innovative and expanded financing...” (p. 3-29), which is directly advanced by this sub-program. Furthermore, this sub-program contributes to the Strategic Plan’s call to:

- “ensure access to financing mechanisms that effectively surmount capital limitations and cash flow requirements. This means attracting the interest of banking and capital industries to the magnitude of investment and borrowing needs, and identifying finance mechanisms...” (p. 3-35)
- identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “pilot innovative financial tools [and e]xpand implementation of innovative financing mechanisms” (strategy #1-4, p. 3-32),
- “Develop effective financial tools for EE improvements to existing buildings” (strategy #2-6, p. 3-34)
- Use financing for closely related goals, HVAC and lighting.

### b) **Leveraging of Resources:**

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of the EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot the rebate/incentive will decrease the total cost of the project that is eligible for credit enhancement funds. For projects in which the customer is receiving a rebate or incentive, in order to receive that benefit, leases will have to comply with IOU rebate and incentive guidelines.<sup>6</sup>

The Pilot will leverage current equipment lease financing offered by a multitude of equipment leasing companies and capital providers. This program will build on a mature commercial market that has extensive experience in providing equipment leases for energy improvements. This program will provide a credit enhancement to leverage this current market and expand it to currently underserved Small Business customers.

The IOUs’ OBF programs can also be leveraged to provide financing for certain projects that may be a better fit for that program. Coordination with OBF will be required to determine the types of projects that are better suited for OBF or this

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<sup>6</sup> For example, the Statewide Customized Retrofit Manual specifies that “new equipment or system retrofit must guarantee energy savings for the effective useful life of the product or for a period of five years, whichever is less.”

Pilot. Coordination specifics will be developed by IOU program and marketing teams to help guide customers to the right EE financing program for their project.

c) **Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilots will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, to submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

12) **Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the criteria required for pilot programs.

a. **A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

The Pilot seeks to overcome the first-cost barrier of implementing EE improvements in the non-residential market and to increase overall energy savings from EE. Current IOU-based programs rely on a rebate structure to pay a portion of the cost of the EE upgrade. Financing pilots, on the other hand, cover 100% of the initial cost of the upgrade, net of any applicable rebates, and subject to repayment. As a result, it is anticipated customers who do not otherwise have the capital readily available will be able to use lease financing to pay for EE upgrades.

b. **Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.a., EE financing is a very important pillar of the Strategic Plan's approach, specifically including the non-residential sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "*Customer Incentives* including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

c. **Specific goals, objectives and end points for the project.**

The Pilot program seeks to:

- a. Stimulate financial institutions to provide capital to EE upgrade markets in the small business market segment.
- b. Lead to incremental energy savings from EE projects in the small business market segment.
- c. Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates.

Further details of the credit enhancement structure will be developed through CAEATFA regulations.

- d. **New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

This Pilot will test how effective financing will be at stimulating either more comprehensive EE projects or a greater number of EE projects. Furthermore, the Pilot provides mechanisms to test specific elements of financing such as the effect of lowering the costs through lower lease payments, expedited lease approvals by Lease Originators, and differing levels of contractor engagement in the financing process.

The Pilot relies on several innovative design features that have not been extensively tested in California. These include:

- **Credit enhancements:** Credit enhancements can reduce financing costs, increase the duration of leases, or make credit underwriting terms more flexible than they otherwise would be. The Pilot will enable testing of the effect of credit enhancements on these features.
  - **Integration of financing and incentive programs:** This pilot will help test the most effective ways for IOU customer rebate/incentive programs to be integrated effectively with third party financing. To this point, these rebate/incentive programs have operated in concert with IOU-run OBF programs.
- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See Attachment 2, Table 1 and Section 10.a.

- f. **Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Financing Evaluation Research Plan includes a “Market Characterization” project that is managed by the Energy Division and expected to be fielded early in the program cycle.

g. Program performance metrics.

Table 16: Program Performance Metrics

Short-Term PPMs:	IOU Target	Metric Type
PPM 1: Lease transaction volume (dollar amount and number of leases) by IOU	Track and report total dollar amount of lease transactions completed (Decision, p. 62)	2a
PPM 2: End-use categories (HVAC, lighting, etc.) of measures installed through pilot	Track and report end use for each program measure and group end uses by category	2a

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

h. Methodologies to test the cost-effectiveness of the project.

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

i. A proposed Evaluation, Measurement, and Verification (EM&V) plan.

For finance pilot program EM&V plan, please refer to the revised 2013-2014 M&E Long-term Roadmap. This roadmap is being updated by the statewide M&E team and will not be available at the time IOUs file this PIP.

j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.

See Section 11.e.

**Additional Information Regarding Fast-Track / OBR PIP Requirements in Decision 13-09-044**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the Off-Bill Small Business Lease Providers Pilot and will be further addressed in CAEATFA's regulations.

## OFF-BILL SM. BUSINESS LEASE PROVIDERS PILOT PIP – REDLINE VERSION

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.)

See Table 1 for the portion of the \$8 million allocated by the IOUs to the Single Family Loan Program “Fast Track” pilot. As directed, the IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- The CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time the customer is making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions (including lease originators) and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas to reference the data protocols (from the DWG final report) in the pilot PIPs since the data fields could differ by pilot (Appendix D).

This is addressed in Section 9.a.iv. Pursuant to D.13-09-044, the data protocols subject to the WG report are incorporated by reference to that report, which is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: CalEEFinance.com.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

ATTACHMENT 1

**Program Non-Energy Objectives**

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>7</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

Test the premise that an equipment lease option with a credit enhancement will drive increased uptake of energy efficiency (EE) projects in the small business market segment. Credit enhancement aim to lower lease originators risks in entering an asset class that does not have a lot of historical data.

Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates. Private capital in the EE lease market can help overcome the up-front cost barrier in a way that limited ratepayer funds are unable to.

Decrease EE implementation costs for small businesses by providing a way for lease originators to get a better understanding of the EE lease risk profile and to achieve enough lease volume to interest lease originators to continue participating in the market. Creating a long term, standardized, and low cost EE lease instrument can help overcome the up-front cost and time barrier for small businesses.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>8</sup>**

The IOUs will not be providing any quantitative targets for these (or any) pilots.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

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<sup>7</sup> A SMART objective is one that is Specific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), Measurable, Ambitious, Realistic, and Time-bound.

<sup>8</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.



- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs. The IOUs do not project PPM's for these (or any) pilots.

ATTACHMENT C  
MASTER-METERED MULTIFAMILY  
FINANCING PROGRAM  
PROGRAM IMPLEMENTATION PLAN

CLEAN PIP

**2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan**

- 1) **Sub-Program Name:** Master-Metered Multifamily Finance Pilot
- 2) **Sub-Program ID number:**
  - a. SoCalGas: SCG3792
  - b. SDG&E: SDGE 3299
  - c. SCE: SCE-13-SW-007E
  - d. PG&E: PGE\_210933
- 3) **Type of Sub-Program:**  Core  Third Party  Partnership  Pilot
- 4) **Market sector or segment that this sub-program is designed to serve:**
  - 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)
- 5) **Is this sub-program primarily a:**
  - a. Non-resource program  Yes  No
  - b. Resource acquisition program  Yes  No
  - c. Market Transformation Program  Yes  No
- 6) **Indicate the primary intervention strategies:**
  - a. Upstream  Yes  No
  - b. Midstream  Yes  No
  - c. Downstream  Yes  No
  - d. Direct Install  Yes  No.
  - e. Non Resource  Yes  No.
- 7) **Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC)** TRC \_\_\_ PAC \_\_\_

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for claiming incremental energy savings for Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information was not yet available to estimate the proposed energy savings. The CPUC has thus

decided to evaluate the energy savings on an *ex post* basis. The Pilot’s TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1. Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Master-Metered Multi Family</b>						
Admin/General Overhead (\$)	\$50,242	\$98,682	\$113,768	TBD	TBD	\$262,692
Direct Implementation (\$)	\$508,015	\$973,700	\$1,222,616	TBD	TBD	\$2,704,331
Credit Enhancements (CE) (\$)	\$0	\$548,701	\$1,578,307	TBD	TBD	\$2,127,008
Marketing & Outreach (\$)*1	\$601	\$295,707	\$599,736	TBD	TBD	\$896,044
Total Statewide Budget (\$)	\$558,858	\$1,916,790	\$3,514,427	TBD	TBD	\$5,990,075

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs’ proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master Servicer, and d) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENs, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations.

SoCalGas	Program Year						
	MMMF	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)		\$2,631	\$24,401	\$39,487	TBD	TBD	\$66,519
Direct Implementation (\$)		\$30,725	\$121,096	\$275,277	TBD	TBD	\$427,098
Credit Enhancements (CE) (\$)		\$0	\$57,756	\$117,261	TBD	TBD	\$175,017
Marketing & Outreach (\$)		\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)		\$33,957	\$293,923	\$522,695	TBD	TBD	\$850,575

SDG&E	Program Year						
	MMMF	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)		\$9,309	\$18,619	\$18,619	TBD	TBD	\$46,547
Direct Implementation (\$)		\$82,821	\$110,318	\$220,968	TBD	TBD	\$414,107
Credit Enhancements (CE) (\$)		\$0	\$108,501	\$217,327	TBD	TBD	\$325,828
Marketing & Outreach (\$)		\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)		\$92,130	\$344,443	\$563,920	TBD	TBD	\$1,000,493

SCE	Program Year						
	MMMF	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)		\$31,133	\$41,325	\$41,325	TBD	TBD	\$113,783
Direct Implementation (\$)		\$229,674	\$412,696	\$396,781	TBD	TBD	\$1,039,151
Credit Enhancements (CE) (\$)		\$0	\$0	\$467,241	TBD	TBD	\$467,241
Marketing & Outreach (\$)		\$0	\$0	\$349,274	TBD	TBD	\$349,274
Total IOU Budget (\$)		\$260,807	\$454,021	\$1,254,621	TBD	TBD	\$1,969,449

PG&E	Program Year						
	MMMF	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)		\$7,169	\$ 14,337	\$14,337	TBD	TBD	\$ 35,843
Direct Implementation (\$)		\$164,795	\$329,590	\$329,590	TBD	TBD	\$823,975
Credit Enhancements (CE) (\$)		\$0	\$ 382,444	\$776,478	TBD	TBD	\$1,158,922
Marketing & Outreach (\$)		\$0	\$98,032	\$52,786	TBD	TBD	\$150,818
Total IOU Budget (\$)		\$171,964	\$ 824,403	\$1,173,191	TBD	TBD	\$2,169,558

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

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

The Master-Metered Multifamily Finance (MMMF) Pilot will use an on-bill repayment (OBR) agreement (without shut-off provision) supported by an OBR tariff with optional transferability feature for the “affordable” housing market segment. The pilot focuses specifically on the sub-set of the affordable housing sector that is substantially master-metered – meaning that only properties in which the property owner pays utility bills for their tenants are eligible to participate.<sup>2</sup> D. 13-09-044 also states that the primary credit enhancement for this Pilot will be a Debt Service Reserve Fund (DSRF).<sup>3</sup> The MMMF Pilot does not require net bill neutrality; however, it will require that the contractor present an estimated bill impact assessment to the customer prior to the time the customer commits to the project.

This Pilot will be used to test the OBR process (e.g. the flow of funds, various stakeholder roles and responsibilities) and its value to the financial community. These OBR process elements will be tested while broader deployment and legal issues around OBR and how it can be deployed in mixed-metered buildings are resolved. Broader scalability beyond the affordable, master metered multi-family sector may or may not be possible, however one goal of this pilot is to demonstrate that financing can offer one pathway to energy efficiency improvements in a narrow sector of the multi-family market, and that success will lead to greater adoption and new experimentation in other parts of the multi-family market such as non-master metered buildings or outside the affordable housing sector.

Pursuant to the Assigned Commissioner’s Ruling issued August 25, 2014, the MMMF Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the loan or lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

<sup>2</sup> Owners must also not live on-site to qualify.

<sup>3</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 42

- i. The primary goals of the Pilot<sup>4</sup> are to:
  - Test the value proposition of OBR in multifamily, master-metered, building environment as a potential pathway to eventually assist with addressing the “split incentive” dynamic of residential rental properties.
  - Understand how to better coordinate and streamline the delivery of services across utilities, building auditors, contractors and lenders (benefits for building owners and tenants).
  - Gather data to evaluate actual performance of energy efficiency measures in multifamily setting.
- ii. Target Market Segment

The target market segment for this Pilot is the affordable multi-family housing sector that is master-metered. For purposes of this Pilot, “affordable” housing properties are defined as those with deed restrictions that require the owner to keep rents affordable for income qualified households (i.e., Energy Savings Assistance Program (ESAP)-eligible), who occupy at least 50 percent of the units.<sup>5</sup> The MMMF Pilot has a target of reaching 5,000 units through properties with buildings of 20 or more units.<sup>6</sup>

Restricting the OBR multifamily pilot to this pool of properties provides two key benefits:

- 1) The owners of these buildings are “mission” driven non-profits that will likely be more willing than for-profit market rate property owners to absorb the costs and risk associated with participating in a new energy efficiency financing pilot. There are also mission-based Community Development Financial Institutions (CDFI) lenders and foundations that are interested in socially responsible investing for these types of affordable housing properties for the purpose of saving energy.
- 2) Tenants in these properties are protected by a range of federal and state regulations from any unintended consequences that might result from a finance program. In addition, these properties typically have deed restrictions that require the owner to keep rents affordable. In master-metered buildings (in which building owners pay utility bills), this means that the risk of rising utility bills falls on property owners – making these owners highly motivated to reduce energy and water consumption.

- iii. Credit Enhancement Mechanism

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<sup>4</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 40.

<sup>5</sup>More information on ESAP and its eligibility guidelines, [www.cpuc.ca.gov/PUC/energy/Low+Income/liee.htm](http://www.cpuc.ca.gov/PUC/energy/Low+Income/liee.htm).

<sup>6</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 40.



The Pilot will provide a credit enhancement (CE) and various programmatic support (contractor networks, marketing, etc.) to attract private capital. MMMF's credit enhancement is expected to come in the form of a DSRF supported by ratepayer funds. DSRF is used to cover individual monthly delinquent payments before default. California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) will establish the final design of the DSRF through its rulemaking, including a maximum amount of debt service charges to be covered by the DSRF for a particular project and financial institution. A website link to the final program rulemaking (with detail on the DSRF and other regulations) will be provided herein when available. Any delinquent financing charges subsequently collected from customers should be credited to the Holding Account to offset some or all of the DSRF funds paid out. This CE provides lenders with the promise of prompt payment if a demand for remuneration is made. Decision 13-09-044 authorizes up to \$2.9 million statewide for the MMMF Pilot (net of funding provided by the Investor-Owned Utilities [IOUs] for audits and technical assistance) for funded loans as they are documented and invoiced for credit enhancements for this Pilot<sup>7</sup>.

Ultimately, all of the Finance Program pilots are designed to test the effectiveness of financing and credit enhancements that are integrated with utility incentive programs to enhance customer and financial institution uptake. The pilot results will offer useful perspectives on the effectiveness of these approaches and on the usefulness of potentially expanding the pilots to become full-scale programs.

Additional information regarding Credit Enhancement guidelines for On-Bill pilots subject to Commission oversight are provided below pursuant to D.13-09-044:

- Per-loan exposure limits: CEs are expected to only apply to the financing net of rebates and incentives.

In addition, in consultation with the CHEEF, the floor and cap for Credit Enhancements are provided below:

- Credit Enhancement Floor (Percent of Principal Amount): 5%
- Credit Enhancement Cap (Percent of Principal Amount): 20%

#### iv. Financing

This Pilot is designed to provide a new way to finance energy efficiency projects in the multifamily sector. The DSRF will cover non- or partial payment of monthly financing charges. The program will rely on a loan as its predominant financial instrument. It will be attractive to property owners in addressing rising energy and water operating costs. These

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<sup>7</sup>Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 114.

transactions are considered to be “commercial” financing by nature, although the tenants of the projects are consumers, ranging from low income to moderate income.

This sector is one in which access to capital is, for many property owners, the key (rather than one of many) barrier to investment in energy efficiency. Experience in California and elsewhere has shown that standard “property secured” financing models are very challenging in the affordable housing sector, where complex capital stacks that involve multiple private, federal, state and local government lien holders lead to overwhelming transaction costs. This leaves a highly motivated group of owners without access to capital to make energy improvements to reduce their operating costs and achieve a range of benefits (e.g., enhanced comfort, new equipment) for their tenants. Access to a credit enhancement in the form of a debt service reserve may induce financial institutions to lend more in this sector.

v. Lenders

Financing for energy efficiency projects is not generally available to property owners of affordable housing properties. One reason is that there often is insufficient equity to provide collateral. The existence of a debt service reserve fund will make lending to these entities more attractive. The on-bill collections will add additional convenience for the property owner and is likely to provide lenders with some additional comfort knowing that finance will be paid by the multifamily housing developer. Lenders in this market sector are primarily Community Development Financial Institutions.

vi. Program Transition

The MMMF Pilot will be rolled-out in two stages: a pre-development version that only Southern California Gas Company (SCG) will launch, and a “regular track” version that will be more broadly available. The pre-development, early release version is a limited, manual version of this pilot, to be coordinated with the California Housing Partnership Corporation (CHPC), and will be implemented without using program funds for credit enhancements, nor any of the other features that are planned for the regular track (except the on-bill feature). Although the early version will not use authorized CEs or FI guidelines, the lenders have already been identified and are certified as “Community Development Financial Institutions” by the U.S. Treasury. CHPC is supporting some or all of these predevelopment projects with foundation funds (for audits and possibly their own credit enhancement), and SCG will provide a manual interface with its billing system for up to five properties during this early phase.

The pre-development MMMF program will be transferred to CAEATFA once the Master Servicer is online and the automated OBR system is functional as part of the full-scale, statewide (“regular track”) program available in all IOU territories. In addition, the automated OBR system will be supported by an OBR tariff with optional transferability feature, and will include the DSRF as credit enhancement. Building audits and limited technical assistance will also be provided, as described below. CAEATFA’s program rules and Lender Service Agreements (LSAs) will identify additional qualified lenders.

During the manual phase, SCG will work directly with the lenders of the pre-development projects to present loan charges on the Utility bill. SCG will track all written communications between the lenders and the Utility, to provide to the Master Servicer, along with participating customers' energy and bill payment history as part of the records of the Manual MMMF Pilot. Relevant loan and project data, consistent with the Data Working Group's final report, will be collected by the lenders and transferred to the Master Servicer once it becomes operational.

vii. Building Audits and Limited Technical Assistance

During the post-transfer period, the IOUs will incorporate the Home Upgrade / Multifamily program audit protocols for multifamily properties to avoid duplication of effort. Authorized Energy Efficiency (EE) finance program funds will be used for building audits to improve understanding of building science and review contactor performance. IOUs will provide technical assistance utilizing qualified consultants to evaluate energy saving opportunities based on existing Home Upgrade / Multifamily program guidelines. Consultants will perform industry standard audits (e.g., ASHRAE) to identify cost effective energy efficiency measures. Energy audits will consider both prescriptive and performance based measures to address whole building performance. As a key to maximizing EE savings, the Program will also include limited post-retrofit "technical services" support for owners which may include training the owners to use free on-line MF audit tool offered by the Utility as well as guidance for energy benchmarking using U.S. Environmental Protection Agency's (EPA) Portfolio Manager. These post-retrofit resources will help owners sustain ongoing energy savings while reducing operating costs.

viii. Data Protocols

Data collection, subject to relevant privacy considerations, is essential for testing the value of various features of the authorized financing pilots. A data Working Group (WG) was convened to address data collection and dissemination issues. The WG Final Report, filed as a Tier 1 Advice Letter and approved by the Commission with an effective date in December 2013, established a set of data elements that should be collected for each residential and non-residential project, including borrower, property, project, and financing information at the time of the installation. The data set also includes post-installation information on the performance of both the financing and the project.<sup>8</sup> The data protocols are standardized across all IOUs and the CHEEF will house and manage the energy finance database.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

### **Sub-Program Energy and Demand Objectives**

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<sup>8</sup> <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>.

As noted in Section 7, above, the workpaper submitted by the IOUs was not accepted. The CPUC determined sufficient information was not yet available to estimate the proposed energy savings, and will evaluate the savings on an *ex post* basis.

**Table 2. Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year**

SoCalGas	Program Years			Total
	2013	2014	2015	
MMMF				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
MMMF				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SCE	Program Years			Total
	2013	2014	2015	
MMMF				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
MMMF				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

\* N/A = "not applicable." TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

The primary non-energy objectives of the MMMF Pilot are to (i) increase the volume of EE financing to attract capital providers and attract new market participants; (ii) provide a reliable, one-stop mechanism with attractive rates and terms for customers; (iii) a relatively quick turn-around for payments to contractors; and (iv) develop a robust and consistent data set on the energy and financial performance of loans in the multifamily market.

Successful implementation of the Pilot will help improve tenant home comfort. Through reduced energy consumption, installation of energy efficiency measures will also contribute to a reduction in greenhouse gas emissions and will help conserve natural resources.

The pilot results will offer useful perspectives on the effectiveness of these approaches, best practices, lessons learned, and expected benefits of expanding the pilots to become full-scale programs.

Additional non-energy objectives identified include:

- Improve customer satisfaction driven by an increase in capital for energy efficiency projects helping customers overcome the "first cost" key barrier
- Improve the credibility of energy efficiency investments and provide economic benefits to the state via increased loan volume through a financing program supported by both Financial Institutions as well as the IOUs

**c) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

**Table 3 – Work paper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

10) Program Implementation Details

a) Timelines:

Table 4: Sub-Program Milestones and Timeline

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>9</sup>
<b>PRE-DEVELOPMENT STAGE</b>	
SCG/Lender (CDFI) sign contract for manual version of MMMF Pilot	September 2014
SCG Set up manual billing system	October 2014
First Loan Funds/Begin billing under manual system	November 2014
<b>"REGULAR TRACK" STAGE</b>	
IOUs submit PIP as part of 90-day PIP for Automated ("regular track") version of program	December 2013
Rulemaking process for MMMFP regulations	C + 90
IOUs submit IT Advice Letter to CPUC	C + 120
Master Servicer becomes operational* (IOU IT changes complete)	C + 300
Transfer manual pilot to Master Servicer / CHEEF program. MMMFP under CHEEF launches	C + 300
Mid-Term CPUC Pilot Review <sup>10</sup>	TBD

*Note:* The expected dates for several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays beyond the IOUs' control. For the regular track schedule, this assumes program development concurrently with IT systems. In the event development activities cannot be done concurrent with IT system development, the schedule would change with first funding occurring in late-2015.

<sup>9</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>10</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

**b) Geographic Scope:**

**Table 5: Geographic Regions Where the Program Will Operate**

<b>Geographic Region</b>	<b>SDG&amp;E</b>	<b>SCG</b>	<b>SCE</b>	<b>PG&amp;E</b>
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

**c) Program Administration**

This early development version of this program will be implemented by SCG in collaboration with CHPC. CHPC will support work with a CDFI or CDFIs to provide capital for loans to a limited number (no more than 5) multifamily housing units. SCG will operate the program on this limited basis through manual inputs to its billing system.

Once the Master Servicer is selected, this pre-development financing program will transition into a multi-IOU, automated program supported by ratepayer funds for the credit enhancement and using the Master Servicer as the interface between participating FIs and the IOUs. The IOUs will enter into a contract with CAEATFA who will serve as the California Hub for Energy Efficiency Financing (CHEEF) for the pilot programs to support management of the pilot.

As CHEEF, CAEATFA will develop regulations to provide specific details on the credit enhancement structure and other requirements for program participation. CAEATFA will also subcontract with a Trustee bank to facilitate the transfer of credit enhancement funds between IOU holding accounts and trustee-held program accounts for the Financial Institutions participating in the Pilot.

**Table 6: 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 (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity [CAEATFA] (X = Yes)
MMMF	Program Application Process		X (Master Servicer)	X (CHPC for Manual Pilot)	X
MMMF	Project Review	X			
MMMF	Credit Review			X (participating financial institutions - enrolled through CAEATFA regulations)	
MMMF	Loan Origination			X (participating financial institutions - enrolled through CAEATFA regulations)	
MMMF	Loan Repayment Process			X (participating financial institutions - enrolled through CAEATFA regulations)	
MMMF	Credit Enhancements				X



Program Name	Program Component	Implemented by IOU Staff? (X = Yes)	Implemented by contractors to be selected by competitive bid process (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity [CAEATFA] ( X = Yes)
MMMFF	Marketing/Outreach	TBD		X (contractors and participating financial institutions - enrolled through CAEATFA regulations; CCSE)	X <sup>11</sup>
MMMFF	Evaluation, Measurement, & Verification (EM&V)	X			CPUC

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**d) Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

**i. Customers:**

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Substantially Master-metered multifamily buildings with at least 20 units.	X	X	X	X
The property owner does not reside on site	X	X	X	X
Properties with deed restrictions that require the owner to keep rents affordable for qualified income households, who occupy at least 50 percent of the units	X	X	X	X
Fully Constructed	X	X	X	X
Project site within utility service territory	X	X	X	X

<sup>11</sup> Pursuant to the Decision, CAEATFA will address additional education and outreach efforts for contractors and lease providers in the CHEEF PIP.

**ii. Contractors/Participants:**

Qualified Contractors must hold active licenses with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications.

**Contractor Participation Requirements**

Contractors will provide in writing a bill impact estimate for the proposed energy efficiency project to the customer before the customer makes a decision about whether to pursue the project.

Contractors engaged in providing service to customers in the IOU low income programs (e.g., the Energy Savings Assistance Program) remain subject to any and all low income program rules and prohibitions related to the promotion / selling / charging for other services to the low income customer. For example, measures available through the ESA Program will be provided at no cost to ESA Program-eligible customers and will not be financed.

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
For any project participating in a CPUC-approved IOU incentive program(s), the contractor must meet any specific requirements laid out by that program.	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will provide in writing a bill impact estimate for the proposed energy efficiency project to the customer at the time that the customer is making a decision about the project.	X	X	X	X

**iii. Financial Institutions:**

Eligibility requirements for FIs participating in this program will be determined through CAEATFA's public process for developing program regulations. These requirements will establish minimum qualifications, set standards for financial products, and ensure FIs conform to the terms of the pilot program in which they are participating (including data collection and privacy requirements), and for any additional requirements related to the use of CEs.

Minimum qualifications for FIs are: a) they possess all required state and federal licenses, and b) be in good standing with regulators. FIs will also be required to conform to pilot program requirements, CE protocols, and data collection and sharing requirements.

In order to access credit enhancements through this pilot, FIs and customers must agree to utilize on-bill repayment and will be subject to compliance with the OBR Tariff.

**Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)**

<b>Financial Institution Eligibility Requirement (list of requirements)</b>	<b>PGE</b>	<b>SCE</b>	<b>SDGE</b>	<b>SCG</b>
Pursuant to D.13-09-044, Eligibility requirements for financial institutions (FIs) participating in this program will be determined through CAEATFA's public process for developing program regulations.	X	X	X	X
Eligible FIs must comply with all requirements set forth in the OBR Tariff, and execute all necessary agreements to participate in OBR.	X	X	X	X

**e) Program Partners:**

**a. Program coordination partners:**

- CHPC – CHPC will support the immediate launch of a limited, manual version of this Pilot. CHPC will identify and support lenders who are certified as CDFIs to participate in the pre-development version of the MMMFP.
- CAEATFA – In its role as CHEEF, CAEATFA will manage flow of funds and data, and provide a simple, streamlined structure to facilitate EE financing in California. Through RFP processes, CAEATFA will competitively select a Master Servicer (MS) and a Data Manager (DM). CAEATFA will also develop, through its rulemaking process, Lender Service Agreements with FIs and will establish qualifications for lenders to participate in the finance pilots. Additionally, CAEATFA will adopt

minimum standards for qualified contractors eligible to participate in the EE financing pilot programs.

- Master Servicer (MS) - The MS will provide many of the operating functions for the CHEEF. Specifically, for this Pilot, the MS will (1) accept requests from FIs for fund disbursement from the DSRF; (2) serve as the interface between the IOUs and FIs by transmitting instructions from FIs to utilities on the amount to be placed on the utility bill and receiving cash from IOUs for further transmittal to FIs. The MS will also serve as a central collection point for all data on performance of energy efficiency financing in this sector.
- Data Manager (DM) – The DM will aggregate data from the pilots and prepare it for public consumption and program evaluation. This role may be included as part of the Master Servicer duties.
- Financial Institutions – The FIs will originate and service financing under the program. FIs are expected to primarily be Community Development Financial Institutions in this sector.
- Real Estate Professionals –The IOUs held a session with real estate professionals to learn about the unique needs of the industry in the non-residential sector and identified multiple areas of opportunity to enhance the on bill pilots. This may include additional information on projects being provided (e.g. amortization tables), creating educational materials that explain how measures (technical) translate into financial savings, and helping develop language that communicates the value of EE measures to subsequent buyers or renters.

**b. Other key program partners:**

- Contractors – Contractors from various trades may participate in the program including: HVAC, insulation, replacement window, electrical, plumbing and Energy Service/Performance Contractors. Based on the audit, the contractors will propose a scope of work to the property owner, and will provide payment options including financing. The IOUs will leverage existing channels working with contractor partners.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and may review financing programs for their member contractors. Distributors may be supportive of financing and could be helpful in promoting the program.

- Community Based Organizations – The CBOs will assist with engaging qualifying affordable multifamily property owners to utilize the program’s financing offerings.
- Local Government Partnerships – The local governments will assist with engaging their affordable multifamily housing constituents to utilize the program’s financing offerings.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure that the marketing of financial products are coordinated with the Energy Upgrade California statewide marketing brand campaign.

**Table 10: Program Coordination Partners**

Coordination Partner Information	PGE	SCE	SDGE	SCG
CHPC	N/A	N/A	N/A	X
CAEATFA	X	X	X	X
Financial Institutions	X	X	X	X
Real Estate Professionals	X	X	X	X
Contractors	X	X	X	X
Distributors	X	X	X	X
Community-based Organizations	X	X	X	X
CCSE	X	X	X	X

**f) Measures and incentive levels:**

Eligible Measures can consist of EEEMs and may include Non-EEEMs, each of which are defined herein.

EEEMs are measures that have been approved by the Commission for an IOU/REN EE rebate/incentive program, although the customer need not receive an incentive or rebate to qualify for the loan.<sup>12</sup> EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Per existing rebate programs, allowable EEEMs costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and labor on a per measure basis. EEEMs projects costs should not include activities unrelated to the installation of energy efficiency measures. Labor costs can be contractor or in-house if proof of direct project hours and costs are provided.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

<sup>12</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 30.

SoCal Gas	<a href="http://www.socalgas.com/for-your-business/energy-savings/">http://www.socalgas.com/for-your-business/energy-savings/</a> and <a href="http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml">http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml</a>
SCE	<a href="https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/">https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/</a>
SDG&E	<a href="http://www.sdge.com/node/4326">http://www.sdge.com/node/4326</a>
PG&E	<a href="http://www.pge.com/eef">http://www.pge.com/eef</a>

Broad guidelines regarding the inclusion of EEEMs and non-EEEMs were determined by D.13-09-044 (at page 31), as follows:

“We find that customers may be more likely to add EE projects while undertaking other improvement activities. Therefore, for purposes of the pilot period, the Commission finds it reasonable and adopts a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to Eligible EE Measures (EEEMs). Therefore, financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.”

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Also pursuant to Resolution E-4663, “The joint protest by California Housing Partnership Corporation and Build it Green is resolved by allowing the financing of Domestic Solar Hot Water systems without ratepayer credit enhancement in the multi-family pilot, including its pre-development phase.” Furthermore, the Resolution deferred to “CAEATFA to determine in its rulemaking whether there should be no credit enhancement for the entire loan if a solar DHW system is financed, or for just the portion of the loan that the solar DHW system makes up.”

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Per D.13-09-044, Conclusion of Law 56, the total loan value eligible for a credit enhancement will be limited to the total project cost net of any utility rebates and incentives received for the project.

In situations where a customer is served by multiple IOUs, refer to the OBR tariff for details on how billing will be treated.

**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Notes:*

- Home Upgrade / Multifamily Program is expected to be launched in 1Q 2014. The MF measures will be the same as the MFEER program except the buildings will be modeled with the installation of any combination of measures to increase overall efficiency rather than accounting for savings from a prescriptive approach.
- All measure rebates/incentives are subject to change. Please refer to each IOU's website to view the current EEEMs list. Inspection rates may vary based on project cost / measure.

SoCalGas <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml> and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>  
 SCE <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>  
 SDG&E <http://www.sdge.com/node/4326>  
 PG&E <http://www.pge.com/obf>

**g) Additional Services:**

The MMMF Pilot will offer a series of additional services that will benefit a variety of market actors. These additional services, where related to marketing and outreach, will be coordinated with Statewide ME&O.

- Lender education and training: The education and outreach component of the pilot will include training events and materials for community development financial institutions and other lenders that will assist them in participating in this pilot. Additional information on lender training plans will be provided in the CHEEF PIP.
- Call center support: IOU's call center will be able to provide general information about the MMMF Pilot.
- Outreach, education and training for property owners, contractors and real estate professionals will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Customer education	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Contractor education	Contractors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Lender education	Lenders	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Call Center Support	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Real estate professional education	Real Estate Professionals	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan



\*CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

<b>Activity</b>	<b>Estimated Timing</b>
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging FIs, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

- b. Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note)  
 Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

- 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).

The MMMF Pilot program will incorporate Home Upgrade / Multifamily program audit protocols for multifamily properties by leveraging the existing IOU/REN programs. CAEATFA, with support from the IOUs, will address specific audit requirements and procedure for financing-only projects during its rulemaking process.

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process.

**Table 13: 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:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

**Table 14: Quality Assurance Provisions**

Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA/QC requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

**l) Sub-program Delivery Method and Measure Installation /Marketing or Training:**

The following sequence illustrates how this program could be delivered to customers<sup>13</sup>.

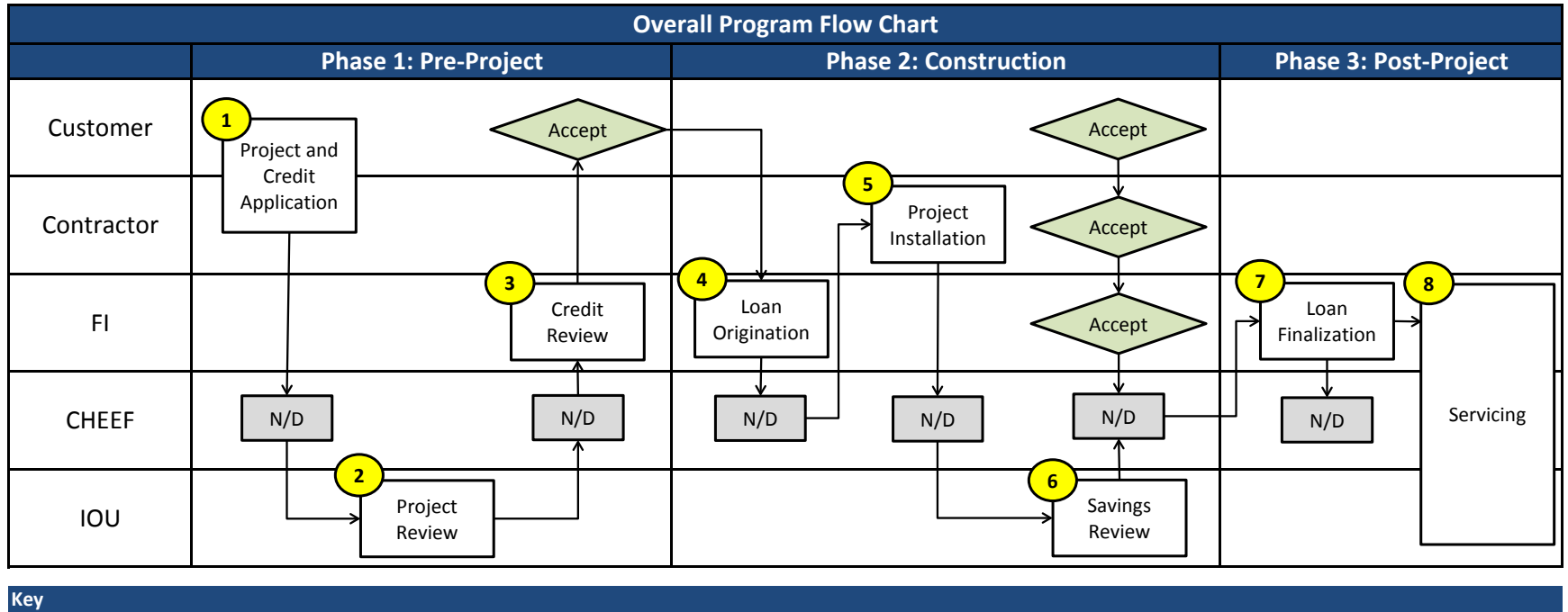
1. IOUs integrate financing with their incentive offerings.
2. IOU Multifamily Programs' Single Point of contact will inform interested multifamily property owner of available incentive/assistance programs in the IOU's portfolio such as Multifamily Energy Efficiency Rebate (MFEER) Program, Home Upgrade / Multifamily Program, ESAP, MIDI or incentive programs/assistance from other sources (e.g. water utility). For customers in overlapping IOU service territories, relevant IOUs involved will work together to guide customer thru the process of leveraging available resources to maximize energy savings.

<sup>13</sup> Credit enhancement funds will be allocated to appropriate financial institution trustee account at the point of loan closing.

3. Customers/Contractors are informed of assistance available from IOU Multifamily Single Point of Contact through customer/contractor outreach efforts.
4. CAEATFA/CCSE will provide contractor training.
5. Contractor and customer meet, driven by contractor marketing or customer inquiry.
6. Contractor interviews customer, collects site information (including results of energy audit).
7. Contractor proposes a project scope, price, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including financing.
8. Customer makes purchase and payment decision.
9. If Customer selects financing option, customer or contractor contacts source of financing with or without assistance of contractor.
10. FI collects application information from Customer, makes underwriting decision and informs Customer and/or contractor.
11. Contractor installs improvements.
12. Customer signs completion certificate.
13. Inspections performed (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
14. FI receives completion certificate and any other required documents.
15. FI funds loan to Customer, Contractor or both (two-party check).
16. FI provides appropriate documentation to CAEATFA.
17. CAEATFA directs trustee to transfer credit enhancement from IOU account to FI's account at the Trustee.
18. Master Servicer transmits loan information to IOU.
19. IOU verifies customer data transmitted by Master Servicer.
20. IOU places loan on customer's bill and begins OBR collection process

**m) Sub-program Process Flow Chart:**

The flowchart below illustrates the process flow for how the multifamily pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation



n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**

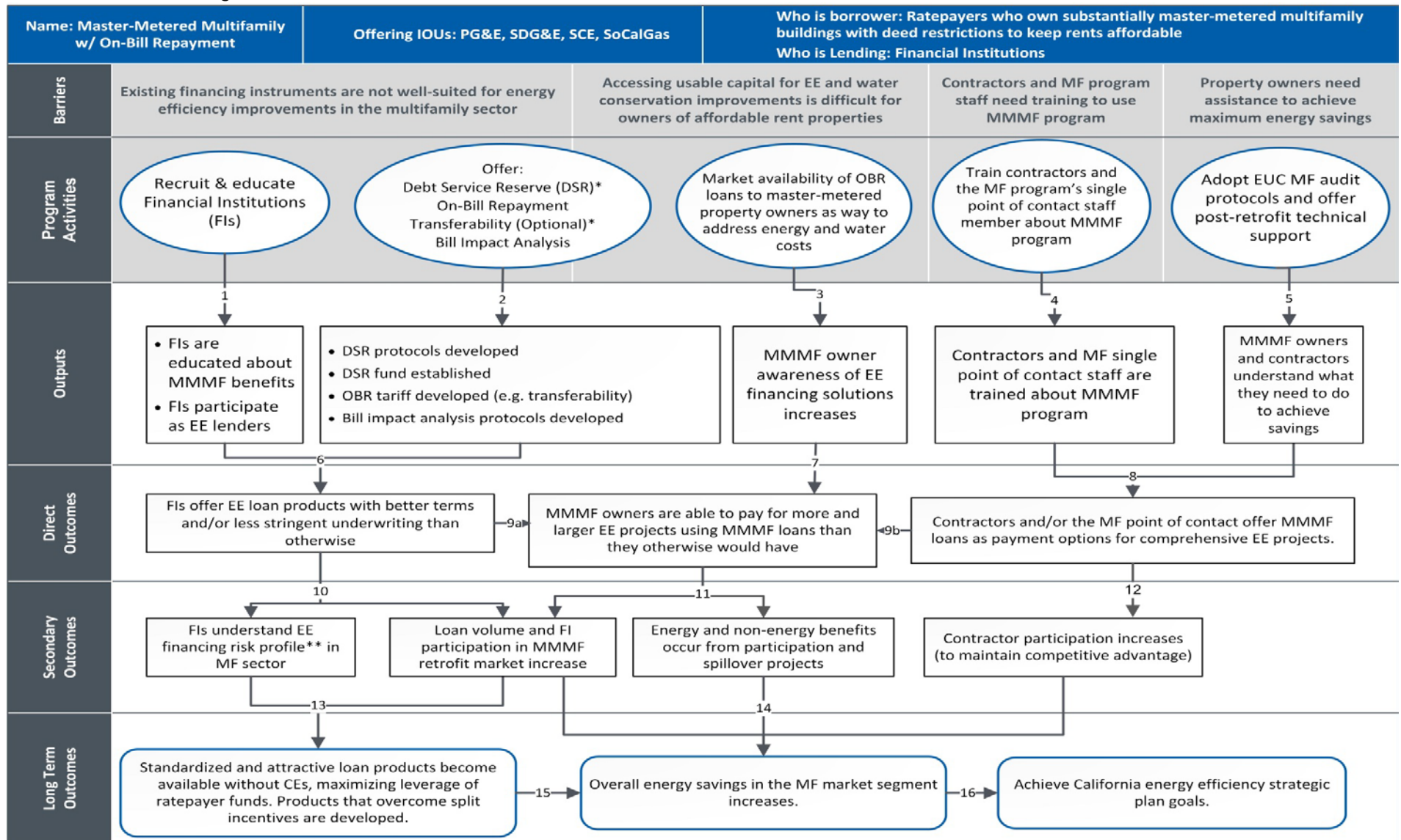
The MMMF Pilot will coordinate with all appropriate IOU/REN rebate/incentive programs, as well as the Statewide ME&O Program.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>Other IOU Sub-program Name</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Multifamily Rebate Programs	Meetings/Emails/Calls	As Needed
Energy Upgrade California	Meetings/Emails/Calls	As Needed
Energy Savings Assistance Program	Meetings/Emails/Calls	As Needed
Middle Income Direct Install Program	Meetings/Emails/Calls	As Needed
Multifamily Home Tune-Up	Meetings/Emails/Calls	As Needed
Multifamily Direct Therm Savings	Meetings/Emails/Calls	As Needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As Needed
Master Servicer*	Data Exchange	Daily
CCSE	Meetings/Emails/Calls	As Needed

\*Coordination occurs after Master Servicer is fully functional

o) Logic Model:



MMMFM = Master-Metered Multifamily OBR = On-Bill Repayment FI = Financial Institution DSR = Debt Service Reserve EE = Energy Efficiency EUC = Energy Upgrade California MF = Multifamily

\* SoCalGas' early release of the MMMFM program will not use credit enhancements and will not include transferability

\*\* Collecting EE financing performance data is an important function of the California Hub for Energy Efficiency Financing (CHEEF)

## 11) Additional Sub-Program Information

### a) Advancing Strategic Plan Goals and Objectives:

As underscored by the California Long Term Energy Efficiency Strategic Plan (the “Strategic Plan”), innovative financing is a major EE strategy for California’s residential sector. Key in the Strategic Plan’s Residential and Low Income section is: “**5. Financing:** Work with the financial community to develop innovative and affordable financing options for [EE] buildings and retrofits” (p. 2-12), a goal directly advanced by this sub-program. Furthermore, this sub-program makes important contributions to the Strategic Plan’s call to:

- Identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “[D]evelop financial products and programs...to encourage demand for energy efficiency building products, home systems and appliances” (strategy #2-4, p. 2-21),
- “Investigate the feasibility of [EE] lending products” and “attention to issues of multi-family housing” (p. 2-21),
- Use EE financing to meet closely related goals, namely HVAC and lighting efficiency.

### b) Leveraging of Resources:

To provide comprehensive services to the eligible multifamily building, including “low cost” or “no cost” tenant measures, the Pilot will integrate with ESAP, MIDI as well as MFEER. In addition, the customer will be guided and encouraged to pursue available incentive programs/assistance from other sources (e.g. water utility). For customers in overlapping IOU service territories, relevant IOUs involved will work together to simplify the overall process from customer’s perspective.

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of the EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot, the rebate/incentive will decrease the total cost of the project that is eligible for credit enhancement funds. For projects in which the customer is receiving a rebate or incentive, in order to receive that benefit, loans will have to comply with IOU rebate and incentive guidelines.<sup>14</sup>

The IOUs’ OBF programs can also be leveraged to provide financing for certain projects and customers that may be a better fit for that program. This could provide customers with a better “EE Financing” experience and boost customer perception of the financing pilots and programs as a whole. Coordination specifics will be developed by IOU program and marketing teams to help guide customers to the right EE financing program for their project. Additionally, the IOUs’ experience in administering the OBF program can be leveraged for best practices and potential pitfalls of EE financing programs.

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<sup>14</sup> For example, the Statewide Customized Retrofit Manual specifies that “new equipment or system retrofit must guarantee energy savings for the effective useful life of the product or for a period of five years, whichever is less.”



c) **Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilots will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, to submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

**12) Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the 10 criteria required for pilot programs.

a. **A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

Financing for energy efficiency projects is not generally available to property owners of affordable housing properties because they do not have sufficient equity to provide collateral. The existence of a debt service reserve fund will make lending to these entities more attractive. The on-bill collections will add some additional convenience for the property owner and is likely to provide the lenders with some additional comfort that the financing charges will be paid by the multi-family housing developer.

b. **Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The MMMF Pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.a, EE financing is a very important pillar of the Strategic Plan's approach, specifically including the multi-family sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "**Customer Incentives** including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

c. **Specific goals, objectives and end points for the project.**

The MMMF Pilot program primary goals are:

- a. Test the value proposition of OBR in multifamily, master-metered, building environment as potential pathway to eventually addressing the “split incentive” dynamic of residential rental properties.
- b. Understand how to better coordinate and streamline the delivery of services across utilities, building auditors, contractors and lenders (create strong value proposition for building owners and tenants).
- c. Gather data to evaluate actual performance of energy efficiency measures in multifamily setting.
- d. New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

The Pilot relies on several innovative design features that have not been extensively tested in California. These include:

- Credit enhancements: Credit enhancements can reduce financing costs, increase the duration of loans, or make credit underwriting terms more flexible than they otherwise would be. The Pilot will enable testing of the effect of credit enhancements on these features.
  - On-Bill repayment: The option for IOUs to offer customer on-bill repayment through the utility bill can add convenience for the customer and improved loan performance for the financial institutions while increase the rate of EE adoption in the master-metered multifamily sector.
  - Integration of financing and incentive programs: This pilot will help test the most effective ways for IOU customer rebate/incentive programs to be integrated effectively with third party financing.
- e. A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See budget in Table 1 and timeline in Section 10.a.

- f. Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Statewide Research Roadmap specifies the mechanism for which energy and demand savings will be determined for the Finance Pilots. In addition, the IOUs are conducting research to develop various requirements of the Pilots including logic models, Program Performance Metrics and related design parameters.

- g. Program performance metrics.**

**Table 16: Program Performance Metrics**

Short-term PPMs:	Measurement Approach	Data Source
PPM 1: Number of loans made	Number of unique loans made should be tracked by the program.	IOUs and/or CHEEF
PPM 2: Number of building owners receiving post-retrofit technical assistance	Number of building owners receiving technical assistance should be tracked by the implementer. The nature of the technical assistance should also be recorded if it varies on a case by case basis. Otherwise, a standardized set of services included in the assistance should be defined.	IOUs and/or implementer

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

**h. Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

**i. A proposed EM&V Plan**

For finance pilot program EM&V plan, please refer to the revised 2013-2014 M&E Long-term Roadmap. This roadmap is being updated by the statewide M&E team and will not be available at the time the IOUs file this PIP.

**j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.d.

**Additional Information Regarding Fast-Track / OBR PIP Requirements in Decision 13-09-044**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the Master-Metered Multifamily Pilot and will be further addressed in CAEATFA's regulations.

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.)

See Table 1 for the portion of the \$8 million allocated by the IOUs to the Master-Metered Multifamily Finance Pilot. As directed, the IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- The CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time the customer is making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions (including lease originators) and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas reference the data protocols (from the final report) in the pilot PIPs since the data fields could differ by pilot (D.13-09-044, Appendix D).

Pursuant to D.13-09-044, the data protocols subject to the WG report were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E. Please also refer to the regulations established by CAEATFA regarding data collection and reporting to implement the WG report. Contractors and FIs should refer to the CHEEF, the selected Master Servicer, and / or the Data Manager regarding any related requirements.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

**Decision 13-09-044, OBR PIPs (Only)**

- The OBR PIP should set credit enhancement guidelines (floor, cap, and spread) to incentivize more favorable financing terms for targeted market sectors (p. 22).

See information regarding credit enhancement guidelines in Section 9.a.iii, including the floor and cap.

- OBR program shall include non-residential shut-off in general conformity with Commission-approved shut off protocols to be approved in the OBR tariff (p. 54).

Not applicable to MMMF Pilot.

- The Commission concludes that written consent should be part of the OBR tariff in order to achieve transferability. Property owners and landlords that initially commit to the EE financing and OBR program (“current landlord”) and all of the current landlord’s tenants responsible for repayment under the OBR program (“current tenants”) should be required to give their written consent to abide by the terms and obligations of the OBR program. The written consent of subsequent property owners and landlords and subsequent tenants subject to the OBR program is required in order for the OBR provisions (e.g., transferability, shut-off, etc.) to apply (p. 56).

The optional transferability is applicable to MMMF Pilot and will be further addressed in the OBR tariff. There is no shut-off provision for the MMMF Pilot.

- IOUs are to apply existing OBF practices for application of OBR partial payments and follow Commission-approved disconnection procedures to obtain delinquent payments (p. 56).

The application of existing OBF practices for application of OBR partial payments is applicable to MMMF Pilot and will be further addressed in the OBR tariff. There is no shut-off provision for the MMMF Pilot.

## ATTACHMENT 1

### Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

**i. List the primary SMART<sup>15</sup> non-energy objectives of the program.**

The primary non-energy objectives of the MMMF Pilot are to (i) increase the volume of EE financing to attract capital providers and attract new market participants; (ii) provide a reliable, one-stop mechanism which provides attractive rates and terms for consumers; (iii) a relatively quick turn-around for payments to contractors; and (iv) develop a robust and consistent data set on the energy and financial performance of loans in the multifamily market.

During the 2013-2017 program period, PPM will be collected and evaluated to assess the success of the stated non-energy objectives.

The pilot results will offer useful perspectives on the effectiveness of these approaches, best practices, lessons learned, and expected benefits of expanding the pilots to become full-scale programs.

**ii. For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>16</sup>**

The IOUs do not establish quantitative targets for this Pilot.

**iii. For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

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<sup>15</sup> A SMART objective is one that is **S**pecific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), **M**easurable, **A**mbitious, **R**ealistic, and **T**ime-bound. For example, for a vender training component of an innovative commercial program, two SMART mid-term objectives and one long-term objective might be:

- a) During the period 2013-2014, the number of HVAC installers in the SCE service territory who are able to perform quality installations of energy efficient packaged air conditioners will increase by 20%.
- b) During the period 2013-2014, the number of installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 25%.
- c) By 2020, installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 75%.

<sup>16</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.

iv. **Quantitative program targets (PPMs):**

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for PPMs (refer to 11.g) as pilots are converted into statewide programs. The IOUs do not project quantitative program targets for this Pilot.

REDLINE PIP



**2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan**

- 1) **Sub-Program Name:** Master-Metered Multifamily Finance Pilot
- 2) **Sub-Program ID number:**
  - a. SoCalGas: SCG3792
  - b. SDG&E: SDGE 3299
  - c. SCE: SCE-13-SW-007E
  - d. PG&E: PGE\_210933
- 3) **Type of Sub-Program:**  Core  Third Party  Partnership  Pilot
- 4) **Market sector or segment that this sub-program is designed to serve:**
  - 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)
- 5) **Is this sub-program primarily a:**
  - a. Non-resource program  Yes  No
  - b. Resource acquisition program  Yes  No
  - c. Market Transformation Program  Yes  No
- 6) **Indicate the primary intervention strategies:**
  - a. Upstream  Yes  No
  - b. Midstream  Yes  No
  - c. Downstream  Yes  No
  - d. Direct Install  Yes  No.
  - e. Non Resource  Yes  No.
- 7) **Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC)** TRC  PAC

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for claiming incremental energy savings for Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information was not yet available to estimate the proposed energy savings. The CPUC has thus

decided to evaluate the energy savings on an *ex post* basis. The Pilot’s TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1. Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Master-Metered Multi Family</b>						
Admin/General Overhead (\$)	\$50,242	\$98,682	\$113,768	TBD	TBD	\$262,692
Direct Implementation (\$)	\$508,015	\$973,700	\$1,222,616	TBD	TBD	\$2,704,331
Credit Enhancements (CE) (\$)	\$0	\$548,701	\$1,578,307	TBD	TBD	\$2,127,008
Marketing & Outreach (\$)*1	\$601	\$295,707	\$599,736	TBD	TBD	\$896,044
<b>Total Statewide Budget (\$)</b>	<b>\$558,858</b>	<b>\$1,916,790</b>	<b>\$3,514,427</b>	<b>TBD</b>	<b>TBD</b>	<b>\$5,990,075</b>

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs’ proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - o Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master Servicer, and ed) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENS, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations~~b) leveraging existing and developing new contractor networks in conjunction with the CHEEF, c) coordinating training of internal and external stakeholders with CAEATFA and other parties, d) integration of financing with existing programs, reacting to market conditions, monitoring of program progress and addressing implementation issues, e) on-going support to Billing, IT, and Call Center operations, and f) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account processing, Energy Auditors for projects not participating in rebates/incentives programs, and multifamily audits/technical assistance.~~

SoCalGas	Program Year						
	MMMF	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)		\$2,631	\$24,401	\$39,487	TBD	TBD	\$66,519
Direct Implementation (\$)		\$30,725	\$121,096	\$275,277	TBD	TBD	\$427,098
Credit Enhancements (CE) (\$)		\$0	\$57,756	\$117,261	TBD	TBD	\$175,017
Marketing & Outreach (\$)		\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)		\$33,957	\$293,923	\$522,695	TBD	TBD	\$850,575

SDG&E	Program Year						
	MMMF	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)		\$9,309	\$18,619	\$18,619	TBD	TBD	\$46,547
Direct Implementation (\$)		\$82,821	\$110,318	\$220,968	TBD	TBD	\$414,107
Credit Enhancements (CE) (\$)		\$0	\$108,501	\$217,327	TBD	TBD	\$325,828
Marketing & Outreach (\$)		\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)		\$92,130	\$344,443	\$563,920	TBD	TBD	\$1,000,493

SCE	Program Year						
	MMMF	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)		\$31,133	\$41,325	\$41,325	TBD	TBD	\$113,783
Direct Implementation (\$)		\$229,674	\$412,696	\$396,781	TBD	TBD	\$1,039,151

Credit Enhancements (CE) (\$)	\$0	\$0	\$467,241	TBD	TBD	\$467,241
Marketing & Outreach (\$)	\$0	\$0	\$349,274	TBD	TBD	\$349,274
Total IOU Budget (\$)	\$260,807	\$454,021	\$1,254,621	TBD	TBD	\$1,969,449

PG&E	Program Year						
	MMMF	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)		\$7,169	\$ 14,337	\$14,337	TBD	TBD	\$ 35,843
Direct Implementation (\$)		\$164,795	\$329,590	\$329,590	TBD	TBD	\$823,975
Credit Enhancements (CE) (\$)		\$0	\$ 382,444	\$776,478	TBD	TBD	\$1,158,922
Marketing & Outreach (\$)		\$0	\$98,032	\$52,786	TBD	TBD	\$150,818
Total IOU Budget (\$)		\$171,964	\$ 824,403	\$1,173,191	TBD	TBD	\$2,169,558

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

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

The Master-Metered Multifamily Finance (MMMF) Pilot will use an on-bill repayment (OBR) agreement (without shut-off provision) supported by an OBR tariff with optional transferability feature for the “affordable” housing market segment. The pilot focuses specifically on the sub-set of the affordable housing sector that is substantially master-metered – meaning that only properties in which the property owner pays utility bills for their tenants are eligible to participate.<sup>2</sup> D. 13-09-044 also states that the primary credit enhancement for this Pilot will be a Debt Service Reserve Fund (DSRF).<sup>3</sup> The MMMF Pilot does not require net bill neutrality; however, it will require that the contractor present an estimated bill impact assessment to the customer prior to the time the customer commits to the project.

This Pilot will be used to test the OBR process (e.g. the flow of funds, various stakeholder roles and responsibilities) and its value to the financial community. These OBR process elements will be tested while broader deployment and legal issues around OBR and how it can be deployed in mixed-metered buildings are resolved. Broader scalability beyond the affordable, master metered multi-family sector may or may not be possible, however one goal of this pilot is to demonstrate that financing can offer one pathway to energy efficiency improvements in a narrow sector of the multi-family market, and that success will lead to greater adoption and new experimentation in other parts of the multi-family market such as non-master metered buildings or outside the affordable housing sector.

Pursuant to the Assigned Commissioner’s Ruling issued August 25, 2014, the MMMF Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the loan or lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

<sup>2</sup> Owners must also not live on-site to qualify.

<sup>3</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 42

- i. The primary goals of the Pilot<sup>4</sup> are to:
  - Test the value proposition of OBR in multifamily, master-metered, building environment as a potential pathway to eventually assist with addressing the “split incentive” dynamic of residential rental properties.
  - Understand how to better coordinate and streamline the delivery of services across utilities, building auditors, contractors and lenders (benefits for building owners and tenants).
  - Gather data to evaluate actual performance of energy efficiency measures in multifamily setting.
- ii. Target Market Segment

The target market segment for this Pilot is the affordable multi-family housing sector that is master-metered. For purposes of this Pilot, “affordable” housing properties are defined as those with deed restrictions that require the owner to keep rents affordable for income qualified households (i.e., Energy Savings Assistance Program (ESAP)-eligible), who occupy at least 50 percent of the units.<sup>5</sup> The MMMF Pilot has a target of reaching 5,000 units through properties with buildings of 20 or more units.<sup>6</sup>

Restricting the OBR multifamily pilot to this pool of properties provides two key benefits:

- 1) The owners of these buildings are “mission” driven non-profits that will likely be more willing than for-profit market rate property owners to absorb the costs and risk associated with participating in a new energy efficiency financing pilot. There are also mission-based Community Development Financial Institutions (CDFI) lenders and foundations that are interested in socially responsible investing for these types of affordable housing properties for the purpose of saving energy.
- 2) Tenants in these properties are protected by a range of federal and state regulations from any unintended consequences that might result from a finance program. In addition, these properties typically have deed restrictions that require the owner to keep rents affordable. In master-metered buildings (in which building owners pay utility bills), this means that the risk of rising utility bills falls on property owners – making these owners highly motivated to reduce energy and water consumption.

- iii. Credit Enhancement Mechanism

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<sup>4</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 40.

<sup>5</sup>More information on ESAP and its eligibility guidelines, [www.cpuc.ca.gov/PUC/energy/Low+Income/liee.htm](http://www.cpuc.ca.gov/PUC/energy/Low+Income/liee.htm).

<sup>6</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 40.

The Pilot will provide a credit enhancement (CE) and various programmatic support (contractor networks, marketing, etc.) to attract private capital. MMMF's credit enhancement is expected to come in the form of a DSRF supported by ratepayer funds. DSRF is used to cover individual monthly delinquent payments before default. California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) will establish the final design of the DSRF through its rulemaking, including a maximum amount of debt service charges to be covered by the DSRF for a particular project and financial institution. [A website link to the final program rulemaking \(with detail on the DSRF and other regulations\) will be provided herein when available.](#) Any delinquent financing charges subsequently collected from customers should be credited to the Holding Account to offset some or all of the DSRF funds paid out. This CE provides lenders with the promise of prompt payment if a demand for remuneration is made. Decision 13-09-044 authorizes up to \$2.9 million statewide for the MMMF Pilot (net of funding provided by the Investor-Owned Utilities [IOUs] for audits and technical assistance) for funded loans as they are documented and invoiced for credit enhancements for this Pilot<sup>7</sup>.

Ultimately, all of the Finance Program pilots are designed to test the effectiveness of financing and credit enhancements that are integrated with utility incentive programs to enhance customer and financial institution uptake. The pilot results will offer useful perspectives on the effectiveness of these approaches and on the usefulness of potentially expanding the pilots to become full-scale programs.

[Additional information regarding Credit Enhancement guidelines for On-Bill pilots subject to Commission oversight are provided below pursuant to D.13-09-044:](#)

- [Per-loan exposure limits: CEs are expected to only apply to the financing net of rebates and incentives.](#)

[In addition, in consultation with the CHEEF, the floor and cap for Credit Enhancements are provided below:](#)

- [Credit Enhancement Floor \(Percent of Principal Amount\): 5%](#)
- [Credit Enhancement Cap \(Percent of Principal Amount\): 20%](#)

#### iv. Financing

This Pilot is designed to provide a new way to finance energy efficiency projects in the multifamily sector. The DSRF will cover non- or partial payment of monthly financing charges. The program will rely on a loan as its predominant financial instrument. It will be attractive to property owners in addressing rising energy and water operating costs. These

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<sup>7</sup>Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 114.

transactions are considered to be “commercial” financing by nature, although the tenants of the projects are consumers, ranging from low income to moderate income.

This sector is one in which access to capital is, for many property owners, the key (rather than one of many) barrier to investment in energy efficiency. Experience in California and elsewhere has shown that standard “property secured” financing models are very challenging in the affordable housing sector, where complex capital stacks that involve multiple private, federal, state and local government lien holders lead to overwhelming transaction costs. This leaves a highly motivated group of owners without access to capital to make energy improvements to reduce their operating costs and achieve a range of benefits (e.g., enhanced comfort, new equipment) for their tenants. Access to a credit enhancement in the form of a debt service reserve may induce financial institutions to lend more in this sector.

v. Lenders

Financing for energy efficiency projects is not generally available to property owners of affordable housing properties. One reason is that there often is insufficient equity to provide collateral. The existence of a debt service reserve fund will make lending to these entities more attractive. The on-bill collections will add additional convenience for the property owner and is likely to provide lenders with some additional comfort knowing that finance will be paid by the multifamily housing developer. Lenders in this market sector are primarily Community Development Financial Institutions.

vi. Program Transition

The MMMF Pilot will be rolled-out in two stages: a pre-development version that only Southern California Gas Company (SCG) will launch, and a “regular track” version that will be more broadly available. The pre-development, early release version is a limited, manual version of this pilot, to be coordinated with the California Housing Partnership Corporation (CHPC), and will be implemented without using program funds for credit enhancements, nor any of the other features that are planned for the regular track (except the on-bill feature). Although the early version will not use authorized CEs or FI guidelines, the lenders have already been identified and are certified as “Community Development Financial Institutions” by the U.S. Treasury. CHPC is supporting some or all of these predevelopment projects with foundation funds (for audits and possibly their own credit enhancement), and SCG will provide a manual interface with its billing system for up to five properties during this early phase.

The pre-development MMMF program will be transferred to CAEATFA once the Master Servicer is online and the automated OBR system is functional as part of the full-scale, statewide (“regular track”) program available in all IOU territories. In addition, the automated OBR system will be supported by an OBR tariff with optional transferability feature, and will include the DSRF as credit enhancement. Building audits and limited technical assistance will also be provided, as described below. CAEATFA’s program rules and Lender Service Agreements (LSAs) will identify additional qualified lenders.



During the manual phase, SCG will work directly with the lenders of the pre-development projects to present loan charges on the Utility bill. SCG will track all written communications between the lenders and the Utility, to provide to the Master Servicer, along with participating customers' energy and bill payment history as part of the records of the Manual MMMF Pilot. Relevant loan and project data, consistent with the Data Working Group's final report, will be collected by the lenders and transferred to the Master Servicer once it becomes operational.

vii. Building Audits and Limited Technical Assistance

During the post-transfer period, the IOUs will incorporate the Home Upgrade / Multifamily program audit protocols for multifamily properties to avoid duplication of effort. Authorized Energy Efficiency (EE) finance program funds will be used for building audits to improve understanding of building science and review contactor performance. IOUs will provide technical assistance utilizing qualified consultants to evaluate energy saving opportunities based on existing Home Upgrade / Multifamily program guidelines. Consultants will perform industry standard audits (e.g., ASHRAE) to identify cost effective energy efficiency measures. Energy audits will consider both prescriptive and performance based measures to address whole building performance. As a key to maximizing EE savings, the Program will also include limited post-retrofit "technical services" support for owners which may include training the owners to use free on-line MF audit tool offered by the Utility as well as guidance for energy benchmarking using U.S. Environmental Protection Agency's (EPA) Portfolio Manager. These post-retrofit resources will help owners sustain ongoing energy savings while reducing operating costs.

viii. Data Protocols

Data collection, subject to relevant privacy considerations, is essential for testing the value of various features of the authorized financing pilots. A data Working Group (WG) was convened to address data collection and dissemination issues. The WG Final Report, filed as a Tier 1 Advice Letter and approved by the Commission with an effective date in December 2013, established a set of data elements that should be collected for each residential and non-residential project, including borrower, property, project, and financing information at the time of the installation. The data set also includes post-installation information on the performance of both the financing and the project.<sup>8</sup> The data protocols are standardized across all IOUs and the CHEEF will house and manage the energy finance database.

[More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking \(with detail on data requirements and other regulations\) will be provided herein when available.](#)

### Sub-Program Energy and Demand Objectives

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<sup>8</sup> <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>.

As noted in Section 7, above, the workpaper submitted by the IOUs was not accepted. The CPUC determined sufficient information was not yet available to estimate the proposed energy savings, and will evaluate the savings on an *ex post* basis.

**Table 2. Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year**

SoCalGas	Program Years			Total
	2013	2014	2015	
MMMF				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
MMMF				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SCE	Program Years			Total
	2013	2014	2015	
MMMF				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
MMMF				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

\* N/A = "not applicable." TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

The primary non-energy objectives of the MMMF Pilot are to (i) increase the volume of EE financing to attract capital providers and attract new market participants; (ii) provide a reliable, one-stop mechanism with attractive rates and terms for customers; (iii) a relatively quick turn-around for payments to contractors; and (iv) develop a robust and consistent data set on the energy and financial performance of loans in the multifamily market.

Successful implementation of the Pilot will help improve tenant home comfort. Through reduced energy consumption, installation of energy efficiency measures will also contribute to a reduction in greenhouse gas emissions and will help conserve natural resources.

The pilot results will offer useful perspectives on the effectiveness of these approaches, best practices, lessons learned, and expected benefits of expanding the pilots to become full-scale programs.

Additional non-energy objectives identified include:

- Improve customer satisfaction driven by an increase in capital for energy efficiency projects helping customers overcome the "first cost" key barrier
- Improve the credibility of energy efficiency investments and provide economic benefits to the state via increased loan volume through a financing program supported by both Financial Institutions as well as the IOUs

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**c) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

**Table 3 – Work paper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

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10) Program Implementation Details

a) Timelines:

Table 4: Sub-Program Milestones and Timeline

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>9</sup>
<b>PRE-DEVELOPMENT STAGE</b>	
SCG/Lender (CDFI) sign contract for manual version of MMMF Pilot	September 2014
SCG Set up manual billing system	October 2014
First Loan Funds/Begin billing under manual system	November 2014
<b>"REGULAR TRACK" STAGE</b>	
IOUs submit PIP as part of 90-day PIP for Automated ("regular track") version of program	December 2013
Rulemaking process for MMMFP regulations	C + 90
IOUs submit IT Advice Letter to CPUC	C + 120
Master Servicer becomes operational* (IOU IT changes complete)	C + 300

<sup>9</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

Milestone	Date
Transfer manual pilot to Master Servicer / CHEEF program. MMMFP under CHEEF launches	C + 300
Mid-Term CPUC Pilot Review <sup>10</sup>	TBD

*Note:* The expected dates for several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays beyond the IOUs' control. For the regular track schedule, this assumes program development concurrently with IT systems. In the event development activities cannot be done concurrent with IT system development, the schedule would change with first funding occurring in late-2015.

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<sup>10</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

**b) Geographic Scope:**

**Table 5: Geographic Regions Where the Program Will Operate**

<b>Geographic Region</b>	<b>SDG&amp;E</b>	<b>SCG</b>	<b>SCE</b>	<b>PG&amp;E</b>
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

**c) Program Administration**

This early development version of this program will be implemented by SCG in collaboration with CHPC. CHPC will support work with a CDFI or CDFIs to provide capital for loans to a limited number (no more than 5) multifamily housing units. SCG will operate the program on this limited basis through manual inputs to its billing system.

Once the Master Servicer is selected, this pre-development financing program will transition into a multi-IOU, automated program supported by ratepayer funds for the credit enhancement and using the Master Servicer as the interface between participating FIs and the IOUs. The IOUs will enter into a contract with CAEATFA who will serve as the California Hub for Energy Efficiency Financing (CHEEF) for the pilot programs to support management of the pilot.

As CHEEF, CAEATFA will develop regulations to provide specific details on the credit enhancement structure and other requirements for program participation. CAEATFA will also subcontract with a Trustee bank to facilitate the transfer of credit enhancement funds between IOU holding accounts and trustee-held program accounts for the Financial Institutions participating in the Pilot.

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**Table 6: 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 (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity [CAEATFA] (X = Yes)
MMMF	Program Application Process		X (Master Servicer)	X (CHPC for Manual Pilot)	X
MMMF	Project Review	X			
MMMF	Credit Review			X (participating financial institutions - enrolled through CAEATFA regulations)	
MMMF	Loan Origination			X (participating financial institutions - enrolled through CAEATFA regulations)	
MMMF	Loan Repayment Process			X (participating financial institutions - enrolled through CAEATFA regulations)	
MMMF	Credit Enhancements				X



Program Name	Program Component	Implemented by IOU Staff? (X = Yes)	Implemented by contractors to be selected by competitive bid process (if Yes then enter type of contractor/other market actor possibly used)	Implemented by contractors NOT selected by competitive bid process (list prime contractor and sub-contractor names)	Implemented by local government or other entity [CAEATFA] ( X = Yes)
MMMFF	Marketing/Outreach	TBD		X (contractors and participating financial institutions - enrolled through CAEATFA regulations; CCSE)	X <sup>11</sup>
MMMFF	Evaluation, Measurement, & Verification (EM&V)	X			CPUC

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

d) Program Eligibility Requirements:

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

i. Customers:

Table 7: Customer Eligibility Requirements (Joint Utility Table)

Customer Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Substantially Master-metered multifamily buildings with at least 20 units.	X	X	X	X
The property owner does not reside on site	X	X	X	X
Properties with deed restrictions that require the owner to keep rents affordable for qualified income households, who occupy at least 50 percent of the units	X	X	X	X
Fully Constructed	X	X	X	X
Project site within utility service territory	X	X	X	X

<sup>11</sup> Pursuant to the Decision, CAEATFA will address additional education and outreach efforts for contractors and lease providers in the CHEEF PIP.

**ii. Contractors/Participants:**

Qualified Contractors must hold active licenses with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications.

**Contractor Participation Requirements**

Contractors will provide in writing a bill impact estimate for the proposed energy efficiency project to the customer before the customer makes a decision about whether to pursue the project.

Contractors engaged in providing service to customers in the IOU low income programs (e.g., the Energy Savings Assistance Program) remain subject to any and all low income program rules and prohibitions related to the promotion / selling / charging for other services to the low income customer. For example, measures available through the ESA Program will be provided at no cost to ESA Program-eligible customers and will not be financed.

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
For any project participating in a CPUC-approved IOU incentive program(s), the contractor must meet any specific requirements laid out by that program.	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will provide in writing a bill impact estimate for the proposed energy efficiency project to the customer at the time that the customer is making a decision about the project.	X	X	X	X

**iii. Financial Institutions:**

Eligibility requirements for FIs participating in this program will be determined through CAEATFA's public process for developing program regulations. These requirements will establish minimum qualifications, set standards for financial products, and ensure FIs conform to the terms of the pilot program in which they are participating (including data collection and privacy requirements), and for any additional requirements related to the use of CEs.

Minimum qualifications for FIs are: a) they possess all required state and federal licenses, and b) be in good standing with regulators. FIs will also be required to conform to pilot program requirements, CE protocols, and data collection and sharing requirements.

In order to access credit enhancements through this pilot, FIs and customers must agree to utilize on-bill repayment and will be subject to compliance with the OBR Tariff.

**Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)**

<b>Financial Institution Eligibility Requirement (list of requirements)</b>	<b>PGE</b>	<b>SCE</b>	<b>SDGE</b>	<b>SCG</b>
Pursuant to D.13-09-044, Eligibility requirements for financial institutions (FIs) participating in this program will be determined through CAEATFA's public process for developing program regulations.	X	X	X	X
Eligible FIs must comply with all requirements set forth in the OBR Tariff, and execute all necessary agreements to participate in OBR.	X	X	X	X

**e) Program Partners:**

**a. Program coordination partners:**

- CHPC – CHPC will support the immediate launch of a limited, manual version of this Pilot. CHPC will identify and support lenders who are certified as CDFIs to participate in the pre-development version of the MMMFP.
- CAEATFA – In its role as CHEEF, CAEATFA will manage flow of funds and data, and provide a simple, streamlined structure to facilitate EE financing in California. Through RFP processes, CAEATFA will competitively select a Master Servicer (MS) and a Data Manager (DM). CAEATFA will also develop, through its rulemaking process, Lender Service Agreements with FIs and will establish qualifications for lenders to participate in the finance pilots. Additionally, CAEATFA will adopt

minimum standards for qualified contractors eligible to participate in the EE financing pilot programs.

- Master Servicer (MS) - The MS will provide many of the operating functions for the CHEEF. Specifically, for this Pilot, the MS will (1) accept requests from FIs for fund disbursement from the DSRF; (2) serve as the interface between the IOUs and FIs by transmitting instructions from FIs to utilities on the amount to be placed on the utility bill and receiving cash from IOUs for further transmittal to FIs. The MS will also serve as a central collection point for all data on performance of energy efficiency financing in this sector.
- Data Manager (DM) – The DM will aggregate data from the pilots and prepare it for public consumption and program evaluation. This role may be included as part of the Master Servicer duties.
- Financial Institutions – The FIs will originate and service financing under the program. FIs are expected to primarily be Community Development Financial Institutions in this sector.
- Real Estate Professionals –The IOUs held a session with real estate professionals to learn about the unique needs of the industry in the non-residential sector and identified multiple areas of opportunity to enhance the on bill pilots. This may include additional information on projects being provided (e.g. amortization tables), creating educational materials that explain how measures (technical) translate into financial savings, and helping develop language that communicates the value of EE measures to subsequent buyers or renters.

**b. Other key program partners:**

- Contractors – Contractors from various trades may participate in the program including: HVAC, insulation, replacement window, electrical, plumbing and Energy Service/Performance Contractors. Based on the audit, the contractors will propose a scope of work to the property owner, and will provide payment options including financing. The IOUs will leverage existing channels working with contractor partners.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and may review financing programs for their member contractors. Distributors may be supportive of financing and could be helpful in promoting the program.

- Community Based Organizations – The CBOs will assist with engaging qualifying affordable multifamily property owners to utilize the program’s financing offerings.
- Local Government Partnerships – The local governments will assist with engaging their affordable multifamily housing constituents to utilize the program’s financing offerings.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure that the marketing of financial products are coordinated with the Energy Upgrade California statewide marketing brand campaign.

**Table 10: Program Coordination Partners**

Coordination Partner Information	PGE	SCE	SDGE	SCG
CHPC	N/A	N/A	N/A	X
CAEATFA	X	X	X	X
Financial Institutions	X	X	X	X
Real Estate Professionals	X	X	X	X
Contractors	X	X	X	X
Distributors	X	X	X	X
Community-based Organizations	X	X	X	X
CCSE	X	X	X	X

**f) Measures and incentive levels:**

Eligible Measures can consist of EEEMs and may include Non-EEEMs, each of which are defined herein.

EEEMs are measures that have been approved by the Commission for an IOU/REN EE rebate/incentive program, although the customer need not receive an incentive or rebate to qualify for the loan.<sup>12</sup> EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Per existing rebate programs, allowable EEEMs costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and labor on a per measure basis. EEEMs projects costs should not include activities unrelated to the installation of energy efficiency measures. Labor costs can be contractor or in-house if proof of direct project hours and costs are provided.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

<sup>12</sup> Decision 13-09-044. (2013). Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs. 30.

SoCal Gas	<a href="http://www.socalgas.com/for-your-business/energy-savings/">http://www.socalgas.com/for-your-business/energy-savings/</a> and <a href="http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml">http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml</a>
SCE	<a href="https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/">https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/</a>
SDG&E	<a href="http://www.sdge.com/node/4326">http://www.sdge.com/node/4326</a>
PG&E	<a href="http://www.pge.com/eef">http://www.pge.com/eef</a>

Broad guidelines regarding the inclusion of EEEMs and non-EEEMs were determined by D.13-09-044 (at page 31), as follows:

“We find that customers may be more likely to add EE projects while undertaking other improvement activities. Therefore, for purposes of the pilot period, the Commission finds it reasonable and adopts a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to Eligible EE Measures (EEEMs). Therefore, financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.”

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Also pursuant to Resolution E-4663, “The joint protest by California Housing Partnership Corporation and Build it Green is resolved by allowing the financing of Domestic Solar Hot Water systems without ratepayer credit enhancement in the multi-family pilot, including its pre-development phase.” Furthermore, the Resolution deferred to “CAEATFA to determine in its rulemaking whether there should be no credit enhancement for the entire loan if a solar DHW system is financed, or for just the portion of the loan that the solar DHW system makes up.”

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Per D.13-09-044, Conclusion of Law 56, the total loan value eligible for a credit enhancement will be limited to the total project cost net of any utility rebates and incentives received for the project.

In situations where a customer is served by multiple IOUs, refer to the OBR tariff for details on how billing will be treated.

**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Notes:*

- Home Upgrade / Multifamily Program is expected to be launched in 1Q 2014. The MF measures will be the same as the MFEER program except the buildings will be modeled with the installation of any combination of measures to increase overall efficiency rather than accounting for savings from a prescriptive approach.
- All measure rebates/incentives are subject to change. Please refer to each IOU's website to view the current EEEMs list. Inspection rates may vary based on project cost / measure.

SoCalGas <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml> and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>  
 SCE <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>  
 SDG&E <http://www.sdge.com/node/4326>  
 PG&E <http://www.pge.com/obf>

**g) Additional Services:**

The MMMF Pilot will offer a series of additional services that will benefit a variety of market actors. These additional services, where related to marketing and outreach, will be coordinated with Statewide ME&O.

- Lender education and training: The education and outreach component of the pilot will include training events and materials for community development financial institutions and other lenders that will assist them in participating in this pilot. Additional information on lender training plans will be provided in the CHEEF PIP.
- Call center support: IOU's call center will be able to provide general information about the MMMF Pilot.
- Outreach, education and training for property owners, contractors and real estate professionals will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Customer education	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Contractor education	Contractors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Lender education	Lenders	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Call Center Support	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Real estate professional education	Real Estate Professionals	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan



\*CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

<b>Activity</b>	<b>Estimated Timing</b>
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging FIs, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

- b. Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note)  
 Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

- 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).

The MMMF Pilot program will incorporate Home Upgrade / Multifamily program audit protocols for multifamily properties by leveraging the existing IOU/REN programs. CAEATFA, with support from the IOUs, will address specific audit requirements and procedure for financing-only projects during its rulemaking process.

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process.

**Table 13: 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:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

**Table 14: Quality Assurance Provisions**

Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA/QC requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

**l) Sub-program Delivery Method and Measure Installation /Marketing or Training:**

The following sequence illustrates how this program could be delivered to customers<sup>13</sup>.

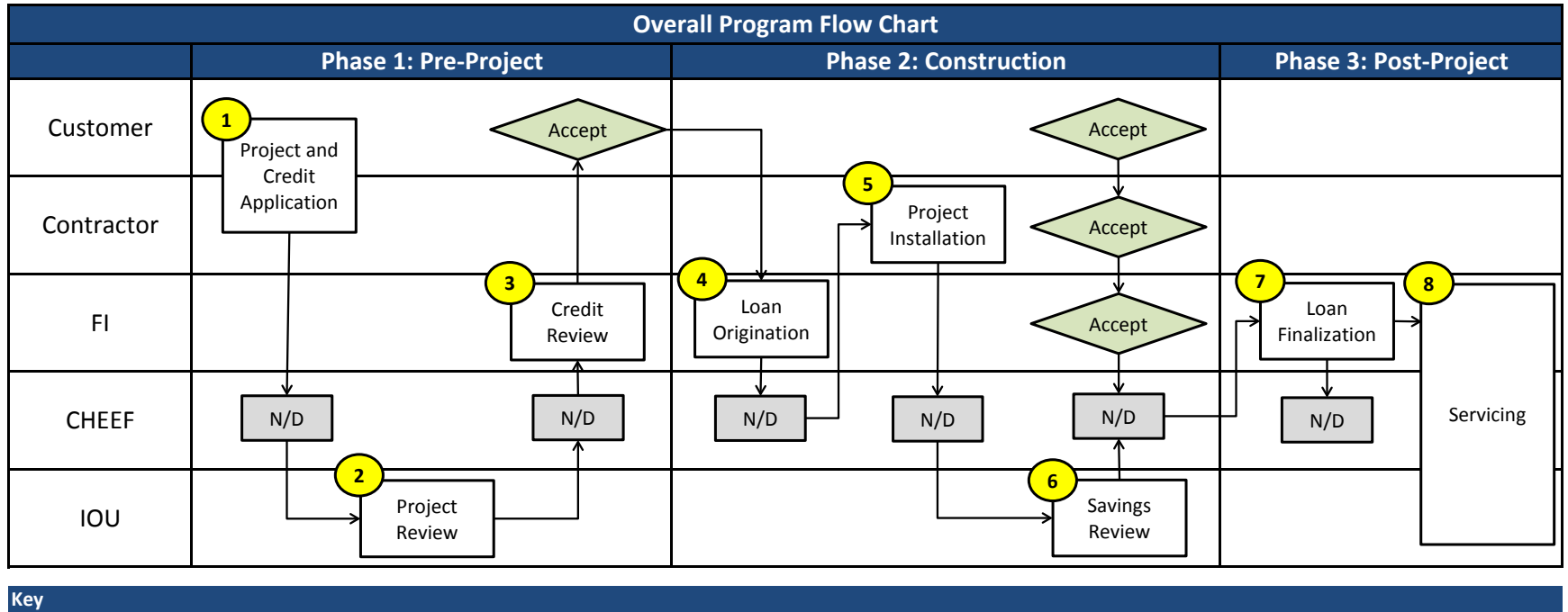
1. IOUs integrate financing with their incentive offerings.
2. IOU Multifamily Programs' Single Point of contact will inform interested multifamily property owner of available incentive/assistance programs in the IOU's portfolio such as Multifamily Energy Efficiency Rebate (MFEER) Program, Home Upgrade / Multifamily Program, ESAP, MIDI or incentive programs/assistance from other sources (e.g. water utility). For customers in overlapping IOU service territories, relevant IOUs involved will work together to guide customer thru the process of leveraging available resources to maximize energy savings.

<sup>13</sup> Credit enhancement funds will be allocated to appropriate financial institution trustee account at the point of loan closing.

3. Customers/Contractors are informed of assistance available from IOU Multifamily Single Point of Contact through customer/contractor outreach efforts.
4. CAEATFA/CCSE will provide contractor training.
5. Contractor and customer meet, driven by contractor marketing or customer inquiry.
6. Contractor interviews customer, collects site information (including results of energy audit).
7. Contractor proposes a project scope, price, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including financing.
8. Customer makes purchase and payment decision.
9. If Customer selects financing option, customer or contractor contacts source of financing with or without assistance of contractor.
10. FI collects application information from Customer, makes underwriting decision and informs Customer and/or contractor.
11. Contractor installs improvements.
12. Customer signs completion certificate.
13. Inspections performed (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
14. FI receives completion certificate and any other required documents.
15. FI funds loan to Customer, Contractor or both (two-party check).
16. FI provides appropriate documentation to CAEATFA.
17. CAEATFA directs trustee to transfer credit enhancement from IOU account to FI's account at the Trustee.
18. Master Servicer transmits loan information to IOU.
19. IOU verifies customer data transmitted by Master Servicer.
20. IOU places loan on customer's bill and begins OBR collection process

**m) Sub-program Process Flow Chart:**

The flowchart below illustrates the process flow for how the multifamily pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation



n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**

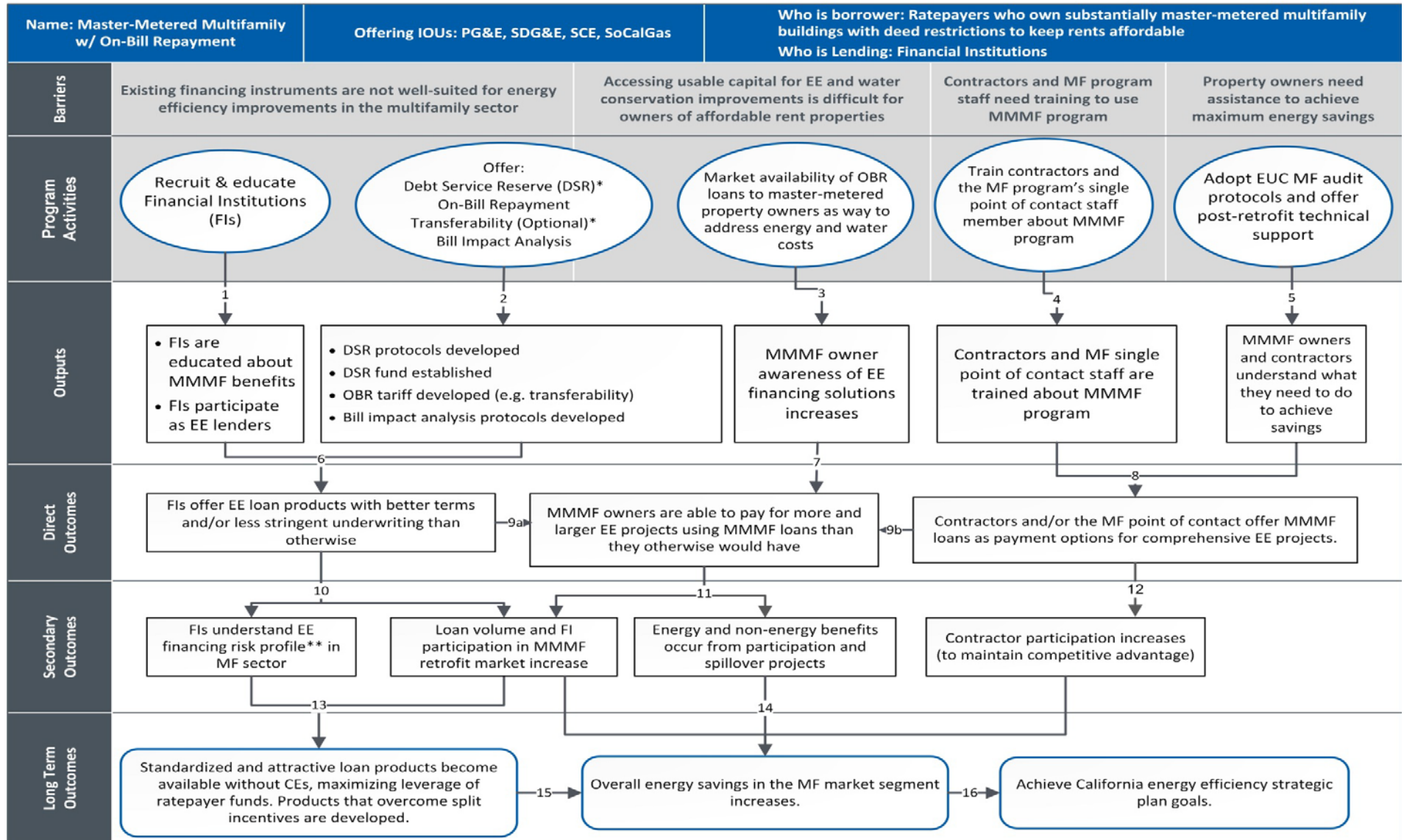
The MMMF Pilot will coordinate with all appropriate IOU/REN rebate/incentive programs, as well as the Statewide ME&O Program.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>Other IOU Sub-program Name</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Multifamily Rebate Programs	Meetings/Emails/Calls	As Needed
Energy Upgrade California	Meetings/Emails/Calls	As Needed
Energy Savings Assistance Program	Meetings/Emails/Calls	As Needed
Middle Income Direct Install Program	Meetings/Emails/Calls	As Needed
Multifamily Home Tune-Up	Meetings/Emails/Calls	As Needed
Multifamily Direct Therm Savings	Meetings/Emails/Calls	As Needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As Needed
Master Servicer*	Data Exchange	Daily
CCSE	Meetings/Emails/Calls	As Needed

\*Coordination occurs after Master Servicer is fully functional

o) Logic Model:



MMMFM = Master-Metered Multifamily OBR = On-Bill Repayment FI = Financial Institution DSR = Debt Service Reserve EE = Energy Efficiency EUC = Energy Upgrade California MF = Multifamily

\* SoCalGas' early release of the MMMFM program will not use credit enhancements and will not include transferability

\*\* Collecting EE financing performance data is an important function of the California Hub for Energy Efficiency Financing (CHEEF)

## 11) Additional Sub-Program Information

### a) Advancing Strategic Plan Goals and Objectives:

As underscored by the California Long Term Energy Efficiency Strategic Plan (the “Strategic Plan”), innovative financing is a major EE strategy for California’s residential sector. Key in the Strategic Plan’s Residential and Low Income section is: “**5. Financing:** Work with the financial community to develop innovative and affordable financing options for [EE] buildings and retrofits” (p. 2-12), a goal directly advanced by this sub-program. Furthermore, this sub-program makes important contributions to the Strategic Plan’s call to:

- Identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “[D]evelop financial products and programs...to encourage demand for energy efficiency building products, home systems and appliances” (strategy #2-4, p. 2-21),
- “Investigate the feasibility of [EE] lending products” and “attention to issues of multi-family housing” (p. 2-21),
- Use EE financing to meet closely related goals, namely HVAC and lighting efficiency.

### b) Leveraging of Resources:

To provide comprehensive services to the eligible multifamily building, including “low cost” or “no cost” tenant measures, the Pilot will integrate with ESAP, MIDI as well as MFEER. In addition, the customer will be guided and encouraged to pursue available incentive programs/assistance from other sources (e.g. water utility). For customers in overlapping IOU service territories, relevant IOUs involved will work together to simplify the overall process from customer’s perspective.

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of the EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot, the rebate/incentive will decrease the total cost of the project that is eligible for credit enhancement funds. For projects in which the customer is receiving a rebate or incentive, in order to receive that benefit, loans will have to comply with IOU rebate and incentive guidelines.<sup>14</sup>

The IOUs’ OBF programs can also be leveraged to provide financing for certain projects and customers that may be a better fit for that program. This could provide customers with a better “EE Financing” experience and boost customer perception of the financing pilots and programs as a whole. Coordination specifics will be developed by IOU program and marketing teams to help guide customers to the right EE financing program for their project. Additionally, the IOUs’ experience in administering the OBF program can be leveraged for best practices and potential pitfalls of EE financing programs.

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<sup>14</sup> For example, the Statewide Customized Retrofit Manual specifies that “new equipment or system retrofit must guarantee energy savings for the effective useful life of the product or for a period of five years, whichever is less.”



c) **Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilots will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, to submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

12) **Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the 10 criteria required for pilot programs.

a. **A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

Financing for energy efficiency projects is not generally available to property owners of affordable housing properties because they do not have sufficient equity to provide collateral. The existence of a debt service reserve fund will make lending to these entities more attractive. The on-bill collections will add some additional convenience for the property owner and is likely to provide the lenders with some additional comfort that the financing charges will be paid by the multi-family housing developer.

b. **Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The MMMF Pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.a, EE financing is a very important pillar of the Strategic Plan's approach, specifically including the multi-family sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "**Customer Incentives** including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

c. **Specific goals, objectives and end points for the project.**

The MMMF Pilot program primary goals are:

- a. Test the value proposition of OBR in multifamily, master-metered, building environment as potential pathway to eventually addressing the “split incentive” dynamic of residential rental properties.
- b. Understand how to better coordinate and streamline the delivery of services across utilities, building auditors, contractors and lenders (create strong value proposition for building owners and tenants).
- c. Gather data to evaluate actual performance of energy efficiency measures in multifamily setting.
- d. New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

The Pilot relies on several innovative design features that have not been extensively tested in California. These include:

- Credit enhancements: Credit enhancements can reduce financing costs, increase the duration of loans, or make credit underwriting terms more flexible than they otherwise would be. The Pilot will enable testing of the effect of credit enhancements on these features.
  - On-Bill repayment: The option for IOUs to offer customer on-bill repayment through the utility bill can add convenience for the customer and improved loan performance for the financial institutions while increase the rate of EE adoption in the master-metered multifamily sector.
  - Integration of financing and incentive programs: This pilot will help test the most effective ways for IOU customer rebate/incentive programs to be integrated effectively with third party financing.
- e. A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See budget in Table 1 and timeline in Section 10.a.

- f. Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Statewide Research Roadmap specifies the mechanism for which energy and demand savings will be determined for the Finance Pilots. In addition, the IOUs are conducting research to develop various requirements of the Pilots including logic models, Program Performance Metrics and related design parameters.

- g. Program performance metrics.**

**Table 16: Program Performance Metrics**

Short-term PPMs:	Measurement Approach	Data Source
PPM 1: Number of loans made	Number of unique loans made should be tracked by the program.	IOUs and/or CHEEF
PPM 2: Number of building owners receiving post-retrofit technical assistance	Number of building owners receiving technical assistance should be tracked by the implementer. The nature of the technical assistance should also be recorded if it varies on a case by case basis. Otherwise, a standardized set of services included in the assistance should be defined.	IOUs and/or implementer

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

**h. Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

**i. A proposed EM&V Plan**

For finance pilot program EM&V plan, please refer to the revised 2013-2014 M&E Long-term Roadmap. This roadmap is being updated by the statewide M&E team and will not be available at the time the IOUs file this PIP.

**j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.d.

**Additional Information Regarding Fast-Track / OBR PIP Requirements in Decision 13-09-044**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the Master-Metered Multifamily Pilot and will be further addressed in CAEATFA's regulations.

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.)

See Table 1 for the portion of the \$8 million allocated by the IOUs to the Master-Metered Multifamily Finance Pilot. As directed, the IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- The CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time the customer is making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions (including lease originators) and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas reference the data protocols (from the final report) in the pilot PIPs since the data fields could differ by pilot (D.13-09-044, Appendix D).

Pursuant to D.13-09-044, the data protocols subject to the WG report were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E. Please also refer to the regulations established by CAEATFA regarding data collection and reporting to implement the WG report. Contractors and FIs should refer to the CHEEF, the selected Master Servicer, and / or the Data Manager regarding any related requirements.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

**Decision 13-09-044, OBR PIPs (Only)**

- The OBR PIP should set credit enhancement guidelines (floor, cap, and spread) to incentivize more favorable financing terms for targeted market sectors (p. 22).

~~Not applicable to MMMF's Credit Enhancement of DSRF~~ See information regarding credit enhancement guidelines in Section 9.a.iii, including the floor and cap.

- OBR program shall include non-residential shut-off in general conformity with Commission-approved shut off protocols to be approved in the OBR tariff (p. 54).

Not applicable to MMMF Pilot.

- The Commission concludes that written consent should be part of the OBR tariff in order to achieve transferability. Property owners and landlords that initially commit to the EE financing and OBR program ("current landlord") and all of the current landlord's tenants responsible for repayment under the OBR program ("current tenants") should be required to give their written consent to abide by the terms and obligations of the OBR program. The written consent of subsequent property owners and landlords and subsequent tenants subject to the OBR program is required in order for the OBR provisions (e.g., transferability, shut-off, etc.) to apply (p. 56).

The optional transferability is applicable to MMMF Pilot and will be further addressed in the OBR tariff. There is no shut-off provision for the MMMF Pilot.

- IOUs are to apply existing OBF practices for application of OBR partial payments and follow Commission-approved disconnection procedures to obtain delinquent payments (p. 56).

The application of existing OBF practices for application of OBR partial payments is applicable to MMMF Pilot and will be further addressed in the OBR tariff. There is no shut-off provision for the MMMF Pilot.

## ATTACHMENT 1

### Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

**i. List the primary SMART<sup>15</sup> non-energy objectives of the program.**

The primary non-energy objectives of the MMMF Pilot are to (i) increase the volume of EE financing to attract capital providers and attract new market participants; (ii) provide a reliable, one-stop mechanism which provides attractive rates and terms for consumers; (iii) a relatively quick turn-around for payments to contractors; and (iv) develop a robust and consistent data set on the energy and financial performance of loans in the multifamily market.

During the 2013-2017 program period, PPM will be collected and evaluated to assess the success of the stated non-energy objectives.

The pilot results will offer useful perspectives on the effectiveness of these approaches, best practices, lessons learned, and expected benefits of expanding the pilots to become full-scale programs.

**ii. For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>16</sup>**

The IOUs do not establish quantitative targets for this Pilot.

**iii. For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

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<sup>15</sup> A SMART objective is one that is **S**pecific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), **M**easurable, **A**mbitious, **R**ealistic, and **T**ime-bound. For example, for a vender training component of an innovative commercial program, two SMART mid-term objectives and one long-term objective might be:

- a) During the period 2013-2014, the number of HVAC installers in the SCE service territory who are able to perform quality installations of energy efficient packaged air conditioners will increase by 20%.
- b) During the period 2013-2014, the number of installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 25%.
- c) By 2020, installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 75%.

<sup>16</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.

iv. **Quantitative program targets (PPMs):**

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for PPMs (refer to 11.g) as pilots are converted into statewide programs. The IOUs do not project quantitative program targets for this Pilot.



**ATTACHMENT D**

**SMALL BUSINESS LOAN PROGRAM**

**PROGRAM IMPLEMENTATION PLAN**

CLEAN PIP

**2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan**

- 1) **Sub-Program Name:** OBR Small Business Loan Pilot
- 2) **Sub-Program ID number:**
  - a. SoCalGas: SCG3789
  - b. SDG&E: SDGE 3301
  - c. SCE: SCE-13-SW-007H
  - d. PG&E: PGE\_210935
- 3) **Type of Sub-Program:**  Core  Third Party  Partnership  Pilot
- 4) **Market sector or segment that this sub-program is designed to serve:**
  - 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)

*Note:* No NAICS codes included because this pilot applies across the full commercial, industrial, and agricultural sectors.
- 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
- 7) **Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC)** TRC  PAC

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for calculating incremental energy savings for the Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information was not yet available to estimate the proposed energy savings. The CPUC has thus

decided to evaluate the energy savings on an *ex post* basis. The Pilot’s TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1. Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>OBR Small Business Loan</b>						
Admin/General Overhead (\$)	\$35,414	\$89,153	\$104,323	TBD	TBD	\$228,890
Direct Implementation (\$)	\$462,264	\$901,726	\$1,116,774	TBD	TBD	\$2,480,764
Credit Enhancements (CE) (\$)	\$0	\$803,717	\$2,444,282	TBD	TBD	\$3,247,999
Marketing & Outreach (\$)*1	\$27,628	\$560,807	\$503,290	TBD	TBD	\$1,091,725
Total Statewide Budget (\$)	\$525,306	\$2,355,403	\$4,168,669	TBD	TBD	\$7,049,378

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs’ proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master Servicer, and d) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENs, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations.

SoCalGas	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$2,631	\$30,568	\$45,738	TBD	TBD	\$78,937
Direct Implementation (\$)	\$30,725	\$149,785	\$254,829	TBD	TBD	\$435,339
Credit Enhancements (CE) (\$)	\$0	\$105,704	\$214,611	TBD	TBD	\$320,315
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,957	\$376,727	\$605,848	TBD	TBD	\$1,016,532

SDG&E	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$11,235	\$22,471	\$22,471	TBD	TBD	\$56,177
Direct Implementation (\$)	\$86,674	\$115,449	\$231,245	TBD	TBD	\$433,368
Credit Enhancements (CE) (\$)	\$0	\$178,269	\$346,052	TBD	TBD	\$524,321
Marketing & Outreach (\$)	\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)	\$97,909	\$423,194	\$706,774	TBD	TBD	\$1,227,877

SCE	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$10,378	\$13,775	\$13,775	TBD	TBD	\$37,928
Direct Implementation (\$)	\$105,606	\$157,974	\$152,182	TBD	TBD	\$415,762
Credit Enhancements (CE) (\$)	\$0	\$46,712	\$923,221	TBD	TBD	\$969,933
Marketing & Outreach (\$)	\$0	\$38,808	\$116,425	TBD	TBD	\$155,233
Total IOU Budget (\$)	\$115,984	\$257,269	\$1,205,603	TBD	TBD	\$1,578,856

PG&E Sub-Program	Program Year					Total
	2013	2014	2015	2016	2017	
Admin/General Overhead (\$)	\$11,170	\$22,339	\$22,339	TBD	TBD	\$55,848
Direct Implementation (\$)	\$239,259	\$478,518	\$478,518	TBD	TBD	\$1,196,295
Credit Enhancements (CE) (\$)	\$0	\$473,032	\$960,398	TBD	TBD	\$1,433,430
Marketing & Outreach (\$)	\$27,027	\$324,324	\$189,189	TBD	TBD	\$540,540
Total IOU Budget (\$)	\$277,456	\$1,298,213	\$1,650,444	TBD	TBD	\$3,226,113

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

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

**i. Financing**

The goal of the On-Bill Repayment (OBR) Small Business Loan Pilot (Pilot) is to test the premise that a small business loan with a credit enhancement and OBR option will increase the number and comprehensiveness of energy efficiency (EE) projects in the small business market segment. Offering loans with an OBR option will test the premise that some loans for small business customers can be more effectively administered through repayment on the IOUs' bills.

The pilot is premised upon the idea that, despite the incentives and general financing options currently available, many customers choose not to engage in EE because the first-cost barrier is still too high. The Pilot will test whether a more attractive loan option can help overcome barriers to financing EE projects.

Pursuant to the Assigned Commissioner's Ruling issued August 25, 2014, the Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the loan terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

**ii. Market Gaps and Means to Address Gaps**

Small business customers often rent/lease their space and can be cash constrained. Although financing tools are already available in the market to customers through several different financial instruments, these existing instruments may not be well-suited to financing for EE for some customers. For example, credit card-based revolving products are convenient and inexpensive to originate but generally come at a high cost to the business owner. Some business owners may have access to lines of credit through their banks, or to other bank-based small business lending products, however, they tend to be used primarily for core business activities such as equipment used in the course of revenue-generating business, and are infrequently used for EE upgrades. Business loans are available to some businesses, but

the size of most EE upgrades – often less than \$50,000 -- are often too small to incent most lenders to offer loans for these types of projects. As a result, these basic finance products tend to add too much cost to an EE project and create a disincentive for customers to do EE upgrades.

The primary goals of the Pilot are:

- a. Test the premise that placing a financing charge on the customer's utility bill through a tariff schedule and that has provisions for utility service disconnection if the financing charge goes unpaid will lead to more capital available at attractive rates and terms than is currently available.
- b. Test the premise that the addition of a financing charge to the utility bill, structured as a tariff, may help to solve the customer-tenant split incentive, in some cases.
- c. Test the effect of a voluntary transfer of the financial obligation from one customer to a successor customer to ascertain whether customers and financial institutions see such transfer as advantageous and use that transferability option. Such transfer would occur with accompanying disclosure to the successor customer and voluntary assent from that successor customer to assume the repayment obligation on the utility bill.
- d. Attract private capital to the EE market for the non-residential customer segment.

iii. Credit Enhancement Mechanism and On-Bill Repayment

The Pilot will provide a credit enhancement and a variety of programmatic supports (contractor networks, marketing, etc.) to attract private capital and to build loan volumes. These credit enhancements are expected to come in the form of a "loan loss reserve" (LLR) of up to 20%, of the total eligible loan value in the portfolio with a \$200,000 cap on credit enhancement value per loan. Details of the credit enhancement structure are to be developed through the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) public rulemaking process. A website link to the final program rulemaking (with detail on the DSRF and other regulations) will be provided herein when available. The Pilot will also be subject to the provisions of the IOUs' approved OBR tariffs.

Ultimately, all of the Finance Program pilots are designed to test the effectiveness of financing and credit enhancements that are integrated with utility incentive programs to enhance customer and financial institution uptake. Additionally, the Pilot will be testing the added value for financial institutions and IOU customers of having an OBR option. The pilot results will offer useful perspectives on the effectiveness of these approaches and on the usefulness of potentially expanding the pilots to become full-scale programs.

Additional information regarding Credit Enhancement guidelines for On-Bill pilots subject to Commission oversight are provided below pursuant to D.13-09-044:

- Per-loan exposure limits: A lender's loss share "should be less than 100%" to encourage FIs to manage risks in lending. The lender's loss recovery per loan is limited to no more than \$200,000 or 90% of the eligible value of any individual loan, whichever is less. CAEATFA will establish the final design of the LLR through its rulemaking, including addressing how the LLR should be reimbursed (e.g., net of late charges, penalty interest, and collection costs incurred in recovery (excluding legal fees)).

In addition, in consultation with the CHEEF, the floor and cap for Credit Enhancements are provided below:

- Credit Enhancement Floor (Percent of Principal Amount): 5%
- Credit Enhancement Cap (Percent of Principal Amount): 20%

iv. Data collection

Pursuant to D.13-09-044, the data protocols subject to the data Working Group (WG) report were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

v. The following are areas of concern for this Pilot:

- *Will financial institutions participate in the pilot?*

This concern has been addressed by reaching out to financial institutions at the development stages of the program to build a program that will be attractive to them.

- *Will customers use the pilot offering?*

It is important to note that this loan Pilot is a market-based financial offering, in contrast to the 0% loans available through the On-Bill Financing (OBF) sub-program. As a result, the Pilot may have less participation than OBF. A credit enhancement to reduce rates and improve terms, broader terms than OBF, and a marketing and outreach campaign that is well integrated with existing IOU rebate/incentive programs and contractor networks, are included to address this issue.



**b) Sub-Program Energy and Demand Objectives**

**Table 2: Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year**

SoCalGas	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Loan Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Loan Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SCE	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Loan Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Loan Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

\* N/A = "not applicable." TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

1. Improve customer satisfaction driven by an increase in capital for energy efficiency projects helping customers overcome the "first cost" key barrier.
2. Improve the credibility of energy efficiency investments and provide economic benefits to the state via increased loan volume through a financing program supported by both Financial Institutions as well as the IOUs.

**d) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

**Table 3: Workpaper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

**10) Program Implementation Details**

**a) Timelines:**

**Table 4: Sub-Program Milestones and Timeline**

*Note:* The expected dates for several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays beyond the IOUs' control.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>2</sup>
Lessor recruitment and contractor training	Ongoing
Trustee, Master Servicer and Data Manager RFPs issued	C + 60
CAEATFA Board Meeting to approve Trustee contract	C + 60
DGS approves Trustee contract	C + 60
CAEATFA Board Meeting to approve Master Servicer and Data Manager contracts	C + 90
Emergency rulemaking process to develop Small Business OBR Loan Pilot rules	C + 120
IOUs submit IT Advice Letter to CPUC	C + 120

<sup>2</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>3</sup>
IOUs complete IT changes *	C + 300
Master Servicer fully interfaced with IOUs (IT changes complete)	C + 300
Small Business OBR Loan pilot launches	C + 330
Mid-Term CPUC Pilot Review <sup>4</sup>	TBD

\* This timeline assumes program development concurrently with IT systems. In the event development activities cannot be done concurrent with IT system development, the schedule would change with first funding occurring in late-2015.

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

**Table 5: Geographic Regions Where the Program Will Operate**

Geographic Region	SDG&E	SCG	SCE	PG&E
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

<sup>3</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>4</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

c) Program Administration

Table 6: 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 other entity
OBR Sm. Bus. Loan Pilot	Program Application Process				CAEATFA
OBR Sm. Bus. Loan Pilot	IOU Incentive Program Participant	X			CAEATFA
OBR Sm. Bus. Loan Pilot	IOU Incentive Program Non-Participants				
OBR Sm. Bus. Loan Pilot	Credit Review			Financial Institutions	
OBR Sm. Bus. Loan Pilot	Loan Origination			Financial Institutions	
OBR Sm. Bus. Loan Pilot	Loan Payments			Financial Institutions	
OBR Sm. Bus. Loan Pilot	Loan Repayment Process	X		Financial Institutions and Master Servicer	
OBR Sm. Bus. Loan Pilot	Credit Enhancements	X			CAEATFA
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 other entity
OBR Sm. Bus. Loan Pilot	Education, & Outreach	TBD		Financial Institutions, CCSE	CAEATFA
OBR Sm. Bus. Loan Pilot	Evaluation, Measurement, & Verification (EM&V)	X			CPUC

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

d) Program Eligibility Requirements:

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

**i. Customers:**

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Small business customer as defined by the Small Business Administration found at 13 C.F.R. 121	X	X	X	X
Project site within utility territory on a non-residential meter/rate	X	X	X	X

**ii. Contractors/Participants:**

**Contractor Eligibility Requirements**

Qualified contractors must hold an active license with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications.

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will be required to provide an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.	X	X	X	X

**Contractor Participation Requirements**

Contractors will be required to provide and document an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.

**iii. Financial Institutions**

Minimum qualifications for FIs are that they: a) possess all required state and federal licenses, and b) are in good standing with regulators. FIs will also be required to conform to pilot program requirements, CE protocols, and data collection and sharing requirements that are identified in the PIP, OBR tariff, and CAEATFA regulations determined through CAEATFA’s public process for developing program regulations.

**Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)**

Financial Institution Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Minimum qualifications for FIs are that they: a) possess all required state and federal licenses, and b) are in good standing with regulators.	X	X	X	X
Additional details on Financial Institution Eligibility requirements will be defined within the scope and evaluation criteria of CAEATFA’s public rulemaking process.	X	X	X	X

**e) Program Partners:**

**a. Program coordination partners:**

- CAEATFA – CAEATFA, acting as the CHEEF, will serve as the manager of the Master Servicer, Data Manager, and Trustee Bank. CAEATFA will establish program regulations that include eligibility criteria for financial institutions, clarification of applicable on-bill repayment requirements and process, and details of the structure of the credit enhancement available through this pilot.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Trustee Bank to hold credit enhancement funds allocated to this pilot program.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Data Manager to aggregate data from the Finance Program pilots and prepare it for public consumption and program evaluation.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Master Servicer (MS). The MS will (1) collect and transmit funds and data between the IOUs, trustee, and financial

institutions/capital providers; and (2) collect pilot data and store it for use by the Data Manager and FIs.

- The FIs will fund and service financial instruments, which may include loans, leases, service agreement or other instruments as approved. The FIs may include the following types of entities.
  - Commercial banks that currently fund commercial loans, and that may be attracted by the tie between the utility bill and repayment of their commercial loan. Some commercial banks may also be attracted by the voluntary transferability feature.
  - Credit unions – non-profit financial institutions that exist for the benefit of their members.
  - Community Development Financial Institutions (CDFIs) or other similar non-profit financing entities that specialize in energy efficiency financing.

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

- Contractors – Various types of contractors may participate in the program including: HVAC, insulation, mechanical, electrical, and plumbing. The contractor will propose a scope of work to a business owner, and will provide payment options including financing. The IOUs will leverage existing channels working with contractor partners.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and will review financing programs for their contractor customers. Distributors are expected to be supportive of credit enhanced, state-wide loan financing and will be helpful in promoting the pilot.
- Financial Institutions – Financial Institutions will be providing the loans for small businesses to finance their projects. A wide variety of financial institutions are expected to participate in the Pilot, including national and local banks, as well as vendors offering financing for their products.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure that the marketing of financial products is done in coordination with the Energy Upgrade California statewide marketing brand campaign.
- Real Estate Professionals – Given the unique nature of on-bill pilots, input from real estate professionals may be incorporated into pilot design and execution. The IOUs held a session with real estate professionals to learn about the unique needs of the industry in the non-residential sector and identified multiple areas of opportunity to enhance the on bill pilots. This may include additional information on projects being provided (e.g. amortization tables), creating educational materials that explain how measures (technical) translate into financial savings, and helping develop

language that communicates the value of EE measures to subsequent buyers or renters.

**Table 10: Program coordination Partners**

Coordination Partner Information	PG&E	SCE	SDG&E	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Financial Institutions	X	X	X	X
Real Estate Professionals	X	X	X	X
CCSE	X	X	X	X

**f) Measures and incentive levels:**

Eligible Measures can consist of EEEMs and may include Non-EEEMs, each of which are both defined herein.

EEEMs are measures that have been approved by the Commission for a utility's EE rebate / incentive program, although the customer need not receive an incentive or rebate to qualify for the loan. EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Per existing rebate programs, allowable EEEMs costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and labor on a per measure basis. EEEMs projects costs should not include activities unrelated to the installation of energy efficiency measures. Labor costs can be contractor or in-house if proof of direct project hours and costs are provided.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-business/energy-savings/>  
 and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>

SCE – <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>

SDG&E – <http://www.sdge.com/sites/default/files/documents/981587305/Targeted%20Basic%20Measures%20-%20Energy%20Efficiency%20Business%20Incentives%20and%20Rebates.xls?nid=4326>

PG&E – <http://www.pge.com/eef>



Broad guidelines regarding the inclusion of EEEMs and non-EEEMs were determined by D.13-09-044 (at page 31), as follows:

“We find that customers may be more likely to add EE projects while undertaking other improvement activities. Therefore, for purposes of the pilot period, the Commission finds it reasonable and adopts a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to Eligible EE Measures (EEEMs). Therefore, financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.”

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Per D.13-09-044, Conclusion of Law 56, the total loan value eligible for a credit enhancement will be limited to the total project cost net of any utility rebates and incentives received for the project.

In situations where a customer is served by multiple IOUs, refer to the OBR tariff for details on how billing will be treated.

**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The categories shown in Table 11 do not apply to the broad grouping of EEEMs and non-EEEMs. Please refer to the IOU EEEMs lists at the company website addresses provided above.

**g) Additional Services:**

The Pilot will include a series of additional services. These additional services, where related to marketing and outreach, will be coordinated with Statewide ME&O.

- Outreach, education and training for customers, contractors and real estate professionals will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lender training: The education and outreach component of the Pilot will include training events and materials for financial institutions and lenders that will assist them in participating in this Pilot. The education and outreach will assist financial institutions with the understanding of the potential market, benefits and drawbacks of on-bill repayment, EE investments, projects QA/QC requirements, and data on loan performance. Additional information on lender training plans will be provided in the CHEEF PIP.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Customer education	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Contractor education	Contractors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Lender education	Lenders	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Real estate professional education	Real Estate Professionals	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan

\*CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

<b>Activity</b>	<b>Estimated Timing</b>
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging financial institutions, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

- b. Indicate if pre and/or post implementation audits will be required for the sub-program. \_\_\_ Yes \_\_\_ No (See note.)  
 Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)  
 Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

- 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).

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process.

**Table 13: Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Auditing requirements and funding are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Customer

**k) Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

**Table 14: Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

**l) Sub-program Delivery Method and Measure Installation /Marketing or Training:**

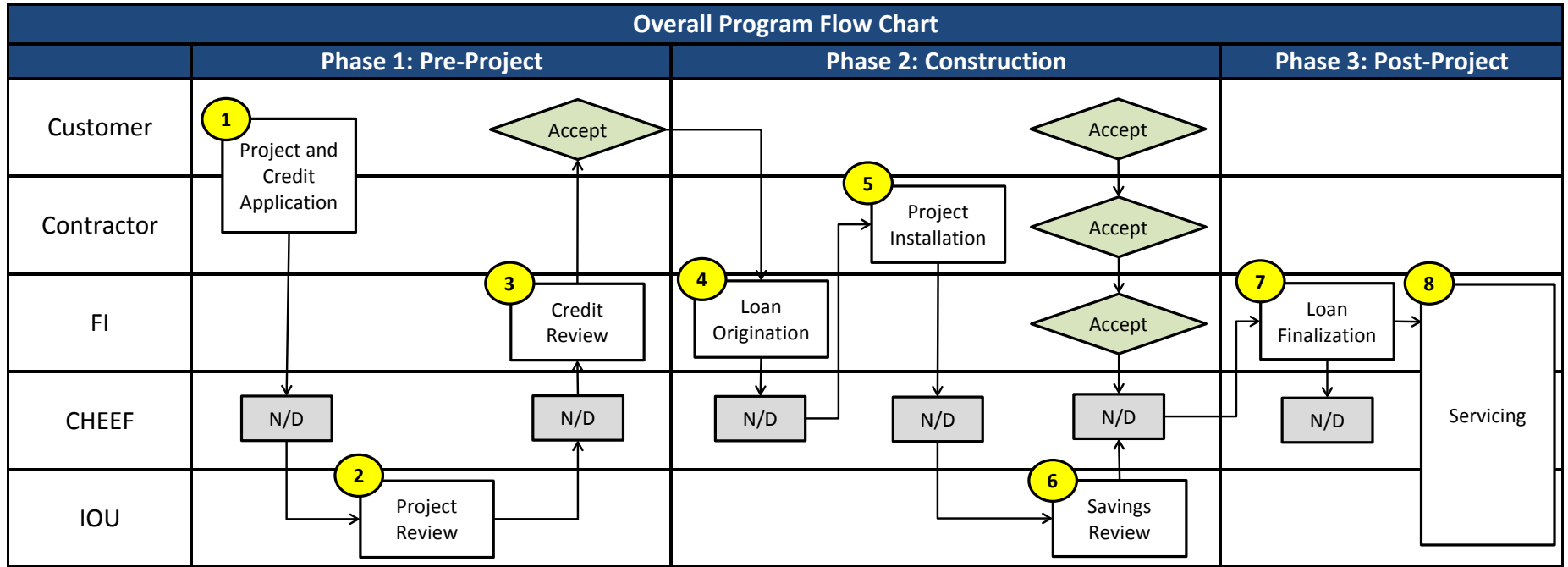
The following sequence illustrates how this program will be delivered to customers.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor training.
3. IOU Customer Relationship Manager (CRM)/Contractor and customer meet, driven by IOU/contractor marketing or customer inquiry.
4. CRM/Contractor interviews customer, collects site information (possibly including results of energy audit).
5. Contractor proposes a project scope, estimated cost, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including the loan.
6. Customer makes loan and payment decision.
7. If customer selects loan option, CRM/contractor collects application information and provides to financial institution.
8. Financial Institution collects application information from customer, makes underwriting decision and informs customer and/or contractor.
9. Customer executes loan agreement.
10. Contractor installs improvements.
11. Customer signs completion certificate.

12. IOU performs inspection (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
13. Financial institution receives completion certificate and other required documents.
14. Financial institution funds contractor.
15. Financial institution provides appropriate documentation to CAEATFA.
16. CAEATFA directs trustee to transfer credit enhancement from IOU account to financial institution's account at the trustee.
17. Master Servicer transmits loan information to IOU.
18. IOU verifies customer data transmitted by Master Servicer.
19. IOU places loan on customer's bill and begins OBR collection process

**m) Sub-program Process Flow Chart:**

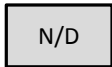
The flowchart below illustrates the process flow for how the loan pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.



Key



**Stage Indicator** = Designates Process Flow Stage



**Notify/Data** = CHEEF notified of Stage completion and data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**

IOU financing programs will leverage the existing incentive and rebate programs.

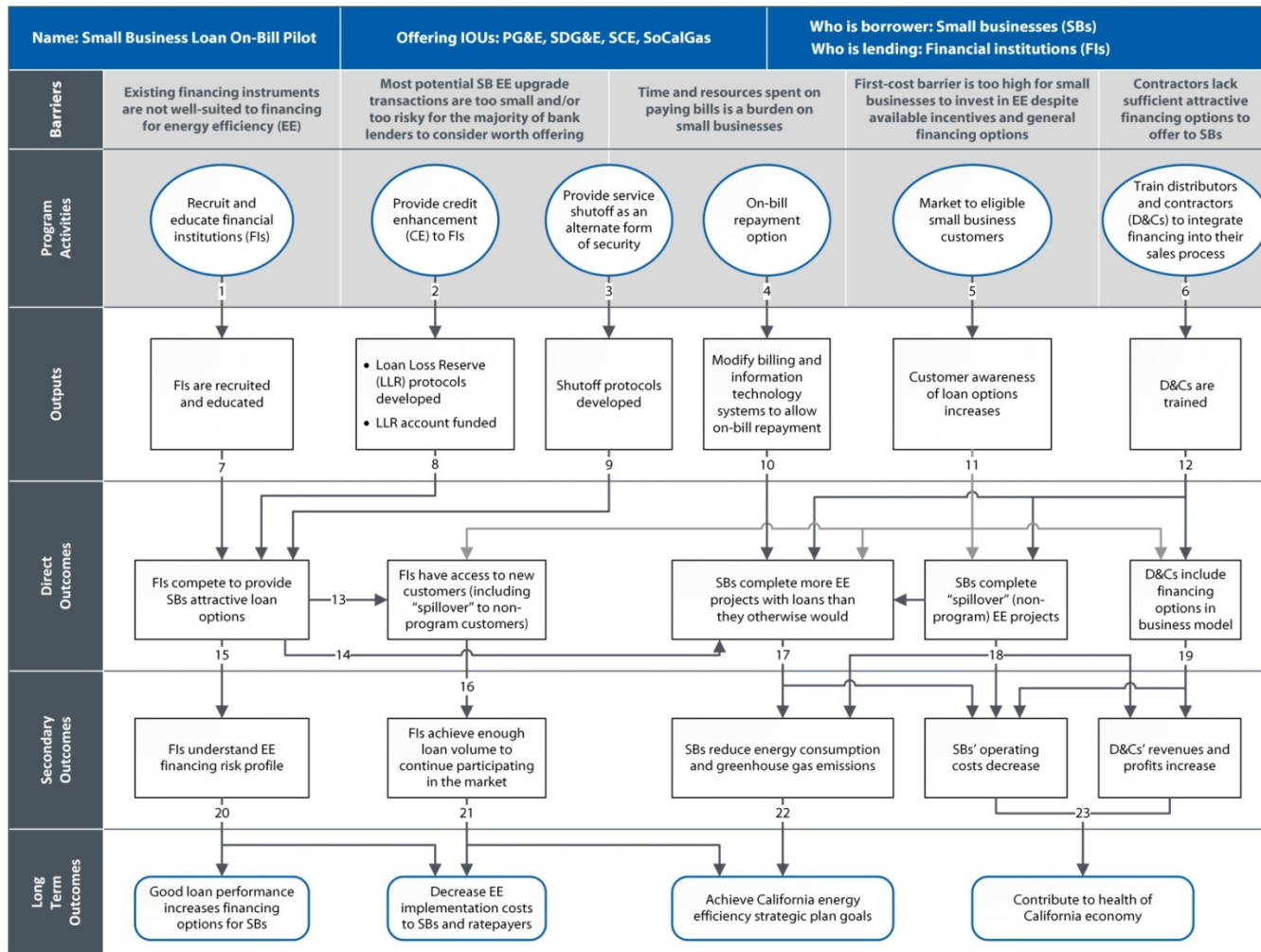
**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>OBR Small Business Loan Pilot</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Statewide Commercial, Industrial, and Agriculture Programs	Meetings/Emails/Calls	As Needed
Emerging Technology	Meetings/Emails/Calls	As Needed
Third Party Programs	Meetings/Emails/Calls	As Needed
Institutional Partnerships	Meetings/Emails/Calls	As Needed
Local Government Partnerships	Meetings/Emails/Calls	As Needed
On Bill Financing	Meetings/Emails/Calls	As Needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As Needed
Master Servicer *	Data Exchange	Daily
CCSE	Meetings/Emails/Calls	As Needed

Note: Coordination will not occur until Master Servicer is fully functional.



o) Logic Model:



SB = Small Business D&Cs = Distributors and Contractors FI = Financial Institution CE = Credit Enhancement LLR = Loan Loss Reserve EE = Energy Efficiency

## 11) Additional Sub-Program Information

### a) Advancing Strategic Plan Goals and Objectives:

Innovative financing is a major Strategic Plan strategy for non-residential sectors. One key commercial sector strategy in the Strategic Plan is “Financing: Target financing ...[including] increased availability and use of innovative and expanded financing...” (p. 3-29), which is directly advanced by this sub-program. Furthermore, this sub-program contributes to the Strategic Plan’s call to:

- “ensure access to financing mechanisms that effectively surmount capital limitations and cash flow requirements. This means attracting the interest of banking and capital industries to the magnitude of investment and borrowing needs, and identifying finance mechanisms...” (p. 3-35)
- identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “pilot innovative financial tools [and e]xpand implementation of innovative financing mechanisms” (strategy #1-4, p. 3-32),
- “Develop effective financial tools for EE improvements to existing buildings” (strategy #2-6, p. 3-34)
- Use financing for closely related goals, HVAC and lighting.

### b) Leveraging of Resources:

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of the EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot, the rebate/incentive will decrease the total cost of the project that is eligible for credit enhancement funds.

The Pilot will leverage current small business loan programs offered by a multitude of financial institutions. This program will build on a mature small business loan market that has extensive experience in providing loans to small businesses. This program will provide a credit enhancement to leverage this current market and expand it to currently underutilized EE projects.

The IOUs’ OBF programs can also be leveraged to provide financing for certain projects and customers that may be a better fit for that program. This could provide customers with a better “EE Financing” experience and boost customer perception of the financing pilots and programs as a whole. Coordination specifics will be developed by IOU program and marketing teams to help guide customers to the right EE financing program for their project. Additionally, the IOUs’ experience in administering the OBF program can be leveraged for best practices and potential pitfalls of EE financing programs.

c) **Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilots will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

12) **Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the 10 criteria required for pilot programs.

a. **A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

The Pilot seeks to overcome the first-cost barrier of implementing EE improvements in the non-residential market and to increase overall energy savings from EE. Current IOU-based programs rely on a rebate structure to pay a portion of the cost of the EE upgrade. Financing pilots, on the other hand, cover 100% of the initial cost of the upgrade, net of any applicable rebates, and subject to repayment. As a result, it is anticipated customers who do not otherwise have the capital readily available will be able to use loan financing to pay for EE upgrades.

b. **Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.a., EE financing is a very important pillar of the Strategic Plan's approach, specifically including the non-residential sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "*Customer Incentives* including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

c. **Specific goals, objectives and end points for the project.**

The Pilot program seeks to:

- a. Stimulate financial institutions to provide capital to EE upgrade markets in the small business market segment.
- b. Lead to incremental energy savings from EE projects in the small business market segment.
- c. Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates.
- d. Stimulate additional EE projects through the availability of capital to cover the full cost of such upgrades.
- e. Additionally, the Pilot will be testing the added value for financial institutions of having an OBR option.

Further details of the credit enhancement structure will be developed through CAEATFA regulations.

- d. **New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

This Pilot will test how effective financing will be at stimulating either more comprehensive EE projects or a greater number of EE projects. Furthermore, the Pilot provides mechanisms to test specific elements of financing such as the effect of lowering the costs through lower loan payments, on-bill repayment, and differing levels of contractor engagement in the financing process.

The Pilot relies on several innovative design features that have not been extensively tested in California. These include:

- Credit enhancements: Credit enhancements can reduce financing costs, increase the duration of loans, or make credit underwriting terms more flexible than they otherwise would be. The Pilot will enable testing of the effect of credit enhancements on these features.
  - On-Bill Repayment for 3<sup>rd</sup> Parties: The option for financial institutions to offer customer on-bill repayment through the utility bill can add increased security for loan providers due to the shut off for non-payment provision. This option can also reduce the time requirements faced by small businesses in paying bills.
  - Integration of financing and incentive programs: This pilot will help test the most effective ways for IOU customer rebate/incentive programs to be integrated effectively with third party financing.
- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See Table 1 and Section 10.a.

**f. Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Financing Evaluation Research Plan includes a “Market Characterization” project that is managed by the Energy Division and expected to be fielded early in the program cycle.

**g. Program performance metrics.**

**Table 16: Program Performance Metrics**

Short-Term PPMs:	IOU Target	Metric Type
PPM 1: Loan transaction volume (dollar amount and number of loan) by IOU	Track and report total dollar amount of loan transactions completed (Decision, p. 62)	2a
PPM 2: End-use categories (HVAC, lighting, etc.) of measures installed through pilot	Track and report end use for each program measure and group end uses by category	2a

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

**h. Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

**i. A proposed Evaluation, Measurement, and Verification (EM&V) plan.**

For finance pilot program EM&V plan, please refer to the revised 2013-2014 M&E Long-term Roadmap. This roadmap is being updated by the statewide M&E team and will not be available at the time IOUs file this PIP.

**j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.e.

**Decision 13-09-044, Fast-Track / OBR PIPs**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the OBR Small Business Loan Pilot and will be further addressed in CAEATFA's regulations.

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.)

See Table 1 for the portion of the \$8 million allocated by the IOUs to the OBR Small Business Loan Pilot. The IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- The CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time they are making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions (including loan originators) and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas to reference the data protocols (from the final report) in the pilot PIPs since the data fields could differ by pilot (Appendix D).

This is addressed in Section 9.a.iv. Pursuant to D.13-09-044, the data protocols subject to the WG report are incorporated by reference to that report, which is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: CalEEFinance.com.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

**Decision 13-09-044, OBR PIPs (Only)**

- The OBR PIP should set credit enhancement guidelines (floor, cap, spread) to incentivize more favorable financing terms for targeted market sectors (p. 22).

See section 9.c. for discussion of credit enhancements for this pilot.

- OBR program shall include non-residential shut-off in general conformity with Commission-approved shut off protocols to be approved in the OBR tariff (p. 54).

This requirement will apply to the OBR Small Business Loan Pilot and is addressed in the OBR tariff.

- The Commission concludes that written consent should be part of the OBR tariff in order to achieve transferability. Property owners and landlords that initially commit to the EE financing and OBR program (“current landlord”) and all of the current landlord’s tenants responsible for repayment under the OBR program (“current tenants”) should be required to give their written consent to abide by the terms and obligations of the OBR program. The written consent of subsequent property owners and landlords and subsequent tenants subject to the OBR program is required in order for the OBR provisions (e.g., transferability, shut-off, etc.) to apply (p. 56).

This requirement will apply to the OBR Small Business Loan Pilot and is addressed in the OBR tariff.

- IOUs are to apply existing OBF practices for application of OBR partial payments and follow Commission-approved disconnection procedures to obtain delinquent payments (p. 56).

This requirement will apply to the OBR Small Business Loan Pilot and is addressed in the OBR tariff.

## ATTACHMENT 1

### Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>5</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

Test the premise that a loan with a credit enhancement and OBR option will drive increased uptake of energy efficiency (EE) projects in the small business market segment. Credit enhancement aim to lower financial institutions risks in entering an asset class that does not have a lot of historical data. The OBR option's aim is to simplify the bill paying process for small businesses and provide financial institutions with the added security of Shut-off On Non-Payment.

Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates. Private capital in the EE loan market can help overcome the up-front cost barrier in a way that limited ratepayer funds are unable to.

Decrease EE implementation costs for small businesses by providing a way for financial institutions to get a better understanding of the EE loan risk profile and to achieve enough loan volume to interest financial institutions to continue participating in the market. Creating a long term, standardized, and low cost EE loan instrument can help overcome the up-front cost and time barrier for small businesses.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>6</sup>**

The IOUs do not establish quantitative targets for this Pilot.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

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<sup>5</sup> A SMART objective is one that is Specific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), Measurable, Ambitious, Realistic, and Time-bound.

<sup>6</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.



Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs. The IOUs do not establish quantitative targets for this Pilot.

REDLINE PIP

2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan

- 1) Sub-Program Name: OBR Small Business Loan Pilot
- 2) Sub-Program ID number:
  - a. SoCalGas: SCG3789
  - b. SDG&E: SDGE 3301
  - c. SCE: SCE-13-SW-007H
  - d. PG&E: PGE\_210935
- 3) Type of Sub-Program:  Core  Third Party  Partnership  Pilot
- 4) Market sector or segment that this sub-program is designed to serve:
  - 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)

*Note:* No NAICS codes included because this pilot applies across the full commercial, industrial, and agricultural sectors.
- 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
- 7) Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC) TRC  PAC

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for calculating incremental energy savings for the Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information was not yet available to estimate the proposed energy savings. The CPUC has thus

decided to evaluate the energy savings on an *ex post* basis. The Pilot’s TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1. Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>OBR Small Business Loan</b>						
Admin/General Overhead (\$)	\$35,414	\$89,153	\$104,323	TBD	TBD	\$228,890
Direct Implementation (\$)	\$462,264	\$901,726	\$1,116,774	TBD	TBD	\$2,480,764
Credit Enhancements (CE) (\$)	\$0	\$803,717	\$2,444,282	TBD	TBD	\$3,247,999
Marketing & Outreach (\$)*1	\$27,628	\$560,807	\$503,290	TBD	TBD	\$1,091,725
Total Statewide Budget (\$)	\$525,306	\$2,355,403	\$4,168,669	TBD	TBD	\$7,049,378

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs’ proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - o Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master Servicer, and ed) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENs, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations~~b) leveraging existing and developing new contractor networks in conjunction with the CHEEF, c) coordinating training of internal and external stakeholders with CAEATFA and other parties, d) integration of financing with existing programs, reacting to market conditions, monitoring of program progress and addressing implementation issues, e) on-going support to Billing, IT, and Call Center operations, and f) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account processing, Energy Auditors for projects not participating in rebates/incentives programs, and multifamily audits/technical assistance.~~

SoCalGas	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$2,631	\$30,568	\$45,738	TBD	TBD	\$78,937
Direct Implementation (\$)	\$30,725	\$149,785	\$254,829	TBD	TBD	\$435,339
Credit Enhancements (CE) (\$)	\$0	\$105,704	\$214,611	TBD	TBD	\$320,315
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,957	\$376,727	\$605,848	TBD	TBD	\$1,016,532

SDG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$11,235	\$22,471	\$22,471	TBD	TBD	\$56,177
Direct Implementation (\$)	\$86,674	\$115,449	\$231,245	TBD	TBD	\$433,368
Credit Enhancements (CE) (\$)	\$0	\$178,269	\$346,052	TBD	TBD	\$524,321
Marketing & Outreach (\$)	\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)	\$97,909	\$423,194	\$706,774	TBD	TBD	\$1,227,877

SCE	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$10,378	\$13,775	\$13,775	TBD	TBD	\$37,928
Direct Implementation (\$)	\$105,606	\$157,974	\$152,182	TBD	TBD	\$415,762
Credit Enhancements (CE) (\$)	\$0	\$46,712	\$923,221	TBD	TBD	\$969,933
Marketing & Outreach (\$)	\$0	\$38,808	\$116,425	TBD	TBD	\$155,233

Total IOU Budget (\$)	\$115,984	\$257,269	\$1,205,603	TBD	TBD	\$1,578,856
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PG&E Sub-Program	Program Year					Total
	2013	2014	2015	2016	2017	
Admin/General Overhead (\$)	\$11,170	\$22,339	\$22,339	TBD	TBD	\$55,848
Direct Implementation (\$)	\$239,259	\$478,518	\$478,518	TBD	TBD	\$1,196,295
Credit Enhancements (CE) (\$)	\$0	\$473,032	\$960,398	TBD	TBD	\$1,433,430
Marketing & Outreach (\$)	\$27,027	\$324,324	\$189,189	TBD	TBD	\$540,540
Total IOU Budget (\$)	\$277,456	\$1,298,213	\$1,650,444	TBD	TBD	\$3,226,113

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

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

**i. Financing**

The goal of the On-Bill Repayment (OBR) Small Business Loan Pilot (Pilot) is to test the premise that a small business loan with a credit enhancement and OBR option will increase the number and comprehensiveness of energy efficiency (EE) projects in the small business market segment. Offering loans with an OBR option will test the premise that some loans for small business customers can be more effectively administered through repayment on the IOUs' bills.

The pilot is premised upon the idea that, despite the incentives and general financing options currently available, many customers choose not to engage in EE because the first-cost barrier is still too high. The Pilot will test whether a more attractive loan option can help overcome barriers to financing EE projects.

Pursuant to the Assigned Commissioner's Ruling issued August 25, 2014, the Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the loan terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

**ii. Market Gaps and Means to Address Gaps**

Small business customers often rent/lease their space and can be cash constrained. Although financing tools are already available in the market to customers through several different financial instruments, these existing instruments may not be well-suited to financing for EE for some customers. For example, credit card-based revolving products are convenient and inexpensive to originate but generally come at a high cost to the business owner. Some business owners may have access to lines of credit through their banks, or to other bank-based small business lending products, however, they tend to be used primarily for core business activities such as equipment used in the course of revenue-generating business, and are infrequently used for EE upgrades. Business loans are available to some businesses, but

the size of most EE upgrades – often less than \$50,000 -- are often too small to incent most lenders to offer loans for these types of projects. As a result, these basic finance products tend to add too much cost to an EE project and create a disincentive for customers to do EE upgrades.

The primary goals of the Pilot are:

- a. Test the premise that placing a financing charge on the customer's utility bill through a tariff schedule and that has provisions for utility service disconnection if the financing charge goes unpaid will lead to more capital available at attractive rates and terms than is currently available.
- b. Test the premise that the addition of a financing charge to the utility bill, structured as a tariff, may help to solve the customer-tenant split incentive, in some cases.
- c. Test the effect of a voluntary transfer of the financial obligation from one customer to a successor customer to ascertain whether customers and financial institutions see such transfer as advantageous and use that transferability option. Such transfer would occur with accompanying disclosure to the successor customer and voluntary assent from that successor customer to assume the repayment obligation on the utility bill.
- d. Attract private capital to the EE market for the non-residential customer segment.

iii. Credit Enhancement Mechanism and On-Bill Repayment

The Pilot will provide a credit enhancement and a variety of programmatic supports (contractor networks, marketing, etc.) to attract private capital and to build loan volumes. These credit enhancements are expected to come in the form of a "loan loss reserve" (LLR) of up to 20%, of the total eligible loan value in the portfolio with a \$200,000 cap on credit enhancement value per loan. Details of the credit enhancement structure are to be developed through the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) public rulemaking process. [A website link to the final program rulemaking \(with detail on the DSRF and other regulations\) will be provided herein when available.](#) The Pilot will also be subject to the provisions of the IOUs' approved OBR tariffs.

Ultimately, all of the Finance Program pilots are designed to test the effectiveness of financing and credit enhancements that are integrated with utility incentive programs to enhance customer and financial institution uptake. Additionally, the Pilot will be testing the added value for financial institutions and IOU customers of having an OBR option. The pilot results will offer useful perspectives on the effectiveness of these approaches and on the usefulness of potentially expanding the pilots to become full-scale programs.

[Additional information regarding Credit Enhancement guidelines for On-Bill pilots subject to Commission oversight are provided below pursuant to D.13-09-044:](#)



- Per-loan exposure limits: A lender's loss share "should be less than 100%" to encourage FIs to manage risks in lending. The lender's loss recovery per loan is limited to no more than \$200,000 or 90% of the eligible value of any individual loan, whichever is less. CAEATFA will establish the final design of the LLR through its rulemaking, including addressing how the LLR should be reimbursed (e.g., net of late charges, penalty interest, and collection costs incurred in recovery (excluding legal fees)).

In addition, in consultation with the CHEEF, the floor and cap for Credit Enhancements are provided below:

- Credit Enhancement Floor (Percent of Principal Amount): 5%
- Credit Enhancement Cap (Percent of Principal Amount): 20%

iv. Data collection

Pursuant to D.13-09-044, the data protocols subject to the data Working Group (WG) report were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

v. The following are areas of concern for this Pilot:

- *Will financial institutions participate in the pilot?*

This concern has been addressed by reaching out to financial institutions at the development stages of the program to build a program that will be attractive to them.

- *Will customers use the pilot offering?*

It is important to note that this loan Pilot is a market-based financial offering, in contrast to the 0% loans available through the On-Bill Financing (OBF) sub-program. As a result, the Pilot may have less participation than OBF. A credit enhancement to reduce rates and improve terms, broader terms than OBF, and a marketing and outreach campaign that is well integrated with existing IOU rebate/incentive programs and contractor networks, are included to address this issue.

**b) Sub-Program Energy and Demand Objectives**

**Table 2: Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year**

SoCalGas	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Loan Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Loan Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SCE	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Loan Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Loan Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

\* N/A = "not applicable." TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

1. Improve customer satisfaction driven by an increase in capital for energy efficiency projects helping customers overcome the "first cost" key barrier.
2. Improve the credibility of energy efficiency investments and provide economic benefits to the state via increased loan volume through a financing program supported by both Financial Institutions as well as the IOUs.

**d) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

**Table 3: Workpaper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

10) Program Implementation Details

a) Timelines:

Table 4: Sub-Program Milestones and Timeline

**Note:** The expected dates for several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays beyond the IOUs' control.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>2</sup>
Lessor recruitment and contractor training	Ongoing
Trustee, Master Servicer and Data Manager RFPs issued	C + 60
CAEATFA Board Meeting to approve Trustee contract	C + 60
DGS approves Trustee contract	C + 60
CAEATFA Board Meeting to approve Master Servicer and Data Manager contracts	C + 90
Emergency rulemaking process to develop Small Business OBR Loan Pilot rules	C + 120
IOUs submit IT Advice Letter to CPUC	C + 120

<sup>2</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<u>Milestone</u>	<u>Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C)<sup>3</sup></u>
IOUs complete IT changes *	C + 300
Master Servicer fully interfaced with IOUs (IT changes complete)	C + 300
Small Business OBR Loan pilot launches	C + 330
Mid-Term CPUC Pilot Review <sup>4</sup>	TBD

\* This timeline assumes program development concurrently with IT systems. In the event development activities cannot be done concurrent with IT system development, the schedule would change with first funding occurring in late-2015.

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

<sup>3</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>4</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

**Table 5: Geographic Regions Where the Program Will Operate**

<b>Geographic Region</b>	<b>SDG&amp;E</b>	<b>SCG</b>	<b>SCE</b>	<b>PG&amp;E</b>
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

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**c) Program Administration**

**Table 6: 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 other entity
OBR Sm. Bus. Loan Pilot	Program Application Process				CAEATFA
OBR Sm. Bus. Loan Pilot	IOU Incentive Program Participant	X			CAEATFA
OBR Sm. Bus. Loan Pilot	IOU Incentive Program Non-Participants				
OBR Sm. Bus. Loan Pilot	Credit Review			Financial Institutions	
OBR Sm. Bus. Loan Pilot	Loan Origination			Financial Institutions	
OBR Sm. Bus. Loan Pilot	Loan Payments			Financial Institutions	
OBR Sm. Bus. Loan Pilot	Loan Repayment Process	X		Financial Institutions and Master Servicer	
OBR Sm. Bus. Loan Pilot	Credit Enhancements	X			CAEATFA
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 other entity
OBR Sm. Bus. Loan Pilot	Education, & Outreach	TBD		Financial Institutions, CCSE	CAEATFA
OBR Sm. Bus. Loan Pilot	Evaluation, Measurement, & Verification (EM&V)	X			CPUC

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**d) Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

**i. Customers:**

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Small business customer as defined by the Small Business Administration found at 13 C.F.R. 121	X	X	X	X
Project site within utility territory on a non-residential meter/rate	X	X	X	X

**ii. Contractors/Participants:**

**Contractor Eligibility Requirements**

Qualified contractors must hold an active license with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications.



**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will be required to provide an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.	X	X	X	X

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**Contractor Participation Requirements**

Contractors will be required to provide and document an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.

**iii. Financial Institutions**

Minimum qualifications for FIs are that they: a) possess all required state and federal licenses, and b) are in good standing with regulators. FIs will also be required to conform to pilot program requirements, CE protocols, and data collection and sharing requirements that are identified in the PIP, OBR tariff, and CAEATFA regulations determined through CAEATFA’s public process for developing program regulations.

**Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)**

<b>Financial Institution Eligibility Requirement (list of requirements)</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Minimum qualifications for FIs are that they: a) possess all required state and federal licenses, and b) are in good standing with regulators.	X	X	X	X
Additional details on Financial Institution Eligibility requirements will be defined within the scope and evaluation criteria of CAEATFA’s public rulemaking process.	X	X	X	X

e) **Program Partners:**

a. **Program coordination partners:**

- CAEATFA – CAEATFA, acting as the CHEEF, will serve as the manager of the Master Servicer, Data Manager, and Trustee Bank. CAEATFA will establish program regulations that include eligibility criteria for financial institutions, clarification of applicable on-bill repayment requirements and process, and details of the structure of the credit enhancement available through this pilot.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Trustee Bank to hold credit enhancement funds allocated to this pilot program.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Data Manager to aggregate data from the Finance Program pilots and prepare it for public consumption and program evaluation.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Master Servicer (MS). The MS will (1) collect and transmit funds and data between the IOUs, trustee, and financial institutions/capital providers; and (2) collect pilot data and store it for use by the Data Manager and FIs.
- The FIs will fund and service financial instruments, which may include loans, leases, service agreement or other instruments as approved. The FIs may include the following types of entities.
  - Commercial banks that currently fund commercial loans, and that may be attracted by the tie between the utility bill and repayment of their commercial loan. Some commercial banks may also be attracted by the voluntary transferability feature.
  - Credit unions – non-profit financial institutions that exist for the benefit of their members.
  - Community Development Financial Institutions (CDFIs) or other similar non-profit financing entities that specialize in energy efficiency financing.

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

- **Contractors** – Various types of contractors may participate in the program including: HVAC, insulation, mechanical, electrical, and plumbing. The contractor will propose a scope of work to a business owner, and will provide payment options including financing. The IOUs will leverage existing channels working with contractor partners.
- **Distributors** – Contractors acquire products from manufacturers through distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools to contractors.

Distributors are knowledgeable about financing and will review financing programs for their contractor customers. Distributors are expected to be supportive of credit enhanced, state-wide loan financing and will be helpful in promoting the pilot.

- Financial Institutions – Financial Institutions will be providing the loans for small businesses to finance their projects. A wide variety of financial institutions are expected to participate in the Pilot, including national and local banks, as well as vendors offering financing for their products.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure that the marketing of financial products is done in coordination with the Energy Upgrade California statewide marketing brand campaign.
- Real Estate Professionals – Given the unique nature of on-bill pilots, input from real estate professionals may be incorporated into pilot design and execution. The IOUs held a session with real estate professionals to learn about the unique needs of the industry in the non-residential sector and identified multiple areas of opportunity to enhance the on bill pilots. This may include additional information on projects being provided (e.g. amortization tables), creating educational materials that explain how measures (technical) translate into financial savings, and helping develop language that communicates the value of EE measures to subsequent buyers or renters.

**Table 10: Program coordination Partners**

Coordination Partner Information	PG&E	SCE	SDG&E	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Financial Institutions	X	X	X	X
Real Estate Professionals	X	X	X	X
CCSE	X	X	X	X

**f) Measures and incentive levels:**

Eligible Measures can consist of EEEMs and may include Non-EEEMs, each of which are both defined herein.

EEEMs are measures that have been approved by the Commission for a utility's EE rebate / incentive program, although the customer need not receive an incentive or rebate to qualify for the loan. EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Per existing rebate programs, allowable EEEMs costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and

labor on a per measure basis. EEEMs projects costs should not include activities unrelated to the installation of energy efficiency measures. Labor costs can be contractor or in-house if proof of direct project hours and costs are provided.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-business/energy-savings/>  
and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>

SCE – <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>

SDG&E –  
<http://www.sdge.com/sites/default/files/documents/981587305/Targeted%20Basic%20Measures%20-%20Energy%20Efficiency%20Business%20Incentives%20and%20Rebates.xls?nid=4326>

PG&E – <http://www.pge.com/eef>

Broad guidelines regarding the inclusion of EEEMs and non-EEEMs were determined by D.13-09-044 (at page 31), as follows:

“We find that customers may be more likely to add EE projects while undertaking other improvement activities. Therefore, for purposes of the pilot period, the Commission finds it reasonable and adopts a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to Eligible EE Measures (EEEMs). Therefore, financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.”

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Per D.13-09-044, Conclusion of Law 56, the total loan value eligible for a credit enhancement will be limited to the total project cost net of any utility rebates and incentives received for the project.

In situations where a customer is served by multiple IOUs, refer to the OBR tariff for details on how billing will be treated.

**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The categories shown in Table 11 do not apply to the broad grouping of EEEMs and non-EEEMs. Please refer to the IOU EEEMs lists at the company website addresses provided above.

**g) Additional Services:**

The Pilot will include a series of additional services. These additional services, where related to marketing and outreach, will be coordinated with Statewide ME&O.

- Outreach, education and training for customers, contractors and real estate professionals will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lender training: The education and outreach component of the Pilot will include training events and materials for financial institutions and lenders that will assist them in participating in this Pilot. The education and outreach will assist financial institutions with the understanding of the potential market, benefits and drawbacks of on-bill repayment, EE investments, projects QA/QC requirements, and data on loan performance. Additional information on lender training plans will be provided in the CHEEF PIP.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Customer education	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Contractor education	Contractors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Lender education	Lenders	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Real estate professional education	Real Estate Professionals	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan

\*CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

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**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

<b>Activity</b>	<b>Estimated Timing</b>
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging financial institutions, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

- b. Indicate if pre and/or post implementation audits will be required for the sub-program.  Yes  No (See note.)  
 Pre-implementation audit required  Yes  No (See note.)  
 Post-implementation audit required  Yes  No (See note.)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

- 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).

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process.

|

**Table 13: Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Auditing requirements and funding are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Customer

**k) Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

**Table 14: Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

**l) Sub-program Delivery Method and Measure Installation /Marketing or Training:**

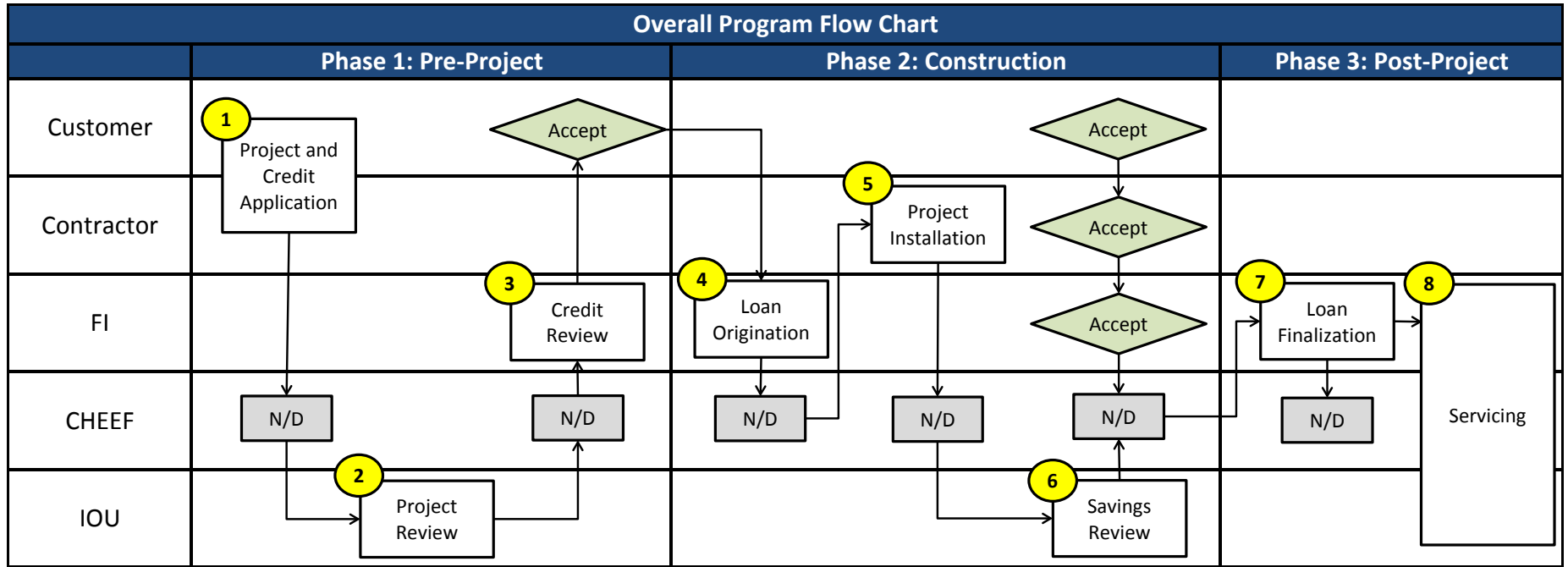
The following sequence illustrates how this program will be delivered to customers.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor training.
3. IOU Customer Relationship Manager (CRM)/Contractor and customer meet, driven by IOU/contractor marketing or customer inquiry.
4. CRM/Contractor interviews customer, collects site information (possibly including results of energy audit).
5. Contractor proposes a project scope, estimated cost, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including the loan.
6. Customer makes loan and payment decision.
7. If customer selects loan option, CRM/contractor collects application information and provides to financial institution.
8. Financial Institution collects application information from customer, makes underwriting decision and informs customer and/or contractor.
9. Customer executes loan agreement.
10. Contractor installs improvements.
11. Customer signs completion certificate.

12. IOU performs inspection (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
13. Financial institution receives completion certificate and other required documents.
14. Financial institution funds contractor.
15. Financial institution provides appropriate documentation to CAEATFA.
16. CAEATFA directs trustee to transfer credit enhancement from IOU account to financial institution's account at the trustee.
17. Master Servicer transmits loan information to IOU.
18. IOU verifies customer data transmitted by Master Servicer.
19. IOU places loan on customer's bill and begins OBR collection process

**m) Sub-program Process Flow Chart:**

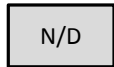
The flowchart below illustrates the process flow for how the loan pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.



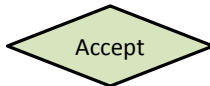
Key



**Stage Indicator** = Designates Process Flow Stage



**Notify/Data** = CHEEF notified of Stage completion and data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**

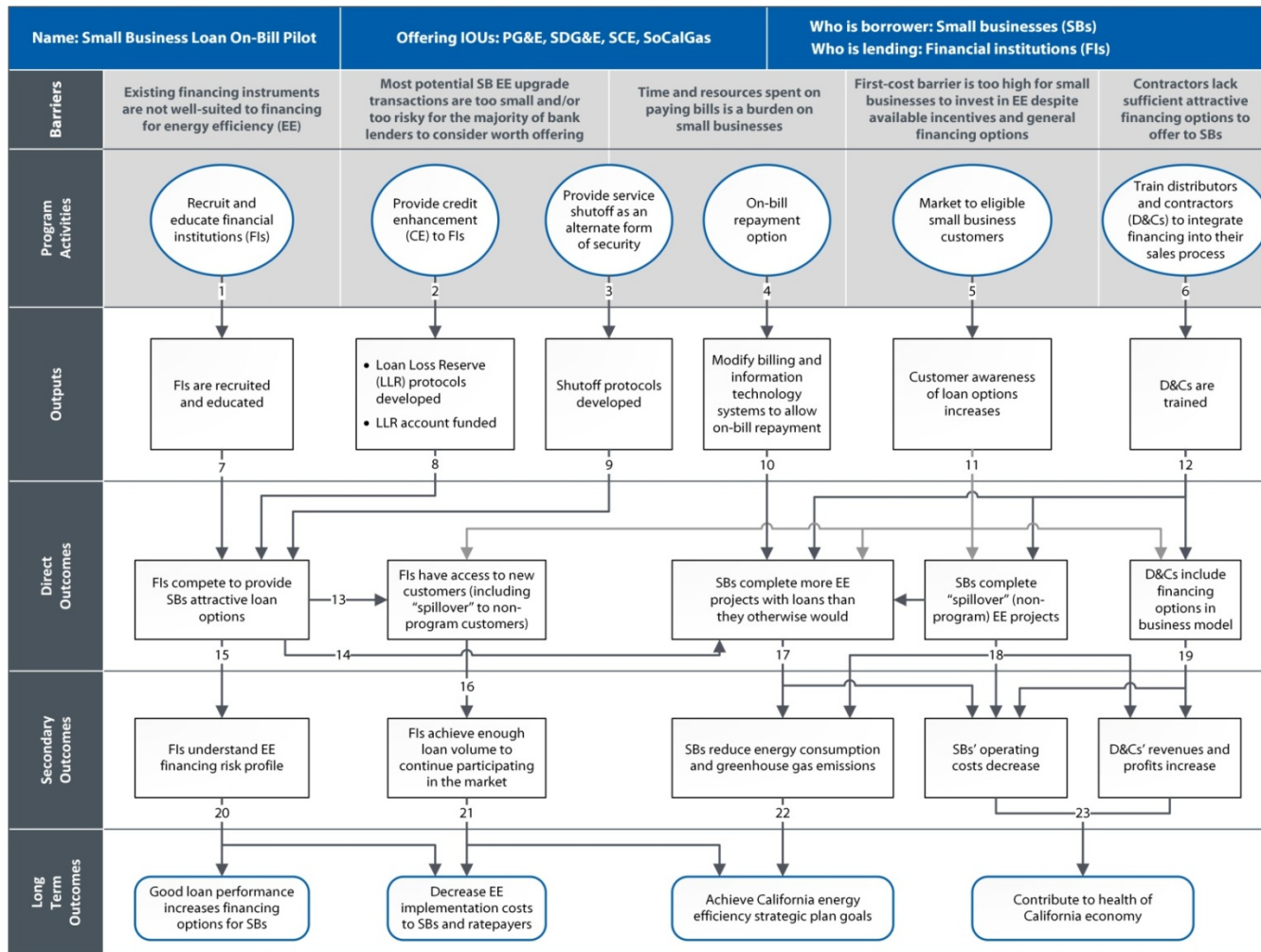
IOU financing programs will leverage the existing incentive and rebate programs.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>OBR Small Business Loan Pilot</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Statewide Commercial, Industrial, and Agriculture Programs	Meetings/Emails/Calls	As Needed
Emerging Technology	Meetings/Emails/Calls	As Needed
Third Party Programs	Meetings/Emails/Calls	As Needed
Institutional Partnerships	Meetings/Emails/Calls	As Needed
Local Government Partnerships	Meetings/Emails/Calls	As Needed
On Bill Financing	Meetings/Emails/Calls	As Needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As Needed
Master Servicer *	Data Exchange	Daily
CCSE	Meetings/Emails/Calls	As Needed

Note: Coordination will not occur until Master Servicer is fully functional.

o) Logic Model:



SB = Small Business D&Cs = Distributors and Contractors FI = Financial Institution CE = Credit Enhancement LLR = Loan Loss Reserve EE = Energy Efficiency

## 11) Additional Sub-Program Information

### a) Advancing Strategic Plan Goals and Objectives:

Innovative financing is a major Strategic Plan strategy for non-residential sectors. One key commercial sector strategy in the Strategic Plan is “Financing: Target financing ...[including] increased availability and use of innovative and expanded financing...” (p. 3-29), which is directly advanced by this sub-program. Furthermore, this sub-program contributes to the Strategic Plan’s call to:

- “ensure access to financing mechanisms that effectively surmount capital limitations and cash flow requirements. This means attracting the interest of banking and capital industries to the magnitude of investment and borrowing needs, and identifying finance mechanisms...” (p. 3-35)
- identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “pilot innovative financial tools [and e]xpand implementation of innovative financing mechanisms” (strategy #1-4, p. 3-32),
- “Develop effective financial tools for EE improvements to existing buildings” (strategy #2-6, p. 3-34)
- Use financing for closely related goals, HVAC and lighting.

### b) Leveraging of Resources:

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of the EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot, the rebate/incentive will decrease the total cost of the project that is eligible for credit enhancement funds.

The Pilot will leverage current small business loan programs offered by a multitude of financial institutions. This program will build on a mature small business loan market that has extensive experience in providing loans to small businesses. This program will provide a credit enhancement to leverage this current market and expand it to currently underutilized EE projects.

The IOUs’ OBF programs can also be leveraged to provide financing for certain projects and customers that may be a better fit for that program. This could provide customers with a better “EE Financing” experience and boost customer perception of the financing pilots and programs as a whole. Coordination specifics will be developed by IOU program and marketing teams to help guide customers to the right EE financing program for their project. Additionally, the IOUs’ experience in administering the OBF program can be leveraged for best practices and potential pitfalls of EE financing programs.

c) **Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilots will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

**12) Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the 10 criteria required for pilot programs.

a. **A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

The Pilot seeks to overcome the first-cost barrier of implementing EE improvements in the non-residential market and to increase overall energy savings from EE. Current IOU-based programs rely on a rebate structure to pay a portion of the cost of the EE upgrade. Financing pilots, on the other hand, cover 100% of the initial cost of the upgrade, net of any applicable rebates, and subject to repayment. As a result, it is anticipated customers who do not otherwise have the capital readily available will be able to use loan financing to pay for EE upgrades.

b. **Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.a., EE financing is a very important pillar of the Strategic Plan's approach, specifically including the non-residential sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "*Customer Incentives* including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

c. **Specific goals, objectives and end points for the project.**

The Pilot program seeks to:



- a. Stimulate financial institutions to provide capital to EE upgrade markets in the small business market segment.
- b. Lead to incremental energy savings from EE projects in the small business market segment.
- c. Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates.
- d. Stimulate additional EE projects through the availability of capital to cover the full cost of such upgrades.
- e. Additionally, the Pilot will be testing the added value for financial institutions of having an OBR option.

Further details of the credit enhancement structure will be developed through CAEATFA regulations.

- d. **New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

This Pilot will test how effective financing will be at stimulating either more comprehensive EE projects or a greater number of EE projects. Furthermore, the Pilot provides mechanisms to test specific elements of financing such as the effect of lowering the costs through lower loan payments, on-bill repayment, and differing levels of contractor engagement in the financing process.

The Pilot relies on several innovative design features that have not been extensively tested in California. These include:

- Credit enhancements: Credit enhancements can reduce financing costs, increase the duration of loans, or make credit underwriting terms more flexible than they otherwise would be. The Pilot will enable testing of the effect of credit enhancements on these features.
  - On-Bill Repayment for 3<sup>rd</sup> Parties: The option for financial institutions to offer customer on-bill repayment through the utility bill can add increased security for loan providers due to the shut off for non-payment provision. This option can also reduce the time requirements faced by small businesses in paying bills.
  - Integration of financing and incentive programs: This pilot will help test the most effective ways for IOU customer rebate/incentive programs to be integrated effectively with third party financing.
- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See Table 1 and Section 10.a.

- f. **Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Financing Evaluation Research Plan includes a “Market Characterization” project that is managed by the Energy Division and expected to be fielded early in the program cycle.

- g. **Program performance metrics.**

**Table 16: Program Performance Metrics**

Short-Term PPMs:	IOU Target	Metric Type
PPM 1: Loan transaction volume (dollar amount and number of loan) by IOU	Track and report total dollar amount of loan transactions completed (Decision, p. 62)	2a
PPM 2: End-use categories (HVAC, lighting, etc.) of measures installed through pilot	Track and report end use for each program measure and group end uses by category	2a

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

- h. **Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

- i. **A proposed Evaluation, Measurement, and Verification (EM&V) plan.**

For finance pilot program EM&V plan, please refer to the revised 2013-2014 M&E Long-term Roadmap. This roadmap is being updated by the statewide M&E team and will not be available at the time IOUs file this PIP.

- j. **A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.e.

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**Decision 13-09-044, Fast-Track / OBR PIPs**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the OBR Small Business Loan Pilot and will be further addressed in CAEATFA's regulations.

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.)

See Table 1 for the portion of the \$8 million allocated by the IOUs to the OBR Small Business Loan Pilot. The IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- The CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time they are making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions (including loan originators) and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas to reference the data protocols (from the final report) in the pilot PIPs since the data fields could differ by pilot (Appendix D).

This is addressed in Section 9.a.iv. Pursuant to D.13-09-044, the data protocols subject to the WG report are incorporated by reference to that report, which is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: CalEEFinance.com.

[More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking \(with detail on data requirements and other regulations\) will be provided herein when available.](#)

**Decision 13-09-044, OBR PIPs (Only)**

- The OBR PIP should set credit enhancement guidelines (floor, cap, spread) to incentivize more favorable financing terms for targeted market sectors (p. 22).

See section 9.c. for discussion of credit enhancements for this pilot.

- OBR program shall include non-residential shut-off in general conformity with Commission-approved shut off protocols to be approved in the OBR tariff (p. 54).

This requirement will apply to the OBR Small Business Loan Pilot and is addressed in the OBR tariff.

- The Commission concludes that written consent should be part of the OBR tariff in order to achieve transferability. Property owners and landlords that initially commit to the EE financing and OBR program (“current landlord”) and all of the current landlord’s tenants responsible for repayment under the OBR program (“current tenants”) should be required to give their written consent to abide by the terms and obligations of the OBR program. The written consent of subsequent property owners and landlords and subsequent tenants subject to the OBR program is required in order for the OBR provisions (e.g., transferability, shut-off, etc.) to apply (p. 56).

This requirement will apply to the OBR Small Business Loan Pilot and is addressed in the OBR tariff.

- IOUs are to apply existing OBF practices for application of OBR partial payments and follow Commission-approved disconnection procedures to obtain delinquent payments (p. 56).

This requirement will apply to the OBR Small Business Loan Pilot and is addressed in the OBR tariff.

## ATTACHMENT 1

### Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>5</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

Test the premise that a loan with a credit enhancement and OBR option will drive increased uptake of energy efficiency (EE) projects in the small business market segment. Credit enhancement aim to lower financial institutions risks in entering an asset class that does not have a lot of historical data. The OBR option's aim is to simplify the bill paying process for small businesses and provide financial institutions with the added security of Shut-off On Non-Payment.

Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates. Private capital in the EE loan market can help overcome the up-front cost barrier in a way that limited ratepayer funds are unable to.

Decrease EE implementation costs for small businesses by providing a way for financial institutions to get a better understanding of the EE loan risk profile and to achieve enough loan volume to interest financial institutions to continue participating in the market. Creating a long term, standardized, and low cost EE loan instrument can help overcome the up-front cost and time barrier for small businesses.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>6</sup>**

The IOUs do not establish quantitative targets for this Pilot.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

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<sup>5</sup> A SMART objective is one that is Specific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), Measurable, Ambitious, Realistic, and Time-bound.

<sup>6</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs. The IOUs do not establish quantitative targets for this Pilot.

ATTACHMENT E  
ON-BILL SMALL BUSINESS LEASE  
PROVIDERS PROGRAM  
PROGRAM IMPLEMENTATION PLAN

CLEAN PIP



**2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan**

- 1) **Sub-Program Name:** OBR Small Business Lease Providers Pilot
- 2) **Sub-Program ID number:**
  - a. SoCalGas: SCG3789
  - b. SDG&E: SDGE 3300
  - c. SCE: SCE-13-SW-007G
  - d. PG&E: PGE\_210934
- 3) **Type of Sub-Program:**  Core  Third Party  Partnership  Pilot
- 4) **Market sector or segment that this sub-program is designed to serve:**
  - 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)

*Note:* No NAICS codes included because this pilot applies across the full commercial, industrial, and agricultural sectors.
- 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
- 7) **Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC)** TRC  PAC

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for calculating incremental energy savings for the Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information was not yet available to estimate the proposed energy savings. The CPUC has thus

decided to evaluate the energy savings on an *ex post* basis. The Pilot's TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1. Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>OBR Small Business Lease</b>						
Admin/General Overhead (\$)	\$35,414	\$89,153	\$104,323	TBD	TBD	\$228,890
Direct Implementation (\$)	\$462,264	\$901,726	\$1,116,774	TBD	TBD	\$2,480,764
Credit Enhancements (CE) (\$)	\$0	\$803,717	\$2,444,282	TBD	TBD	\$3,247,999
Marketing & Outreach (\$)*1	\$27,628	\$560,807	\$503,290	TBD	TBD	\$1,091,725
<b>Total Statewide Budget (\$)</b>	<b>\$525,306</b>	<b>\$2,355,403</b>	<b>\$4,168,669</b>	<b>TBD</b>	<b>TBD</b>	<b>\$7,049,378</b>

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs' proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - o Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

- Servicer, and d) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).
- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENs, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations.

SoCalGas	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$2,631	\$30,568	\$45,738	TBD	TBD	\$78,937
Direct Implementation (\$)	\$30,725	\$149,785	\$254,829	TBD	TBD	\$435,339
Credit Enhancements (CE) (\$)	\$0	\$105,704	\$214,611	TBD	TBD	\$320,315
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,957	\$376,727	\$605,848	TBD	TBD	\$1,016,532

SDG&E	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$11,235	\$22,471	\$22,471	TBD	TBD	\$56,177
Direct Implementation (\$)	\$86,674	\$115,449	\$231,245	TBD	TBD	\$433,368
Credit Enhancements (CE) (\$)	\$0	\$178,269	\$346,052	TBD	TBD	\$524,321
Marketing & Outreach (\$)	\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)	\$97,909	\$423,194	\$706,774	TBD	TBD	\$1,227,877

SCE	Program Year					
	Sub-Program	2013	2014	2015	2016	2017
Admin/General Overhead (\$)	\$10,378	\$13,775	\$13,775	TBD	TBD	\$37,928
Direct Implementation (\$)	\$105,606	\$157,974	\$152,182	TBD	TBD	\$415,762
Credit Enhancements (CE) (\$)	\$0	\$46,712	\$923,221	TBD	TBD	\$969,933
Marketing & Outreach (\$)	\$0	\$38,808	\$116,425	TBD	TBD	\$155,233
Total IOU Budget (\$)	\$115,984	\$257,269	\$1,205,603	TBD	TBD	\$1,578,856

PG&E Sub-Program	Program Year					
	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)	\$11,170	\$22,339	\$22,339	TBD	TBD	\$55,848
Direct Implementation (\$)	\$239,259	\$478,518	\$478,518	TBD	TBD	\$1,196,295
Credit Enhancements (CE) (\$)	\$0	\$473,032	\$960,398	TBD	TBD	\$1,433,430
Marketing & Outreach (\$)	\$27,027	\$324,324	\$189,189	TBD	TBD	\$540,540
Total IOU Budget (\$)	\$277,456	\$1,298,213	\$1,650,444	TBD	TBD	\$3,226,113

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

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

**i. Financing**

The goal of the On-Bill Repayment (OBR) Small Business Lease Providers Pilot (Pilot) is to test the premise that a lease option with a credit enhancement and OBR option will increase the number and comprehensiveness of energy efficiency (EE) projects in the small business market segment. Offering Equipment Leases with an OBR option will test the premise that some leases for small business customers can be more effectively administered through repayment on the IOUs' bills.

The pilot is premised upon the idea that, despite the incentives and general financing options currently available, many customers choose not to engage in EE because the first-cost barrier is still too high. The Pilot will test whether a more attractive lease option can help overcome barriers to financing EE projects.

The leases under this pilot will primarily be equipment leases. The equipment leases allowed under this pilot will be defined by CAEATFA in its rulemaking for equipment leases. A website link to the final program rulemaking (with detail on leases and other regulations) will be provided herein when available.

Pursuant to the Assigned Commissioner's Ruling issued August 25, 2014, the Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

**ii. Market Gaps and Means to Address Gaps**

Small business customers often rent/lease their space and can be cash constrained. Although financing tools are already available in the market to customers through several different financial instruments, these existing instruments may not be well-suited to

financing for EE for some customers. For example, credit card-based revolving products are convenient and inexpensive to originate but generally come at a high cost to the business owner. Some business owners may have access to lines of credit through their banks, or to other bank-based small business lending products, however, they tend to be used primarily for core business activities such as equipment used in the course of revenue-generating business, and are infrequently used for EE upgrades. Business loans are available to some businesses, but the size of most EE upgrades – often less than \$50,000 -- are often too small to incent most lessors to offer loans for these types of projects. As a result, these basic finance products tend to add too much cost to an EE project and create a disincentive for customers to do EE upgrades.

The commercial lease offering that this pilot is testing offers several features that are well-suited to the small business market. This sector is often characterized by small deal sizes, which require streamlined and efficient origination processes.

A key goal of the Pilot is to stimulate lease originators to offer attractively priced, fast-origination equipment leases on the utility bill (on-bill) that are appropriate for the small business market. Leases may be attractive to customers because of the following characteristics of lease originators:

- Lease originators operate a streamlined lease origination process, typically involving a single-page application and fast approval times for those applications that are less than approximately \$100,000. These sub-\$100,000 projects are typical of the small business EE market.
- In many cases, lease companies are able to close financing on the basis of simpler documentation than is possible in other financing structures, thus reducing transaction costs and time for the applicants.
- The streamlined and standardized application processes for lease originators should enable them to originate financing at a low cost – and thus to fund small projects that are challenging for more typical bank lessors.
- Lease originators often have access to sources of capital that can enable greater flexibility in financing terms than are available for other financial products.
- Lease originators are able to match equipment leases to the expected useful life of the EE measures being installed by the customer.

### iii. Credit Enhancement Mechanism and On-Bill Repayment

The Pilot will provide a credit enhancement and a variety of programmatic supports (contractor networks, marketing, etc.) to attract private capital and to build lease volumes. These credit enhancements are expected to come in the form of a “loan loss reserve” (LLR) of up to 20% of the total eligible lease value in the portfolio. Details of the credit enhancement structure are to be developed through the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) public rulemaking process. The Pilot will also be subject to the provisions of the IOUs’ approved OBR tariffs.

Ultimately, all of the Finance Program pilots are designed to test the effectiveness of financing and credit enhancements that are integrated with utility incentive programs to enhance customer and financial institution uptake. Additionally, the Pilot will be testing the added value for financial institutions and IOU customers of having an OBR option. The pilot results will offer useful perspectives on the effectiveness of these approaches and on the usefulness of potentially expanding the pilots to become full-scale programs.

Additional information regarding Credit Enhancement guidelines for On-Bill pilots subject to Commission oversight are provided below pursuant to D.13-09-044:

- Per-loan exposure limits: A lender's loss share "should be less than 100%" to encourage FIs to manage risks in lending. The lender's loss recovery per loan is limited to no more than \$200,000 or 90% of the eligible value of any individual loan, whichever is less. CAEATFA will establish the final design of the LLR through its rulemaking, including addressing how the LLR should be reimbursed (e.g., net of late charges, penalty interest, and collection costs incurred in recovery (excluding legal fees)).

In addition, in consultation with the CHEEF, the floor and cap for Credit Enhancements are provided below:

- Credit Enhancement Floor (Percent of Principal Amount): 5%
- Credit Enhancement Cap (Percent of Principal Amount): 20%

iv. Data collection

Pursuant to D.13-09-044, the data protocols subject to the data Working Group (WG) were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>. Please also refer to the regulations established by CAEATFA regarding data collection and reporting to implement the WG report. Contractors and FIs should refer to the CHEEF, the selected Master Servicer, and / or the Data Manager regarding any related requirements.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

v. The following are areas of concern for this Pilot:

- *Will financial institutions participate in the pilot?*

This concern has been addressed by reaching out to financial institutions at the development stages of the program to build a program that will be attractive to them. The Pilot is designed to attract two to four financial institutions to create a viable pilot that tests the premise described above.

- *Will customers use the pilot offering?*

It is important to note that the lease Pilot is a market-based financial offering, in contrast to the 0% loans available through the On-Bill Financing (OBF) sub-program. As a result, the Pilot may have less participation than OBF. A credit enhancement to reduce rates and improve terms, broader terms than OBF, and a marketing and outreach campaign that is well integrated with existing IOU rebate/incentive programs and contractor networks, are included to address this issue.

**b) Sub-Program Energy and Demand Objectives**

**Table 2: Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year**

SoCalGas		Program Years			Total
		2013	2014	2015	
<b>OBR Small Business Lease Providers Pilot</b>					
GWh	N/A	TBD	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD	TBD

SDG&E		Program Years			Total
		2013	2014	2015	
<b>OBR Small Business Lease Providers Pilot</b>					
GWh	N/A	TBD	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD	TBD

SCE		Program Years			Total
		2013	2014	2015	
<b>OBR Small Business Lease Providers Pilot</b>					
GWh	N/A	TBD	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Lease Providers Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

\* N/A = "not applicable." TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

1. Improve customer satisfaction driven by an increase in capital for energy efficiency projects helping customers overcome the "first cost" key barrier.
2. Improve the credibility of energy efficiency investments and provide economic benefits to the state via increased loan volume through a financing program supported by both Financial Institutions as well as the IOUs.

**d) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

**Table 3: Workpaper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		



10) Program Implementation Details

a) Timelines:

**Table 4: Sub-Program Milestones and Timeline**

*Note:* The expected dates for several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>2</sup>
Lessor recruitment and contractor training	Ongoing
Lease Originator RFP issued	C + 30
Trustee, Master Servicer, and Data Manager RFPs issued	C + 60
CAEATFA Board Meeting to approve Trustee contract	C + 60
DGS approves Trustee contract	C + 60
CAEATFA Board Meeting to approve Master Servicer and Data Manager contracts	C + 90
CAEATFA Board approves emergency regulations	C + 120
Office of Administrative Law (OAL) approves emergency regulations	C + 120
DGS approves Master Servicer and Data Manager contracts	C + 120
DGS approves Lease Originator contracts	C + 120
Small Business Off-Bill Lease Pilot launches	C + 120
IOUs submit IT Advice Letter to CPUC	C + 120
IOUs complete IT changes **	C + 300
Master Servicer fully interfaced with IOUs (IT changes complete)	C + 300
Small Business OBR Lease pilot launches	C + 330
Mid-Term CPUC Pilot Review <sup>3</sup>	TBD

\*\* This timeline assumes program development concurrently with IT systems. In the event development activities cannot be done concurrent with IT system development, the schedule would change with first funding occurring in late-2015.

<sup>2</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>3</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

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

**Table 5: Geographic Regions Where the Program Will Operate**

Geographic Region	SDG&E	SCG	SCE	PG&E
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

**c) Program Administration**

**Table 6: 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 other entity
OBR Sm. Bus. Lease Providers Pilot	Program Application Process				CAEATFA
OBR Sm. Bus. Lease Providers Pilot	IOU Incentive Program Participant	X			CAEATFA
OBR Sm. Bus. Lease Providers Pilot	IOU Incentive Program Non-Participants				CAEATFA
OBR Sm. Bus. Lease Providers Pilot	Credit Review		Lease Originators		
OBR Sm. Bus. Lease Providers Pilot	Lease Origination		Lease Originators		
OBR Sm. Bus. Lease Providers Pilot	Lease Payments		Lease Originators		
OBR Sm. Bus. Lease Providers Pilot	Lease Payment Repayment Process	X	Lease Originators and Master Servicer		
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 other entity
OBR Sm. Bus. Lease Providers Pilot	Credit Enhancements	X			CAEATFA
OBR Sm. Bus. Lease Providers Pilot	Marketing, Education & Outreach (ME&O) (See note below)	TBD	Lease Originators	CCSE	CAEATFA
OBR Sm. Bus. Lease Providers Pilot	Evaluation, Measurement, & Verification (EM&V)	X			CPUC

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**d) Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

**i. Customers:**

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Small business customer as defined by the Small Business Administration found at 13 C.F.R. 121	X	X	X	X
Project site within utility territory on a non-residential meter/rate	X	X	X	X

**ii. Contractors/Participants:**

**Contractor Eligibility Requirements**

Qualified contractors must hold an active license with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications.

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will be required to provide an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.	X	X	X	X

**Contractor Participation Requirements**

Contractors will be required to provide and document an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.

**iii. Lease Originators**

Only Lease Originators selected through CAEATFA's competitive process will be eligible to participate in the Pilot. D.13-09-044 requires that CAEATFA enter into contracts with a minimum of two, and no more than four, Lease Originators. Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA's Lease Originator Request for Proposal.

**Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)**

<b>Financial Institution Eligibility Requirement (list of requirements)</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Only Lease Originators selected through CAEATFA's competitive process will be eligible to participate in the Pilot. D.13-09-044 requires that CAEATFA enter into contracts with a minimum of two, and no more than four, Lease Originators.	X	X	X	X
Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA's Lease Originator Request for Proposal.	X	X	X	X

**e) Program Partners:**

**a. Program coordination partners:**

- CAEATFA – CAEATFA, acting as the CHEEF, will serve as the manager of the Master Servicer, Data Manager, and Trustee Bank. CAEATFA will establish program regulations that include eligibility criteria for financial institutions, clarification of applicable on-bill repayment requirements and process, and details of the structure of the credit enhancement available through this pilot.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Trustee Bank to hold credit enhancement funds allocated to this pilot program.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Data Manager to aggregate data from the Finance Program pilots and prepare it for public consumption and program evaluation.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Master Servicer (MS). The MS will (1) collect and transmit funds

and data between the IOUs, trustee, and financial institutions/capital providers; and (2) collect pilot data and store it for use by the Data Manager and FIs.

- Master Servicer (MS) - The Master Servicer will receive customer loan information for transmission to the IOUs and will receive loan payments from the IOUs for remission to the FIs. The MS will operate under its contract with CAEATFA referred to as the California Hub for Energy Efficiency Financing (CHEEF) in the Financing Pilot Program. The MS will collect pilot data and store it for use by the Data Manager.
- Data Manager (DM) – The Data Manager will aggregate and prepare data. This role may be included as part of the Master Servicer duties.

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

- Contractors – Various types of contractors may participate in the program including: HVAC, insulation, mechanical, electrical, and plumbing. The contractor will propose a scope of work to a business owner, and will provide payment options including financing. The IOUs will leverage existing channels working with contractor partners.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and will review financing programs for their contractor customers. Distributors are expected to be supportive of credit enhanced, state-wide lease financing and will be helpful in promoting the pilot.
- Lease Originators – Two to four Lease Originators will be selected to participate in this Pilot. The Lease Originators will originate and service leases. The Lease Originators will be selected by CAEATFA's competitive RFP process, and will be further governed by the regulations CAEATFA will develop.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure that the marketing of financial products is done in coordination with the Energy Upgrade California statewide marketing brand campaign.
- Real Estate Professionals – Given the unique nature of on-bill pilots, input from real estate professionals may be incorporated into pilot design and execution. The IOUs held a session with real estate professionals to learn about the unique needs of the industry in the non-residential sector and identified multiple areas of opportunity to enhance the on bill pilots. This may include additional information on projects being provided (e.g. amortization tables), creating educational materials that explain how measures (technical) translate into financial savings, and helping develop language that communicates the value of EE measures to subsequent buyers or renters.

**Table 10: Program coordination Partners**

Coordination Partner Information	PG&E	SCE	SDG&E	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Lease Originators	X	X	X	X
Real Estate Professionals	X	X	X	X
CCSE	X	X	X	X

**f) Measures and incentive levels:**

Eligible Measures can consist of EEEMs and may include Non-EEEMs, each of which are both defined herein.

EEEMs are measures that have been approved by the Commission for a utility's EE rebate / incentive program, although the customer need not receive an incentive or rebate to qualify for the loan. EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Per existing rebate programs, allowable EEEMs costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and labor on a per measure basis. EEEMs projects costs should not include activities unrelated to the installation of energy efficiency measures. Labor costs can be contractor or in-house if proof of direct project hours and costs are provided.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-business/energy-savings/>  
 and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>

SCE – <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>

SDG&E – <http://www.sdge.com/sites/default/files/documents/981587305/Targeted%20Basic%20Measures%20-%20Energy%20Efficiency%20Business%20Incentives%20and%20Rebates.xls?nid=4326>

PG&E – <http://www.pge.com/eef>

Broad guidelines regarding the inclusion of EEEMs and non-EEEMs were determined by D.13-09-044 (at page 31), as follows:

“We find that customers may be more likely to add EE projects while undertaking other improvement activities. Therefore, for purposes of the pilot period, the Commission finds it reasonable and adopts a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to Eligible EE Measures (EEEMs). Therefore, financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.”

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Per D.13-09-044, Conclusion of Law 56, the total loan value eligible for a credit enhancement will be limited to the total project cost net of any utility rebates and incentives received for the project.

In situations where a customer is served by multiple IOUs, refer to the OBR tariff for details on how billing will be treated.

**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The categories shown in Table 11 do not apply to the broad grouping of EEEMs and non-EEEMs. Please refer to the IOU EEEMs lists at the company website addresses provided above.



**g) Additional Services:**

The Pilot will include a series of additional services. These additional services, where related to marketing and outreach, will be coordinated with Statewide ME&O.

- Outreach, education and training for customers, contractors and real estate professionals will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lessor education: The education and outreach component of the Pilot will include training events and materials for financial institutions and lease originators that will assist them in participating in this pilot. The education and outreach will help lease originators understand the EE market, EE investments, project QA/QC requirements, benefits and drawbacks of on-bill repayment, and data on lease performance. Additional information on lessor training plans will be provided in the CHEEF PIP.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Customer education	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Contractor education	Contractors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Lessor education	Lessors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Real estate professional education	Real Estate Professionals	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan

\*CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities

shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

Appendix A

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

<b>Activity</b>	<b>Estimated Timing</b>
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging Lease Originators, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

b. Indicate if pre and/or post implementation audits will be required for the sub-program. \_\_\_ Yes \_\_\_ No (See note.)

Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

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).

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process.

**Table 13: Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Auditing requirements and funding are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Customer

**k) Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

**Table 14: Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

**l) Sub-program Delivery Method and Measure Installation /Marketing or Training:**

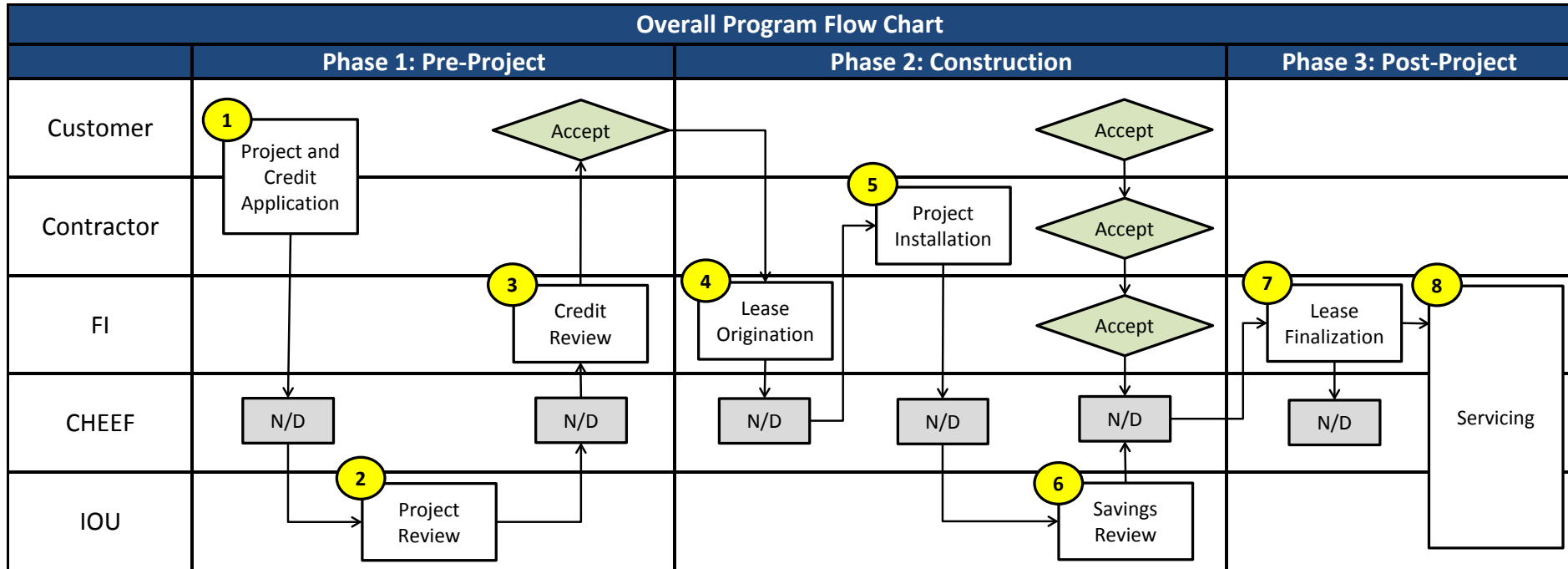
The following sequence illustrates how this program will be delivered to customers.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor training.
3. IOU Customer Relationship Manager (CRM)/Contractor and customer meet, driven by IOU/contractor marketing or customer inquiry.
4. CRM/Contractor interviews customer, collects site information (possibly including results of energy audit).
5. Contractor proposes a project scope, estimated cost, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including the lease.
6. Customer makes lease and payment decision.
7. If customer selects leasing option, CRM/contractor collects application information and provides to lease company.
8. Lease company collects application information from customer, makes underwriting decision and informs customer and/or contractor.
9. Customer executes lease agreement.

10. Contractor installs improvements.
11. Customer signs completion certificate.
12. IOU performs inspection (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
13. Lease company receives completion certificate and other required documents.
14. Lease company funds contractor.
15. Lease company provides appropriate documentation to CAEATFA.
16. CAEATFA directs trustee to transfer credit enhancement from IOU account to lease company's account at the trustee.
17. Master Servicer transmits lease information to IOU.
18. IOU verifies customer data transmitted by Master Servicer.
19. IOU places lease on Customer's bill and begins OBR collection process

**m) Sub-program Process Flow Chart:**

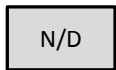
The flowchart below illustrates the process flow for how the lease pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.



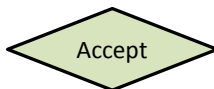
Key



**Stage Indicator** = Designates Process Flow Stage



**Notify/Data** = CHEEF notified of Stage completion and data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**

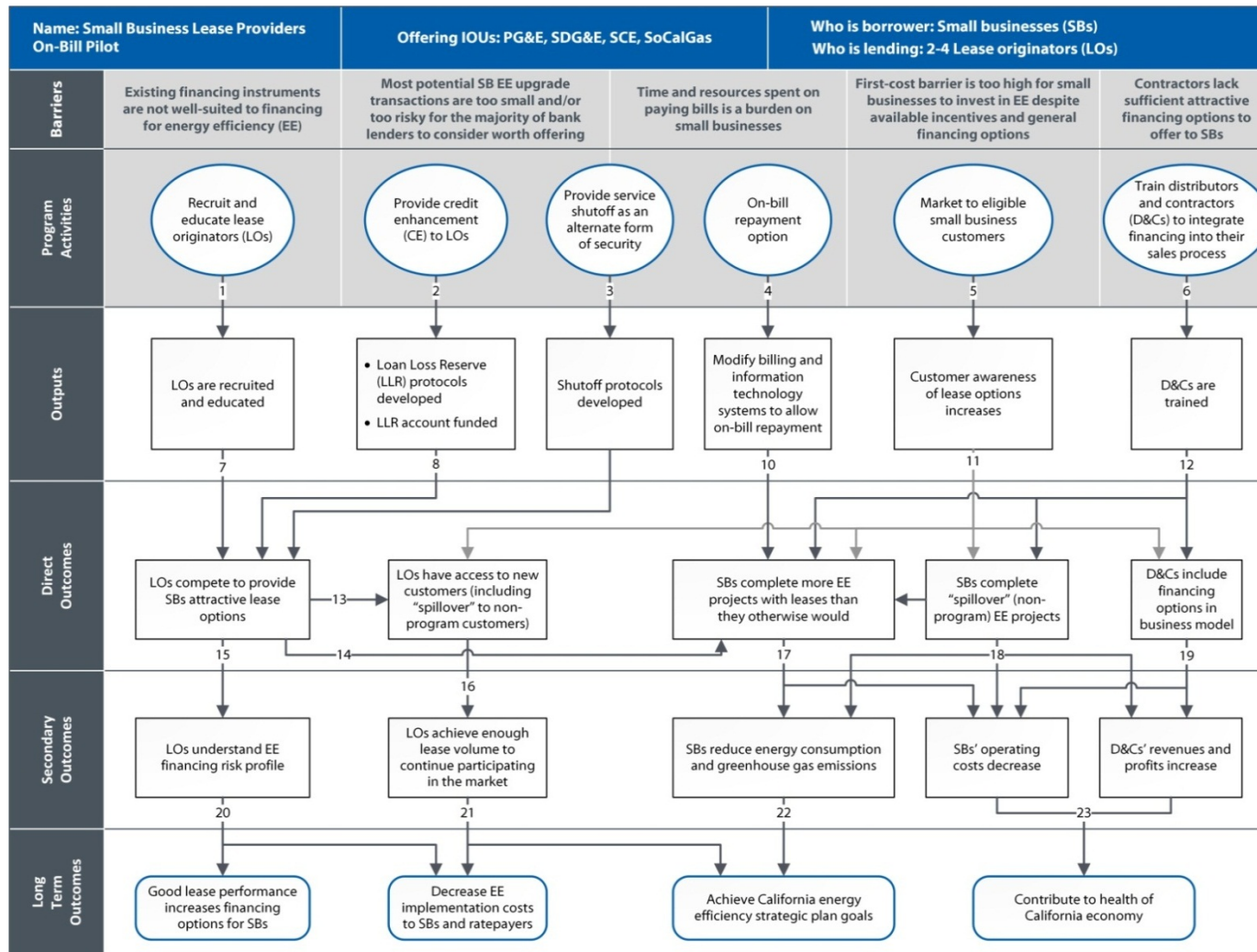
IOU financing programs will leverage the existing incentive and rebate programs.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>OBR Small Business Lease Providers Pilot</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Statewide Commercial, Industrial, and Agriculture Programs	Meetings/Emails/Calls	As Needed
Emerging Technology	Meetings/Emails/Calls	As Needed
Third Party Programs	Meetings/Emails/Calls	As Needed
Institutional Partnerships	Meetings/Emails/Calls	As Needed
Local Government Partnerships	Meetings/Emails/Calls	As Needed
On Bill Financing	Meetings/Emails/Calls	As Needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As Needed
Master Servicer *	Data Exchange	Daily
CCSE	Meetings/Emails/Calls	As Needed

Note: Coordination will not occur until Master Servicer is fully functional.

o) Logic Model:



SB = Small Business D&Cs = Distributors and Contractors LO = Lease Originator CE = Credit Enhancement LLR = Loan Loss Reserve EE = Energy Efficiency



## 11) Additional Sub-Program Information

### a) Advancing Strategic Plan Goals and Objectives:

Innovative financing is a major Strategic Plan strategy for non-residential sectors. One key commercial sector strategy in the Strategic Plan is “Financing: Target financing ...[including] increased availability and use of innovative and expanded financing...” (p. 3-29), which is directly advanced by this sub-program. Furthermore, this sub-program contributes to the Strategic Plan’s call to:

- “ensure access to financing mechanisms that effectively surmount capital limitations and cash flow requirements. This means attracting the interest of banking and capital industries to the magnitude of investment and borrowing needs, and identifying finance mechanisms...” (p. 3-35)
- identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “pilot innovative financial tools [and e]xpand implementation of innovative financing mechanisms” (strategy #1-4, p. 3-32),
- “Develop effective financial tools for EE improvements to existing buildings” (strategy #2-6, p. 3-34)
- Use financing for closely related goals, HVAC and lighting.

### b) Leveraging of Resources:

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of the EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot, the rebate/incentive will decrease the total cost of the project that is eligible for credit enhancement funds. For projects in which the customer is receiving a rebate or incentive, in order to receive that benefit, leases will have to comply with IOU rebate and incentive guidelines.<sup>4</sup>

The Pilot will leverage current equipment lease financing offered by a multitude of equipment leasing companies and capital providers. This program will build on a mature commercial market that has extensive experience in providing equipment leases for energy improvements. This program will provide a credit enhancement to leverage this current market and expand it to currently underserved small business customers.

The IOUs’ OBF programs can also be leveraged to provide financing for certain projects and customers that may be a better fit for that program. This could

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<sup>4</sup> For example, the Statewide Customized Retrofit Manual specifies that “new equipment or system retrofit must guarantee energy savings for the effective useful life of the product or for a period of five years, whichever is less.”

provide customers with a better “EE Financing” experience and boost customer perception of the financing pilots and programs as a whole. Coordination specifics will be developed by IOU program and marketing teams to help guide customers to the right EE financing program for their project. Additionally, the IOUs’ experience in administering the OBF program can be leveraged for best practices and potential pitfalls of EE financing programs.

**c) Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilots will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

**12) Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the criteria required for pilot programs.

**a. A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

The Pilot seeks to overcome the first-cost barrier of implementing EE improvements in the non-residential market and to increase overall energy savings from EE. Current IOU-based programs rely on a rebate structure to pay a portion of the cost of the EE upgrade. Financing pilots, on the other hand, cover 100% of the initial cost of the upgrade, net of any applicable rebates, and subject to repayment. As a result, it is anticipated customers who do not otherwise have the capital readily available will be able to use lease financing to pay for EE upgrades.

**b. Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.a., EE financing is a very important pillar of the Strategic Plan’s approach, specifically including the non-residential sector.

Additionally, the Strategic Plan describes five “policy tools” for Market Transformation, the first of which explains that “*Customer Incentives* including...innovative or discounted financing...are the ‘carrots’ that help *pull* consumers into choosing the efficient option.” (p. 1-5).

**c. Specific goals, objectives and end points for the project.**

The Pilot program seeks to:

- a. Stimulate financial institutions to provide capital to EE upgrade markets in the small business market segment.
- b. Lead to incremental energy savings from EE projects in the small business market segment.
- c. Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates.
- d. Stimulate additional EE projects through the availability of capital to cover the full cost of such upgrades.
- e. Additionally, the Pilot will be testing the added value for financial institutions of having an OBR option.

Further details of the credit enhancement structure will be developed through CAEATFA regulations.

**d. New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

This Pilot will test how effective financing will be at stimulating either more comprehensive EE projects or a greater number of EE projects. Furthermore, the Pilot provides mechanisms to test specific elements of financing such as the effect of lowering the costs through lower lease payments, expedited lease approvals by Lease Originators, and differing levels of contractor engagement in the financing process.

The Pilot relies on several innovative design features that have not been extensively tested in California. These include:

- Credit enhancements: Credit enhancements can reduce financing costs, increase the duration of leases, or make credit underwriting terms more flexible than they otherwise would be. The Pilot will enable testing of the effect of credit enhancements on these features.
- On-Bill Repayment for 3<sup>rd</sup> Parties: The option for lease providers to offer customer on-bill repayment through the utility bill can add increased security for lease providers due to the shut off for non-payment provision. This option can also reduce the time requirements faced by small businesses in paying bills.
- Integration of financing and incentive programs: This pilot will help test the most effective ways for IOU customer rebate/incentive programs to be integrated effectively with third party financing.

- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See Table 1 and Section 10.a.

- f. **Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Financing Evaluation Research Plan includes a “Market Characterization” project that is managed by the Energy Division and expected to be fielded early in the program cycle.

- g. **Program performance metrics.**

**Table 16: Program Performance Metrics**

Short-Term PPMs:	IOU Target	Metric Type
PPM 1: Lease transaction volume (dollar amount and number of leases) by IOU	Track and report total dollar amount of lease transactions completed (Decision, p. 62)	2a
PPM 2: End-use categories (HVAC, lighting, etc.) of measures installed through pilot	Track and report end use for each program measure and group end uses by category	2a

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

- h. **Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

- i. **A proposed Evaluation, Measurement, and Verification (EM&V) plan.**

For finance pilot program EM&V plan, please refer to the revised 2013-2014 M&E Long-term Roadmap. This roadmap is being updated by the statewide M&E team and will not be available at the time IOUs file this PIP.

- j. **A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.e.

**Additional Information Regarding Fast-Track / OBR PIP Requirements in Decision 13-09-044**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the OBR Small Business Lease Providers Pilot and will be further addressed in CAEATFA's regulations.

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.)

See Table 1 for the portion of the \$8 million allocated by the IOUs to the OBR Small Business Lease Providers Pilot. The IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- The CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time they are making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions (including lease originators) and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas to reference the data protocols (from the final report) in the pilot PIPs since the data fields could differ by pilot (Appendix D).

This is addressed in Section 9.a.iv. Pursuant to D.13-09-044, the data protocols subject to the WG report are incorporated by reference to that report, which is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: CalEEFinance.com.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

**Decision 13-09-044, OBR PIPs (Only)**

- The OBR PIP should set credit enhancement guidelines (floor, cap, spread) to incentivize more favorable financing terms for targeted market sectors (p. 22).

See section 9.c. for discussion of credit enhancements for this pilot.

- OBR program shall include non-residential shut-off in general conformity with Commission-approved shut off protocols to be approved in the OBR tariff (p. 54).

This requirement will apply to the OBR Small Business Lease Providers Pilot and is addressed in the OBR tariff.

- The Commission concludes that written consent should be part of the OBR tariff in order to achieve transferability. Property owners and landlords that initially commit to the EE financing and OBR program (“current landlord”) and all of the current landlord’s tenants responsible for repayment under the OBR program (“current tenants”) should be required to give their written consent to abide by the terms and obligations of the OBR program. The written consent of subsequent property owners and landlords and subsequent tenants subject to the OBR program is required in order for the OBR provisions (e.g., transferability, shut-off, etc.) to apply (p. 56).

This requirement will apply to the OBR Small Business Lease Providers Pilot and is addressed in the OBR tariff.

- IOUs are to apply existing OBF practices for application of OBR partial payments and follow Commission-approved disconnection procedures to obtain delinquent payments (p. 56).

This requirement will apply to the OBR Small Business Lease Providers Pilot and is addressed in the OBR tariff.

## ATTACHMENT 1

### Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>5</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

Test the premise that an equipment lease option with a credit enhancement and OBR option will drive increased uptake of energy efficiency (EE) projects in the small business market segment. Credit enhancement aim to lower lease originators risks in entering an asset class that does not have a lot of historical data. The OBR option's aim is to simplify the bill paying process for small businesses and provide Lease Originators with the added security of Shut-off On Non-Payment.

Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates. Private capital in the EE lease market can help overcome the up-front cost barrier in a way that limited ratepayer funds are unable to.

Decrease EE implementation costs for small businesses by providing a way for lease originators to get a better understanding of the EE lease risk profile and to achieve enough lease volume to interest lease originators to continue participating in the market. Creating a long term, standardized, and low cost EE lease instrument can help overcome the up-front cost and time barrier for small businesses.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>6</sup>**

The IOUs do not establish quantitative targets for this Pilot.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

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<sup>5</sup> A SMART objective is one that is Specific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), Measurable, Ambitious, Realistic, and Time-bound.

<sup>6</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs. The IOUs do not establish quantitative targets for this Pilot.



REDLINE PIP

**2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan**

- 1) **Sub-Program Name:** OBR Small Business Lease Providers Pilot
- 2) **Sub-Program ID number:**
  - a. SoCalGas: SCG3789
  - b. SDG&E: SDGE 3300
  - c. SCE: SCE-13-SW-007G
  - d. PG&E: PGE\_210934
- 3) **Type of Sub-Program:**  Core  Third Party  Partnership  Pilot
- 4) **Market sector or segment that this sub-program is designed to serve:**
  - 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: \_\_\_\_\_)
  - c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
  - d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)

*Note:* No NAICS codes included because this pilot applies across the full commercial, industrial, and agricultural sectors.
- 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
- 7) **Projected Sub-program Total Resource Cost (TRC) and Program Administrator Cost (PAC)** TRC  PAC

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for calculating incremental energy savings for the Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information was not yet available to estimate the proposed energy savings. The CPUC has thus

decided to evaluate the energy savings on an *ex post* basis. The Pilot’s TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1. Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>OBR Small Business Lease</b>						
Admin/General Overhead (\$)	\$35,414	\$89,153	\$104,323	TBD	TBD	\$228,890
Direct Implementation (\$)	\$462,264	\$901,726	\$1,116,774	TBD	TBD	\$2,480,764
Credit Enhancements (CE) (\$)	\$0	\$803,717	\$2,444,282	TBD	TBD	\$3,247,999
Marketing & Outreach (\$)*1	\$27,628	\$560,807	\$503,290	TBD	TBD	\$1,091,725
<b>Total Statewide Budget (\$)</b>	<b>\$525,306</b>	<b>\$2,355,403</b>	<b>\$4,168,669</b>	<b>TBD</b>	<b>TBD</b>	<b>\$7,049,378</b>

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs’ proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - o Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

- Service, and ~~ed~~) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).
- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENS, LGPs, WET, low-income programs, solar providers, water agencies, etc.) f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations~~b) leveraging existing and developing new contractor networks in conjunction with the CHEEF, c) coordinating training of internal and external stakeholders with CAEATFA and other parties, d) integration of financing with existing programs, reacting to market conditions, monitoring of program progress and addressing implementation issues, e) on-going support to Billing, IT, and Call Center operations, and f) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account processing, Energy Auditors for projects not participating in rebates/incentives programs, and multifamily audits/technical assistance.~~

SoCalGas	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$2,631	\$30,568	\$45,738	TBD	TBD	\$78,937
Direct Implementation (\$)	\$30,725	\$149,785	\$254,829	TBD	TBD	\$435,339
Credit Enhancements (CE) (\$)	\$0	\$105,704	\$214,611	TBD	TBD	\$320,315
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,957	\$376,727	\$605,848	TBD	TBD	\$1,016,532

SDG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$11,235	\$22,471	\$22,471	TBD	TBD	\$56,177
Direct Implementation (\$)	\$86,674	\$115,449	\$231,245	TBD	TBD	\$433,368
Credit Enhancements (CE) (\$)	\$0	\$178,269	\$346,052	TBD	TBD	\$524,321
Marketing & Outreach (\$)	\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)	\$97,909	\$423,194	\$706,774	TBD	TBD	\$1,227,877

SCE	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$10,378	\$13,775	\$13,775	TBD	TBD	\$37,928

Direct Implementation (\$)	\$105,606	\$157,974	\$152,182	TBD	TBD	\$415,762
Credit Enhancements (CE) (\$)	\$0	\$46,712	\$923,221	TBD	TBD	\$969,933
Marketing & Outreach (\$)	\$0	\$38,808	\$116,425	TBD	TBD	\$155,233
Total IOU Budget (\$)	\$115,984	\$257,269	\$1,205,603	TBD	TBD	\$1,578,856

PG&E	Program Year						
	Sub-Program	2013	2014	2015	2016	2017	Total
	Admin/General Overhead (\$)	\$11,170	\$22,339	\$22,339	TBD	TBD	\$55,848
	Direct Implementation (\$)	\$239,259	\$478,518	\$478,518	TBD	TBD	\$1,196,295
	Credit Enhancements (CE) (\$)	\$0	\$473,032	\$960,398	TBD	TBD	\$1,433,430
	Marketing & Outreach (\$)	\$27,027	\$324,324	\$189,189	TBD	TBD	\$540,540
	Total IOU Budget (\$)	\$277,456	\$1,298,213	\$1,650,444	TBD	TBD	\$3,226,113

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

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

**i. Financing**

The goal of the On-Bill Repayment (OBR) Small Business Lease Providers Pilot (Pilot) is to test the premise that a lease option with a credit enhancement and OBR option will increase the number and comprehensiveness of energy efficiency (EE) projects in the small business market segment. Offering Equipment Leases with an OBR option will test the premise that some leases for small business customers can be more effectively administered through repayment on the IOUs' bills.

The pilot is premised upon the idea that, despite the incentives and general financing options currently available, many customers choose not to engage in EE because the first-cost barrier is still too high. The Pilot will test whether a more attractive lease option can help overcome barriers to financing EE projects.

The leases under this pilot will primarily be equipment leases. The equipment leases allowed under this pilot will be defined by CAEATFA in its rulemaking for equipment leases. [A website link to the final program rulemaking \(with detail on leases and other regulations\) will be provided herein when available.](#)

Pursuant to the Assigned Commissioner's Ruling issued August 25, 2014, the Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

ii. Market Gaps and Means to Address Gaps

Small business customers often rent/lease their space and can be cash constrained. Although financing tools are already available in the market to customers through several different financial instruments, these existing instruments may not be well-suited to financing for EE for some customers. For example, credit card-based revolving products are convenient and inexpensive to originate but generally come at a high cost to the business owner. Some business owners may have access to lines of credit through their banks, or to other bank-based small business lending products, however, they tend to be used primarily for core business activities such as equipment used in the course of revenue-generating business, and are infrequently used for EE upgrades. Business loans are available to some businesses, but the size of most EE upgrades – often less than \$50,000 -- are often too small to incent most lessors to offer loans for these types of projects. As a result, these basic finance products tend to add too much cost to an EE project and create a disincentive for customers to do EE upgrades.

The commercial lease offering that this pilot is testing offers several features that are well-suited to the small business market. This sector is often characterized by small deal sizes, which require streamlined and efficient origination processes.

A key goal of the Pilot is to stimulate lease originators to offer attractively priced, fast-origination equipment leases on the utility bill (on-bill) that are appropriate for the small business market. Leases may be attractive to customers because of the following characteristics of lease originators:

- Lease originators operate a streamlined lease origination process, typically involving a single-page application and fast approval times for those applications that are less than approximately \$100,000. These sub-\$100,000 projects are typical of the small business EE market.
- In many cases, lease companies are able to close financing on the basis of simpler documentation than is possible in other financing structures, thus reducing transaction costs and time for the applicants.
- The streamlined and standardized application processes for lease originators should enable them to originate financing at a low cost – and thus to fund small projects that are challenging for more typical bank lessors.
- Lease originators often have access to sources of capital that can enable greater flexibility in financing terms than are available for other financial products.
- Lease originators are able to match equipment leases to the expected useful life of the EE measures being installed by the customer.

iii. Credit Enhancement Mechanism and On-Bill Repayment

The Pilot will provide a credit enhancement and a variety of programmatic supports (contractor networks, marketing, etc.) to attract private capital and to build lease volumes. These credit enhancements are expected to come in the form of a “loan loss reserve” (LLR) of up to 20% of the total eligible lease value in the portfolio. Details of the credit enhancement structure are to be developed through the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) public rulemaking process. The Pilot will also be subject to the provisions of the IOUs’ approved OBR tariffs.

Ultimately, all of the Finance Program pilots are designed to test the effectiveness of financing and credit enhancements that are integrated with utility incentive programs to enhance customer and financial institution uptake. Additionally, the Pilot will be testing the added value for financial institutions and IOU customers of having an OBR option. The pilot results will offer useful perspectives on the effectiveness of these approaches and on the usefulness of potentially expanding the pilots to become full-scale programs.

Additional information regarding Credit Enhancement guidelines for On-Bill pilots subject to Commission oversight are provided below pursuant to D.13-09-044:

- Per-loan exposure limits: A lender’s loss share “should be less than 100%” to encourage FIs to manage risks in lending. The lender’s loss recovery per loan is limited to no more than \$200,000 or 90% of the eligible value of any individual loan, whichever is less. CAEATFA will establish the final design of the LLR through its rulemaking, including addressing how the LLR should be reimbursed (e.g., net of late charges, penalty interest, and collection costs incurred in recovery (excluding legal fees)).

In addition, in consultation with the CHEEF, the floor and cap for Credit Enhancements are provided below:

- Credit Enhancement Floor (Percent of Principal Amount): 5%
- Credit Enhancement Cap (Percent of Principal Amount): 20%

iv. Data collection

Pursuant to D.13-09-044, the data protocols subject to the data Working Group (WG) were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: <http://www.caleefinance.com/wp->

content/uploads/2013/12/AL-4579-et-al.pdf. Please also refer to the regulations established by CAEATFA regarding data collection and reporting to implement the WG report. Contractors and FIs should refer to the CHEEF, the selected Master Servicer, and / or the Data Manager regarding any related requirements.

[More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking \(with detail on data requirements and other regulations\) will be provided herein when available.](#)

v. The following are areas of concern for this Pilot:

- *Will financial institutions participate in the pilot?*

This concern has been addressed by reaching out to financial institutions at the development stages of the program to build a program that will be attractive to them. The Pilot is designed to attract two to four financial institutions to create a viable pilot that tests the premise described above.

- *Will customers use the pilot offering?*

It is important to note that the lease Pilot is a market-based financial offering, in contrast to the 0% loans available through the On-Bill Financing (OBF) sub-program. As a result, the Pilot may have less participation than OBF. A credit enhancement to reduce rates and improve terms, broader terms than OBF, and a marketing and outreach campaign that is well integrated with existing IOU rebate/incentive programs and contractor networks, are included to address this issue.



**b) Sub-Program Energy and Demand Objectives**

**Table 2: Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year**

SoCalGas	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Lease Providers Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Lease Providers Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SCE	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Lease Providers Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
<b>OBR Small Business Lease Providers Pilot</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

\* N/A = "not applicable." TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

1. Improve customer satisfaction driven by an increase in capital for energy efficiency projects helping customers overcome the "first cost" key barrier.
2. Improve the credibility of energy efficiency investments and provide economic benefits to the state via increased loan volume through a financing program supported by both Financial Institutions as well as the IOUs.

**d) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

**Table 3: Workpaper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

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10) Program Implementation Details

a) Timelines:

Table 4: Sub-Program Milestones and Timeline

**Note:** The expected dates for several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions and/or other parties, and are subject to adjustment necessitated by any delays.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>2</sup>
Lessor recruitment and contractor training	Ongoing
Lease Originator RFP issued	C + 30
Trustee, Master Servicer, and Data Manager RFPs issued	C + 60
CAEATFA Board Meeting to approve Trustee contract	C + 60
<b>Milestone</b>	<b>Date</b>
DGS approves Trustee contract	C + 60
CAEATFA Board Meeting to approve Master Servicer and Data Manager contracts	C + 90
CAEATFA Board approves emergency regulations	C + 120
Office of Administrative Law (OAL) approves emergency regulations	C + 120
DGS approves Master Servicer and Data Manager contracts	C + 120
DGS approves Lease Originator contracts	C + 120
Small Business Off-Bill Lease Pilot launches	C + 120
IOUs submit IT Advice Letter to CPUC	C + 120
IOUs complete IT changes **	C + 300
Master Servicer fully interfaced with IOUs (IT changes complete)	C + 300
Small Business OBR Lease pilot launches	C + 330
Mid-Term CPUC Pilot Review <sup>3</sup>	TBD

\*\* This timeline assumes program development concurrently with IT systems. In the event development activities cannot be done concurrent with IT system development, the schedule would change with first funding occurring in late-2015.

<sup>2</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>3</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

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

**Table 5: Geographic Regions Where the Program Will Operate**

Geographic Region	SDG&E	SCG	SCE	PG&E
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

|

**c) Program Administration**

**Table 6: 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 other entity
OBR Sm. Bus. Lease Providers Pilot	Program Application Process				CAEATFA
OBR Sm. Bus. Lease Providers Pilot	IOU Incentive Program Participant	X			CAEATFA
OBR Sm. Bus. Lease Providers Pilot	IOU Incentive Program Non-Participants				CAEATFA
OBR Sm. Bus. Lease Providers Pilot	Credit Review		Lease Originators		
OBR Sm. Bus. Lease Providers Pilot	Lease Origination		Lease Originators		
OBR Sm. Bus. Lease Providers Pilot	Lease Payments		Lease Originators		
OBR Sm. Bus. Lease Providers Pilot	Lease Payment Repayment Process	X	Lease Originators and Master Servicer		
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 other entity
OBR Sm. Bus. Lease Providers Pilot	Credit Enhancements	X			CAEATFA
OBR Sm. Bus. Lease Providers Pilot	Marketing, Education & Outreach (ME&O) (See note below)	TBD	Lease Originators	CCSE	CAEATFA
OBR Sm. Bus. Lease Providers Pilot	Evaluation, Measurement, & Verification (EM&V)	X			CPUC

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**d) Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

**i. Customers:**

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Small business customer as defined by the Small Business Administration found at 13 C.F.R. 121	X	X	X	X
Project site within utility territory on a non-residential meter/rate	X	X	X	X

**ii. Contractors/Participants:**

**Contractor Eligibility Requirements**

Qualified contractors must hold an active license with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications.

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will be required to provide an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.	X	X	X	X

**Contractor Participation Requirements**

Contractors will be required to provide and document an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.

**iii. Lease Originators**

Only Lease Originators selected through CAEATFA's competitive process will be eligible to participate in the Pilot. D.13-09-044 requires that CAEATFA enter into contracts with a minimum of two, and no more than four, Lease Originators. Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA's Lease Originator Request for Proposal.

**Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)**

<b>Financial Institution Eligibility Requirement (list of requirements)</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Only Lease Originators selected through CAEATFA's competitive process will be eligible to participate in the Pilot. D.13-09-044 requires that CAEATFA enter into contracts with a minimum of two, and no more than four, Lease Originators.	X	X	X	X
Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA's Lease Originator Request for Proposal.	X	X	X	X

**e) Program Partners:**

**a. Program coordination partners:**

- CAEATFA – CAEATFA, acting as the CHEEF, will serve as the manager of the Master Servicer, Data Manager, and Trustee Bank. CAEATFA will establish program regulations that include eligibility criteria for financial institutions, clarification of applicable on-bill repayment requirements and process, and details of the structure of the credit enhancement available through this pilot.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Trustee Bank to hold credit enhancement funds allocated to this pilot program.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Data Manager to aggregate data from the Finance Program pilots and prepare it for public consumption and program evaluation.
  - Pursuant to D.13-09-044, CAEATFA will subcontract with a Master Servicer (MS). The MS will (1) collect and transmit funds

and data between the IOUs, trustee, and financial institutions/capital providers; and (2) collect pilot data and store it for use by the Data Manager and FIs.

- Master Servicer (MS) - The Master Servicer will receive customer loan information for transmission to the IOUs and will receive loan payments from the IOUs for remission to the FIs. The MS will operate under its contract with CAEATFA referred to as the California Hub for Energy Efficiency Financing (CHEEF) in the Financing Pilot Program. The MS will collect pilot data and store it for use by the Data Manager.
- Data Manager (DM) – The Data Manager will aggregate and prepare data. This role may be included as part of the Master Servicer duties.

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

- Contractors – Various types of contractors may participate in the program including: HVAC, insulation, mechanical, electrical, and plumbing. The contractor will propose a scope of work to a business owner, and will provide payment options including financing. The IOUs will leverage existing channels working with contractor partners.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect manufacturers from credit risk and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and will review financing programs for their contractor customers. Distributors are expected to be supportive of credit enhanced, state-wide lease financing and will be helpful in promoting the pilot.
- Lease Originators – Two to four Lease Originators will be selected to participate in this Pilot. The Lease Originators will originate and service leases. The Lease Originators will be selected by CAEATFA's competitive RFP process, and will be further governed by the regulations CAEATFA will develop.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure that the marketing of financial products is done in coordination with the Energy Upgrade California statewide marketing brand campaign.
- Real Estate Professionals – Given the unique nature of on-bill pilots, input from real estate professionals may be incorporated into pilot design and execution. The IOUs held a session with real estate professionals to learn about the unique needs of the industry in the non-residential sector and identified multiple areas of opportunity to enhance the on bill pilots. This may include additional information on projects being provided (e.g. amortization tables), creating educational materials that explain how measures (technical) translate into financial savings, and helping develop language that communicates the value of EE measures to subsequent buyers or renters.



**Table 10: Program coordination Partners**

Coordination Partner Information	PG&E	SCE	SDG&E	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Lease Originators	X	X	X	X
Real Estate Professionals	X	X	X	X
CCSE	X	X	X	X

**f) Measures and incentive levels:**

Eligible Measures can consist of EEEMs and may include Non-EEEMs, each of which are both defined herein.

EEEMs are measures that have been approved by the Commission for a utility's EE rebate / incentive program, although the customer need not receive an incentive or rebate to qualify for the loan. EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Per existing rebate programs, allowable EEEMs costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and labor on a per measure basis. EEEMs projects costs should not include activities unrelated to the installation of energy efficiency measures. Labor costs can be contractor or in-house if proof of direct project hours and costs are provided.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-business/energy-savings/>  
 and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>

SCE – <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>

SDG&E – <http://www.sdge.com/sites/default/files/documents/981587305/Targeted%20Basic%20Measures%20%20Energy%20Efficiency%20Business%20Incentives%20and%20Rebates.xls?nid=4326>

PG&E – <http://www.pge.com/eef>

Broad guidelines regarding the inclusion of EEEMs and non-EEEMs were determined by D.13-09-044 (at page 31), as follows:

“We find that customers may be more likely to add EE projects while undertaking other improvement activities. Therefore, for purposes of the pilot period, the Commission finds it reasonable and adopts a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to Eligible EE Measures (EEEMs). Therefore, financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.”

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Per D.13-09-044, Conclusion of Law 56, the total loan value eligible for a credit enhancement will be limited to the total project cost net of any utility rebates and incentives received for the project.

In situations where a customer is served by multiple IOUs, refer to the OBR tariff for details on how billing will be treated.

**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The categories shown in Table 11 do not apply to the broad grouping of EEEMs and non-EEEMs. Please refer to the IOU EEEMs lists at the company website addresses provided above.

**g) Additional Services:**

The Pilot will include a series of additional services. These additional services, where related to marketing and outreach, will be coordinated with Statewide ME&O.

- Outreach, education and training for customers, contractors and real estate professionals will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lessor education: The education and outreach component of the Pilot will include training events and materials for financial institutions and lease originators that will assist them in participating in this pilot. The education and outreach will help lease originators understand the EE market, EE investments, project QA/QC requirements, benefits and drawbacks of on-bill repayment, and data on lease performance. Additional information on lessor training plans will be provided in the CHEEF PIP.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Customer education	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Contractor education	Contractors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Lessor education	Lessors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Real estate professional education	Real Estate Professionals	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan

\*CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

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**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

<b>Activity</b>	<b>Estimated Timing</b>
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging Lease Originators, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

b. Indicate if pre and/or post implementation audits will be required for the sub-program. \_\_\_ Yes \_\_\_ No (See note.)

Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

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).

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process.

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**Table 13: Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Auditing requirements and funding are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Customer

**k) Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

**Table 14: Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

**l) Sub-program Delivery Method and Measure Installation /Marketing or Training:**

The following sequence illustrates how this program will be delivered to customers.

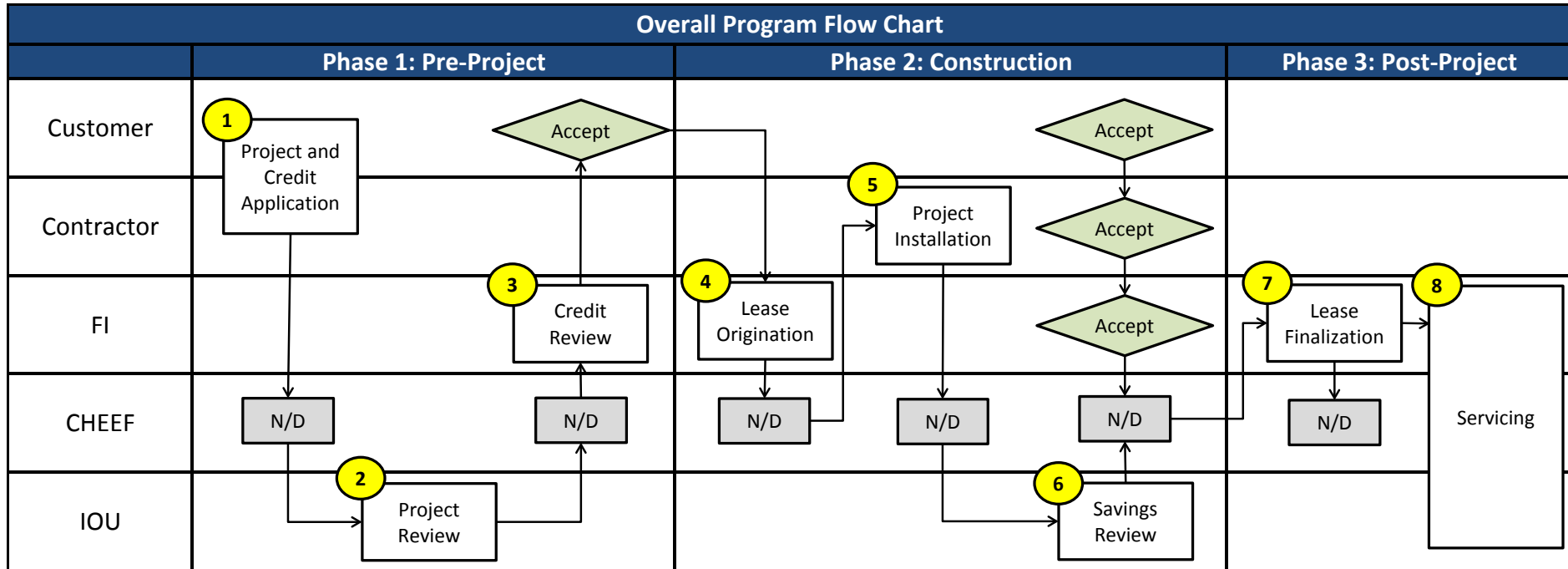
1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor training.
3. IOU Customer Relationship Manager (CRM)/Contractor and customer meet, driven by IOU/contractor marketing or customer inquiry.
4. CRM/Contractor interviews customer, collects site information (possibly including results of energy audit).
5. Contractor proposes a project scope, estimated cost, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including the lease.
6. Customer makes lease and payment decision.
7. If customer selects leasing option, CRM/contractor collects application information and provides to lease company.
8. Lease company collects application information from customer, makes underwriting decision and informs customer and/or contractor.
9. Customer executes lease agreement.

10. Contractor installs improvements.
11. Customer signs completion certificate.
12. IOU performs inspection (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
13. Lease company receives completion certificate and other required documents.
14. Lease company funds contractor.
15. Lease company provides appropriate documentation to CAEATFA.
16. CAEATFA directs trustee to transfer credit enhancement from IOU account to lease company's account at the trustee.
17. Master Servicer transmits lease information to IOU.
18. IOU verifies customer data transmitted by Master Servicer.
19. IOU places lease on Customer's bill and begins OBR collection process

**m) Sub-program Process Flow Chart:**

The flowchart below illustrates the process flow for how the lease pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.

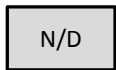




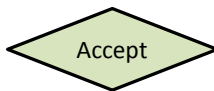
**Key**



**Stage Indicator** = Designates Process Flow Stage



**Notify/Data** = CHEEF notified of Stage completion and data normalized



**Accept and Move to Next Phase** = Acceptance required before project moves to next Phase

n) **Cross-cutting Sub-program and Non-IOU Partner Coordination:**

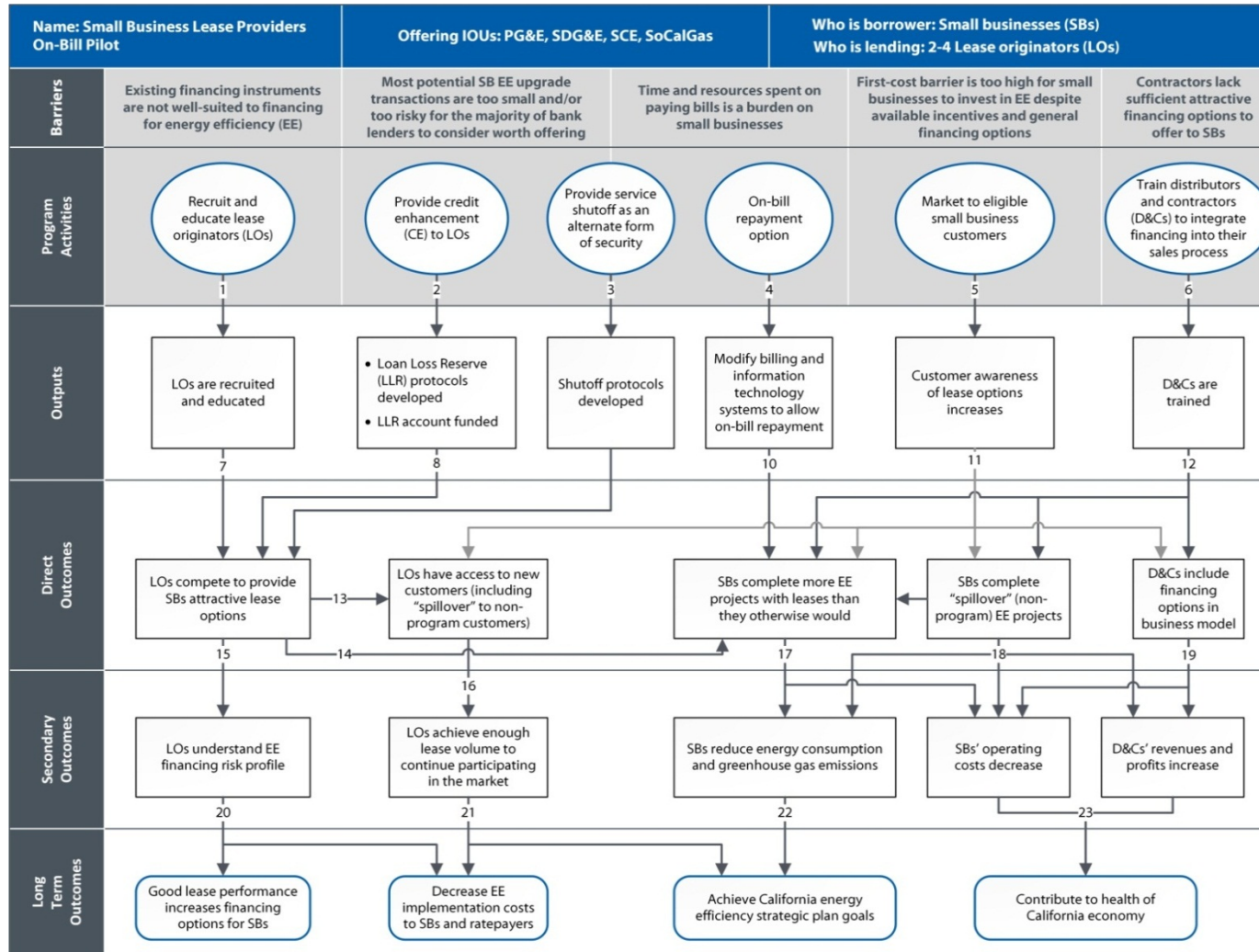
IOU financing programs will leverage the existing incentive and rebate programs.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>OBR Small Business Lease Providers Pilot</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Statewide Commercial, Industrial, and Agriculture Programs	Meetings/Emails/Calls	As Needed
Emerging Technology	Meetings/Emails/Calls	As Needed
Third Party Programs	Meetings/Emails/Calls	As Needed
Institutional Partnerships	Meetings/Emails/Calls	As Needed
Local Government Partnerships	Meetings/Emails/Calls	As Needed
On Bill Financing	Meetings/Emails/Calls	As Needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As Needed
Master Servicer *	Data Exchange	Daily
CCSE	Meetings/Emails/Calls	As Needed

Note: Coordination will not occur until Master Servicer is fully functional.

o) Logic Model:



SB = Small Business D&Cs = Distributors and Contractors LO = Lease Originator CE = Credit Enhancement LLR = Loan Loss Reserve EE = Energy Efficiency

## 11) Additional Sub-Program Information

### a) Advancing Strategic Plan Goals and Objectives:

Innovative financing is a major Strategic Plan strategy for non-residential sectors. One key commercial sector strategy in the Strategic Plan is “Financing: Target financing ...[including] increased availability and use of innovative and expanded financing...” (p. 3-29), which is directly advanced by this sub-program. Furthermore, this sub-program contributes to the Strategic Plan’s call to:

- “ensure access to financing mechanisms that effectively surmount capital limitations and cash flow requirements. This means attracting the interest of banking and capital industries to the magnitude of investment and borrowing needs, and identifying finance mechanisms...” (p. 3-35)
- identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “pilot innovative financial tools [and e]xpand implementation of innovative financing mechanisms” (strategy #1-4, p. 3-32),
- “Develop effective financial tools for EE improvements to existing buildings” (strategy #2-6, p. 3-34)
- Use financing for closely related goals, HVAC and lighting.

### b) Leveraging of Resources:

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of the EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot, the rebate/incentive will decrease the total cost of the project that is eligible for credit enhancement funds. For projects in which the customer is receiving a rebate or incentive, in order to receive that benefit, leases will have to comply with IOU rebate and incentive guidelines.<sup>4</sup>

The Pilot will leverage current equipment lease financing offered by a multitude of equipment leasing companies and capital providers. This program will build on a mature commercial market that has extensive experience in providing equipment leases for energy improvements. This program will provide a credit enhancement to leverage this current market and expand it to currently underserved small business customers.

The IOUs’ OBF programs can also be leveraged to provide financing for certain projects and customers that may be a better fit for that program. This could

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<sup>4</sup> For example, the Statewide Customized Retrofit Manual specifies that “new equipment or system retrofit must guarantee energy savings for the effective useful life of the product or for a period of five years, whichever is less.”

provide customers with a better “EE Financing” experience and boost customer perception of the financing pilots and programs as a whole. Coordination specifics will be developed by IOU program and marketing teams to help guide customers to the right EE financing program for their project. Additionally, the IOUs’ experience in administering the OBF program can be leveraged for best practices and potential pitfalls of EE financing programs.

**c) Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilots will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

**12) Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the criteria required for pilot programs.

**a. A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

The Pilot seeks to overcome the first-cost barrier of implementing EE improvements in the non-residential market and to increase overall energy savings from EE. Current IOU-based programs rely on a rebate structure to pay a portion of the cost of the EE upgrade. Financing pilots, on the other hand, cover 100% of the initial cost of the upgrade, net of any applicable rebates, and subject to repayment. As a result, it is anticipated customers who do not otherwise have the capital readily available will be able to use lease financing to pay for EE upgrades.

**b. Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.a., EE financing is a very important pillar of the Strategic Plan’s approach, specifically including the non-residential sector.

Additionally, the Strategic Plan describes five “policy tools” for Market Transformation, the first of which explains that “*Customer Incentives* including...innovative or discounted financing...are the ‘carrots’ that help *pull* consumers into choosing the efficient option.” (p. 1-5).

**c. Specific goals, objectives and end points for the project.**

The Pilot program seeks to:

- a. Stimulate financial institutions to provide capital to EE upgrade markets in the small business market segment.
- b. Lead to incremental energy savings from EE projects in the small business market segment.
- c. Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates.
- d. Stimulate additional EE projects through the availability of capital to cover the full cost of such upgrades.
- e. Additionally, the Pilot will be testing the added value for financial institutions of having an OBR option.

Further details of the credit enhancement structure will be developed through CAEATFA regulations.

**d. New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

This Pilot will test how effective financing will be at stimulating either more comprehensive EE projects or a greater number of EE projects. Furthermore, the Pilot provides mechanisms to test specific elements of financing such as the effect of lowering the costs through lower lease payments, expedited lease approvals by Lease Originators, and differing levels of contractor engagement in the financing process.

The Pilot relies on several innovative design features that have not been extensively tested in California. These include:

- Credit enhancements: Credit enhancements can reduce financing costs, increase the duration of leases, or make credit underwriting terms more flexible than they otherwise would be. The Pilot will enable testing of the effect of credit enhancements on these features.
- On-Bill Repayment for 3<sup>rd</sup> Parties: The option for lease providers to offer customer on-bill repayment through the utility bill can add increased security for lease providers due to the shut off for non-payment provision. This option can also reduce the time requirements faced by small businesses in paying bills.
- Integration of financing and incentive programs: This pilot will help test the most effective ways for IOU customer rebate/incentive programs to be integrated effectively with third party financing.

- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

See Table 1 and Section 10.a.

- f. **Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Financing Evaluation Research Plan includes a “Market Characterization” project that is managed by the Energy Division and expected to be fielded early in the program cycle.

|

**g. Program performance metrics.**

**Table 16: Program Performance Metrics**

Short-Term PPMs:	IOU Target	Metric Type
PPM 1: Lease transaction volume (dollar amount and number of leases) by IOU	Track and report total dollar amount of lease transactions completed (Decision, p. 62)	2a
PPM 2: End-use categories (HVAC, lighting, etc.) of measures installed through pilot	Track and report end use for each program measure and group end uses by category	2a

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

**h. Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

**i. A proposed Evaluation, Measurement, and Verification (EM&V) plan.**

For finance pilot program EM&V plan, please refer to the revised 2013-2014 M&E Long-term Roadmap. This roadmap is being updated by the statewide M&E team and will not be available at the time IOUs file this PIP.

**j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.e.

**Additional Information Regarding Fast-Track / OBR PIP Requirements in Decision 13-09-044**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

This requirement will apply to the OBR Small Business Lease Providers Pilot and will be further addressed in CAEATFA's regulations.

- Up to \$10 million from EE funds allocated as necessary costs are documented and invoiced to fund marketing, education, and outreach (ME&O) plans customized for the authorized EE finance pilots, as follows: (1) up to \$8 million to be expended in coordination



with the statewide ME&O plans under consideration in Application 12-08-007, et al., and (2) up to \$2 million to the CHEEF to perform non-duplicative ME&O for contractors and financial institutions (Ordering Paragraph 1.vi.)

See Table 1 for the portion of the \$8 million allocated by the IOUs to the OBR Small Business Lease Providers Pilot. The IOUs will expend these amounts as proposed in Section 10.h, which describes the local marketing plan for the pilot. The local marketing plan will be done in coordination with the statewide ME&O plan, which is developed and funded under Application 12-08-007 et. al. The IOU budget for local marketing activities in total will not exceed the \$8 million designated expenditures provided under D.13-09-044.

- The CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time they are making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions (including lease originators) and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas to reference the data protocols (from the final report) in the pilot PIPs since the data fields could differ by pilot (Appendix D).

This is addressed in Section 9.a.iv. Pursuant to D.13-09-044, the data protocols subject to the WG report are incorporated by reference to that report, which is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: CalEEFinance.com.

[More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking \(with detail on data requirements and other regulations\) will be provided herein when available.](#)

#### **Decision 13-09-044, OBR PIPs (Only)**

- The OBR PIP should set credit enhancement guidelines (floor, cap, spread) to incentivize more favorable financing terms for targeted market sectors (p. 22).

See section 9.c. for discussion of credit enhancements for this pilot.

- OBR program shall include non-residential shut-off in general conformity with Commission-approved shut off protocols to be approved in the OBR tariff (p. 54).

This requirement will apply to the OBR Small Business Lease Providers Pilot and is addressed in the OBR tariff.

- The Commission concludes that written consent should be part of the OBR tariff in order to achieve transferability. Property owners and landlords that initially commit to the EE financing and OBR program (“current landlord”) and all of the current landlord’s tenants responsible for repayment under the OBR program (“current tenants”) should be required to give their written consent to abide by the terms and obligations of the OBR program. The written consent of subsequent property owners and landlords and subsequent tenants subject to the OBR program is required in order for the OBR provisions (e.g., transferability, shut-off, etc.) to apply (p. 56).

This requirement will apply to the OBR Small Business Lease Providers Pilot and is addressed in the OBR tariff.

- IOUs are to apply existing OBF practices for application of OBR partial payments and follow Commission-approved disconnection procedures to obtain delinquent payments (p. 56).

This requirement will apply to the OBR Small Business Lease Providers Pilot and is addressed in the OBR tariff.

## ATTACHMENT 1

### Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>5</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

Test the premise that an equipment lease option with a credit enhancement and OBR option will drive increased uptake of energy efficiency (EE) projects in the small business market segment. Credit enhancement aim to lower lease originators risks in entering an asset class that does not have a lot of historical data. The OBR option's aim is to simplify the bill paying process for small businesses and provide Lease Originators with the added security of Shut-off On Non-Payment.

Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates. Private capital in the EE lease market can help overcome the up-front cost barrier in a way that limited ratepayer funds are unable to.

Decrease EE implementation costs for small businesses by providing a way for lease originators to get a better understanding of the EE lease risk profile and to achieve enough lease volume to interest lease originators to continue participating in the market. Creating a long term, standardized, and low cost EE lease instrument can help overcome the up-front cost and time barrier for small businesses.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>6</sup>**

The IOUs do not establish quantitative targets for this Pilot.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

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<sup>5</sup> A SMART objective is one that is Specific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), Measurable, Ambitious, Realistic, and Time-bound.

<sup>6</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs. The IOUs do not establish quantitative targets for this Pilot.

**ATTACHMENT F**

**NONRESIDENTIAL ON-BILL REPAYMENT  
WITHOUT CREDIT ENHANCEMENT  
PROGRAM IMPLEMENTATION PLAN**

CLEAN PIP

2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan

- 1) Sub-Program Name: Non-Residential On-Bill Repayment (OBR) without Credit Enhancement
- 2) Sub-Program ID number:
  - a. SoCalGas: SCG3791
  - b. SDG&E: SDG&E 3298
  - c. SCE: SCE-13-SW0071
  - d. PG&E: PGE\_210937
- 3) Type of Sub-Program:  Core  Third Party  Partnership  Pilot
- 4) Market sector or segment that this sub-program is designed to serve:

- 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: \_\_\_\_\_)
- c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
- d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)

Note: No NAICS codes included; this pilot will be offered across the entire non-residential sectors.

- 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.

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

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for calculating incremental energy savings for the Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information was not yet available to estimate the proposed energy savings. The CPUC has thus

decided to evaluate the energy savings on an *ex post* basis. The Pilot's TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1. Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Non-Res OBR w/out CEs</b>						
Admin/General Overhead (\$)	\$56,169	\$111,417	\$121,143	TBD	TBD	\$288,729
Direct Implementation (\$)	\$612,247	\$1,090,242	\$1,298,681	TBD	TBD	\$3,001,170
Credit Enhancements (CE) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)* <sup>1</sup>	\$16,435	\$387,683	\$657,788	TBD	TBD	\$1,061,906
Total Statewide Budget (\$)	\$684,851	\$1,589,342	\$2,077,612	TBD	TBD	\$4,351,805

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs' proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master Servicer, and d) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.



- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENS, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations.

SoCalGas	Program Year					
Sub-Program	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)	\$2,631	\$25,282	\$35,008	TBD	TBD	\$62,921
Direct Implementation (\$)	\$30,725	\$149,785	\$254,829	TBD	TBD	\$435,339
Credit Enhancements (CEs) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,957	\$265,737	\$380,507	TBD	TBD	\$680,201

SDG&E	Program Year					
Sub-Program	2013	2014	2015	2016	2017	Total
Admin/General Overhead (\$)	\$11,235	\$22,471	\$22,471	TBD	TBD	\$56,177
Direct Implementation (\$)	\$86,674	\$115,449	\$231,245	TBD	TBD	\$433,368
Credit Enhancements (CEs) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)	\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)	\$97,909	\$244,925	\$360,722	TBD	TBD	\$703,556

SCE	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$31,133	\$41,325	\$41,325	TBD	TBD	\$113,783
Direct Implementation (\$)	\$316,817	\$468,946	\$456,545	TBD	TBD	\$1,242,308
Credit Enhancements (CEs) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)	\$0	\$0	\$349,274	TBD	TBD	\$349,274
Total IOU Budget (\$)	\$347,950	\$510,271	\$847,144	TBD	TBD	\$1,705,365

PG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$11,170	\$22,339	\$22,339	TBD	TBD	\$55,848
Direct Implementation (\$)	\$178,031	\$356,062	\$356,062	TBD	TBD	\$890,155
Credit Enhancements (CEs) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)	\$15,834	\$190,008	\$110,838	TBD	TBD	\$316,680
Total IOU Budget (\$)	\$205,035	\$568,409	\$489,239	TBD	TBD	\$1,262,683

9) Sub-Program Description, Objectives and Theory

a) Program Description:

i. Financing

The Non-Residential On-Bill Repayment (OBR) Pilot Program for non-residential customers will help achieve the California Long-term Energy Efficiency Strategic Plan’s vision of comprehensive and deep energy retrofits by removing first-cost barriers to customer projects by enabling loan repayment on the customer’s bill. This Pilots offer participants the flexibility of financing Eligible Energy Efficiency Measures (EEEMs), Distributed Generation (DG) or Demand Response (DR) projects.

The Pilot will test the efficacy of attracting private capital to fund Demand Side Management (DSM) investments in the non-residential sector via an on-bill

repayment instrument which does not rely on ratepayer supported credit enhancements.

Detailed linkages, market barriers, program mechanisms, program outcomes and related Pilot operations are provided in the Logic Model included in this PIP. A website link to the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) program rulemaking (with detail on the program regulations) will be provided herein when available.

Pursuant to the Assigned Commissioner's Ruling issued August 25, 2014, the Non-Residential OBR Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the loan or lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

The primary goals of the Pilot are:

- a. Test the premise that placing a financing charge on the customer's utility bill through a tariff schedule and has provisions for utility service disconnection if the financing charge goes unpaid, will lead to more capital available at attractive rates and terms than is currently available.
- b. Test the premise that adding a financing charge to a customer's utility bill, structured as a tariff, may help to solve the customer-tenant split incentive issue.
- c. Test whether incremental private capital flows to the DSM market for the non-residential segment.
- d. Determine if DSM implementation costs decrease for Businesses, Organizations and Institutions and (BOIs).
- e. Determine if BOIs complete more DSM projects with loans than they otherwise would.
- f. Test the effect of a voluntary transfer of the financial obligation from one customer to a successor customer to ascertain whether customers and financial institutions see such transfer as advantageous and use that transferability option. Such transfer would occur with accompanying disclosure to the successor customer and voluntary assent from that successor customer to assume the repayment obligation on the utility bill.

ii. Market Gaps and Means to Address Gaps

The target segment for this pilot includes small, medium and large business customers. These customers encounter a similar decision making process when they are considering Energy Efficiency (EE) improvements. The business customer must decide between financing investments to grow their revenue stream and reducing energy consumption through the installation of EE measures. Other issues limiting investment in EE include highly leveraged building space and/or tenant/landlord financial structures that don't support investment in EE.

This Pilot attempts to mitigate these barriers primarily by including repayment of the loan on the customer's utility bill and allowing for disconnection of service in the event customers default on the financing. The expectation is that customers will be disinclined to default to avoid service disconnection, ensuring repayment of the loan.

iii. Credit Enhancement Mechanism and On Bill Repayment

The OBR without Credit Enhancements Plot (the Pilot) does not contain a Credit Enhancement element. Non-residential customers of all sizes may participate in this Pilot.

iv. Data Collection

Data collection, subject to relevant privacy considerations, is essential for testing the value of various features of the authorized financing pilots. Pursuant to D.13-09-044, the data protocols subject to the data Working Group (WG) were submitted and approved by the Commission. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. The report is available at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>. Please also refer to the regulations established by CAEATFA regarding data collection and reporting to implement the WG report. Contractors and FIs should refer to the CHEEF, the selected Master Servicer, and / or the Data Manager regarding any related requirements.

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

v. Areas of Concern for The Pilot

- Will financial institutions participate in the Pilot?

This concern has been addressed by reaching out to financial institutions at the development stages of the program to build a program that will be attractive to them.

- Will customers use the Pilot Offering?

This Pilot is a market-based financial offering unlike OBF which is offered by IOUs. Financing acquired through this Pilot will accrue interest charges as opposed to the current IOU financing program, OBF. It's possible this may impact the likelihood of customer participation. It is hoped the broader terms of the

financing, coordinated marketing activities, and existing rebate programs, which can be used to reduce the amount financed, will address this concern.

vi. Financial Institution Participants

The Pilot will overcome market barriers in part by developing strong participation from Financial Institutions (FIs). Likely financial institution participants in this pilot will include:

- a. Commercial banks that currently fund commercial loans that may be attracted by the association between the utility bill and repayment of their commercial loan. Some commercial banks may also be attracted by the voluntary transferability feature.
- b. Lease, or similar finance, companies that originate and service equipment finance leases or similar financial agreements for medium and large businesses.
- c. Credit unions – non-profit financial institutions that exist for the benefit of their members; participation from credit unions is not expected to be high.
- d. Community Development Financial Institutions (CDFIs) or other similar non-profit financing entities that specialize in energy efficiency financing.

b) Sub-Program Energy and Demand Objectives

Table 2. Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year

SoCalGas	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SCE	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

PG&E	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

\* N/A = "not applicable." TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

This pilot program has the following Non-Energy Objectives:

- 1) Improvement in customer satisfaction driven by an increase in capital for energy efficiency projects helping customers overcome the "first cost" key barrier.
- 2) Improve the credibility of energy efficiency investment and provide economic benefits to the state via increased loan volume through a financing program supported by both Financial Institutions as well as the IOUs.

**d) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

Data sources for these measures are consistent with the rebate/incentive programs the measures are offered through.

**Table 3: Workpaper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

**10) Program Implementation Details**

**a) Timelines:**

**Table 4: Sub-Program Milestones and Timeline**

*Note:* The expected dates of several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions, and/or other parties, and are subject to adjustment necessitated by any delays.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>2</sup>
Lender recruitment and contractor training	Ongoing
Trustee, Master Servicer and Data Manager RFPs issued	C + 60
CAEATFA Board Meeting to approve Trustee contract	C + 60
DGS Approves Trustee contract	C + 60
CAEATFA Board Meeting to approve Master Servicer and Data Manager contracts	C + 90
DGS approves Master Servicer and Data Manager contracts	C + 90
Non-residential OBR Pilot rulemaking process	C + 120
IOUs submit IT Advice Letter to CPUC	C + 120
IOUs complete IT changes *	C + 300
Master Servicer fully interfaced with IOUs	C + 300
Non-Residential OBR Pilot launches	C + 330
Mid-Term CPUC Pilot Review <sup>3</sup>	TBD

\*This timeline assumes program development concurrently with IT systems. In the event development activities cannot be done concurrent with IT system development, the schedule would change with first funding occurring in late-2015.

<sup>2</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>3</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

**b) Geographic Scope:**

**Table 5: Geographic Regions Where the Program Will Operate**

<b>Geographic Region</b>	<b>SDG&amp;E</b>	<b>SCG</b>	<b>SCE</b>	<b>PG&amp;E</b>
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X



c) Program Administration

Table 6: Program Administration of Program Components

Program Name	Program Component	Implemented by IOU Staff? (X = Yes)	Implemented by financial institutions approved by CAEATFA? (X = Yes) d)	Implemented by Master Servicer? (X = Yes)	Implemented by other entity (CAEATFA, Data Manager, Contractors, CCSE)? (X = Yes)
OBR Nonresidential Pilot	Loan Application Process		X	X	
OBR Nonresidential Pilot	Project Review	X	X		X
OBR Nonresidential Pilot	Credit Review		X		
OBR Nonresidential Pilot	Loan Origination		X		
OBR Nonresidential Pilot	Loan Data Transmission		X	X	
OBR Nonresidential Pilot	Loan Re-payment Collection	X			
OBR Nonresidential Pilot	Loan Re-payment remission	X		X	
OBR Nonresidential Pilot	Loan Data Capture and storage		X	X	
OBR Nonresidential Pilot	Energy savings Data Capture and storage	X			
OBR Nonresidential Pilot	Reporting	X	X	X	X
OBR Nonresidential Pilot	Data Aggregation				X
OBR Nonresidential Pilot	Marketing, Education & Outreach (ME&O) (See note below)	TBD	X	X	X
OBR Nonresidential Pilot	Evaluation, Measurement, & Verification (EM&V)	X			CPUC

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**d) Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

**i) Customers:**

All non-residential customers installing qualifying Energy Efficiency measures, Distributed Generation and Demand Response projects may participate in the OBR without Credit Enhancements Pilot. Customer eligibility requirements are further defined in of the OBR Tariff.

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
All Non-residential Customers	X	X	X	X
Project site within utility territory on a non-residential meter/rate	X	X	X	X

**ii) Contractors/Participants:**

Qualified contractors must hold an active license with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the incentive program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications.

Contractors will be required to provide and document an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will be required to provide an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.	X	X	X	X

iii) Financial Institutions

Minimum qualifications for FIs are that they: a) possess all required state and federal licenses, and b) are in good standing with regulators. FIs will also be required to conform to pilot program requirements, and data collection and sharing requirements that are identified in the PIP, OBR tariff, and CAEATFA regulations. Additional eligibility requirements for the FIs participating in this program will be determined through CAEATFA's public process for developing program regulations.

**Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)**

Financial Institution Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Minimum qualifications for FIs are that they: a) possess all required state and federal licenses, and b) are in good standing with regulators.	X	X	X	X
Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA's public rulemaking process.	X	X	X	X

e) Program Partners:

a) Program Coordination partners:

- CAEATFA – CAEATFA, acting as the CHEEF, will serve as the manager of the Master Servicer, Data Manager, and Trustee Bank. CAEATFA will establish program regulations that include eligibility criteria for financial institutions, clarification of applicable on-bill repayment requirements and process through this pilot.

- Pursuant to D.13-09-044, CAEATFA will subcontract with a Data Manager to aggregate data from the Finance Program pilots and prepare it for public consumption and program evaluation.
- Pursuant to D.13-09-044, CAEATFA will subcontract with a Master Servicer (MS). The MS will (1) collect and transmit funds and data between the IOUs, trustee, and financial institutions/capital providers; and (2) collect pilot data and store it for use by the Data Manager and FIs.
- The FIs will fund and service financial instruments, which may include loans, leases, service agreement or other instruments as approved. The FIs may include the following types of entities.
  - Commercial banks that currently fund commercial loans, and that may be attracted by the tie between the utility bill and repayment of their commercial loan. Some commercial banks may also be attracted by the voluntary transferability feature.
  - Lease or similar finance companies that originate and service equipment finance leases or similar financial agreements.
  - Credit unions – non-profit financial institutions that exist for the benefit of their members.
  - Community Development Financial Institutions (CDFIs) or other similar non-profit financing entities that specialize in energy efficiency financing.

**b) Other key program partners:**

- Contractors – Various types of contractors may participate in the program including: HVAC, insulation, mechanical, electrical and plumbing. The contractor will propose a scope of work to business owners, often based on the results of an energy audit, and will provide payment options including financing.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect contractors from credit risk, manufacturer defects and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and will review financing programs for their contractor customers. Distributors are expected to be supportive of credit enhanced, state-wide financing and will be helpful in promoting the OBR without Credit Enhancement pilot.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure that the marketing of financial products is done in coordination with the Energy Upgrade California statewide marketing brand campaign.
- Real Estate Professionals – Given the unique nature of on-bill pilots, input from real estate professionals may be incorporated into pilot design and execution. The IOUs held a session with real estate professionals to learn about the unique needs of the industry in the non-residential sector and

identified multiple areas of opportunity to enhance the on-bill pilots. This may include additional information on projects being provided (e.g. amortization tables), creating educational materials that explain how measures (technical) translate into financial savings and helping develop language that communicates the value of EE measures to subsequent buyers or renters.

**Table 10: Program coordination Partners**

Coordination Partner Information	PG&E	SCE	SDG&E	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Financial Institutions	X	X	X	X
Master Servicer	X	X	X	X
Data Manager	X	X	X	X
California Center for Sustainable Energy (CCSE)	X	X	X	X
Real Estate Professionals	X	X	X	X

**f) Measures and incentive levels:**

Eligible Measures consist of EEEMs and may include non-EEEMs, each of which are both defined herein.

EEEMs are measures that have been approved by the Commission for a utility's EE rebate / incentive program, although the customer need not receive an incentive or rebate to qualify for the loan. EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Per existing rebate programs, allowable EEEMs costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and labor on a per measure basis. EEEMs projects costs should not include activities unrelated to the installation of energy efficiency measures. Labor costs can be contractor or in-house if proof of direct project hours and costs are provided.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-business/energy-savings/>  
and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>

SCE - <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>

SDG&E – <http://www.sdge.com/node/4326>

PG&E – <http://www.pge.com/eef>

Broad guidelines regarding the inclusion of EEEMs and non-EEEMs were determined by D.13-09-044 (at page 31), as follows:

“We find that customers may be more likely to add EE projects while undertaking other improvement activities. Therefore, for purposes of the pilot period, the Commission finds it reasonable and adopts a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to Eligible EE Measures (EEEMs). Therefore, financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.”

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Per D.13-09-044, Conclusion of Law 56, the total loan value eligible for a credit enhancement will be limited to the total project cost net of any utility rebates and incentives received for the project.

Because this pilot does not include credit enhancements, DG may be included in the 70%-100% EEEMs portion. Pursuant to Resolution E-4663, the Commission stated “We think it is implicit that technologies allowed in existing IOU programs are eligible.” Projects will be based on but not limited to existing technologies from existing IOU DR (Automated Demand Response, Permanent Load Shift) and DG (California Solar Initiative (CSI), CSI Thermal, Net Energy Metering, Self-Generation Incentive Programs) programs. Per Resolution E-4663, the Commission declined to allow administrators to define project eligibility in the PIPs; Commission staff in consultation with CAEATFA may consider whether it is prudent for CAEATFA to make ineligible certain technologies, including diesel back-up generators.

In situations where a customer is served by multiple IOUs, refer to the OBR tariff for details on how billing will be treated.

**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The categories shown in Table 11 do not apply to the broad grouping of EEEMs and non-EEEMs. Please refer to the IOU EEEMs lists at the company website addresses provided above.

**g) Additional Services:**

The Pilot will include a series of additional services. These additional services, where related to marketing and outreach, will be coordinated with Statewide ME&O.

- Outreach, education and training for customers, contractors and real estate professionals will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lender training: The education and outreach component of the Pilot will include training events and materials for financial institutions and lenders that will assist them in participating in this pilot. The education and outreach will assist financial institutions with the understanding of the potential market, benefits and drawbacks of on-bill repayment, EE investments, projects QA/QC requirements, and data on loan performance. Additional information on lender training plans will be provided in the CHEEF PIP.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Customer Education	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Contractor Education	Contractors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Lender Education	Lenders	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Real estate professional education	Real Estate Professionals	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan

\* CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.



CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

<b>Activity</b>	<b>Estimated Timing</b>
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging FIs, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

b) Indicate if pre and/or post implementation audits will be required for the sub-program. \_\_\_ Yes \_\_\_ No (See note.)

Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

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).

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process.

**Table 13: Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Auditing requirements and funding are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Customer

**k) Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

**Table 14: Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

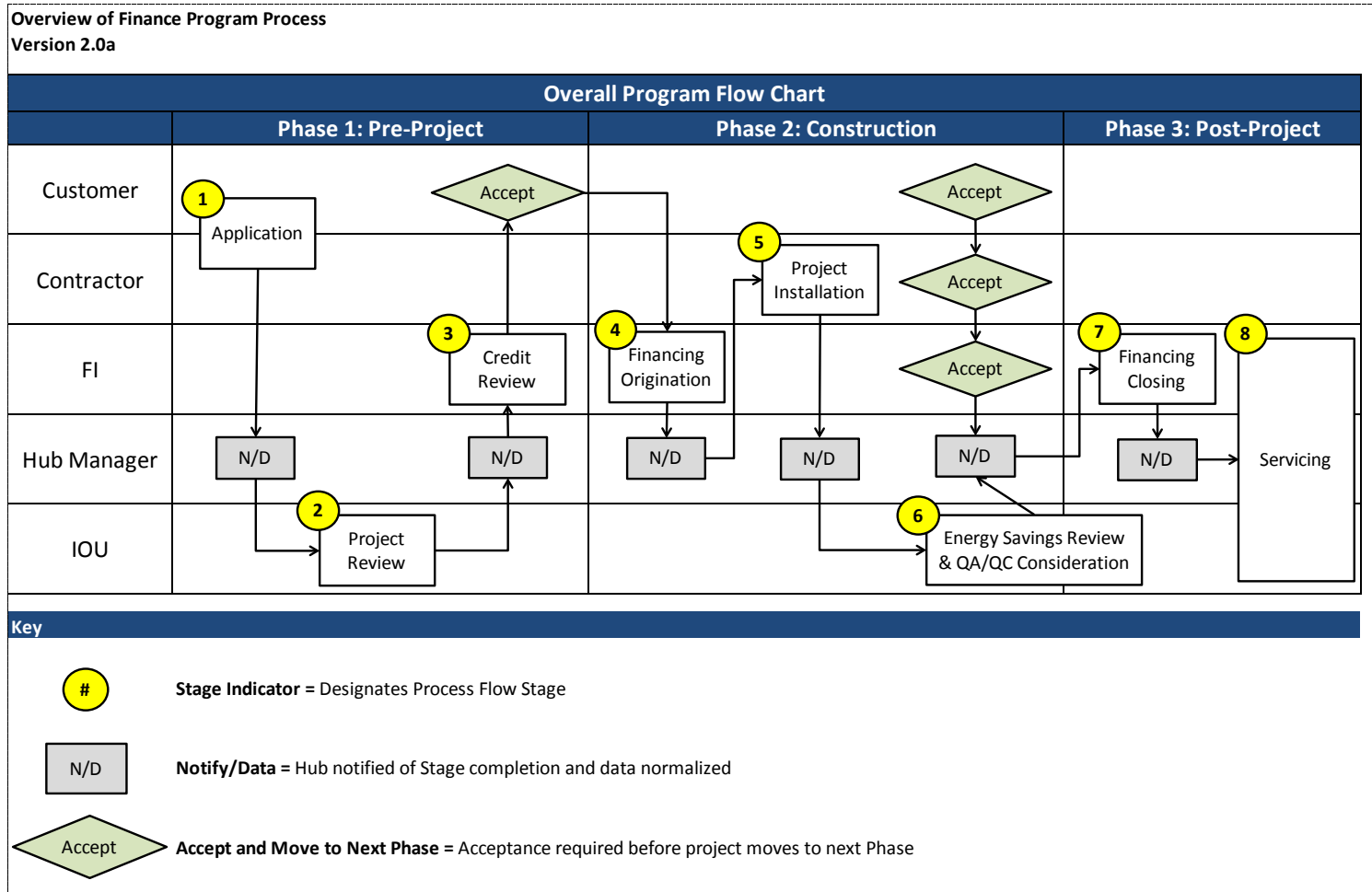
**l) Sub-program Delivery Method and Measure Installation /Marketing or Training:**

The following sequence illustrates how this program is expected to be delivered to customers.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor and financial institution training.
3. IOU Account Executive (AE)/Contractor and customer meet, driven by AE/contractor marketing or customer inquiry.
4. AE/Contractor interviews customer, collects site information (possibly including results of energy audit).
5. Contractor proposes a project scope, price, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including financing.
6. Customer makes purchase and payment decision.
7. If Customer selects financing option, AE/contractor provides customer with list of Financial Institutions participating in financing program.
8. Financial Institution collects application information from Customer, makes underwriting decision and informs Customer and/or contractor.
9. Customer executes loan agreement.
10. Contractor installs improvements.
11. Customer signs completion certificate.
12. IOU performs inspection (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
13. Financial Institution receives completion certificate and other required documents.
14. Financial Institution funds Contractor.
15. Financial Institution informs Master Servicer loan funds have been disbursed.
16. Master Servicer transmits financing information to IOU.
17. IOU verifies customer data transmitted by Master Servicer.
18. IOU places loan on Customer's bill and begins OBR collection process.

**m) Sub-program Process Flow Chart:**

The flowchart below illustrates the process flow for how the OBR without credit enhancements pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.



**n) Cross-cutting Sub-program and Non-IOU Partner Coordination**

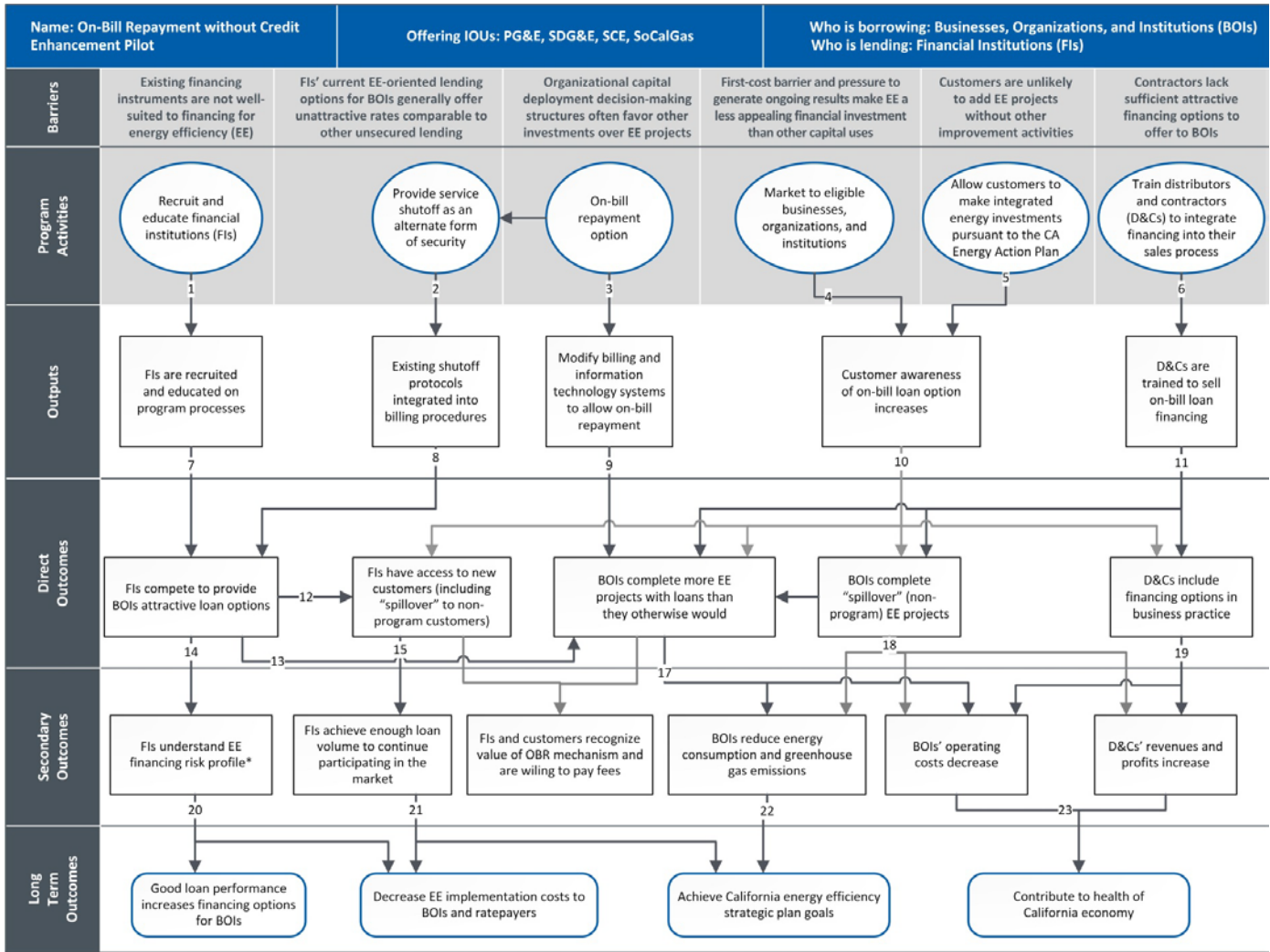
IOU financing programs will leverage the existing incentive and rebate programs to promote the financing pilots.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>OBR w/out Credit Enhancement Pilot</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Statewide rebate/incentive programs	Meetings/Emails/Calls	As needed
Statewide Emerging Technology Program	Meetings/Emails/Calls	As needed
Statewide Marketing, Education, and Outreach Program	Meetings/Emails/Calls	As needed
IOU EE Third Party Programs	Meetings/Emails/Calls	As needed
IOU Institutional Partnerships	Meetings/Emails/Calls	As needed
IOU Local Government Partnerships	Meetings/Emails/Calls	As needed
Statewide On-Bill Financing Program	Meetings/Emails/Calls	As needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As needed
Master Servicer*	Data Exchange	Daily
Data Manager*	Data Exchange	As Needed
CCSE	Meetings/Emails/Calls	As needed

Note: Coordination will not occur until Master Servicer is fully functional.

o) Logic Model:



BOIs = Businesses, Organizations, and Institutions    D&Cs = Distributors and Contractors    FI = Financial Institution    LLR = Loan Loss Reserve    EE = Energy Efficiency  
\* Collecting EE financing performance data is an important function of the California Hub for Energy Efficiency Financing (CHEEF)

## 11) Additional Sub-Program Information

### a) Advancing Strategic Plan Goals and Objectives:

Innovative financing is a major Strategic Plan strategy for non-residential sectors. One key commercial sector strategy in the Strategic Plan is “Financing: Target financing ...[including] increased availability and use of innovative and expanded financing...” (p. 3-29), which is directly advanced by this sub-program. Furthermore, this sub-program contributes to the Plan’s call to:

- “ensure access to financing mechanisms that effectively surmount capital limitations and cash flow requirements. This means attracting the interest of banking and capital industries to the magnitude of investment and borrowing needs, and identifying finance mechanisms...” (p. 3-35)
- identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “pilot innovative financial tools [and e]xpand implementation of innovative financing mechanisms” (strategy #1-4, p. 3-32),
- “Develop effective financial tools for EE improvements to existing buildings” (strategy #2-6, p. 3-34)
- Use financing for closely related goals, HVAC and lighting.

### b) Leveraging of Resources:

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot, the rebate/incentive will decrease the total amount financed. For projects in which the customer is receiving a rebate or incentive, in order to receive that benefit, loans will have to comply with IOU rebate and incentive guidelines.<sup>4</sup>

The Pilot will leverage financing options offered by financial institutions that meet the eligibility criteria defined in CAEATFA’s regulations. This program will build on a mature financing market that has extensive experience in providing loans to business customers. The pilot will offer IOU on bill repayment as a means to facilitate loan repayment to the financial institution.

The IOUs’ On-Bill Financing (OBF) programs can also be leveraged to provide financing for certain projects that may be a better fit for that program. Coordination with OBF will be required to determine the types of projects that are better suited for OBF or this Pilot. Coordination specifics will be developed by IOU program

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<sup>4</sup> For example, the Statewide Customized Retrofit Manual specifies that “new equipment or system retrofit must guarantee energy savings for the effective useful life of the product or for a period of five years, whichever is less.”

and marketing teams to help guide customers to the right EE financing program for their project.

**c) Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilot programs will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

**12) Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the 10 criteria required for pilot programs.

**a. A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

The pilot seeks to overcome the first-cost barrier of implementing EE improvements in the non-residential market and to increase overall energy savings from EE. Current IOU-based programs rely on a rebate structure to pay a portion of the cost of EE upgrades. Financing pilots, on the other hand, cover 100% of the initial cost of the upgrade, net of any applicable rebates, and subject to repayment. As a result, it is anticipated customers who do not otherwise have the capital readily available will be able to use financing to pay for EE upgrades.

**b. Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.A, EE financing is a very important pillar of the Strategic Plan's approach, specifically including the non-residential sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "**Customer Incentives** including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

**c. Specific goals, objectives and end points for the project.**

The Pilot seeks to:



- a. Stimulate financial institutions to provide capital to energy efficiency upgrade markets in the non-residential sector.
- b. Lead to incremental energy savings from energy efficiency projects.
- c. Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates.
- d. The Pilot will be testing the added value of having an OBR option for financial institutions.
- e. Allow DR/DG measures in order to drive additional energy efficiency projects, create additional EE deal flow, and allow for the distribution of fixed costs over a larger number of projects.

The Pilot seeks to facilitate repayment of the loan through use of the utility bill. D.13-09-044 Conclusion of Law 31 states: "No ratepayer funds, other than implementation and servicing costs should be allocated for the OBR pilot program without CEs." The Pilot will be closely monitored to ensure that implementation and servicing costs associated with DR and DG financing do not prohibit EE goals from being achieved. The IOUs will evaluate incremental costs associated with OBR financing relative to budgets, and may develop guidelines including subscription limits. Guidelines will be updated through the PIP addendum process.

- d. **New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

This Pilot will test how effective financing and on bill repayment will be at stimulating either more comprehensive EE projects or a greater number of EE projects. Furthermore, the pilot provides mechanisms to test specific elements of financing such as lowering the costs through lower loan payments, financing, repayment through the utility bill, and differing levels of contractor engagement in the financing process.

- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

The target launch date for the Non-Residential OBR without Credit Enhancements Pilot is July 2014; it is scheduled to be in effect through 2017. No budget for Credit Enhancements was allocated to this pilot.

See Table 1 and Section 10.a.

- f. **Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Financing Evaluation Research Plan includes a "Market Characterization" project that is managed by the Energy Division and expected to be fielded early in the program cycle.

**g. Program performance metrics.**

Program performance metrics will consist of loan transaction volume: number of loans and total amount of financing for the pilot period.

**Table 16: Program Performance Metrics**

Short-Term PPMs:	IOU Target	Metric Type
PPM 1: Loan Transaction Volume	Track, and report, number of loans and total amount of financing.	2a

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

**h. Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

**i. A proposed Evaluation, Measurement and Evaluation (EM&V) plan.**

The statewide IOU M&E team has submitted an updated 2013-2014 Finance Long-term Research Roadmap to Energy Division. The overall EM&V will be guided by this research roadmap.

**j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.e.

**Decision 13-09-044, Fast-Track / OBR PIPs**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

The OBR without Credit Enhancements pilot is not supported by a Credit Enhancement.

- CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time they are making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas to reference the data protocols (from the final report) in the pilot PIPs since the data fields could differ by pilot (Appendix D).

Pursuant to D.13-09-044, the data protocols subject to the WG report were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>. Please also refer to the regulations established by CAEATFA regarding data collection and reporting to implement the WG report. Contractors and FIs should refer to the CHEEF, the selected Master Servicer, and / or the Data Manager regarding any related requirements

More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking (with detail on data requirements and other regulations) will be provided herein when available.

#### **Decision 13-09-044, OBR PIPs (Only)**

- The OBR PIP should set credit enhancement guidelines (floor, cap, spread) to incentivize more favorable financing terms for targeted market sectors (p. 22).

The OBR without Credit Enhancements pilot is not supported by a Credit Enhancement.

- OBR program shall include non-residential shut-off in general conformity with Commission-approved shut off protocols to be approved in the OBR tariff (p. 54).

This requirement applies to the Non-Residential OBR without Credit Enhancement Pilot and is addressed in the OBR tariff.

- The Commission concludes that written consent should be part of the OBR tariff in order to achieve transferability. Property owners and landlords that initially commit to the EE financing and OBR program (“current landlord”) and all of the current landlord’s tenants responsible for repayment under the OBR program (“current tenants”) should be required

to give their written consent to abide by the terms and obligations of the OBR program. The written consent of subsequent property owners and landlords and subsequent tenants subject to the OBR program is required in order for the OBR provisions (e.g., transferability, shut-off, etc.) to apply (p. 56).

This requirement will apply to the OBR without Credit Enhancements pilot and is addressed in the OBR tariff.

- IOUs are to apply existing OBF practices for application of OBR partial payments and follow Commission-approved disconnection procedures to obtain delinquent payments (p. 56).

This requirement will apply to the OBR without Credit Enhancements pilot and is addressed in the OBR tariff.

## ATTACHMENT 1

### Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>5</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

Test the premise that placing a financing charge on the customer's utility bill through a tariff schedule and has provisions for utility service disconnection if the financing charge goes unpaid, will lead to more capital available at attractive rates and terms than is currently available

Test the efficacy of attracting private capital to fund DSM investments in the non-residential sector via an on-bill repayment instrument which does not rely on ratepayer supported credit enhancements.

Test the effect of a voluntary transfer of the financial obligation from one customer to a successor customer to ascertain whether customers and financial institutions see such a transfer as advantageous and use that transferability option. Such transfer would occur with accompanying disclosure to the successor customer and voluntary assent from that successor customer to assume the repayment obligation of the utility bill.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>6</sup>**

The IOUs do not establish quantitative targets for this Pilot.

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<sup>5</sup> A SMART objective is one that is **S**pecific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), **M**easurable, **A**mbitious, **R**ealistic, and **T**ime-bound. For example, for a vender training component of an innovative commercial program, two SMART mid-term objectives and one long-term objective might be:

- a) During the period 2013-2014, the number of HVAC installers in the SCE service territory who are able to perform quality installations of energy efficient packaged air conditioners will increase by 20%.
- b) During the period 2013-2014, the number of installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 25%.
- c) By 2020, installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 75%.

<sup>6</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs. The IOUs do not establish quantitative targets for this Pilot.

REDLINE PIP

2013 – 2017 Energy Efficiency Programs  
Statewide Finance Pilot Sub-Program  
Program Implementation Plan

- 1) Sub-Program Name: Non-Residential On-Bill Repayment (OBR) without Credit Enhancement
- 2) Sub-Program ID number:
  - a. SoCalGas: SCG3791
  - b. SDG&E: SDG&E 3298
  - c. SCE: SCE-13-SW0071
  - d. PG&E: PGE\_210937
- 3) Type of Sub-Program:  Core  Third Party  Partnership  Pilot
- 4) Market sector or segment that this sub-program is designed to serve:

- 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: \_\_\_\_\_)
- c.  Industrial (List applicable NAIC codes: \_\_\_\_\_)
- d.  Agricultural (List applicable NAIC codes: \_\_\_\_\_)

Note: No NAICS codes included; this pilot will be offered across the entire non-residential sectors.

- 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.

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

TRC and PAC analyses are subject to the development, submission, and final California Public Utilities Commission (CPUC) disposition of the workpaper which will contain the methodology for calculating incremental energy savings for the Finance Pilot Programs. A workpaper was submitted by the California Investor Owned Utilities (IOUs) in compliance with CPUC Decision (D.)13-09-044, however the CPUC determined sufficient information was not yet available to estimate the proposed energy savings. The CPUC has thus



decided to evaluate the energy savings on an *ex post* basis. The Pilot's TRC and PAC will be studied during the pilot period and assessed *ex post*.

8) Projected Sub-Program Budget

Table 1. Projected Sub-Program Budget, by Calendar Year

Statewide (All Utilities)	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Non-Res OBR w/out CEs</b>						
Admin/General Overhead (\$)	\$56,169	\$111,417	\$121,143	TBD	TBD	\$288,729
Direct Implementation (\$)	\$612,247	\$1,090,242	\$1,298,681	TBD	TBD	\$3,001,170
Credit Enhancements (CE) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)*1	\$16,435	\$387,683	\$657,788	TBD	TBD	\$1,061,906
Total Statewide Budget (\$)	\$684,851	\$1,589,342	\$2,077,612	TBD	TBD	\$4,351,805

Notes (applicable to all budget tables):

- This statewide table contains the authorized combined budgets for all utilities, and thus is intended for illustrative purposes only. The CE amounts shown do not represent funds available for any singular lending activity; please see the utility-specific budget tables for authorized amounts for each respective company in their service territory.
- CHEEF implementation costs are reflected in the CHEEF PIP per CPUC direction (Appendix F, D. 13-09-044).
- The following is a list of the general activities within the direct implementation (DI) budget category for the IOUs' proposed financing pilots. Activities are ordered according to estimated budget (high to low) allocations, and represent best estimates of cost levels prior to program deployment; the actual list of activities and associated level of expenditures within the DI category may vary, particularly given the pilot nature of these programs. IOU accounting systems do not necessarily record costs by each activity type; therefore the list below is based on operational knowledge and not accounting records. Lastly, cost treatment for DINI activities is governed by the CPUC Energy Efficiency Policy Manual, Version 5 (dated July 2013), Appendix F: Cost Categories and Related Caps and Targets and Targets, and the budgets and conditions established by Decision (D.) 13-09-044 and any subsequent Commission funding decisions.
  - o Information Technology Costs: May include a) design and development of automated On Bill Repayment system, b) development of EEEMs portal, c) development of a system interface with Master Servicer, and ed) development and integration of the system with program specific applications (project management tools, unique interfaces with reporting systems, etc.).

<sup>1</sup> The Resolution finds CCSE shall be allocated up to \$8 million less 5% of that amount (to be released to IOUs to fund participation in marketing plan development). The remaining marketing funds shown in Table 1 are illustrative and shall be allocated according to the approved statewide integrated marketing plan that will be developed by CCSE in coordination with IOUs, CAEATFA, and CPUC staff and submitted by Tier I Advice Letter.

- o Program launch and implementation costs: May include a) development of program policies and procedures, including CAEATFA support; b) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account validation, and multifamily audits/technical assistance; c) reacting to market conditions, monitoring of program progress and addressing implementation issues in support of CHEEF; d) leveraging existing and developing new contractor networks in support of the CHEEF's and Center for Sustainable Energy's (CSE's) Contractor Management roles; e) coordinating training of internal and external stakeholders (e.g., RENs, LGPs, WET, low-income programs, solar providers, water agencies, etc. f) EEEMs list posting, Energy Advisor; and g) on-going support to Billing, IT, and Call Center operations~~b) leveraging existing and developing new contractor networks in conjunction with the CHEEF, c) coordinating training of internal and external stakeholders with CAEATFA and other parties, d) integration of financing with existing programs, reacting to market conditions, monitoring of program progress and addressing implementation issues, e) on-going support to Billing, IT, and Call Center operations, and f) funding for consultants, including an Expert Finance Consultant in coordination with CAEATFA, Credit Enhancement account processing, Energy Auditors for projects not participating in rebates/incentives programs, and multifamily audits/technical assistance.~~

SoCalGas	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$2,631	\$25,282	\$35,008	TBD	TBD	\$62,921
Direct Implementation (\$)	\$30,725	\$149,785	\$254,829	TBD	TBD	\$435,339
Credit Enhancements (CEs) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)	\$601	\$90,670	\$90,670	TBD	TBD	\$181,941
Total IOU Budget (\$)	\$33,957	\$265,737	\$380,507	TBD	TBD	\$680,201

SDG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$11,235	\$22,471	\$22,471	TBD	TBD	\$56,177
Direct Implementation (\$)	\$86,674	\$115,449	\$231,245	TBD	TBD	\$433,368
Credit Enhancements (CEs) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)	\$0	\$107,005	\$107,006	TBD	TBD	\$214,011
Total IOU Budget (\$)	\$97,909	\$244,925	\$360,722	TBD	TBD	\$703,556

SCE	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$31,133	\$41,325	\$41,325	TBD	TBD	\$113,783
Direct Implementation (\$)	\$316,817	\$468,946	\$456,545	TBD	TBD	\$1,242,308
Credit Enhancements (CEs) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)	\$0	\$0	\$349,274	TBD	TBD	\$349,274
Total IOU Budget (\$)	\$347,950	\$510,271	\$847,144	TBD	TBD	\$1,705,365

PG&E	Program Year					
	2013	2014	2015	2016	2017	Total
<b>Sub-Program</b>						
Admin/General Overhead (\$)	\$11,170	\$22,339	\$22,339	TBD	TBD	\$55,848
Direct Implementation (\$)	\$178,031	\$356,062	\$356,062	TBD	TBD	\$890,155
Credit Enhancements (CEs) (\$)	\$0	\$0	\$0	TBD	TBD	\$0
Marketing & Outreach (\$)	\$15,834	\$190,008	\$110,838	TBD	TBD	\$316,680
Total IOU Budget (\$)	\$205,035	\$568,409	\$489,239	TBD	TBD	\$1,262,683

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

**a) Program Description:**

**i. Financing**

The Non-Residential On-Bill Repayment (OBR) Pilot Program for non-residential customers will help achieve the California Long-term Energy Efficiency Strategic Plan’s vision of comprehensive and deep energy retrofits by removing first-cost barriers to customer projects by enabling loan repayment on the customer’s bill. This Pilots offer participants the flexibility of financing Eligible Energy Efficiency Measures (EEEMs), Distributed Generation (DG) or Demand Response (DR) projects.

The Pilot will test the efficacy of attracting private capital to fund Demand Side Management (DSM) investments in the non-residential sector via an on-bill

repayment instrument which does not rely on ratepayer supported credit enhancements.

Detailed linkages, market barriers, program mechanisms, program outcomes and related Pilot operations are provided in the Logic Model included in this PIP. [A website link to the California Alternative Energy and Advanced Transportation Financing Authority \(CAEATFA\) program rulemaking \(with detail on the program regulations\) will be provided herein when available.](#)

Pursuant to the Assigned Commissioner's Ruling issued August 25, 2014, the Non-Residential OBR Pilot will operate for a minimum of 24 months and continue to support the underlying financial transactions made under the program for the duration of the loan or lease terms. Additionally, a mid-point review public workshop will be facilitated after the first 12 months of program operation.

The primary goals of the Pilot are:

- a. Test the premise that placing a financing charge on the customer's utility bill through a tariff schedule and has provisions for utility service disconnection if the financing charge goes unpaid, will lead to more capital available at attractive rates and terms than is currently available.
- b. Test the premise that adding a financing charge to a customer's utility bill, structured as a tariff, may help to solve the customer-tenant split incentive issue.
- c. Test whether incremental private capital flows to the DSM market for the non-residential segment.
- d. Determine if DSM implementation costs decrease for Businesses, Organizations and Institutions and (BOIs).
- e. Determine if BOIs complete more DSM projects with loans than they otherwise would.
- f. Test the effect of a voluntary transfer of the financial obligation from one customer to a successor customer to ascertain whether customers and financial institutions see such transfer as advantageous and use that transferability option. Such transfer would occur with accompanying disclosure to the successor customer and voluntary assent from that successor customer to assume the repayment obligation on the utility bill.

ii. Market Gaps and Means to Address Gaps

The target segment for this pilot includes small, medium and large business customers. These customers encounter a similar decision making process when they are considering Energy Efficiency (EE) improvements. The business customer must decide between financing investments to grow their revenue stream and reducing energy consumption through the installation of EE measures. Other issues limiting investment in EE include highly leveraged building space and/or tenant/landlord financial structures that don't support investment in EE.

This Pilot attempts to mitigate these barriers primarily by including repayment of the loan on the customer's utility bill and allowing for disconnection of service in the event customers default on the financing. The expectation is that customers will be disinclined to default to avoid service disconnection, ensuring repayment of the loan.

iii. Credit Enhancement Mechanism and On Bill Repayment

The OBR without Credit Enhancements Plot (the Pilot) does not contain a Credit Enhancement element. Non-residential customers of all sizes may participate in this Pilot.

iv. Data Collection

Data collection, subject to relevant privacy considerations, is essential for testing the value of various features of the authorized financing pilots. Pursuant to D.13-09-044, the data protocols subject to the data Working Group (WG) were submitted and approved by the Commission. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. The report is available at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>. Please also refer to the regulations established by CAEATFA regarding data collection and reporting to implement the WG report. Contractors and FIs should refer to the CHEEF, the selected Master Servicer, and / or the Data Manager regarding any related requirements.

[More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking \(with detail on data requirements and other regulations\) will be provided herein when available.](#)

v. Areas of Concern for The Pilot

- Will financial institutions participate in the Pilot?

This concern has been addressed by reaching out to financial institutions at the development stages of the program to build a program that will be attractive to them.

- Will customers use the Pilot Offering?

This Pilot is a market-based financial offering unlike OBF which is offered by IOUs. Financing acquired through this Pilot will accrue interest charges as opposed to the current IOU financing program, OBF. It's possible this may impact the likelihood of customer participation. It is hoped the broader terms of the

| financing, coordinated marketing activities, and existing rebate programs, which can be used to reduce the amount financed, will address this concern.

vi. Financial Institution Participants

The Pilot will overcome market barriers in part by developing strong participation from Financial Institutions (FIs). Likely financial institution participants in this pilot will include:

- a. Commercial banks that currently fund commercial loans that may be attracted by the association between the utility bill and repayment of their commercial loan. Some commercial banks may also be attracted by the voluntary transferability feature.
- b. Lease, or similar finance, companies that originate and service equipment finance leases or similar financial agreements for medium and large businesses.
- c. Credit unions – non-profit financial institutions that exist for the benefit of their members; participation from credit unions is not expected to be high.
- d. Community Development Financial Institutions (CDFIs) or other similar non-profit financing entities that specialize in energy efficiency financing.

b) Sub-Program Energy and Demand Objectives

**Table 2. Projected Sub-Program Net Energy and Demand Impacts, by Calendar Year**

SoCalGas	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SDG&E	Program Years			Total
	2013	2014	2015	
<b>Sub-program Name</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

SCE	Program Years			
	2013	2014	2015	Total
<b>Sub-program Name</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

PG&E	Program Years			
	2013	2014	2015	Total
<b>Sub-program Name</b>				
GWh	N/A	TBD	TBD	TBD
Peak MW	N/A	TBD	TBD	TBD
Therms (millions)	N/A	TBD	TBD	TBD

\* N/A = "not applicable." TBD = "to be determined." Per the CPUC disposition regarding the Financing Program workpaper, energy savings will be determined on an *ex post* basis.

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

This pilot program has the following Non-Energy Objectives:

- 1) Improvement in customer satisfaction driven by an increase in capital for energy efficiency projects helping customers overcome the "first cost" key barrier.
- 2) Improve the credibility of energy efficiency investment and provide economic benefits to the state via increased loan volume through a financing program supported by both Financial Institutions as well as the IOUs.

**d) Cost Effectiveness/Market Need:**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness.

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

Data sources for these measures are consistent with the rebate/incentive programs the measures are offered through.



**Table 3: Workpaper Status**

See section 7, above.

#	Workpaper Number/Measure Name	Approved	Pending Approval	Submitted but Awaiting Review
1	PGECOALL110	No		

**10) Program Implementation Details**

**a) Timelines:**

**Table 4: Sub-Program Milestones and Timeline**

*Note:* The expected dates of several of these events are sequential and dependent on milestones to be met by State agencies, financial institutions, and/or other parties, and are subject to adjustment necessitated by any delays.

Milestone	Days After CAEATFA Receives Contractual Authorization to Become CHEEF (C) <sup>2</sup>
Lender recruitment and contractor training	Ongoing
Trustee, Master Servicer and Data Manager RFPs issued	C + 60
CAEATFA Board Meeting to approve Trustee contract	C + 60
DGS Approves Trustee contract	C + 60
CAEATFA Board Meeting to approve Master Servicer and Data Manager contracts	C + 90
DGS approves Master Servicer and Data Manager contracts	C + 90
Non-residential OBR Pilot rulemaking process	C + 120
IOUs submit IT Advice Letter to CPUC	C + 120
IOUs complete IT changes *	C + 300
Master Servicer fully interfaced with IOUs	C + 300
Non-Residential OBR Pilot launches	C + 330
Mid-Term CPUC Pilot Review <sup>3</sup>	TBD

\*This timeline assumes program development concurrently with IT systems. In the event development activities cannot be done concurrent with IT system development, the schedule would change with first funding occurring in late-2015.

<sup>2</sup> Estimated to be September 1, 2014 when DGS approves the IOU-CAEATFA contract.

<sup>3</sup> Mid-point review workshop to be held 12 months after pilot becomes operational.

**b) Geographic Scope:**

**Table 5: Geographic Regions Where the Program Will Operate**

<b>Geographic Region</b>	<b>SDG&amp;E</b>	<b>SCG</b>	<b>SCE</b>	<b>PG&amp;E</b>
CEC Climate Zone 1				X
CEC Climate Zone 2				X
CEC Climate Zone 3				X
CEC Climate Zone 4		X		X
CEC Climate Zone 5		X		X
CEC Climate Zone 6	X	X	X	
CEC Climate Zone 7	X	X	X	
CEC Climate Zone 8		X	X	
CEC Climate Zone 9		X	X	
CEC Climate Zone 10	X	X	X	
CEC Climate Zone 11				X
CEC Climate Zone 12				X
CEC Climate Zone 13		X	X	X
CEC Climate Zone 14	X	X	X	
CEC Climate Zone 15		X	X	
CEC Climate Zone 16		X	X	X

c) Program Administration

Table 6: Program Administration of Program Components

Program Name	Program Component	Implemented by IOU Staff? (X = Yes)	Implemented by financial institutions approved by CAEATFA? (X = Yes) d)	Implemented by Master Servicer? (X = Yes)	Implemented by other entity (CAEATFA, Data Manager, Contractors, CCSE)? (X = Yes)
OBR Nonresidential Pilot	Loan Application Process		X	X	
OBR Nonresidential Pilot	Project Review	X	X		X
OBR Nonresidential Pilot	Credit Review		X		
OBR Nonresidential Pilot	Loan Origination		X		
OBR Nonresidential Pilot	Loan Data Transmission		X	X	
OBR Nonresidential Pilot	Loan Re-payment Collection	X			
OBR Nonresidential Pilot	Loan Re-payment remission	X		X	
OBR Nonresidential Pilot	Loan Data Capture and storage		X	X	
OBR Nonresidential Pilot	Energy savings Data Capture and storage	X			
OBR Nonresidential Pilot	Reporting	X	X	X	X
OBR Nonresidential Pilot	Data Aggregation				X
OBR Nonresidential Pilot	Marketing, Education & Outreach (ME&O) (See note below)	TBD	X	X	X
OBR Nonresidential Pilot	Evaluation, Measurement, & Verification (EM&V)	X			CPUC

TBD = To be determined, based on integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**d) Program Eligibility Requirements:**

CAEATFA may set forth program eligibility requirements, in addition to those addressed below, during its public process for developing program regulations.

**i) Customers:**

All non-residential customers installing qualifying Energy Efficiency measures, Distributed Generation and Demand Response projects may participate in the OBR without Credit Enhancements Pilot. Customer eligibility requirements are further defined in of the OBR Tariff.

**Table 7: Customer Eligibility Requirements (Joint Utility Table)**

Customer Eligibility Requirement (list of requirements)	PGE	SCE	SDGE	SCG
All Non-residential Customers	X	X	X	X
Project site within utility territory on a non-residential meter/rate	X	X	X	X

**ii) Contractors/Participants:**

Qualified contractors must hold an active license with the California Contractors State License Board for the work they perform, and must complete all work according to all applicable laws, rules, and regulations.

- (1) For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the incentive program(s).
- (2) For any project not participating in a CPUC-approved IOU incentive program(s), CAEATFA will work with stakeholders to develop contractor eligibility requirements through its rulemaking process. CAEATFA may also create guidelines for the process of verifying these qualifications.

Contractors will be required to provide and document an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.

**Table 8: Contractor/Participant Eligibility Requirements (Joint Utility Table)**

Contractor Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
For any project where the customer is participating in a CPUC-approved IOU incentive program(s), the contractor must meet the specific requirements of the program(s).	X	X	X	X
For any project not participating in a CPUC-approved IOU incentive program(s), contractor qualifications will be determined in CAEATFA's rulemaking process.	X	X	X	X
Contractors will be required to provide an estimate of potential energy bill (dollar) savings for the proposed EE project to the customer before the customer makes a decision about whether to pursue the project.	X	X	X	X

iii) Financial Institutions

Minimum qualifications for FIs are that they: a) possess all required state and federal licenses, and b) are in good standing with regulators. FIs will also be required to conform to pilot program requirements, and data collection and sharing requirements that are identified in the PIP, OBR tariff, and CAEATFA regulations. Additional eligibility requirements for the FIs participating in this program will be determined through CAEATFA's public process for developing program regulations.

**Table 9: Financial Institution Eligibility Requirements (Joint Utility Table)**

Financial Institution Eligibility Requirement (list of requirements)	PG&E	SCE	SDG&E	SCG
Minimum qualifications for FIs are that they: a) possess all required state and federal licenses, and b) are in good standing with regulators.	X	X	X	X
Additional details on requirements will be defined within the scope and evaluation criteria of CAEATFA's public rulemaking process.	X	X	X	X

e) Program Partners:

a) Program Coordination partners:

- CAEATFA – CAEATFA, acting as the CHEEF, will serve as the manager of the Master Servicer, Data Manager, and Trustee Bank. CAEATFA will establish program regulations that include eligibility criteria for financial institutions, clarification of applicable on-bill repayment requirements and process through this pilot.

- Pursuant to D.13-09-044, CAEATFA will subcontract with a Data Manager to aggregate data from the Finance Program pilots and prepare it for public consumption and program evaluation.
- Pursuant to D.13-09-044, CAEATFA will subcontract with a Master Servicer (MS). The MS will (1) collect and transmit funds and data between the IOUs, trustee, and financial institutions/capital providers; and (2) collect pilot data and store it for use by the Data Manager and FIs.
- The FIs will fund and service financial instruments, which may include loans, leases, service agreement or other instruments as approved. The FIs may include the following types of entities.
  - Commercial banks that currently fund commercial loans, and that may be attracted by the tie between the utility bill and repayment of their commercial loan. Some commercial banks may also be attracted by the voluntary transferability feature.
  - Lease or similar finance companies that originate and service equipment finance leases or similar financial agreements.
  - Credit unions – non-profit financial institutions that exist for the benefit of their members.
  - Community Development Financial Institutions (CDFIs) or other similar non-profit financing entities that specialize in energy efficiency financing.

**b) Other key program partners:**

- Contractors – Various types of contractors may participate in the program including: HVAC, insulation, mechanical, electrical and plumbing. The contractor will propose a scope of work to business owners, often based on the results of an energy audit, and will provide payment options including financing.
- Distributors – Contractors acquire products from manufacturers through distributors. Distributors protect contractors from credit risk, manufacturer defects and provide product information and marketing tools to contractors. Distributors are knowledgeable about financing and will review financing programs for their contractor customers. Distributors are expected to be supportive of credit enhanced, state-wide financing and will be helpful in promoting the OBR without Credit Enhancement pilot.
- California Center for Sustainable Energy (CCSE) – The IOUs and CAEATFA will coordinate with CCSE to ensure that the marketing of financial products is done in coordination with the Energy Upgrade California statewide marketing brand campaign.
- Real Estate Professionals – Given the unique nature of on-bill pilots, input from real estate professionals may be incorporated into pilot design and execution. The IOUs held a session with real estate professionals to learn about the unique needs of the industry in the non-residential sector and

identified multiple areas of opportunity to enhance the on-bill pilots. This may include additional information on projects being provided (e.g. amortization tables), creating educational materials that explain how measures (technical) translate into financial savings and helping develop language that communicates the value of EE measures to subsequent buyers or renters.

**Table 10: Program coordination Partners**

Coordination Partner Information	PG&E	SCE	SDG&E	SCG
Contractors	X	X	X	X
Distributors	X	X	X	X
CAEATFA	X	X	X	X
Financial Institutions	X	X	X	X
Master Servicer	X	X	X	X
Data Manager	X	X	X	X
California Center for Sustainable Energy (CCSE)	X	X	X	X
Real Estate Professionals	X	X	X	X

**f) Measures and incentive levels:**

Eligible Measures consist of EEEMs and may include non-EEEMs, each of which are both defined herein.

EEEMs are measures that have been approved by the Commission for a utility's EE rebate / incentive program, although the customer need not receive an incentive or rebate to qualify for the loan. EEEMs will be inclusive of measures that are approved as part of the utility EE programs.

Per existing rebate programs, allowable EEEMs costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and labor on a per measure basis. EEEMs projects costs should not include activities unrelated to the installation of energy efficiency measures. Labor costs can be contractor or in-house if proof of direct project hours and costs are provided.

Pursuant to D.13-09-044, the utilities have made publicly available the list of EEEMs on their websites at the following address:

SoCalGas – <http://www.socalgas.com/for-your-business/energy-savings/>  
 and <http://www.socalgas.com/for-your-home/rebates/financing-tax-credits.shtml>

SCE - <https://www.sce.com/wps/portal/home/business/Energy-Efficiency-Financing/>

SDG&E – <http://www.sdge.com/node/4326>

PG&E – <http://www.pge.com/eef>

Broad guidelines regarding the inclusion of EEEMs and non-EEEMs were determined by D.13-09-044 (at page 31), as follows:

“We find that customers may be more likely to add EE projects while undertaking other improvement activities. Therefore, for purposes of the pilot period, the Commission finds it reasonable and adopts a requirement that authorized EE pilot program financing qualifying for CEs must apply a minimum of 70% of the funding to Eligible EE Measures (EEEMs). Therefore, financing eligible for CEs may include funds for non-EEEMs totaling up to 30% of the loan total.”

Further details will be defined through the CAEATFA regulation process.

Pursuant to Finding Number 8 of Resolution E-4663, the Commission stated the following: “It is reasonable to further the Commission’s policy of encouraging integrated demand side management by allowing DR-enabled technologies and solutions to be included in energy efficiency projects that will be financed by the credit enhanced pilots in this program.” Thus, for purposes of this pilot, Demand Response measures will be eligible for inclusion in up to 100% of the loan.

Resolution E-4663 also instructed that “the eligibility of an EEEM for financing without the use of a rebate or incentive should not be dependent on whether or not the customer has received a rebate or incentive for the EEEM in the past.”

Per D.13-09-044, Conclusion of Law 56, the total loan value eligible for a credit enhancement will be limited to the total project cost net of any utility rebates and incentives received for the project.

Because this pilot does not include credit enhancements, DG may be included in the 70%-100% EEEMs portion. Pursuant to Resolution E-4663, the Commission stated “We think it is implicit that technologies allowed in existing IOU programs are eligible.” Projects will be based on but not limited to existing technologies from existing IOU DR (Automated Demand Response, Permanent Load Shift) and DG (California Solar Initiative (CSI), CSI Thermal, Net Energy Metering, Self-Generation Incentive Programs) programs. Per Resolution E-4663, the Commission declined to allow administrators to define project eligibility in the PIPs; Commission staff in consultation with CAEATFA may consider whether it is prudent for CAEATFA to make ineligible certain technologies, including diesel back-up generators.

In situations where a customer is served by multiple IOUs, refer to the OBR tariff for details on how billing will be treated.



**Table 11: Summary Table of Measures, Incentive Levels and Verification Rates**

Measure Group	Program Number	Market Actor Receiving Incentive or Rebate	PGE		SCE		SDGE		SCG	
			Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate	Incentive Level	Installation Sampling Rate
EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-EEEMs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: The categories shown in Table 11 do not apply to the broad grouping of EEEMs and non-EEEMs. Please refer to the IOU EEEMs lists at the company website addresses provided above.

**g) Additional Services:**

The Pilot will include a series of additional services. These additional services, where related to marketing and outreach, will be coordinated with Statewide ME&O.

- Outreach, education and training for customers, contractors and real estate professionals will be determined in the integrated statewide marketing plan to be developed by CSE in coordination with IOUs, CAEATFA and the Commission.
- Lender training: The education and outreach component of the Pilot will include training events and materials for financial institutions and lenders that will assist them in participating in this pilot. The education and outreach will assist financial institutions with the understanding of the potential market, benefits and drawbacks of on-bill repayment, EE investments, projects QA/QC requirements, and data on loan performance. Additional information on lender training plans will be provided in the CHEEF PIP.

**Table 12: Additional Services \***

<b>Additional Services</b>	<b>To Which Market Actors</b>	<b>CAEATFA</b>	<b>PG&amp;E</b>	<b>SCE</b>	<b>SDG&amp;E</b>	<b>SCG</b>
Customer Education	Customers	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Contractor Education	Contractors	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Lender Education	Lenders	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan
Real estate professional education	Real Estate Professionals	See CHEEF PIP	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan	TBD by Finance Pilot ME&O Plan

\* CHEEF (CAEATFA) to perform non-duplicative ME&O for contractors and financial Institutions per D.13-09-044, Ordering Paragraph 1.vi. TBD = To be determined. The ME&O-related activities shown in Table 12 will be based on the integrated statewide marketing plan to be developed by CCSE with coordination by IOUs, CAEATFA, and CPUC Staff. Please see Section 10.h. regarding marketing for financing pilots.

**h) Sub-Program Specific Marketing and Outreach:**

The following section was provided in Resolution E-4663, Appendix A, and represents “a high level ME&O plan.”

**Appendix A**

In order to accomplish the statewide integrated approach to promoting the finance pilots envisioned by D.13-09-044, the California Center for Sustainable Energy (CCSE) will create one integrated statewide, multi-sector marketing, education and outreach (ME&O) plan. CCSE is also the coordinator of the statewide ME&O effort under the Energy Upgrade California brand. The finance pilot ME&O plan will identify roles, actors including IOUs, and allocate the marketing budget accordingly.

CCSE will oversee the implementation of the plan. Concurrent to its development of the ME&O plan, CCSE will develop the contractor training and outreach. CCSE will perform any other roles the plan assigns it.

Based on the timeline below, CCSE will convene and lead a "go-to-market" working group comprised of CAEATFA and IOUs in order to develop and finalize the plan. The plan will take a market facilitation approach that at a minimum leverages channels of customer service including contractors and lenders, as well as IOU customer data segmentation, and existing ME&O of appropriate IOU programs.

In order to develop the plan, CCSE will draw on existing market research, the experience of program administrators, and as needed lead research that examines barriers to pilot participation and how to overcome them. CCSE may convene sector and pilot specific financing strategic partner advisory groups.

Major elements of the plan are likely to include contractor outreach and training, including development of educational information and tools for contractors and consumers, and ongoing support to contractors and financial institutions through a variety of channels including cooperative marketing campaigns.

As envisioned by the Finance Decision, the plan will integrate financing education and awareness messaging into the existing statewide Energy Upgrade California marketing, education and outreach, and capitalize on those synergies.

**CCSE Timeline for Finance ME&O Plan & Concurrent Activities**

<b>Activity</b>	<b>Estimated Timing</b>
Contract for work to commence	July 2014
Convene working group to collaborate on plan	July 2014 + ongoing
Solicit and conduct additional research needed	July-September 2014
Develop contractor training and outreach	August-September 2014
Complete first draft ME&O implementation plan	September 1, 2014
Complete final draft ME&O implementation plan and File Tier 1 Advice Letter	October 2014
Lead implementation of ME&O plan	Q4 2014 + all 2015

**i) Sub-Program Specific Training:**

See Section 10.g. above for description of training including engaging FIs, contractors, and other market participants and borrowers.

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

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

Not applicable to this Pilot.

b) Indicate if pre and/or post implementation audits will be required for the sub-program. \_\_\_ Yes \_\_\_ No (See note.)

Pre-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Post-implementation audit required \_\_\_ Yes \_\_\_ No (See note.)

Note: Requirements for project/measure audits are dependent on the associated IOU program, and/or regulations that may be developed by the CHEEF.

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).

There will not be any additional audit requirements directly from the financing program for projects that participate in a CPUC-approved program(s). CAEATFA will address audit requirements for projects not participating in a CPUC-approved incentive program during its rulemaking process.

**Table 13: Program Related Audits**

Levels at Which Program Related Audits Are Rebated or Funded	Who Receives the Rebate/Funding (Customer or Contractor)
Auditing requirements and funding are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Customer

**k) Sub-Program Quality Assurance Provisions:**

Quality Assurance of projects participating in the Financing Pilots will be driven by incentive program requirements. CAEATFA will address quality assurance requirements for projects where the customer is not participating in a CPUC-approved incentive program during its rulemaking process. Pursuant to D.13-09-044 (p. 79), the borrower is responsible for the QA/QC of non-energy measures.

**Table 14: Quality Assurance Provisions**

QA Requirements	QA Sampling Rate (Indicate Pre/Post Sample)	QA Personnel Certification Requirements
QA requirements are dependent on the associated IOU incentive program, and/or regulations that may be developed by CAEATFA.	Dependent on program / measure.	Dependent on program / measure.

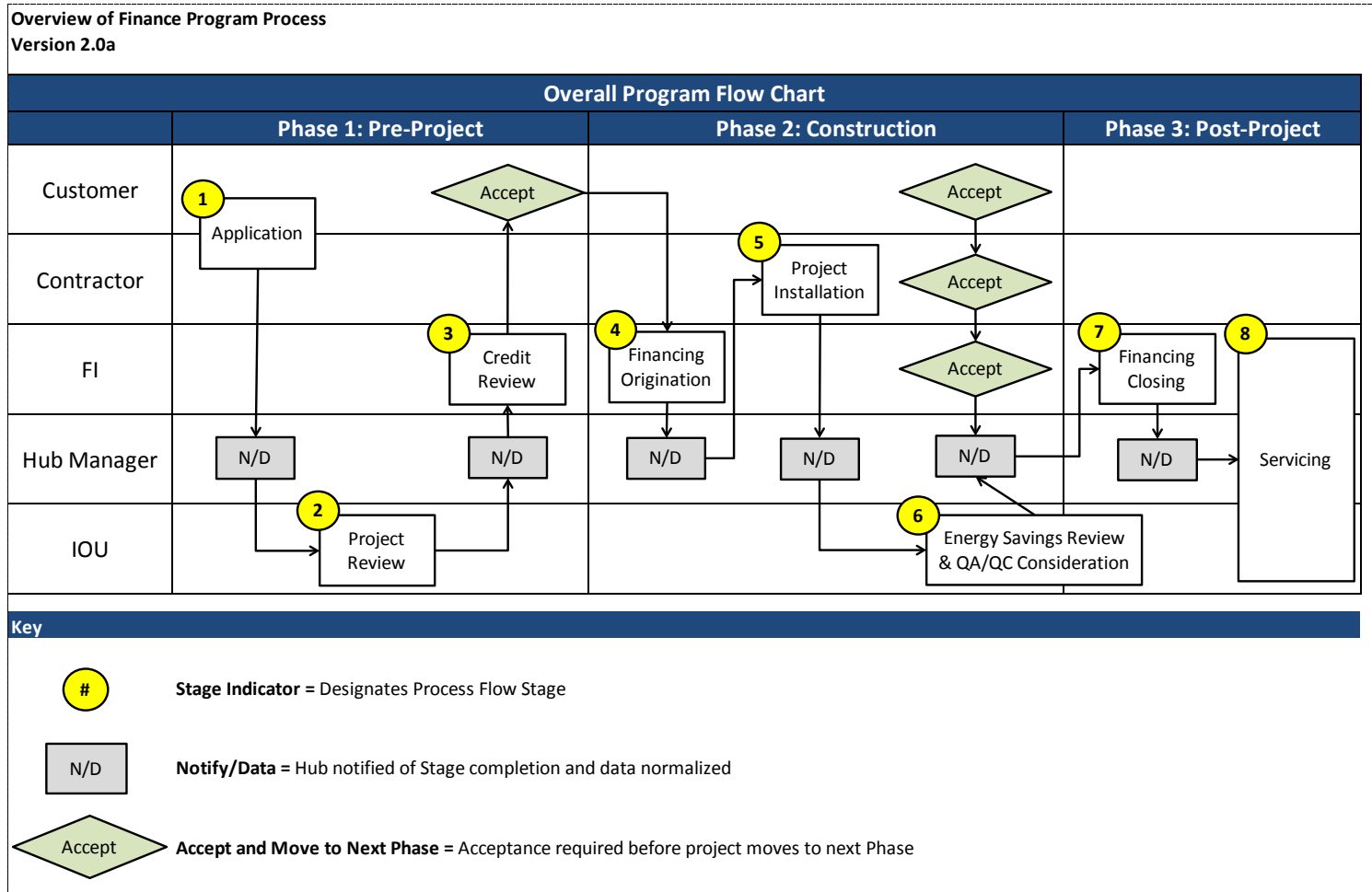
**l) Sub-program Delivery Method and Measure Installation /Marketing or Training:**

The following sequence illustrates how this program is expected to be delivered to customers.

1. IOUs integrate financing with their incentive offerings.
2. CAEATFA/CCSE will provide contractor and financial institution training.
3. IOU Account Executive (AE)/Contractor and customer meet, driven by AE/contractor marketing or customer inquiry.
4. AE/Contractor interviews customer, collects site information (possibly including results of energy audit).
5. Contractor proposes a project scope, price, anticipated energy savings, anticipated bill impact, and incentives (typically utility or manufacturer rebates) and provides payment options, including financing.
6. Customer makes purchase and payment decision.
7. If Customer selects financing option, AE/contractor provides customer with list of Financial Institutions participating in financing program.
8. Financial Institution collects application information from Customer, makes underwriting decision and informs Customer and/or contractor.
9. Customer executes loan agreement.
10. Contractor installs improvements.
11. Customer signs completion certificate.
12. IOU performs inspection (if required by rebate/incentive programs or by CAEATFA regulations for projects that do not use IOU rebates or incentives).
13. Financial Institution receives completion certificate and other required documents.
14. Financial Institution funds Contractor.
15. Financial Institution informs Master Servicer loan funds have been disbursed.
16. Master Servicer transmits financing information to IOU.
17. IOU verifies customer data transmitted by Master Servicer.
18. IOU places loan on Customer's bill and begins OBR collection process.

**m) Sub-program Process Flow Chart:**

The flowchart below illustrates the process flow for how the OBR without credit enhancements pilot is expected to operate. Specific details of how the program will operate will vary in actual implementation. Note that the process flow is designed to be as easy as possible from the perspective of the customer, the contractor and the FI. The priority is to develop programs that function with sufficient oversight to be able to assure compliance with Commission decision orders while also keeping the program as simple as possible, in order to stimulate maximum participation.



**n) Cross-cutting Sub-program and Non-IOU Partner Coordination**

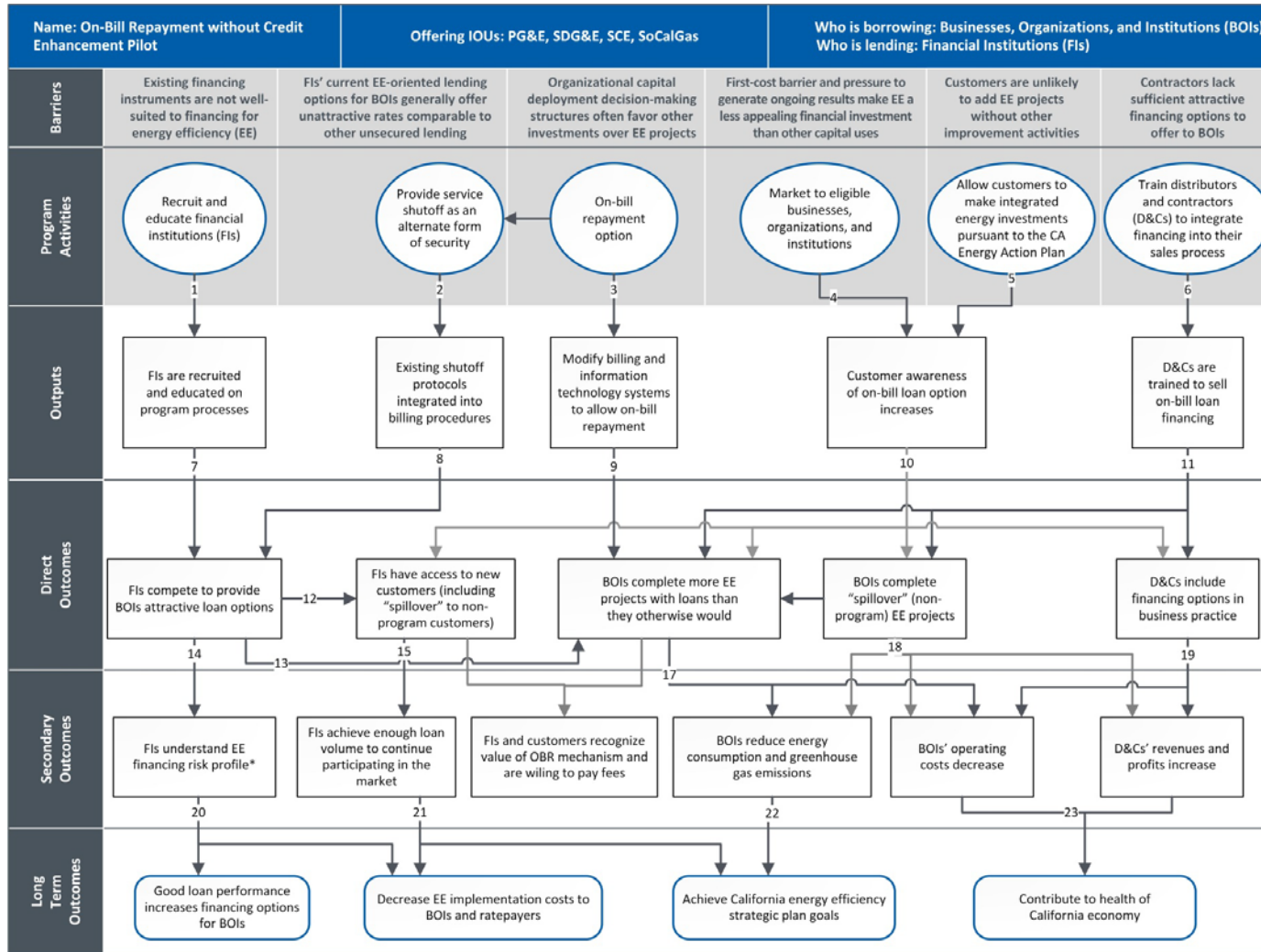
IOU financing programs will leverage the existing incentive and rebate programs to promote the financing pilots.

**Table 15: Cross-cutting Sub-program and Non-IOU Partner Coordination**

<b>Sub-Program Name</b>		
<b>OBR w/out Credit Enhancement Pilot</b>	<b>Coordination Mechanism</b>	<b>Expected Frequency</b>
Statewide rebate/incentive programs	Meetings/Emails/Calls	As needed
Statewide Emerging Technology Program	Meetings/Emails/Calls	As needed
Statewide Marketing, Education, and Outreach Program	Meetings/Emails/Calls	As needed
IOU EE Third Party Programs	Meetings/Emails/Calls	As needed
IOU Institutional Partnerships	Meetings/Emails/Calls	As needed
IOU Local Government Partnerships	Meetings/Emails/Calls	As needed
Statewide On-Bill Financing Program	Meetings/Emails/Calls	As needed
<b>Coordination Partners Outside CPUC</b>		
CAEATFA	Form and Data Exchange Meetings/Emails/Calls	Daily As needed
Master Servicer*	Data Exchange	Daily
Data Manager*	Data Exchange	As Needed
CCSE	Meetings/Emails/Calls	As needed

Note: Coordination will not occur until Master Servicer is fully functional.

o) Logic Model:



BOIs = Businesses, Organizations, and Institutions D&Cs = Distributors and Contractors FI = Financial Institution LLR = Loan Loss Reserve EE = Energy Efficiency

\* Collecting EE financing performance data is an important function of the California Hub for Energy Efficiency Financing (CHEEF)



## 11) Additional Sub-Program Information

### a) Advancing Strategic Plan Goals and Objectives:

Innovative financing is a major Strategic Plan strategy for non-residential sectors. One key commercial sector strategy in the Strategic Plan is “Financing: Target financing ...[including] increased availability and use of innovative and expanded financing...” (p. 3-29), which is directly advanced by this sub-program. Furthermore, this sub-program contributes to the Plan’s call to:

- “ensure access to financing mechanisms that effectively surmount capital limitations and cash flow requirements. This means attracting the interest of banking and capital industries to the magnitude of investment and borrowing needs, and identifying finance mechanisms...” (p. 3-35)
- identify “needed tools, instruments, and information necessary to attract greater participation of capital markets in funding efficiency transactions” (p. 2-16),
- “pilot innovative financial tools [and e]xpand implementation of innovative financing mechanisms” (strategy #1-4, p. 3-32),
- “Develop effective financial tools for EE improvements to existing buildings” (strategy #2-6, p. 3-34)
- Use financing for closely related goals, HVAC and lighting.

### b) Leveraging of Resources:

The Pilot will leverage the IOUs’ existing rebate/incentive programs to help customers overcome the up-front cost of EE projects. In cases where the customer’s project will go through an IOU rebate/incentive program in conjunction with participation in this Pilot, the rebate/incentive will decrease the total amount financed. For projects in which the customer is receiving a rebate or incentive, in order to receive that benefit, loans will have to comply with IOU rebate and incentive guidelines.<sup>4</sup>

The Pilot will leverage financing options offered by financial institutions that meet the eligibility criteria defined in CAEATFA’s regulations. This program will build on a mature financing market that has extensive experience in providing loans to business customers. The pilot will offer IOU on bill repayment as a means to facilitate loan repayment to the financial institution.

The IOUs’ On-Bill Financing (OBF) programs can also be leveraged to provide financing for certain projects that may be a better fit for that program. Coordination with OBF will be required to determine the types of projects that are better suited for OBF or this Pilot. Coordination specifics will be developed by IOU program

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<sup>4</sup> For example, the Statewide Customized Retrofit Manual specifies that “new equipment or system retrofit must guarantee energy savings for the effective useful life of the product or for a period of five years, whichever is less.”

and marketing teams to help guide customers to the right EE financing program for their project.

**c) Knowledge Transfer:**

Best practices will be identified and shared through frequent communication between the statewide IOUs and CAEATFA. Additionally, the statewide IOUs and the consultants engaged to help with the financing pilot programs will monitor developments in other EE Financing programs nation-wide and outside of the U.S.

Commission Decision (D.)13-09-044 also requires that CAEATFA, with assistance from the Southern California Gas Company, submit quarterly reports on the pilot program uptake. These quarterly reports will aid in evaluating the pilots to determine any necessary program or budgetary changes.

**12) Additional information as required by Commission decision or ruling or as needed:**

Decision 09-09-047, pp. 48 – 49 provides instruction regarding information to be submitted for pilot programs. The following addresses the 10 criteria required for pilot programs.

**a. A specific statement of the concern, gap, or problem that the pilot seeks to address and the likelihood that the issue can be addressed cost-effectively through utility programs.**

The pilot seeks to overcome the first-cost barrier of implementing EE improvements in the non-residential market and to increase overall energy savings from EE. Current IOU-based programs rely on a rebate structure to pay a portion of the cost of EE upgrades. Financing pilots, on the other hand, cover 100% of the initial cost of the upgrade, net of any applicable rebates, and subject to repayment. As a result, it is anticipated customers who do not otherwise have the capital readily available will be able to use financing to pay for EE upgrades.

**b. Whether and how the pilot will address a Strategic Plan goal or strategy and market transformation.**

The pilot program significantly addresses numerous Strategic Plan goals and strategies. As detailed above in Section 11.A, EE financing is a very important pillar of the Strategic Plan's approach, specifically including the non-residential sector.

Additionally, the Strategic Plan describes five "policy tools" for Market Transformation, the first of which explains that "*Customer Incentives* including...innovative or discounted financing...are the 'carrots' that help *pull* consumers into choosing the efficient option." (p. 1-5).

**c. Specific goals, objectives and end points for the project.**

The Pilot seeks to:

- a. Stimulate financial institutions to provide capital to energy efficiency upgrade markets in the non-residential sector.
- b. Lead to incremental energy savings from energy efficiency projects.
- c. Leverage private capital to augment the limited ratepayer funds currently used to provide incentives in the form of customer rebates.
- d. The Pilot will be testing the added value of having an OBR option for financial institutions.
- e. Allow DR/DG measures in order to drive additional energy efficiency projects, create additional EE deal flow, and allow for the distribution of fixed costs over a larger number of projects.

The Pilot seeks to facilitate repayment of the loan through use of the utility bill. D.13-09-044 Conclusion of Law 31 states: "No ratepayer funds, other than implementation and servicing costs should be allocated for the OBR pilot program without CEs." The Pilot will be closely monitored to ensure that implementation and servicing costs associated with DR and DG financing do not prohibit EE goals from being achieved. The IOUs will evaluate incremental costs associated with OBR financing relative to budgets, and may develop guidelines including subscription limits. Guidelines will be updated through the PIP addendum process.

- d. **New and innovative design, partnerships, concepts or measure mixes that have not yet been tested or employed.**

This Pilot will test how effective financing and on bill repayment will be at stimulating either more comprehensive EE projects or a greater number of EE projects. Furthermore, the pilot provides mechanisms to test specific elements of financing such as lowering the costs through lower loan payments, financing, repayment through the utility bill, and differing levels of contractor engagement in the financing process.

- e. **A clear budget and timeframe to complete the project and obtain results within a portfolio cycle - pilot projects should not be continuations of programs from previous portfolios.**

The target launch date for the Non-Residential OBR without Credit Enhancements Pilot is July 2014; it is scheduled to be in effect through 2017. No budget for Credit Enhancements was allocated to this pilot.

See Table 1 and Section 10.a.

- f. **Information on relevant baselines metrics or a plan to develop baseline information against which the project outcomes can be measured.**

The Financing Evaluation Research Plan includes a "Market Characterization" project that is managed by the Energy Division and expected to be fielded early in the program cycle.

**g. Program performance metrics.**

Program performance metrics will consist of loan transaction volume: number of loans and total amount of financing for the pilot period.

**Table 16: Program Performance Metrics**

Short-Term PPMs:	IOU Target	Metric Type
PPM 1: Loan Transaction Volume	Track, and report, number of loans and total amount of financing.	2a

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs if the pilots are converted into statewide programs. As such, the IOUs do not establish targets for these PPMs at this time.

**h. Methodologies to test the cost-effectiveness of the project.**

Since the finance pilots have energy and demand objectives, the methods contained in the Standard Practice Manual will be used to determine cost effectiveness. The EM&V studies will provide major inputs for final cost effectiveness calculations.

**i. A proposed Evaluation, Measurement and Evaluation (EM&V) plan.**

The statewide IOU M&E team has submitted an updated 2013-2014 Finance Long-term Research Roadmap to Energy Division. The overall EM&V will be guided by this research roadmap.

**j. A concrete strategy to identify and disseminate best practices and lessons learned from the pilot to all California utilities and to transfer those practices to resource programs, as well as a schedule and plan to expand the pilot to utility and hopefully statewide usage.**

See Section 11.e.

**Decision 13-09-044, Fast-Track / OBR PIPs**

- The single credit enhancement pool for each pilot program made available to all Financial Institutions is to draw down from on a first-come-first-served basis (pp. 23 – 24).

The OBR without Credit Enhancements pilot is not supported by a Credit Enhancement.

- CPUC requires an estimate of bill impacts of the EE project to be financed be presented by the contractor to the customer at the time they are making the commitment to the project to insure an informed decision (p. 81).

See Section 10.d.ii. for the contractor requirements for this pilot program.

- ME&O plans shall include training for all pilot programs, including engaging FIs, contractors, and other market participants and borrowers (p. 84).

See Section 10.h. for the ME&O plan for this pilot program. Additional information on education and outreach to financial institutions and contractors will be provided in the CHEEF PIP.

- CAEATFA/SoCalGas to reference the data protocols (from the final report) in the pilot PIPs since the data fields could differ by pilot (Appendix D).

Pursuant to D.13-09-044, the data protocols subject to the WG report were submitted in a final report and approved by the Commission with an effective date of December 16, 2013. This PIP incorporates by reference the data protocols associated with non-residential pilots from the current report. Additional clarifications are required in order to implement the WG report and for the CHEEF to issue Request for Proposals for the Master Servicer and Data Manager. The report is available in SoCalGas Advice Letter (AL) 4579, SDG&E AL 2557-E / 2252-G, PG&E AL 3440-G / 4330-E, and SCE AL 29980E, and at the following website: <http://www.caleefinance.com/wp-content/uploads/2013/12/AL-4579-et-al.pdf>. Please also refer to the regulations established by CAEATFA regarding data collection and reporting to implement the WG report. Contractors and FIs should refer to the CHEEF, the selected Master Servicer, and / or the Data Manager regarding any related requirements

[More detailed data requirements for the pilot will be provided through the CHEEF rulemaking process. A website link to the final program rulemaking \(with detail on data requirements and other regulations\) will be provided herein when available.](#)

#### Decision 13-09-044, OBR PIPs (Only)

- The OBR PIP should set credit enhancement guidelines (floor, cap, spread) to incentivize more favorable financing terms for targeted market sectors (p. 22).

The OBR without Credit Enhancements pilot is not supported by a Credit Enhancement.

- OBR program shall include non-residential shut-off in general conformity with Commission-approved shut off protocols to be approved in the OBR tariff (p. 54).

This requirement applies to the Non-Residential OBR without Credit Enhancement Pilot and is addressed in the OBR tariff.

- The Commission concludes that written consent should be part of the OBR tariff in order to achieve transferability. Property owners and landlords that initially commit to the EE financing and OBR program (“current landlord”) and all of the current landlord’s tenants responsible for repayment under the OBR program (“current tenants”) should be required

to give their written consent to abide by the terms and obligations of the OBR program. The written consent of subsequent property owners and landlords and subsequent tenants subject to the OBR program is required in order for the OBR provisions (e.g., transferability, shut-off, etc.) to apply (p. 56).

This requirement will apply to the OBR without Credit Enhancements pilot and is addressed in the OBR tariff.

- IOUs are to apply existing OBF practices for application of OBR partial payments and follow Commission-approved disconnection procedures to obtain delinquent payments (p. 56).

This requirement will apply to the OBR without Credit Enhancements pilot and is addressed in the OBR tariff.

## ATTACHMENT 1

### Program Non-Energy Objectives

For New or Substantially changed programs and sub-programs, provide the following information for Program Non-Energy Objectives and follow the format used for the previous cycle Program Performance Metrics found in Resolution E-4385.

- i. **List the primary SMART<sup>5</sup> non-energy objectives of the program.** These should correspond to key methods identified above to overcome the market barriers, areas of concern or gaps, and to the outputs and short, mid- and long-term non-energy outcomes identified in the logic model requested below.

Test the premise that placing a financing charge on the customer's utility bill through a tariff schedule and has provisions for utility service disconnection if the financing charge goes unpaid, will lead to more capital available at attractive rates and terms than is currently available

Test the efficacy of attracting private capital to fund DSM investments in the non-residential sector via an on-bill repayment instrument which does not rely on ratepayer supported credit enhancements.

Test the effect of a voluntary transfer of the financial obligation from one customer to a successor customer to ascertain whether customers and financial institutions see such a transfer as advantageous and use that transferability option. Such transfer would occur with accompanying disclosure to the successor customer and voluntary assent from that successor customer to assume the repayment obligation of the utility bill.

- ii. **For each SMART objective, identify the quantitative targets, direction or percent of change that you hope to achieve during the program cycle.<sup>6</sup>**

The IOUs do not establish quantitative targets for this Pilot.

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<sup>5</sup> A SMART objective is one that is **S**pecific (i.e. quantitative and quantifiable generally, in terms of the results to be achieved), **M**easurable, **A**mbitious, **R**ealistic, and **T**ime-bound. For example, for a vender training component of an innovative commercial program, two SMART mid-term objectives and one long-term objective might be:

- a) During the period 2013-2014, the number of HVAC installers in the SCE service territory who are able to perform quality installations of energy efficient packaged air conditioners will increase by 20%.
- b) During the period 2013-2014, the number of installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 25%.
- c) By 2020, installations of energy efficient packaged air conditions in the SCE service territory that are considered quality installations will increase by 75%.

<sup>6</sup> Please also add any new program objectives and quantitative targets for statewide programs to the portfolio PPM/MTI reporting template.

- iii. **For each proposed SMART objective, describe any relevant baseline data on current market conditions that you have assembled or plan to assemble and the sources.**

Each IOU will look at past program participation rates of other similar programs, current market conditions, current economic conditions, available work-paper/studies, baseline data, and customer mix and penetration.

- iv. **Quantitative program targets (PPMs):** If not already provided above, indicate estimates of the number of measure units, buildings, etc. projected to be treated by the sub-program.

The IOUs will analyze the data collected during the 2013-2017 pilot period to better assess future projections for these PPMs as pilots are converted into statewide programs. The IOUs do not establish quantitative targets for this Pilot.