

California Hub for Energy Efficiency Financing

Quarterly Report and Program Status Summary

October 1, 2016 – December 31, 2016



CALIFORNIA HUB FOR
ENERGY EFFICIENCY
FINANCING

Submitted by:

California Alternative Energy and Advanced
Transportation Financing Authority (CAEATFA)

Sacramento, California

Tel: (916) 651-8157

Email: CHEEF@treasurer.ca.gov

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Section 1: Introduction

CAEATFA is working with the California Public Utilities Commission (CPUC), investor-owned utilities (IOUs)¹, the Center for Sustainable Energy (CSE) and financial institutions throughout California to develop a series of pilot programs that allow consumers to finance complex energy efficiency retrofits. The pilot programs enable consumers to undertake deeper and broader energy efficiency than previously achieved through traditional programs, and will assist in removing the upfront cost barrier of financing for consumers to promote the State's broader energy efficiency and environmental policy goals.

In September 2013, the CPUC approved Decision 13-09-044 ("D.13-09-044"), authorizing two-year pilot programs to be supported by up to \$66 million of IOU ratepayer funds serving four market segments. Only the first three of the four markets listed below provide credit enhancements to lenders:

- single-family, with one-third of funds reserved for low and moderate income households;
- multi-family, affordable housing with master meters;
- small businesses;
- On-Bill Repayment (OBR) of financing by non-residential energy users, without credit enhancement.

The pilot programs were established with a myriad of goals, all of which are intended to support the State's broader energy efficiency and environmental policy goals using an innovative approach. Primarily, the pilots are designed to:

- provide credit enhancements to lenders thereby reducing risks to lenders who are able to provide lower interest rates to consumers;
- broaden the availability of financing to individuals who might not have been able to access it otherwise;
- address upfront cost barriers to energy efficiency retrofit projects.

This report is responsive to D.13-09-044, Ordering Paragraph 21, which directs CAEATFA in conjunction with the IOUs to issue quarterly reports throughout the pilot period, by pilot program and on CHEEF operational expenses. The reports keep the CPUC and interested stakeholders apprised of:

- implementation progress, opportunities and challenges;
- platform and space within which CHEEF functions take place;

¹ The IOUs consist of Pacific Gas & Electric (PG&E), San Diego Gas and Electric Company (SDG&E), Southern California Edison (SCE), and Southern California Gas Company (SoCalGas).

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- accounts and account managers, database permission criteria and platforms associated with the CHEEF;
- customer facing products (websites, informational charts), as appropriate under CAEATFAs limited authority over consumer marketing;
- pilot program performance and certain aggregate profile information about participating lenders, borrowers, and projects.

Appendix A of this report includes information on each of the above-listed data points that are required pursuant to D.13-09-044.

Section 2: Budget

D.13-09-044 directs the IOUs to allocate a total of \$75.2 million to finance the pilots over the initial pilot period. Table 1 provides an itemized breakdown of these allocations, current expenditures and remaining balance.

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Table 1 – Budget Table for CHEEF Expenditures (September 2014 through December 31, 2016)²

Item	Allocated	Expended/ Encumbered ³	Balance
CHEEF Start-Up Cost			
Includes CAEATFA administrative, direct implementation, and contracting costs	\$ 5,000,000	\$ 2,441,176	\$ 2,558,824
Subtotal CHEEF Start-Up Costs	\$ 5,000,000	\$ 2,441,176	\$ 2,558,824
Marketing, Education, Outreach (MEO)			
Statewide MEO plan	\$ 8,000,000	(TBD)	\$ 8,000,000
CAEATFA outreach and training to financial institutions and Contractors	\$ 2,000,000	\$ 275,472	\$ 1,724,528
Subtotal Marketing, Education, and Outreach	\$ 10,000,000	\$ 275,472	\$ 9,724,528
Residential pilots			
Single family loan loss reserve	\$ 25,000,000	\$ 7,432	\$ 24,992,568
Energy Financing Line Item Charge (Funding to PG&E)	\$ 1,000,000	(TBD)	\$ 1,000,000
Multi-Family	\$ 2,900,000	-	\$ 2,900,000
Subtotal Residential Pilots	\$ 28,900,000	\$ 7,432	\$ 28,892,568
Non-Residential Pilots			
Small business sector OBR with credit enhancement	\$ 14,000,000	-	\$ 14,000,000
Sub-pilot: OBR for lease providers	-	-	-
Sub-pilot: Off-bill for lease providers	-	-	-
Non-residential OBR without credit enhancement	-	-	-
Subtotal Non-Residential Pilots	\$ 14,000,000	\$ -	\$ 14,000,000
Information Technology (IT)			
IT Funding to IOUs ⁴	\$ 8,000,000	(TBD)	\$ 8,000,000
Subtotal IT Funding to IOUs	\$ 8,000,000	(TBD)	\$ 8,000,000
CHEEF Pilot Reserve			
CHEEF Pilot Reserve	\$ 7,000,000	-	\$ 7,000,000
Adjustment to reconcile to D.12-11-015 and IOU Compliance	\$ 2,344,931	-	\$ 2,344,931
Subtotal CHEEF Pilot Reserve	\$ 9,344,931	\$ -	\$ 9,344,931
GRAND TOTAL	\$75,244,931	\$ 2,724,080	\$72,520,851

***Note:** Quarterly expenditures are based on good faith estimates due to a lag in invoice submittals.

As of December 31, 2016, CAEATFA expended \$2,716,648 of the \$7 million allocated for CHEEF start-up costs, marketing, education, outreach, and training of financial institutions and contractors.⁵ Of the \$2,716,648 expended, \$670,598 was used to fund contracts with the Master Servicer (Concord Servicing Corporation) and the Trustee Bank (US Bank).

² More detailed program budgets can be found in the program implementation plans.

³ Encumbered refers to the credit enhancement funds for enrolled loans under the Single family Loan Loss Reserve (LLR).

⁴ IT Funding to IOUs reports only the initial allocation and does not reflect current IOU expenditures.

⁵ Expenditures for Q4 2016 were under review by the IOUs during the time of this report.

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As of July 1, 2015, CAEATFA received extended legislative budget authority to carry out the services of the CHEEF within the initial existing \$7 million budget through June 30, 2017 (FY 2016-17). Over the spring and summer of 2016, CAEATFA staff re-evaluated its resources and pilot timetable to better identify the necessary resources it would need to complete pilot implementation. To continue to carry out the CHEEF functions without an interruption in services, CAEATFA:

- requested approval of an additional \$8.36 million in administrative funds and additional staff resources through fiscal year 2019-2020 from the CPUC⁶;
- concurrently worked in coordination with CPUC staff to request Legislative approval of a 2017 budget request to provide CAEATFA with the corresponding reimbursement and expenditure authority beyond June 30, 2017.

The CPUC approved CAEATFA's funding request and released \$8.36 million of CHEEF reserve funds, and CAEATFA is currently navigating the legislative budget process. This is discussed in more detail on page 13.

Section 3: CHEEF Infrastructure

This Section complies with the direction from the CPUC to provide updates on the “the platform and space within which CHEEF functions take place.”

CAEATFA is creating a streamlined, statewide platform for lenders and contractors to participate in the uptake of energy efficiency projects through increased access to financing. As the manager of the CHEEF, CAEATFA is developing uniform program requirements, standardized documentation and processes, and a central administrative entity to facilitate investment in energy efficiency projects and implementation of the pilot programs.

CHEEF Infrastructure

Central to the infrastructure needed to implement the CHEEF are a Master Servicer, Technical Advisors, Trustee Bank, Agent Bank/Secure Flow of Funds, Contractor Manager, and Data Manager . Below are descriptions of each of these roles and information on the current status as it relates to CAEATFA's procurement processes.

Master Servicer. The Master Servicer (MS) plays a key role in the daily administration of the program(s), accepting lender and loan enrollment applications, and processing on-bill repayment transactions. Through a competitive solicitation, CAEATFA selected Concord Servicing Corporation (Concord) as the MS, and entered into a contract effective April 23, 2015.

⁶ CPUC Rulemaking 13-11-005

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Concord began its on-boarding process, and defining its infrastructure and data privacy requirements of the pilots. Concord subsequently began the mapping and development of the REEL infrastructure process, while concurrently working with the IOUs to define the various business requirements required of the IOU billing systems to enable the flow of funds and data for OBR. The current contract with Concord Servicing Corporation has been extended to the maximum allowable term and expires on December 31, 2017. A new Request for Proposal (RFP) is currently being developed and will be released to select and onboard a new MS before the end of the current contract term.

Technical Advisors. Technical Advisors provide expertise to CAEATFA in its development and implementation of the CHEEF pilot programs. From May 2016 to October 2016, Energy Futures Group, Inc. was contracted to provide short-term technical assistance for the research and development of the commercial pilot project eligibility requirements. In December 2016, CAEATFA released a Request for Offer for a higher-value technical assistance contract to continue research and development and implementation assistance for the commercial pilots. CAEATFA expects to bring an entity under contract in Q1 of 2017. Under its implementation agreement with the Investor-Owned Utilities, CAEATFA continues to rely on the ongoing technical support of Harcourt Brown & Carey (HB&C) and anticipates additional assistance from HB&C with regard to on-bill infrastructure implementation. HB&C's expertise and project management assistance has been helpful in providing continuity under the pilots.

Trustee Bank. The Trustee Bank holds the ratepayer funds provided by the IOUs to serve as credit enhancements under the various pilot programs. CAEATFA maintains the integrity of ratepayer funding, and provides direction to the Trustee Bank to transfer credit enhancement funds between IOU program holding accounts and participating lender accounts. The regulations developed for each pilot specify the amount of credit enhancement funds available for each enrolled financing, and also identify the processes for payment of claims under the programs. The Trustee Bank contract was initially approved by the Department of General Services on March 11, 2015 and has been extended to the maximum allowable term expiring on December 31, 2017. A new Request for Proposal (RFP) is being developed and will be released to select a new Trustee Bank before the end of the current contract term.

Agent Bank/Secure Flow on Funds. In CAEATFA's research and outreach to interested lenders OBR functionality, lenders expressed the need for additional safeguards around their funds, as the IOUs remit daily payments designated for participating lenders. In working with Concord Servicing, legal counsel, and advisors, it was determined that an Agent Bank was an appropriate role to accommodate interested lender needs. The RFP for this service was advertised on May 16, 2016. Although potential bidders posed various questions regarding the RFP, CAEATFA did not receive any responses.

During the Summer/Fall 2016, CAEATFA held follow-up discussions with potential respondent banks to better understand the lack of bids and explore more viable structure for a secure flow of funds. In October 2016, CAEATFA solicited a Request for Information (RFI) for a "Secure Cash Flow Solution," removing the assumption that banks would act as an Agent so that potential respondents could provide additional insight and guidance on solutions for secure cash flow.

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CAEATFA is currently consulting with banking professionals, the IOUs, and Concord in exploring options to enable a secure stream of funds for lenders under the pilots.

Contractor Manager. The Contractor Manager will enroll and manage contractors in the REEL Program; coordinate with the Statewide Marketing Implementer on outreach; and conduct quality control oversight of projects not participating in an IOU rebate/incentive program. The RFP for this service is under development, and is expected to be released in Q1 2017.

Data Manager. The Data Manager will receive pilot program data from the MS and other energy efficiency finance program administrators such to prepare it for public presentation and use. It will also receive pilot program related energy usage data from the IOUs. The data will be aggregated and anonymized according to the combined standards and regulatory requirements of the IOUs and capital providers. The RFP for this service has been preliminarily drafted but not released while CAEATFA prioritizes its workload to develop and implement the pilots. Concurrently, CAEATFA and its agents will continue to collect the appropriate data to ultimately be transmitted to the data manager when it is brought under contract.

Section 4: Program Development

Residential Energy Efficiency Loan Assistance Program

The Residential Energy Efficiency Loan (REEL) Assistance Program launched and enrolled its first loan in July 2016. REEL's initial pilot term is expected to last through July 15, 2018.

Regulatory Development

Under statute, CAEATFA is able to statutorily adopt emergency regulations, which can accelerate the initial rulemaking process. Under State law, emergency regulations are effective for an initial 180-day period and may be re-adopted for two additional 90-day periods as an agency completes its regular rulemaking process. Initial REEL program regulations were approved by the Office of Administrative Law ("OAL") and considered effective March 9, 2015. Regulations were re-adopted with some amendments to incorporate early lessons learned in August 2015, and were effective September 8, 2015.

On October 30, 2015, CAEATFA issued a Notice of Proposed Rulemaking for the REEL program under the regular rule making process along with the proposed regulation text and the Initial Statement of Reasons, beginning a 45-day public comment period concluded with a public hearing on December 15, 2015. No public comments were received during this period.

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Based on early experiences during program implementation, CAEATFA released revised regulations⁷ for a 15-day comment period from January 6, 2016 to January 21, 2016. No public comments were received. Revised regulations were approved by the CAEATFA board on February 16, 2016 and by the OAL on April 13, 2016.

Regulations were revised to streamline program participation and administration which included standardizing program identifiers and project data tracking requirements. Additional updates and clarifications were included to address issues raised by staff and stakeholders regarding program data tracking needs and the ability to enroll loans that will not receive a credit enhancement for solar installation.

Infrastructure Development and Operations

The operational infrastructure to enroll loans under REEL has been established and launched. CAEATFA is working with participating lenders to streamline processes and procedures for their respective REEL financial products. Training and enrolling contractors into the REEL program occurs on a rolling basis.

Eligible Energy Efficiency Measures (EEEMs)

Each IOU displays their separate and unique EEEMs list on the EEEMs portal (<http://eeems.azurewebsites.net>). The EEEMS Portal is used by contractors, lenders, and the Master Servicer (Concord) to ensure project eligibility listing the various requirements for comprehensive, whole house projects. One of the most challenging aspects of implementation has been streamlining each IOU's EEEMs list while ensuring accuracy and ease of use for contractors, lenders, and the public. This action was undertaken based on feedback provided by contractors. December 1, 2016, Southern California Edison (SCE) released a simplified EEEMs list. The original residential SCE EEEMs list contained over 700 measures and was too burdensome for contractors and lenders to easily use. The simplified list contains 32 measures, making it easier for contractors to navigate and locate the appropriate measures for their projects; down from 700.

Lender Recruitment and Training

CAEATFA is continuously recruiting, enrolling and training Participating Financial Institutions ("PFIs") and Participating Finance Lenders ("PFLs"). In November 2016, CAEATFA completed training and onboarding California Coast Credit Union, REEL's second statewide lender. Staff is working with Desert Valleys Federal Credit Union to launch in January 2017 as a regional lender in Kern, Inyo and San Bernardino Counties. Staff is reviewing additional lender applications and engaging prospective program participants.

⁷ Proposed regulations approved by the CAEATFA board on February 16, 2016 - www.treasurer.ca.gov/caeatfa/cheef/reel/regulations/2016/20160106/text.pdf

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Significant time was invested in refining the loan enrollment process to easily integrate REEL with lenders' existing procedures, allowing participating lenders to offer REEL alongside other financial products without more substantial delay. Some refinements include:

- CAEATFA facilitating testing with Concord;
- creating procedures for partner notifications;
- conducting operations walkthroughs; and
- advocating for the acceptance of e-signatures on customer documents by the IOUs.

CAEATFA staff created implementation tools and resource materials for lenders which include checklists, an implementation manual, fillable PDF forms and a loan enrollment workbook.

Contractor Recruitment and Training

Contractor training began on April 13, 2016 with a first, in-person contractor training event being held in Tulare, California at the Southern California Edison Energy Center. Valley Oak Credit Union, the first lender prepared to enroll a loan under the REEL program, was in attendance to engage with contractors. Additional in-person contractor trainings have taken place in Downey, San Diego, Fresno, and Stockton. Starting in June 2016, weekly online contractor training sessions were conducted by CAEATFA staff. Between October 1, 2016 to December 31, 2016, 11 online contractor training sessions have been held. The current online contractor training schedule can be found at www.thecheef.com.

As of December 31, 2016, 171 contractors/contractor companies have completed the REEL required training; 76 of those contractors have enrolled in the REEL program, and at least six projects have been completed. There is ongoing outreach to and training of contractors for the REEL program. CAEATFA has worked with the IOUs and their third-party implementers, Build It Green and ICF International, to post REEL program information and training schedules on their websites, as well as monthly/quarterly newsletters. Ongoing efforts are being made to improve the resources available to contractors on www.thecheef.com.

Marketing Coordination

CAEATFA has been working with the Center for Sustainable Energy (CSE) to improve contractor, lender and consumer experience with REEL. CSE has been developing marketing collateral for REEL. CAEATFA provided suggestions to CSE on how to better reach REEL's target audiences and on simplifying post enrollment processes for participants. CAEATFA has been collaborating with the IOUs and CSE to create an informational webpage for direct consumers as well on www.thecheef.com/REEL. The webpage is currently going through a review process with the IOUs and is anticipated to launch in January 2017.

PG&E REEL Sub-Pilot: Energy Finance Line Item Charge (EFLIC)

CAEATFA is concurrently developing EFLIC, a sub-pilot of REEL. EFLIC, only available in PG&E territory, will initially focus on "small dollar" loans to encourage low-mid income homeowners to purchase energy efficiency equipment from retailers. In the initial phase of the project, CAEATFA staff worked with PG&E and interested financiers to propose an initial draft of the program structure. While analyzing various

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operational elements of the program (eligibility, data exchange and servicing requirements), staff identified initial eligibility and operational requirements that interested retailers could participate in.

In 2017, CAEATFA will draft regulations for EFLIC followed by commencement of the public process. The development and roll-out of this pilot relies on the OBR infrastructure, and this workload is being prioritized accordingly.

On-Bill Repayment (OBR)

Several pilot programs will include OBR as a key feature. CAEATFA staff is working with the IOUs and the MS to establish the OBR infrastructure.

Infrastructure Development and Operations

One key component of the OBR infrastructure is the Data Exchange Protocol (DEP) which establishes specific data points, file layout and frequency under which data and payments will be exchanged. The DEP outlines the process allowing for secure transmission of payments and repayment data between the IOUs, MS and lenders.

After working through multiple complex residential and commercial customer data scenarios, the MS and the IOUs signed off on the DEP requirements in January of 2016. The development of DEP was a time-intensive, high priority requiring numerous meetings and hundreds of hours of work by the MS, IOUs and their IT teams, and CAEATFA staff. Establishing these requirements allowed the IOUs to start development of their respective IT systems. DEP is a critical component in collecting and sharing customer energy consumption data from current and future pilot programs. OBR, CHEEF infrastructure and REEL are being developed concurrently.

The MS and the IOUs worked independently, and in close coordination to develop their respective IT systems to accommodate the DEP. Additionally, the IOUs modified their billing systems to accept energy efficiency financing charges on their bills. In March of 2016, CAEATFA, the MS and the IOUs launched the planning and testing phases of DEP and the OBR infrastructure. The parties identified several information technology risks and gaps related to the testing plan that had been initially developed. These risks were addressed by developing several mitigation strategies to ensure a robust testing plan approach and process.

In April 2016, the MS brought on a systems integration/project management resource with experience testing and developing OBR programs. The parties finalized the IOU-MS functionality testing plan and schedule. These documents were accepted by the corresponding parties in early June of 2016. Based on the finalized documents, CAEATFA created a timetable with anticipated IOU MS IT-infrastructure for completion dates for OBR. From Summer 2016 to Fall 2016, three of our four partner IOUs successfully completed the majority of their scheduled OBR testing. The fourth IOU is scheduled to complete OBR testing during Q2 of 2017.

In addition, during Fall 2016, CAEATFA collaborated with the IOUs to develop a full catalogue of implications of participating in OBR for lenders. CAEATFA worked with the IOUs and MS to outline and simplify the nuances of engagement with the on-bill infrastructure. CAEATFA will present OBR

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infrastructure details and what lenders need to know to integrate with OBR in early 2017.

OBR Development Milestones

Milestone	Target Date
1. Finalize Data Exchange Protocol	January 2016 – completed
2. Establish Test Schedule & Develop Testing Plan	June 2016 – completed
3. Begin IOU-Master Service System Integration Testing	June 2016 – in process
4. Additional Research on Secure Cash Flow Issue	July 2016 – in process
5. Issue Secure Cash Flow RFI/Review Responses	October 2016 / Nov 2016
6. Develop Secure Cash Flow RFP/Competitive Bid/ DGS approval	Q2 2017
7. Workshop OBR infrastructure for Lenders	January 2017
8. Complete IOU System Integration Testing	June 2017
9. Secure Cash Flow/Concord IT Build Out (est. 2-6 months)	Q2/Q3 2017
10. IT Contingency (TBD)	Q3/Q4 2017
11. End-to-End Testing (includes secure flow of funds; lender testing)	Q3/Q4 2017

The MS and CAEATFA continue to work on various on-bill lender interaction processes including development of communication, data flow, and secure cash flow between lenders and the IOUs, as facilitated by the MS. This process will inform the OBR Commercial workshops scheduled for Q1 2017.

While researching and developing the OBR infrastructure and through initial workshops, CAEATFA identified the need for:

- operational reserve fund to smooth the funding stream to address potential anomalies in the IOU billing systems;
- secure cash flow to enable open-market OBR (further discussed above).

CAEATFA is working with its partners, stakeholders and the CPUC to further clarify these issues and propose solutions. CAEATFA released a Request for Information (RFI) for Secure Cash Flow in October 2016 to better understand how banks could provide a secure flow of funds from utility to lender, given their existing product offerings, financial institution regulatory concerns and CAEATFA’s program needs. CAEATFA is currently considering issuing an RFP for Secure Cash Flow services in Q1/Q2 2017, as well as considering the feasibility of addressing the issues through other approaches, such as the use of legal agreements. If CAEATFA releases an RFP, we will proceed with a competitive bidding and DGS approval process. CAEATFA will continue to troubleshoot and address issues that may continue to arise as OBR is further developed.

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Commercial and Other CHEEF Pilot Development

CAEATFA staff continued development of the CHEEF Commercial Pilots. CAEATFA researched program features and financial structures for small business and non-residential projects, financing structures best suited for multifamily projects, and the incorporation of EFLIC into the REEL Program.

Program Development

Based on research and informal conversations with stakeholders, CAEATFA staff published proposed parameters for the commercial pilot programs. The commercial pilots offer various financial products including loans, leases, and energy service agreements. The small business elements of the pilots allow for credit enhancements to help financing entities mitigate risk, while both small business and large commercial pilots allow an option for on-bill or off-bill repayment.

CAEATFA has been in conversation with the IOUs and contractors to explore a finance-only path to complement existing utility rebate and incentive programs by providing financing for projects not otherwise covered. This gives contractors more control over the timing of project completion and avoiding the lengthy review process for utility custom incentives. CAEATFA is reaching out to contractors and other industry professionals to solicit feedback on the viability of this path.

CAEATFA is working with the Investor Confidence Project (ICP) to explore the integration of ICP protocols as third party quality assurance for finance-only projects. This would ensure efficiency goals are being met and provide a uniform set of industry recognized quality assurance standards. ICP protocols define a road map of best practices for energy retrofits, leveraging commonly accepted standards to create standardized projects with reliable returns. CAEATFA and ICP staff coordinated training for IOU engineers on ICP protocols, while reaching out to contractors to explore the feasibility of establishing a statewide network of ICP-credentialed quality assurance professionals.

Workshops, Public Comment, and Regulatory Development

CAEATFA conducted workshops related to the OBR tariffs and lease providers in 2015. Subsequent meetings were held with interested parties to discuss questions on various proposals and structures, including a series of workshops to share proposed program structure of the commercial pilots with external stakeholders. CAEATFA will commence its regulatory process during the development of other pilot programs once CAEATFA staff can incorporate OBR features as discussed above. Beginning in July of 2016, CAEATFA began holding a series of workshops for the Commercial pilot. Below is a list of completed and anticipated workshops that will inform CAEATFA's regulatory process. Participants included contractors, lenders, realtors, product manufacturers and energy efficiency consultants.

CAEATFA conducts outreach to contractors and other industry professionals to build awareness and interest in the commercial pilots. CAEATFA put on presentations at an October 6, 2016 On-Bill Financing panel and a December 8, 2016 Energy Efficiency Financing panel, both hosted by PG&E. These events provided excellent outreach opportunities, as did the November 16, 2016 Institute of Heating and Air Conditioning Industries trade show attended by CAEATFA staff. Continuous research and development of the programs occurs through feedback solicitation from stakeholders.

Plans are underway to develop proposed regulations for the commercial pilots. Ongoing efforts are

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being made to seek public input through workshops and direct outreach into Q1 2017.

- July 20, 2016 – Commercial Financing Program Parameters
 - Credit enhancement structure for small business pilots
 - Financial product eligibility
 - Finance provider eligibility
 - Borrower/Customer underwriting guidelines
- October 28, 2016 – Commercial Project Program Parameters
 - Eligible measures and eligible projects
 - Contractor requirements
 - Project Quality Assurance/Quality Control requirements
 - Data reporting
 - Finance-only (non-rebate) pathway
- January 31, 2017 – On-Bill Repayment Program Parameters
 - On-bill governance and agreement structures
 - Eligibility guidelines
 - On-bill infrastructure and communication with the Master Servicer
 - Details and timing of cash flows and payments
- Q2 2017 – Commercial Regulation Workshops
- TBD – EFLIC Program Parameters
 - Timeframe will be sequential to PG&E OBR development.
 - Financial product eligibility
 - Finance provider eligibility
 - Borrower/Customer underwriting guidelines
- TBD – Multifamily Program Parameters
 - Timeframe will be sequential to OBR development
 - Financial product eligibility
 - Finance provider eligibility
 - Borrower/Customer underwriting guidelines
- TBD – Multifamily, EFLIC, OBR
 - Regulatory Workshops

Pilot Budget Modifications and CPUC Activity

Once the substantive issues with OBR were identified, and the IOU-Master Servicer exchange was mapped and developed, CAEATFA was able to better inform the overall timetable for the development and launch of the remaining pilots. The timetable was extended due to the complexity of the pilots and

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development of the OBR infrastructure. In August 2016, CAEATFA estimated that the combined two-year implementation period of the pilots, as they launch sequentially, will run through fiscal year (FY) 2019-2020 (June 30, 2020). This timetable was based on CAEATFA’s best estimates at the time, and was developed relying on certain reasonable assumptions about issue resolutions/deliverables, and CAEATFA’s staffing resources.

Anticipated Pilot Implementation Schedule					
Pilot Implementation Period	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
Residential Pilot (CE)					
Small Business Pilot (CE)					
Multifamily Pilot (CE)					
Non-Residential OBR ONLY					

CAEATFA and CPUC staff began discussion on CAEATFA’s resource needs to complete the pilots as they are currently designed – as well as challenges and opportunities of the pilots -- over the summer of 2016. While CAEATFA only expended \$2,724,080 of the \$7 million allocated to it under D.13-09-044, its current legislative budget authority expires June 30, 2017. Due to CAEATFA’s role as a state agency, it was concurrently required to submit a legislative budget request and extension for consideration and approval in the 2017 Budget.

CAEATFA has requested an additional \$8.36 million of the \$9 million existing contingency fund to implement the pilots through FY 2019-2020. These costs include:

- administrative costs, including its contracts with the MS, Trustee Bank, Contractor Manager, and Technical Advisors;
- right-sizing the number and level of CAEATFA staff to more effectively implement the scope of work of the CHEEF, including the establishment of 4 permanent staff positions necessary for continuity in implementation and long-term administration through the term of enrolled loans (15 years).

On November 14, 2016, the CPUC hosted a mid-point review of the CHEEF pilots as required by D. 13-19-044, at which CAEATFA:

- provided information on the history and state of CHEEF pilot development and implementation;
- illustrated opportunities and risks to be mitigated;
- identified and requested potential modifications to the current pilot program design for consideration and input;
- outlined the details of its budget request.

On November 22, 2016, a *Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing, Education and Outreach Activities* was issued, which:

- released the contingency funds and approved CAEATFA’s budget request, and requested comments on potential next steps for the pilots;

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- addressed short-term and longer-term actions necessary to continue marketing, education, and outreach activities related to the financing pilots.

Comments were requested by December 12, 2016, with reply comments due no later than December 19, 2016. The CPUC is currently considering comments and is expecting to release a proposed decision in early 2017.

Section 5: Additional Information

More information on the CHEEF Pilot Programs is available on CAEATFA's website at <http://www.treasurer.ca.gov/caeatfa/cheef> or at thecheef.com. To receive notifications regarding workshops, regulations, and other items related to the CHEEF, please sign up [here](#) for CAEATFA's email distribution list. Please direct inquiries on this report or generally on the CHEEF Pilot Programs to CAEATFA at (916) 651-8157 or cheef@treasurer.ca.gov.

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Below is a full list of data points required by D.13-09-044 to be submitted as part of this Quarterly Report. Many of these components are related to the implementation stages of the program. As detailed above, CAEATFA is in the process of establishing the basic infrastructure for implementing the financing pilots. Additional information will be provided in subsequent Quarterly Reports as program activity ramps-up.

- **The platform and space within which CHEEF functions take place**
 - See Section 3 on p. 5.
- **Accounts and account managers associated with CHEEF**

The following CHEEF accounts have been established with US Bank:

- CHEEF PG&E Holding Account
- CHEEF PG&E REEL Program Account
- CHEEF PG&E REEL Reservation Account
- Valley Oak Credit Union PG&E REEL Loss Reserve Account
- Viewtech PG&E REEL Loss Reserve Account
- Matadors Community Credit Union PG&E REEL Loss Reserve Account
- California Coast Credit Union PG&E REEL Loss Reserve Account
- Desert Valleys Federal Credit Union PG&E REEL Loss Reserve Account

- CHEEF SDG&E Holding Account
- CHEEF SDG&E Program Account
- CHEEF SDG&E Reservation Account
- Valley Oak Credit Union SDG&E REEL Loss Reserve Account
- Viewtech SDG&E REEL Loss Reserve Account
- Matadors Community Credit Union SDG&E REEL Loss Reserve Account
- California Coast Credit Union SDG&E REEL Loss Reserve Account
- Desert Valleys Federal Credit Union SDG&E REEL Loss Reserve Account

- CHEEF SCE Holding Account
- CHEEF SCE Program Account
- CHEEF SCE Reservation Account
- Valley Oak Credit Union SCE REEL Loss Reserve Account
- Viewtech SCE REEL Loss Reserve Account
- Matadors Community Credit Union SCE REEL Loss Reserve Account
- California Coast Credit Union SCE REEL Loss Reserve Account
- Desert Valleys Federal Credit Union SCE REEL Loss Reserve Account

- CHEEF SoCalGas Holding Account
- CHEEF SoCalGas Program Account
- CHEEF SoCalGas Reservation Account

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- Valley Oak Credit Union SoCalGas REEL Loss Reserve Account
- Viewtech SoCalGas REEL Loss Reserve Account
- Matadors Community Credit Union SoCalGas REEL Loss Reserve Account
- California Coast Credit Union SoCalGas REEL Loss Reserve Account
- Desert Valleys Federal Credit Union SoCalGas REEL Loss Reserve Account

- **Database permission (and levels therein) criteria and platforms**
CAEATFA is in the process of working with the Master Servicer to establish database infrastructure. No permissions have been set at this time.

- **Contractor-facing products (such as websites/informational charts)**
CAEATFA maintains information about the pilots and related workshops, trainings, and events on its website: <http://www.treasurer.ca.gov/caeatfa/cheef/reel/contractor/index.asp>.
 - information on Eligible Energy Efficiency Measures is available online at <http://eeems.azurewebsites.net/>
 - CAEATFA is also working with the Center for Sustainable Energy to integrate messaging about the financing pilots within the Energy Upgrade California efforts (<https://www.energyupgradeca.org/en/>)
 - additional information regarding the CHEEF pilot programs, lender profiles, contractor resources, marketing and continuing education information can be found at thecheef.com.

- **Transactions of various financial products administered by CHEEF and certain aggregate profile information about borrowers, project purposes/scope, financed amounts, etc.**
As of December 31, 2016, five loans have been enrolled into the program. Four were funded by Matadors Community Credit Union (statewide lender) and one was funded by Valley Oak Credit Union (regional lender).

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Loss Reserve Funding Date	Lender Name	Total Loan Amount	Credit Enhancement Amount⁸	Interest Rate	Income Range	FICO BAND	D/I Ratio	Term of Loan (Months)
9/26/2016	Matadors	\$8,385	\$922.35	6.99%	\$100,000 - \$149,999	701-760	36-45%	120
7/28/2016	Matadors	\$12,285	\$1,351.35	6.99%	\$100,000 - \$149,999	641-700	25-35%	120
7/19/2016	Matadors	\$7,500	\$825.00	6.99%	\$75,000-\$99,999	701-760	46-55%	180
10/31/2016	Matadors	\$15,000	\$3,000.00	6.49%	<\$25,000	761-820	<25%	60
11/28/2016	Valley Oak	\$14,368	\$1,332.98	7.10%	\$50,000-\$74,999	701-760	46-55%	120
	Grand Total	\$57,538	\$7,431.68					

- **Overview of participating FIs for the REEL program**

As of December 31, 2016, five lenders (Viewtech Financial Services, Valley Oak Credit Union, Matadors Community Credit Union, California Coast Credit Union, and Desert Valleys Federal Credit Union) have been approved in the REEL Assistance Program. Of the five lenders, three are operational and can accept REEL applications from consumers: Valley Oak Credit Union, Matadors Community Credit Union, and California Coast Credit Union. CAEATFA is currently recruiting other eligible FIs and conducting additional outreach.

⁸ No claims on the reserve funds have been made to date.

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- **Viewtech Financial Services** anticipates offering their REEL product on a statewide basis through Retail Installment Contracts (RICs) offered to borrowers through the contractor. While Viewtech’s current rate on a non-REEL RIC ranges from 7.99% for borrowers with high FICO scores, up to 14.99% for those with lower FICO scores, the interest for the REEL product has been greatly reduced for those borrowers whose FICO scores fall into the lower end of the spectrum. Through the availability of the CE, Viewtech is able to offer a rate of either 7.99% or 8.99%.

Viewtech – Rate (Non REEL compared to REEL Loan)		
Borrower FICO	Non REEL RIC Rate Range	REEL Loan or RIC Rate
780+	7.99%	7.99%
720-779	7.49 to 9.99%	7.99%
680-719	8.99 to 12.24%	7.99%
640-679	11.99 to 14.99%	8.99%
600-639	14.99%	8.99%
Viewtech – Term & Amount		
Term (Years)	Minimum Loan Amount	Maximum Loan Amount
1 - 5	\$2,500	\$3,999
6 - 7	\$4,000	\$6,499
8 - 12	\$6,500	\$30,000

The lower interest rates will result in customer savings for borrowers with FICO scores lower than 720, as shown here. For example:

- A Viewtech customer with a FICO score of 600, taking out a \$20,000 12-year loan, would save \$10,448 in interest over the life of the loan.
- A Viewtech customer with a FICO score of 680, taking out a \$15,000 12-year loan, would save \$5,315 in interest over the life of the loan.

The Viewtech/Kilowatt Financial’s roll-out of the REEL product is currently on hold due to continued priorities in managing their merger with Clean Power Finance, rebranded as Spruce. They’ve indicated that they will restart conversations around energy efficiency in late 2016 at the earliest.

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- Valley Oak Credit Union is a regional credit union offering financial products and services in California’s Central Valley, a region dominated by low-to-moderate income households according to the CA Department of Housing and Community Development. Valley Oak serves borrowers in Fresno, Kings, Madera, and Tulare counties and is eager to offer energy efficiency financing to its members in order to help them to reduce their energy consumption, improve their homes, and ultimately lower their cost of living expenses.

While Valley Oak did not previously offer an energy efficiency home improvement loan, a member seeking this type of financing would have applied for a “Personal Loan” through the credit union at a rate of 8.95% for high FICO borrowers and at rates up to 15.95% for those with a lower FICO. With the availability of the CE, they have been able to develop a loan product offering rates that were reduced from 8.95% - 15.95% to 6.77% - 9.27%.

Valley Oak – Rate (Personal Loan compared to REEL Loan)				
Borrower FICO	Personal Loan Rate (5yr)	REEL Loan Rate (5yr)	REEL Loan Rate (10yr)	REEL Loan Rate (15yr)
730+	8.95%	6.77%	6.77%	6.77%
680-729	9.95%	7.27%	7.27%	7.27%
640-679	11.95%	7.77%	7.77%	7.77%
600-639	13.95%	8.27%	8.27%	8.27%
580-599	15.95%	9.27%	9.27%	9.27%
Valley Oak – Term & Loan Amount (Personal Loan compared to REEL Loan)				
Term (Years)	Personal Loan Amount		REEL Loan Amount	
1 – 5	\$2,500 - \$20,000		\$1,500 - \$50,000	
6 – 10	Not Offered		\$10,000 - \$50,000	
11 – 15	Not Offered		\$25,000 - \$50,000	

The lower interest rates will result in significant customer savings for credit-challenged borrowers. For example:

- A Valley Oak customer with a FICO score of 580, taking out an \$8,000 7-year loan, would save \$2,203.41 in interest over the life of the loan.
- A Valley Oak customer with a FICO score of 600, taking out a \$20,000 12-year loan, would save \$8,668.91 in interest over the life of the loan.

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- **Matadors Community Credit Union** is a statewide credit union offering financial products to pay for eligible energy efficiency to qualified single-family residential customers throughout California.

Matadors – Rate (Personal Loan compared to REEL Loan)				
Borrower FICO	Signature Loan Rate (1yr)	REEL Loan Rate (5yr)	REEL Loan Rate (10yr)	REEL Loan Rate (15yr)
740+	9.90%	5.99%	6.99%	7.99%
690-739	10.90%	5.99%	6.99%	7.99%
660-689	12.40%	5.99%	6.99%	7.99%
640-659	Not Offered	5.99%	6.99%	7.99%

Matadors – Term & Loan Amount (Personal Loan compared to REEL Loan)		
Term (Years)	Personal Loan Amount	REEL Loan Amount
1	\$500 - \$5,000	\$2,500 - \$50,000
2 - 5	Not Offered	\$2,500 - \$50,000
6 - 10	Not Offered	\$2,500 - \$50,000
11 - 15	Not Offered	\$2,500 - \$50,000

Matadors did not previously offer single measure energy efficiency home improvement loans, and a member seeking this type of financing would have applied for a “Personal Loan” through the credit union at a rate of 9.90% for higher FICO borrowers and at rates up to 12.40% for those with a lower FICO. With the availability of the CE they have been able to develop a loan product to cover single measures, as well as whole house retrofits, offering unsecured financing rates that range from 5.99% to 7.99%.

The lower interest rates and longer repayment terms will result in lower monthly payments and savings for credit-challenged borrowers. For example, a Matadors member who needs to take a personal loan of \$5,000 for an emergency HVAC replacement would be charged at least 9.90% for a loan that has to be repaid in one (1) year. That same borrower, with the REEL product option, will pay only 5.99% and has up to five (5) years to repay the loan.

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- **California Coast Credit Union** is a statewide credit union offering financial products to pay for eligible energy efficiency to qualified single-family residential customers throughout California.

California Coast – Rate (Signature Loan compared to REEL Loan)				
Borrower FICO	Signature Loan Rate (5yr)	REEL Loan Rate (5yr)	REEL Loan Rate (10yr)	REEL Loan Rate (15yr)
700+	9.85%	5.88%	6.38%	6.88%
675-699	12.85%	6.88%	7.38%	7.88%
640-674	15.85%	6.88%	7.38%	7.88%
600-639	18.85%	6.88%	7.38%	7.88%
California Coast – Term & Loan Amount (Signature Loan compared to REEL Loan)				
Term (Years)	Signature Loan Amount		REEL Loan Amount	
1 – 5	\$5,000 - \$20,000		\$2,500 - \$50,000	
6 - 10	Not Offered		\$2,500 - \$50,000	
11 - 15	Not Offered		\$2,500 - \$50,000	

California Coast did not previously offer any energy efficiency home improvement loans. A member seeking unsecured financing (5-year term) would have applied for a “Signature Loan” through the credit union at a rate of 9.85% for higher FICO borrowers and at rates up to 18.85% for those with a lower FICO. With the availability of the CE they have been able to develop a loan product to cover single measures, as well as whole house retrofits, offering unsecured financing rates that range from 5.88% to 7.88%.

The lower interest rates and longer repayment terms will result in lower monthly payments and savings for credit-challenged borrowers. For example, a California Coast member who needs to take a personal loan of \$5,000 for an emergency HVAC replacement would be charged at least 9.85% for a loan that has to be repaid in five (5) years. That same borrower, with the REEL product option, will pay only 5.88% and has up to 15 years to repay the loan.

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- **Desert Valleys Federal Credit Union** is a regional credit union offering financial products and services in California’s eastern deserts, a region dominated by low-to-moderate income households according to the CA Department of Housing and Community Development. Desert Valleys serves borrowers in parts of Inyo, Kern and San Bernardino counties and is eager to offer energy efficiency financing to its members in order to help them to reduce their energy consumption, improve their homes, and ultimately lower their cost of living expenses.



While Desert Valleys does offer an energy loan called “Alternative Energy Loan”, it is only for solar projects. A member seeking an energy efficiency home improvement loan (5-year term) would have applied for a “Signature Loan” through the credit union at a rate of 10.99% for high FICO borrowers and at rates up to 18.00% for those with a lower FICO. With the availability of the CE they have been able to develop a loan product offering rates that range from 4.50% to 8.50%.

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Desert Valleys – Rate (Signature Loan compared to REEL Loan)				
Borrower FICO	Signature Loan Rate (5yr)	REEL Loan Rate (5yr)	REEL Loan Rate (10yr)	REEL Loan Rate (15yr)
700+	10.99%	4.50%	5.50%	6.50%
640-679	12.99%	5.50%	6.50%	7.50%
600-639	15.99%	6.50%	7.50%	8.50%
580-599	18.00%	7.50%	8.50%	Not Available
Desert Valleys – Term & Loan Amount (Signature Loan compared to REEL Loan)				
Term (Years)	Signature Loan Amount		REEL Loan Amount	
1 – 5	\$2,500 - \$15,000		\$2,500 - \$50,000	
6 - 10	Not Offered		\$10,000 - \$50,000	
11 - 15	Not Offered		\$25,000 - \$50,000	

The lower interest rates and longer repayment terms will result in lower monthly payments and savings for credit-challenged borrowers. For example, a Desert Valleys member who needs to take a personal loan of \$5,000 for an emergency HVAC replacement would be charged at between 10.99% - 18.00% for a loan that has to be repaid in five (5) years. That same borrower, with the REEL product option, will pay between 4.50% - 8.50% and has up to 10 years to repay the loan and up to 15 years if their FICO is 600 or higher.