CALIFORNIA ALTERNATIVE ENERGY AND ADVANCED TRANSPORTATION FINANCING AUTHORITY

Overview of the Property Assessed Clean Energy (PACE) Loss Reserve Program

Tuesday, July 21, 2020

Prepared By: Ashley Emery, Program Manager

SUMMARY

CAEATFA's PACE Loss Reserve Program launched in March 2014 to support residential PACE financing by making first mortgage lenders whole for direct losses as a result of a PACE lien in a foreclosure or forced sale. The legislature funded the loss reserve with a one-time appropriation of \$10 million, which currently supports 151,453 PACE financings with an outstanding value of over \$3.5 billion from 22 PACE programs. Although the mortgage industry has maintained its position against first-priority PACE liens, since the PACE Loss Reserve Program's launch, the residential PACE market has matured and is widely available throughout the state. Additionally, legislation in recent years established consumer protection requirements, minimum underwriting (including ability-to-pay), and regulatory oversight under the California Department of Business Oversight.

With the growth and maturity of the PACE industry, coupled with recent legislation that increased consumer protections and established PACE regulatory oversight under the California Department of Business Oversight, CAEATFA staff has been exploring several policy questions, including: How long might the PACE Loss Reserve last and what is the potential demand for claims against the reserve? Has the PACE Loss Reserve addressed its original policy goal? Given recent developments, does the residential PACE industry still need this support?

CAEATFA hired a contractor, Blue Sky Consulting Group, to conduct a longevity and risk analysis of the loss reserve to better assess the possible demand during anticipated economic downturns. This analysis can be found in Attachment B, and is being brought to the Board as an informational discussion item. The staff report below provides additional historical information on PACE financing, the development and activity under CAEATFA's PACE Loss Reserve Program, and a summary of CAEATFA's recent and anticipated future efforts in this area.

BACKGROUND ON PACE FINANCING IN CALIFORNIA

Statutory Authorization

Property Assessed Clean Energy ("PACE") financing was initially authorized in California by AB 811 (Levine, Statutes of 2008), which amended the Improvement Act of 1911 to allow local agencies to enter into contractual assessments with property owners to finance energy efficiency

and renewable energy projects permanently affixed to the property. Future legislation added water efficiency, EV charging infrastructure, and seismic strengthening to the list of projects eligible for PACE financings under the Improvement Act of 1911, as amended by AB 811. In 2011, SB 555 (Hancock, Statutes of 2011) amended the Mello Roos Community Facilities Act of 1982 to authorize a community facilities district to finance energy efficiency, water conservation, and renewable energy improvements through a special tax. The first PACE program was a pilot program in Berkeley called BerkeleyFIRST, which began originating financings in early 2009.

Like other property tax assessments, PACE liens have first priority status, even against pre-existing liens such as a first mortgage, and the PACE financing transfers upon sale unless repaid in full. Additionally, PACE financing does not accelerate upon default—only the amount in arrears is due. In California, default triggers the local agency's right to strip the assessment from the tax roll and go through the judicial foreclosure process to recover amount in arrears.

PACE Program Structures

In California, PACE programs are created by local government entities, such as a city, county, or joint powers authority ("JPA"). Within the bounds of state law, each program has its own processes, requirements, and list of eligible measures. Each program may have a different source of capital for funding projects, whether from the county's treasury or private investment firms.

PACE programs may be self-administered by the local government entity, such as Sonoma and Placer County, or through a public-private partnership. Additionally, a PACE program may have multiple administrators operating separate "sub-programs," such as with the California Statewide Communities Development Authority's Open PACE program, which currently has four PACE administrators operating separate residential programs.

Cities and counties that wish to offer PACE financing in their jurisdiction may create a PACE program or opt into an existing program that operates statewide by passing a resolution. Cities and counties may also authorize more than one PACE program to operate within their jurisdiction.

Issues with the Mortgage Industry

In June 2009, the Federal Housing Finance Agency ("FHFA") issued a letter voicing concerns over PACE financing, specifically its superior lien status to existing first mortgages. In July 2010, FHFA issued a directive banning Fannie Mae, Freddie Mac, and the Federal Home Loan Banks (the Enterprises) from purchasing mortgages on properties with first-priority PACE liens and advising other protective actions, including redlining PACE communities (e.g. adjusting LTV to reflect max permissible PACE financing amount available and tightening borrower debt-to-income ratios to account for possible PACE financing amounts). A few residential PACE programs chose to continue to operate despite FHFA's directive, but most suspended operations.

The State of California and other parties sued FHFA in September 2010, arguing the directive was a "rule" under the Administrative Procedures Act and needed to be adopted through formal rulemaking. The district court ordered FHFA to begin the rulemaking process, which FHFA did, but in March 2013 the 9th Circuit Court of Appeals held FHFA's directive was a lawful exercise of authority as conservator of the Enterprises, which is not subject to judicial review.

To date, FHFA has maintained its position against first-priority PACE liens.

BACKGROUND ON CAEATFA'S PACE LOSS RESERVE PROGRAM

Program Creation

In response to FHFA's directive, Governor Brown signed into law SB 96 (Budget Act of 2013), which directs CAEATFA to establish a "risk mitigation program to increase the acceptance of PACE financing in the marketplace and protect against the risk of default and foreclosure," with a one-time appropriation of \$10 million from the Renewable Resource Trust Fund.

During program development, CAEATFA staff considered various program designs, including an insurance product whereby in the event of a foreclosure or tax sale of the property, the PACE lien would be extinguished; however, the insurance portfolio design was not cost effective and did not limit payout to the actual direct losses to first mortgage lenders. Because PACE financings do not accelerate upon default, only outstanding PACE payments would be put before a first mortgage lender. Therefore, through the emergency rulemaking process, CAEATFA established a loss reserve program which seeks to put first mortgage lenders in the same position they would have been in without a first-priority PACE lien.

The proposed emergency regulations establishing the PACE Loss Reserve Program (the "Program") were originally approved by the Office of Administrative Law and became effective on March 10, 2014, and the Certificate of Compliance was approved on April 6, 2015.

Types of Eligible Claims

The Program makes first mortgage lenders whole for direct losses incurred due to the existence of a PACE lien on a property during a foreclosure or forced sale. The loss reserve will reimburse the following losses as a result of an enrolled PACE assessment:

- PACE payments paid while a first mortgage lender is in possession of a foreclosed home.
- Any losses to the first mortgage lender up to the amount of outstanding PACE assessments in a forced sale for unpaid taxes or special assessments.

In no instance shall the loss exceed the amount of the PACE assessment, or in the case of forced sale for unpaid taxes or special assessments, the amount of the delinquent PACE assessments.

The loss reserve currently supports financings dating back to 2009, but to date, CAEATFA has not paid a claim against the reserve.

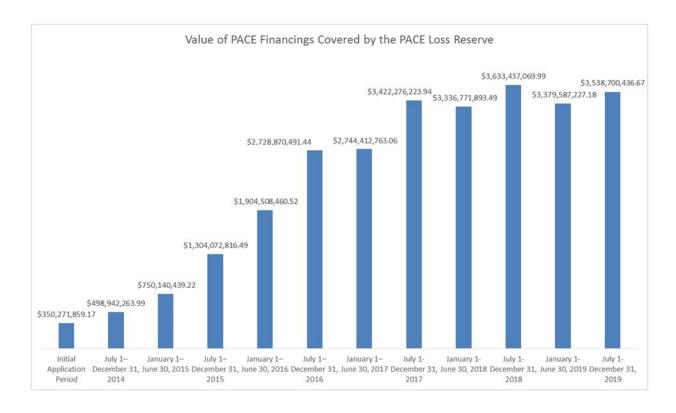
Program Enrollment and Activity

PACE programs voluntarily apply to participate in the Program by providing program information and PACE program formation documents and handbooks that demonstrate the PACE program meets the Program's eligibility and underwriting underwriting criteria as established in statute and regulations. Once enrolled, all residential PACE assessments originated by the PACE program and reported to CAEATFA are covered by the loss reserve.¹

In anticipation of the Program's launch, many residential PACE administrators restarted their programs, and in June 2014, CAEATFA initially enrolled 8 PACE administrators with a combined existing residential PACE portfolio of 17,401 financings with a value of over \$350 million, representing all outstanding residential PACE financings issued by the enrolled administrators since 2009.

The Program currently has an outstanding portfolio of 151,453 residential PACE financings with a value of over \$3.5 billion from 22 PACE administrators. A chart of all participating PACE programs and financing enrollment activity can be found in Attachment A.

¹ Program regulations also allow PACE administrators that enrolled during the Program's initial launch in June 2014 to have their entire existing residential portfolios covered by the loss reserve.



RECENT PACE CONSUMER PROTECTIONS AND OVERSIGHT LEGISLATION

Initially, California's PACE enabling statute did not establish minimum underwriting requirements or designate a centralized entity specifically tasked with overseeing California PACE administrators. Although CAEATFA may impose specific eligibility criteria under the PACE Loss Reserve Program, limited by the Program's authorizing statute, the Program is voluntary and intended to support and encourage the residential PACE market. However, until recently, CAEATFA's voluntary program was the only centralized source for California PACE requirements and PACE data.

This decentralized approach to implementing PACE in California led to concerns with PACE consumer protections and oversight. Industry and policy groups took steps to strengthen consumer protections and oversight by exploring self-regulation and developing best practices, but the California legislature eventually enacted several pieces of legislation to address these issues. Additionally, although residential PACE is available in only California, Florida, and Missouri, Congress passed federal legislation incorporating PACE financing under the Truth in Lending Act.

AB 2693 – First Statutory Consumer Protection Requirements

On September 25, 2016, Governor Brown signed into law AB 2693 (Dababneh, Ch. 618, Statutes of 2016), known as the PACE Preservation and Consumer Protections Act, which effective

January 1, 2017, established statutory consumer protection requirements including a financing estimate disclosure document and a 3-day right to cancel. AB 2693 also required properties meet the minimum underwriting criteria set out in CAEATFA's statute for the PACE Loss Reserve Program to be eligible to receive PACE financing.

AB 1284 and SB 242 – PACE Industry Oversight

AB 1284 (Dababneh, Chapter 475, Statutes of 2017) and SB 242 (Skinner, Chapter 484, Statutes of 2017) amended the minimum underwriting criteria by which PACE administrators must evaluate PACE financing applicants (including ability to pay), imposed statutory reporting requirements, and established regulatory oversight over PACE administrators and PACE solicitors (e.g. contractors) under the California Department of Business Oversight ("DBO").

Federal PACE Legislation

The 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act (Pub.L. 115–174) amended the Truth in Lending Act ("TILA") to require the Consumer Financial Protection Bureau ("CFPB") develop regulations to carry out the purposes of TILA's ability-to-pay requirements, currently in place for residential mortgage loans, with respect to PACE financing, taking into account the unique nature of PACE financing, and authorizes the collection of data and information necessary to support a PACE rulemaking.

CFPB issued an Advance Notice of Proposed Rulemaking in March 2019 and is continuing its stakeholder process and collecting information for the rulemaking, including quantitative data on the effect of PACE on consumers' financial outcomes.

CAEATFA'S ONGOING EFFORTS UNDER THE PACE LOSS RESERVE PROGRAM

Audit of Enrolled PACE Programs

CAEATFA engaged a contractor, Crowe LLP, to evaluate the participating PACE programs' compliance with the Program's eligibility and minimum underwriting requirements. The on-site audits have been completed and staff are currently working with Crowe and the PACE programs to finalize the reports, which are anticipated to be complete in August 2020.

Modifying Regulations to Align with Current PACE Statute and Address Lessons Learned

After the Program's regulations were adopted in 2015, California's PACE enabling statute was amended several times, updating the types of eligible measures, adding consumer protections and underwriting requirements, and establishing DBO as regulator over residential PACE

administrators. CAEATFA staff are working to modify the Program's regulations to align with current PACE statute and address lessons learned from Program implementation, such as allowing first mortgage lenders to submit claims directly to CAEATFA and clarifying that PACE programs may offer PACE financing for improvements not covered under the loss reserve.² Staff anticipates completing the emergency rulemaking process in Q4 2020.

PACE Loss Reserve Longevity and Risk Analysis

Given that the Loss Reserve was funded with a one-time appropriation of \$10 million, CAEATFA engaged a contractor to analyze the following questions:

- What size portfolio of residential PACE financings can the \$10 million loss reserve support?
- How long will the \$10 million last?
- How could California appropriately size the loss reserve to make it self-sustaining over time?

Although CAEATFA has not paid a claim from the loss reserve yet, it is likely that foreclosure rates will rise in the future given current economic conditions, which would increase the likelihood of claims against the loss reserve. The analysis completed by Blue Sky Consulting Group shows that the \$10 million fund may not be able to pay all potential claims from the currently enrolled portfolio, which includes over \$3.5 billion in PACE financings that have terms of up to 30 years.

POLICY QUESTIONS AND POTENTIAL NEXT STEPS

Since the PACE Loss Reserve Program's launch, the residential PACE market has matured and is widely available throughout the state. Additionally, recent legislation has established consumer protection requirements, minimum underwriting (including ability-to-pay), and a regulatory framework under DBO to oversee residential PACE administrators and solicitors. Although the loss reserve remains to cover losses to first mortgage lenders as a result of PACE's first-lien priority, FHFA has maintained its position against residential PACE and will not refinance or mortgage properties with a PACE lien.

Based on the loss reserve longevity analysis, the \$10 million loss reserve may not be sufficient to pay all potential claims. One solution would be to size the loss reserve to correspond to potential demand, but this would require legislation and a source of funding. Another option would be to sunset the Program and stop enrolling new financings for coverage under the loss reserve while continuing to support the current portfolio; this would also require legislation. Alternatively, the

⁻

² California statute allows PACE for seismic strengthening improvements and fire hardening measures, but CAEATFA's PACE Loss Reserve Program statute has not been amended to include these types of measures as eligible for coverage under the Program.

state could take a wait and see approach to determine actual demand and whether there is a need for additional funding.

Given the significant growth of residential PACE and how much the market and regulatory framework has developed since the Program began, CAEATFA staff will be engaging stakeholders to assess the current role of the loss reserve in the residential PACE market.

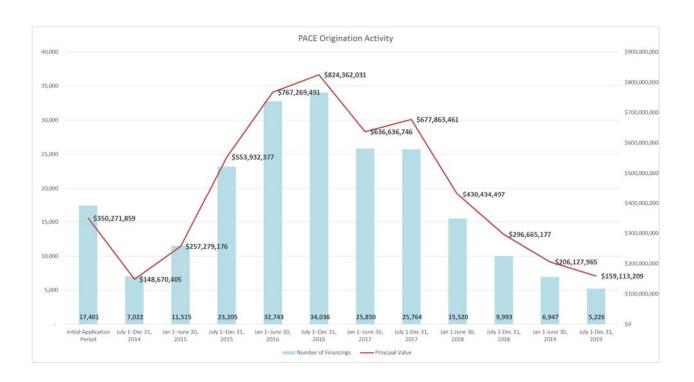
Attachments:

- Attachment A PACE Loss Reserve Program Enrollment Activity
- Attachment B Potential Longevity and Risk Analysis of the PACE Loss Reserve prepared by Blue Sky Consulting

Attachment A

PACE Loss Reserve Program Enrollment Activity

Number and Amount of PACE Financing Enrolled Each Reporting Period



List of Enrolled PACE Programs

Active PACE Programs

Program Name	Local Agency Program Areas Served Administrator (Counties)		Date Enrolled	
Sonoma County Energy Independence Program	County of Sonoma	County of Sonoma (Auditor-Controller Treasurer-Tax Collector)	Sonoma County	June 26, 2014
CaliforniaFIRST	California Statewide Communities Development Authority (CSCDA)	Renew Financial	State of California	June 19, 2014
Western Riverside Council of Governments (WRCOG) Home Energy Renovation Opportunity (HERO) Program	WRCOG	WRCOG and Renovate America	Western Riverside County	June 23, 2014
California HERO Program	WRCOG	WRCOG and Renovate America	State of California	June 23, 2014
Ygrene Works Program	Golden State Finance Authority (GSFA)	Ygrene Energy Fund CA, LLC	State of California	October 19, 2015
PACEfunding	CSCDA	PACE Funding Group	State of California	January 22, 2016
California Municipal Finance Authority (CMFA) PACE	CMFA	Energy Efficient Equity (E3)	State of California	August 31, 2016
CSCDA HERO Program	CSCDA	Renovate America	State of California	July 6, 2017
mPOWER	Pioneer Community Energy	Placer County Treasurer-Tax Collector	Placer County, Nevada County, City of Colfax, Town of Truckee, City of Grass Valley, City of Folsom	November 6, 2017
PACE Funding (WRCOG)	WRCOG	WRCOG and PACE Funding Group	Western Riverside County	September 10, 2018

Agenda Item – 4.C

Program Name	Local Agency	Program Administrator	Areas Served (Counties)	Date Enrolled
CaliforniaFIRST (WRCOG)	WRCOG	WRCOG and Renew Financial	Western Riverside County	February 7, 2019
FortiFi (CSCDA)	CSCDA	FortiFi Financial, Inc.	State of California	March 12, 2020

Inactive PACE Programs

These PACE Programs are no longer actively enrolling new financings for coverage under the loss reserve, but previously enrolled financings are still eligible for coverage.

Program Name	Local Agency	Program Administrator	Areas Served (Counties)	Date Enrolled	Date Inactive
mPOWER Placer	County of Placer	County of Placer (Treasurer-Tax Collector)	Placer County	June 18, 2014	April 26, 2019
mPOWER Folsom	County of Placer	County of Placer (Treasurer-Tax Collector)	City of Folsom	June 18, 2014	January 5, 2018
Berkeley Financing Initiative for Renewable and Solar Technology (FIRST)	City of Berkeley	Renew Financial	City of Berkeley	June 20, 2014	June 21, 2014
San Bernardino Associated Governments (SANBAG) HERO Program	SANBAG	SANBAG and Renovate America	San Bernardino County	June 23, 2014	December 20, 2017
AllianceNRG Program	CSCDA	Counterpointe Energy Solutions (CA) LLC	State of California	August 20, 2015	October 1, 2019
LA HERO Program	County of Los Angeles	County of Los Angeles and Renovate America	Los Angeles County	October 7, 2015	April 2020
CaliforniaFIRST in Los Angeles County	County of Los Angeles	County of Los Angeles and Renew Financial	Los Angeles County	October 14, 2015	April 2020
Figtree PACE Program	California Enterprise Development Authority	Dividend Finance, LLC	State of California	August 1, 2017	September 27, 2018

Agenda Item – 4.C

Program Name	Local Agency	Program Administrator	Areas Served (Counties)	Date Enrolled	Date Inactive
Spruce PACE	CSCDA	Spruce PACE, LLC	State of California	August 28, 2017	June 29, 2018
PACEFunding (LA County)	County of Los Angeles	County of Los Angeles and PACE Funding Group	Los Angeles County	January 14, 2019	May 2020



PACE LOSS RESERVE FUND

An Analysis of the Fund's Capacity to Pay Potential Claims

June 30, 2020

Prepared by

Matthew Newman and Shawn Blosser

Blue Sky Consulting Group

Contents

ACKNOWLEDGEMENTS3
EXECUTIVE SUMMARY4
California PACE Financing and History of the PACE Loss Reserve Program4
Discussion6
INTRODUCTION
PACE History and Recent Legislation7
Impact of the PACE LR Program8
Recent Changes to the PACE Program9
ADEQUACY OF THE LOSS RESERVE FUND
No claims Paid from the LR Fund to date10
METHODOLOGY11
A Note on Foreclosure Rates
FINDINGS
POTENTIAL POLICY RESPONSES
How Potential PACE Defaults Could Affect the Mortgage Market15
Potential Methods of Extending the Loss Reserve Fund16
Fully Fund the PACE LR Fund16
Sunset the PACE LR Program17
Wait and See18
DISCUSSION
INTERVIEWS20

ACKNOWLEDGEMENTS

This report was prepared by Matthew Newman and Shawn Blosser for the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA). The analysis presented and the conclusions of this report are those of the authors.

EXECUTIVE SUMMARY

California PACE Financing and History of the PACE Loss Reserve Program

California's Property Assessed Clean Energy or PACE financing provides a mechanism for property owners to finance energy efficiency, renewable energy, water conservation, and seismic and fire safety improvements to their properties. Unlike other financing mechanisms, PACE assessments are paid along with the property tax bill, and the obligation to make the assessment payments stays with the property in the event of a sale.

Because the PACE assessments are paid as part of the property tax bill, a lien is placed on the property which – like the property tax payment itself – is generally senior in payment priority to any first mortgage that a property owner may have. This senior priority position caused the Federal Housing Finance Agency (FHFA) to become concerned that the presence of a PACE lien increased the risk for mortgage lenders and holders of mortgage backed securities.³ As a result of these concerns, Fannie Mae and Freddie Mac do not purchase mortgages for homes with PACE obligations.⁴

In an effort to address the concerns identified by FHFA, California adopted a residential PACE Loss Reserve Program (the LR Program). The LR Program is run by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), and manages a \$10 million fund intended to compensate first mortgage lenders in the event of a loss stemming from a PACE default. Specifically, in the event a property with a PACE lien is foreclosed upon, the PACE LR Program will repay the first mortgage lender for any PACE payments made by the first mortgage lender during the time the property is in foreclosure. In addition, the LR Fund will compensate a first mortgage lender for losses resulting from PACE assessments being paid ahead of the first mortgage in the event of a forced sale.

Although the LR Program was specifically designed to address the concerns raised by FHFA, Fannie Mae and Freddie Mac have continued their policy of not purchasing mortgages with existing PACE obligations.

The federal response notwithstanding, implementation of the LR Program likely encouraged growth in California's PACE financing. As the Legislature was considering PACE LR Program legislation in 2013, less than 20% of Californians lived in incorporated cities with a PACE program. By 2016, that proportion had

1

¹ Note that Senate Bill 465 (Jackson), Chapter 465 of 2018 expanded PACE eligibility for certain fire safety improvements such as ember-resistant roofs.

² In practice, PACE assessments are repaid at the time of the sale transaction.

³ See "FHFA Statement on Certain Energy Retrofit Loan Programs" available at: https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Statement-on-Certain-Energy-Retrofit-Loan-Programs.aspx.

⁴ In response to the federal action, the State of California sued FHFA, but the lawsuit was ultimately unsuccessful. See CAEATFA PACE Background available at: https://www.treasurer.ca.gov/caeatfa/pace/background.asp.

⁵ Ibid.

increased to approximately 90%.⁶ As the availability of PACE programs has increased, so has the volume of PACE financings. In June 2014, PACE financings totaled about \$350 million. As of December 2019, the value of outstanding PACE program financings had increased to approximately \$3.5 billion.⁷

The significant growth in PACE financings notwithstanding, to date no claim has been paid by the LR Fund. The precise reasons for the lack of claims are not fully known; however, it is likely that, in a rising property value environment, there was little reason for mortgage holders to assume possession of properties (and make claims on the LR Fund). Nevertheless, it is likely that foreclosure rates will rise in the future as a result of the current economic downturn, and with them potential claims on the LR Fund.

This report presents the results of an analysis of the capacity of the LR Fund to cover these potential losses. Because the extent of future foreclosures and resulting claims on the LR Fund are not known, the analysis presented in this report shows to what extent the fund would be able to cover foreclosure-induced losses under varying levels of economic stress. As shown in Figure 1 on the following page, our analysis anticipates that the LR Fund would have the capacity to make all eligible claims for approximately eight years under the Moderate Stress Scenario, which is based on currently low foreclosure rates rising to levels similar to those during the recession in the mid-1990s. Under the High Stress Scenario, which assumes a pattern of foreclosures similar to the financial crisis that started in 2008, the fund would be depleted by 2025.

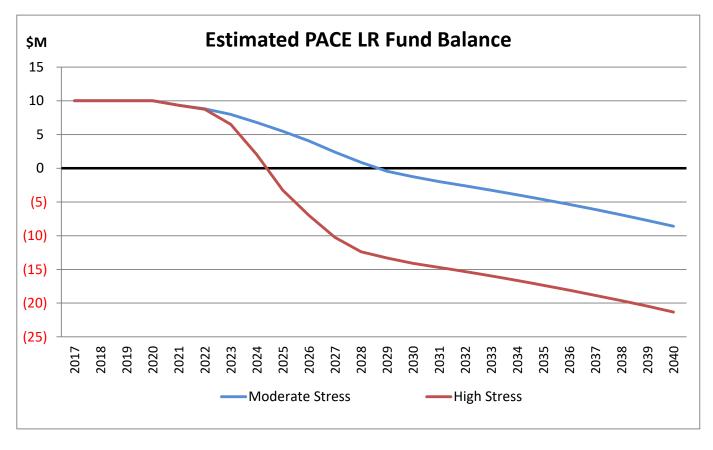
⁶ Deason, Jeff and Sean Murphy, "Assessing the PACE of California residential solar deployment Impacts of Property Assessed Clean Energy programs on residential solar photovoltaic deployment in California, 2010-2015." Lawrence Berkeley National Laboratory (2008), p. 5.

⁷ CAEATFA PACE Loss Reserve Program Enrollment Activity Report: https://www.treasurer.ca.gov/caeatfa/pace/activity.pdf.

⁸ Note that while forced sales can also trigger a claim on the PACE LR Fund, these sales generally take longer and are less common than a foreclosure initiated by a bank. Therefore, the analysis presented in this report is based on foreclosure rates.

⁹ Note that the reported results reflect all potential, eligible claims. Actual claims may be lower to the extent lenders choose not to pursue a claim on the LR Fund. To date there have not been any claims paid out from the LR Fund, although there have likely been at least some eligible claims. The precise reasons why lenders might choose not to make claims on the fund are not known.

FIGURE 1: CAPACITY OF THE PACE LR FUND TO PAY ELIGIBLE CLAIMS



Discussion

California's PACE Loss Reserve Program was developed to support the development of PACE in California; specifically to reduce the risk faced by first mortgage lenders, encourage FHFA to accept mortgages with PACE liens, and encourage the growth of residential PACE financing in California. Although the creation of the LR Fund was not successful in convincing FHFA to approve the purchase of mortgages for properties with PACE liens, the growth in PACE financings and the continued functioning of the state's mortgage market suggests that the goal of increasing the use of the PACE program while maintaining the ability of borrowers to obtain a first mortgage has been accomplished. This leads to the question of whether the PACE LR program is still needed and, if so, what changes if any should be made to the program.

CAEATFA and the Legislature may wish to consider several policy options, including sunsetting the program, fully funding the LR Fund with fees paid by PACE borrowers, or adopting a wait and see approach while leaving the program unchanged.

INTRODUCTION

California's residential Property Assessed Clean Energy (PACE) financing provides a mechanism for Californians to finance energy efficiency, renewable energy, water conservation, and seismic and fire safety improvements to their homes. Unlike unsecured credit or a conventional loan secured by a homeowner's property, PACE obligations are secured by a unique financing arrangement in which a property owner enters into a voluntary agreement with a local government entity to have an additional assessment placed on their property. This assessment is added to a homeowner's property tax bill and collected with semi-annual property tax payments. And, because the assessment is linked to the property rather than the borrower, the obligation to repay the PACE obligation stays with the property in the event of a sale or transfer.

PACE History and Recent Legislation

California was an early leader in residential PACE programs. The first such program was established in the City of Berkeley, and subsequent legislation authorized use of PACE statewide in 2008. Widespread adoption of PACE programs, however, took several more years. In part, the slow rate of expansion was a result of resistance from the Federal Housing Finance Agency (FHFA). In a 2010 statement, FHFA publicized its concerns regarding PACE, stating that, by putting a lien for PACE-financed improvements on a property ahead of a traditional first mortgage lien, PACE programs "pose unusual and difficult risk management challenges for lenders." Ultimately, both Fannie Mae and Freddie Mac decided that they would not purchase mortgages that had existing PACE liens. This action effectively forces homeowners to pay off a PACE obligation and remove the lien prior to or in conjunction with a sale or refinancing of a property, at least in cases in which a conventional mortgage is used.

In response to these federal actions, the state of California sued FHFA for not conducting a formal rulemaking prior to its decision. Ultimately, however, the lawsuit was not successful. California subsequently created the PACE Loss Reserve Program in 2014 as a tool for addressing the concerns raised by FHFA, although Fannie Mae and Freddie Mac have continued their practice of refusing to purchase loans on properties with PACE liens. The legislature funded the LR Program with a one-time appropriation of \$10 million, which is intended to repay first mortgage lenders on a first come, first served basis in the event of losses stemming from foreclosure of a residential property with a PACE lien. Specifically, the LR Program will repay a mortgage lender for any payments made on a PACE obligation while the property is in foreclosure or in the event that the lender suffers a loss from a forced sale on a property with a PACE assessment.

¹² See Senate Bill 96, Chapter 356 (2013).

 $^{^{10}}$ See Assembly Bill 811, Chapter 159 (2008).

¹¹ FHFA, "FHFA Statement on Certain Energy Retrofit Loan Programs." FHFA, July 2010. Available at: https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Statement-on-Certain-Energy-Retrofit-Loan-Programs.aspx

Impact of the PACE LR Program

The establishment of the LR Program in 2014 coincided with a rapid increase in the number of jurisdictions offering PACE programs. In 2013, less than 20% of Californians lived in incorporated cities with a PACE program. By 2016, that proportion had increased to approximately 90%. As the availability of PACE programs has increased, so has the volume of PACE financings. In June 2014, PACE financings totaled about \$350 million from eight enrolled PACE programs. By December 2017, the value of outstanding PACE financings had increased to more than \$3.4 billion and included approximately 145,000 financings from eighteen enrolled PACE programs. Since then the number and value of outstanding PACE financings has held relatively stable at around 150,000 and \$3.5 billion, respectively (see Figure 2), with payoffs of existing financings roughly equaling new originations.

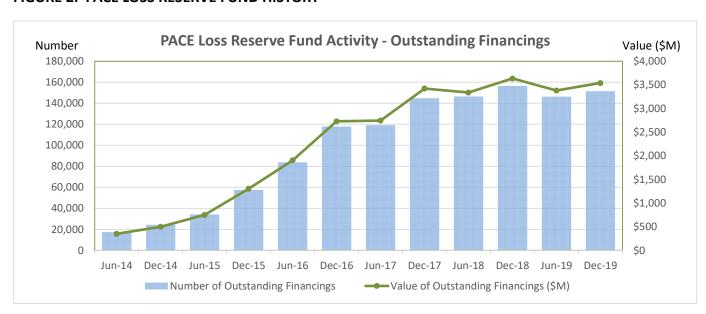


FIGURE 2: PACE LOSS RESERVE FUND HISTORY

The reasons for the increase in the availability and use of PACE programs are not well established. However, the creation of the PACE LR Fund may have contributed to this growth. Anecdotal evidence suggests, for example, that some elected officials, in voting to authorize a PACE program in their jurisdiction, made their decision in part because of (or at least with knowledge of) the PACE LR Program. Other factors that contributed to the growth in PACE financings include ease of use, fast approval, and contractor incentives offered by PACE lenders, among other factors.

Blue Sky Consulting Group
Page 8

¹³ Deason, Jeff and Sean Murphy, "Assessing the PACE of California residential solar deployment Impacts of Property Assessed Clean Energy programs on residential solar photovoltaic deployment in California, 2010-2015." Lawrence Berkeley National Laboratory (2008), p. 5.

¹⁴ See CAEATFA PACE FAQs: https://www.treasurer.ca.gov/caeatfa/pace/faq.asp.

¹⁵ Interviews with PACE program officials in Sonoma County and Western Riverside Council of Governments as well as representatives from PACE programs and others.

Recent Changes to the PACE Program

Since the initial legislation authorizing PACE programs was adopted, numerous changes have been approved by the Legislature. Perhaps the most consequential of these has been the consumer protections adopted in 2016 and 2017. Together, these reforms served to increase disclosure requirements for PACE borrowers and, most importantly, establish a requirement for PACE providers to consider a borrower's ability to repay the obligation, and not just underwrite a financing based on property value. Specifically, PACE program administrators are now required to make "a reasonable good faith determination that the property owner has a reasonable ability to pay the annual payment obligations for the PACE assessment." 17

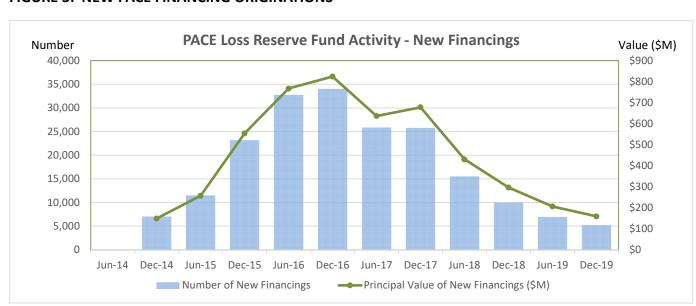


FIGURE 3: NEW PACE FINANCING ORIGINATIONS

This change, together with other recent changes to the PACE authorizing statute, has resulted in a significant reduction in the number of new PACE originations as shown in Figure 3. New PACE originations have decreased considerably from the 2016 peak, with new originations in 2019 representing only 18 percent of the 2016 number and the total principal value for new PACE financings falling to 23 percent of the 2016 value. The precise reasons for the drop in new PACE financings is not firmly established, but PACE Program administrators have indicated that the new ability to pay requirements – most notably the accompanying income verification requirements – have resulted in increased time to process and approve PACE applications. As a result, PACE lenders report that some contractors (who often interact with customers and initiate the PACE financing process) have opted to recommend different financing mechanisms for their customers that can be approved more quickly. In addition, it is also likely that at least some borrowers who would have qualified under the previous PACE rules now no longer qualify.

¹⁶ See Assembly Bill 1284, Chapter 475 (2017).

¹⁷ Bill text of AB 1284.

ADEQUACY OF THE LOSS RESERVE FUND

The LR program was established to serve claims on a first come, first served basis. However, with a large outstanding balance of financings coinciding with a likely increase in foreclosures, it is nevertheless appropriate to review the capacity of the fund to pay any claims that may arise.

Although the size of the fund (\$10 million) could be considered small relative to the size of the \$3.5 billion PACE portfolio, this fact in and of itself does not mean that the fund is not adequate. PACE financings do not accelerate in the event of a foreclosure, meaning that the outstanding balance of the PACE obligation does not become due in full (as would be the case with a conventional mortgage). Instead, in the event of a foreclosure in which the mortgage holder takes possession of the subject property, the mortgage holder (as the new property owner) is only responsible for any past due PACE payments as well as any payments due during the term of the foreclosure. According to data from ATTOM Data Solutions, the average time from initial delinquency to sale of a lender-owned property is approximately 751 days. Therefore, a mortgage lender that takes possession of a property with a PACE assessment might expect to make about four semi-annual PACE payments. But, the full outstanding principal associated with the PACE obligation would transfer to the new owner of the property (or be paid off by the previous owner at the time of sale).

In addition, in many foreclosure situations, the mortgage lender never assumes ownership of the affected property. Instead, a foreclosure may be initiated, but the property is ultimately transferred from the original owner to the new owner without the mortgage lender assuming ownership. In such a transaction, no liability accrues for the PACE LR Program because only the mortgage lender is eligible to assert a claim on the fund (via the enrolled PACE program). In these cases, the new owner would likely acquire the subject property at a discount as a result of assuming the liability for any past due PACE assessments. But, there would be no claim on the LR Fund.

No claims Paid from the LR Fund to date

These characteristics of the PACE LR Program may explain another important fact: to date there have not been any claims paid from the fund. The precise reasons for the lack of claims on the fund are not fully known; however, it is likely that, in a rising property value environment such as the one California has experienced during the years immediately following the adoption of the PACE LR Program, there was little reason for mortgage holders to assume possession of properties (or make claims on the LR Fund) since the value of most properties was increasing during this period. In addition, foreclosure rates were quite low by historical standards during the period immediately following adoption of the LR Program (see Figure 4 on page 12). To the extent these foreclosures are resolved without the mortgage lender taking possession of the property, no eligible claim would be realized. In addition, anecdotal evidence suggests that many mortgage lenders may not be aware of the PACE LR Program.¹⁸

 $^{^{\}rm 18}$ Based on interviews with PACE program administrators.

In spite of the fact that there have not been any claims on the PACE LR Fund to date, it is likely that foreclosure rates will rise in the future as a result of the current economic downturn. In the event that foreclosure rates rise, the PACE LR Fund would be exposed to increases in claims, and it is likely that mortgage lenders would begin making claims, particularly in circumstances where property values are falling.

The subsequent section of this report presents the methodology for estimating potential claims on the LR Fund and the results of that analysis.

METHODOLOGY

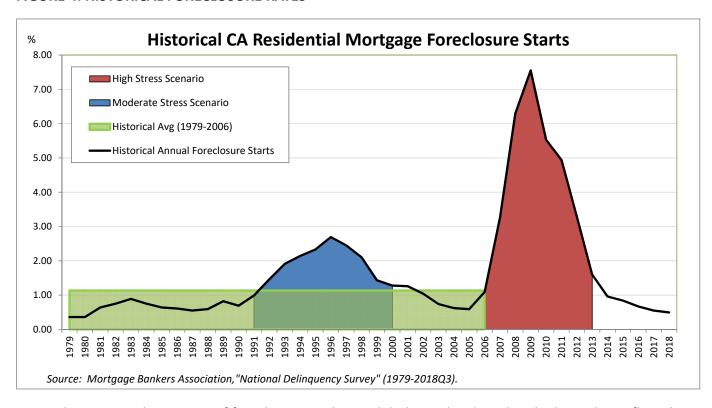
In order to determine the adequacy of the LR Fund, two scenarios were developed representing varying levels of foreclosure rates, which are the primary driver of potential claims on the LR Fund. ¹⁹

- The Moderate Stress Scenario is based on a pattern of foreclosures similar to the period from 1991 to 2000, during which foreclosure rates increased. This period includes the most recent historical increase in foreclosures prior to the spike stemming from the 2008 financial crisis.
- The High Stress Scenario is based on a pattern of foreclosures similar to the period from 2006 to 2013, including the "Great Recession" financial crisis. This scenario represents very high foreclosure rates and significant claims on the LR Fund.

Figure 4 presents foreclosure rates for the period 1979 – 2018. The shaded regions correspond to the periods used as the basis for the beginning of the Moderate and High Stress Scenarios, after which the foreclosure rates return to the historical (1979-2006) average. The average rate that represents the historical baseline is based on the period represented by the green area.

¹⁹ Note that while forced sales can also trigger a claim on the PACE LR Fund, these sales generally take longer and are less common than a foreclosure initiated by a bank. Therefore, the analysis presented in this report is based on foreclosure rates.

FIGURE 4: HISTORICAL FORECLOSURE RATES



For each scenario, the pattern of foreclosures to be modeled was developed and adjusted to reflect the fraction of foreclosures that result in a mortgage lender taking possession of a property (i.e., the "REO" or Real Estate Owned rate). Then, this rate was applied to the portfolio of PACE financings to estimate the extent of potential claims for each period examined.

To estimate the value or cost of potential claims, the current portfolio of PACE financings was divided into categories based on the term. Interest rates were associated with each term based on historical average rates by term, and the estimated payment for each term category was calculated.

Going forward, the number of PACE financings was estimated to increase with the increase in the labor force, and the value or size of individual obligations was estimated to increase with the rate of personal income growth.²⁰ The Department of Finance forecast provided annual figures for the years 2020 through 2023, after which the long-term average annual growth rates from 1998 through 2023 were applied.

Further adjustments to the size of the affected PACE portfolio were made to reflect just those financings for parcels that have a mortgage. Data from ATTOM indicates that about 21 percent of California

²⁰ Based on Forecasts from the Department of Finance (http://www.dof.ca.gov/Forecasting/Economics/Eco_Forecasts_Us_Ca/index.html), downloaded May 18, 2020.

residential properties have no associated mortgage.²¹ PACE financings for these parcels with no mortgage would not be eligible to make a claim on the LR Fund.

Next, the PACE portfolio was modeled over time, with some financings maturing while others are added. In addition, some financings with shorter terms are paid off each year, and some additional number of financings are pre-paid, either as a result of a homeowner's decision to refinance the debt or pay it off. Based on research conducted by the Kroll Bond Rating Agency (KBRA), the prepayment rates for securitized PACE liens have ranged from 10.1 to 18.9 percent, with an average rate of 14.6 percent.²² The average prepayment rate of 14.6 percent per year was used for developing the model.

Finally, because the LR Program repays the mortgage lender for payments made against the PACE lien while the property is held, it was also necessary to estimate the number of payments a lender would be required to make. Data from ATTOM indicates that the average time period for REO properties is 751 days. This implies that the lender would need to make on average about two years' worth of payments. However, for those properties that have escrow accounts, the escrow account balance could be used to make a portion of the required payment (estimated at one semi-annual payment).²³

A Note on Foreclosure Rates

While the establishment of an ability to pay standard in 2018 may increase the credit quality of PACE borrowers, and with it decrease the likelihood of foreclosure, the existence of underwriting criteria under the prior program also acted to ensure a minimum credit quality standard. Prior to the implementation of the ability to pay standard, borrowers needed to be current on property taxes and have no more than one late payment during the preceding three years. Borrowers also needed to meet minimum equity requirements and be current on mortgage payments, with no more than one late payment during the prior 12 months. Finally, borrowers must not have been in bankruptcy during the period immediately preceding the PACE financing. These criteria acted to enforce a minimum credit quality standard, even without the ability to pay requirement. The effectiveness of these previous requirements is evidenced by data showing that the property tax delinquency rate for PACE borrowers is similar to the rate for all property tax payers. Furthermore, PACE lenders report that some potential borrowers are being steered toward other financing options which may require a credit check, but can be approved more quickly and with less documentation relative to a PACE financing. Consequently, it is also possible that at least some of the remaining borrowers chose the PACE program because they were not able to qualify for one of the alternative financing options. This would tend to reduce the credit quality of the remaining PACE

Blue Sky Consulting Group Page 13

²¹ Based on statewide data for residential properties up to 4 units as compiled as of September 2018 by ATTOM Data Solutions.

²² "The Pace Evolution," Kroll Bond Rating Agency, June 22, 2018 (https://www.krollbondratings.com/show_report/11071).

²³ CoreLogic data for January 2017 indicate that 57 percent of mortgages for California have escrow accounts.

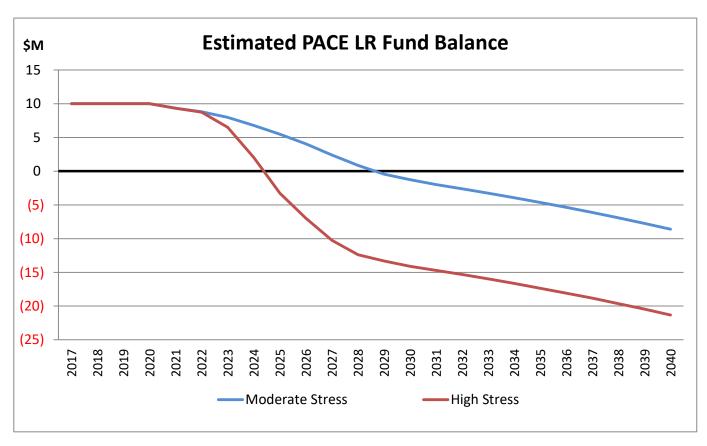
²⁴ DBRS, "Residential PACE Delinquency Trends." DBRS, February 2018.

borrowers relative to the average credit quality prior to the adoption of the ability to pay standard. These factors suggest that any improvement in credit quality when viewed from a portfolio-wide perspective is potentially minor.²⁵

FINDINGS

The results of our analysis suggest that the PACE LR Fund could last between four and eight years (i.e., until 2024-2028) depending upon the extent of foreclosures and assuming no additional resources are added to the fund, as shown in Figure 5.²⁶

FIGURE 5: CAPACITY OF THE PACE LR FUND TO PAY ELIGIBLE CLAIMS



²⁵ According to PACE lenders, the 50% reduction in PACE financings since the ability to pay standard was adopted likely primarily reflects a change in contractor origination practices rather than denials of potential PACE borrowers due to credit quality.

Note that the model estimates the total exposure to the LR Fund. To the extent that some eligible claims are not be made, the actual impact on the fund would be less than what is shown in Figure 5.

Under the Moderate Stress Scenario, the fund maintains a positive balance through 2028, with a cumulative outstanding demand of \$8.6 million by 2040. Under the High Stress Scenario, the fund is estimated to deplete in 2025 with a total outstanding demand of \$21.3 million by 2040.²⁷

POTENTIAL POLICY RESPONSES

The results shown in Figure 5 indicate that, under both scenarios modeled, the value of eligible potential claims is expected to exceed the capacity of the PACE LR Fund at some point in the future. The possibility of claims exceeding the capacity of the fund presents PACE LR Program administrators and the Legislature with an important choice about how to respond. Should the Legislature and the CAEATFA board determine that the LR Fund is still necessary, the viability of the fund could be extended through taxpayer contributions or by instituting a fee on PACE borrowers. If, however, the LR Fund is determined to be no longer needed, a sunset date could be set after which the LR Fund would not guarantee any new PACE financings.

How Potential PACE Defaults Could Affect the Mortgage Market

To the extent claims on the LR Fund exceed the fund's value, there will likely be impacts on the mortgage market (even if such impacts cannot be directly measured). Specifically, while no data exists with which to assess the impact of the LR Program on the mortgage market, economic theory suggests at least two potential outcomes.

One possibility is that underwriters and investors in residential mortgage backed securities (RMBS) may believe that, in the event of a significant foreclosure event serious enough to deplete the Loss Reserve Fund, the State of California would step in and replenish the fund, thereby insulating mortgage holders from any losses. In this case, the (limited) size of the current fund would not impact mortgage rates, as mortgage lenders would not anticipate losses under this scenario. Instead, California taxpayers would bear the costs for any losses that exceed the fund's value.

Alternatively, underwriters and holders of RMBS may not expect the state to step in and make lenders whole. Instead, they might expect that some losses will result from foreclosures on PACE assessed properties. These losses would then be reflected in either reduced profits for shareholders or higher interest rates or other costs for borrowers. Because lenders do not know in advance who will get a PACE financing, lenders would in effect need to charge all borrowers more in order to cover the costs associated with losses related to the PACE assessments.

Under either of these potential outcomes, someone other than the PACE borrower is bearing the costs of the potential losses from PACE defaults. Either the taxpayers are paying the costs if the state decides to step in and replenish the fund, or investors and homeowners with mortgages are paying the costs.

²⁷ Note that some financings may have terms up to 30 years, and would therefore extend beyond the 2040 study period, although the value of these claims is included in the estimates.

Potential Methods of Extending the Loss Reserve Fund

Recognizing who will bear the costs associated with claims that exceed the value of the PACE LR Fund can help to clarify what policy responses may be appropriate. Below, we identify three potential responses.

Fully Fund the PACE LR Fund

One possible policy response to the likelihood that the PACE LR Fund will not be able to pay all claims is to fully fund the LR Program (through a specific end date, such as 2040). As shown in Figure 6, preventing the PACE LR Program from running out of money prior to 2040 depends on the extent of foreclosure activity. Under the Moderate Stress Scenario, approximately \$9 million would be needed, while just over \$21 million would be needed under the High Stress Scenario.

FIGURE 6: AMOUNT NEEDED TO FULLY FUND PACE LR

	Moderate Stress			High Stress		
	Additions	Claims	Ending	Additions	Claims	Ending
Year	(\$M)	(\$M)	3alance (\$M	(\$M)	(\$M)	Balance (\$M)
2017			10.0			10.0
2018	0.0	0.0	10.0	0.0	0.0	10.0
2019	0.0	0.0	10.0	0.0	0.0	10.0
2020	0.0	0.0	10.0	0.0	0.0	10.0
2021	0.0	(0.7)	9.3	0.0	(0.7)	9.3
2022	0.0	(0.5)	8.8	0.0	(0.6)	8.7
2023	0.0	(0.9)	8.0	0.0	(2.2)	6.5
2024	0.0	(1.2)	6.8	0.0	(4.5)	2.0
2025	0.0	(1.3)	5.5	0.0	(5.3)	(3.3)
2026	0.0	(1.4)	4.1	0.0	(3.7)	(7.0)
2027	0.0	(1.7)	2.4	0.0	(3.3)	(10.3)
2028	0.0	(1.5)	0.9	0.0	(2.1)	(12.4)
2029	0.0	(1.3)	(0.4)	0.0	(0.9)	(13.3)
2030	0.0	(0.8)	(1.3)	0.0	(0.8)	(14.1)
2031	0.0	(0.7)	(2.0)	0.0	(0.6)	(14.7)
2032	0.0	(0.6)	(2.6)	0.0	(0.6)	(15.3)
2033	0.0	(0.7)	(3.3)	0.0	(0.7)	(16.0)
2034	0.0	(0.7)	(3.9)	0.0	(0.7)	(16.7)
2035	0.0	(0.7)	(4.6)	0.0	(0.7)	(17.4)
2036	0.0	(0.7)	(5.4)	0.0	(0.7)	(18.1)
2037	0.0	(0.8)	(6.1)	0.0	(0.8)	(18.8)
2038	0.0	(0.8)	(6.9)	0.0	(0.8)	(19.6)
2039	0.0	(0.8)	(7.7)	0.0	(0.8)	(20.5)
2040	0.0	(0.9)	(8.6)	0.0	(0.9)	(21.3)

There are at least two possible mechanisms for fully funding the PACE LR Program. First, taxpayers generally could fund the potential claims on the fund. Such an action could be justified on the grounds that at least some portion of the benefits of PACE investments accrue to society as a whole (in addition to the benefits to the property owner). Installing solar panels, for example, not only reduces a

homeowner's electricity bill, but it also reduces greenhouse gas emissions, which benefits all Californians.

Alternatively, a separate fee could be charged to PACE borrowers sufficient to fully fund the PACE LR Program. Under this option, PACE borrowers (the primary beneficiaries of PACE investments) would pay the costs associated with any potential foreclosures which otherwise might be passed on to mortgage lenders or holders of mortgage backed securities (and ultimately consumers who obtain a mortgage to buy or refinance a property). In order to extend the PACE LR Fund through 2040, a borrower fee of 0.08 percent of the principal value for the financing (currently about \$24 per financing) would need to be collected starting in 2021 under the Moderate Stress Scenario. Under the High Stress Scenario, this fee would need to be 0.20 percent of the PACE financing value, or \$59 per financing.²⁸ These charges would be in addition to any costs already borne by PACE borrowers.

Fully funding the PACE LR Program would minimize any risk to PACE financing itself. That is, to the extent program participation or availability of mortgages is dependent on the presence of an adequate LR Fund, those risks would be mitigated by fully funding the Program. Financing this funding with taxpayer resources would avoid the need to increase costs for PACE program participants and would align (a portion of) the costs with those who benefit from reduced greenhouse gas emissions. Charging PACE borrowers would have the disadvantage of increasing costs for participation in the program, but would better align program costs and benefits, since most benefits accrue to homeowners.

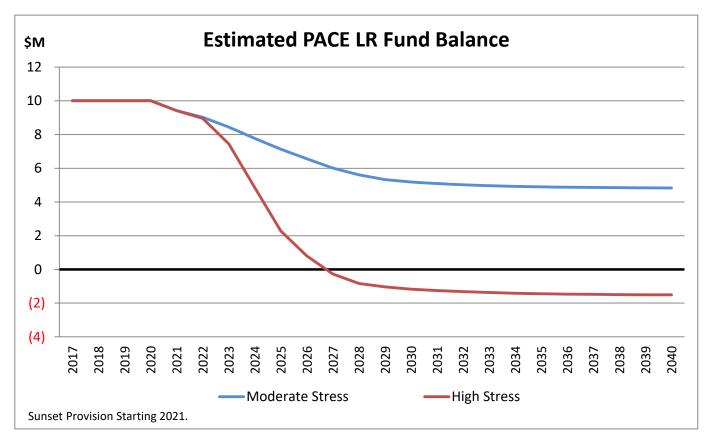
Sunset the PACE LR Program

Another possible policy response is to adopt a sunset date for the PACE LR Program given that the residential PACE market has matured since the Program began. Under such a policy, terms of the PACE LR would remain the same for existing PACE obligations. However, new PACE assessments would not be eligible for enrollment in the program, and any losses associated with these new originations would be the responsibility of the mortgage lender or holder of a mortgage backed security. In response, mortgage lenders could then determine if any change to their lending practices or pricing of mortgages was required, although there is no evidence to suggest that the presence of the PACE LR Program has had a significant impact on the availability of credit or on the pricing of mortgages.

As shown in Figure 7, adding a sunset provision as of January 2021 increases the potential capacity of the PACE LR Fund under both scenarios. Under the Moderate Stress Scenario, the fund maintains a positive balance through 2040, with an ending balance of \$4.8 million. Under the High Stress Scenario, the fund still turns negative in 2027 with a sunset in 2021, but the total deficit through 2040 is only \$1.5 million rather than the \$21.3 million expected without the sunset provision.

²⁸ Note that the fund balance could become negative during periods of very high foreclosures; however, the fund balance as of 2040 would be positive with the fee amounts shown.

FIGURE 7: CAPACITY OF THE PACE LR FUND ASSUMING A SUNSET DATE OF JANUARY 1, 2021



Another approach to estimating the effect of a sunset date on the viability of the LR Fund is to estimate the fund's maximum capacity, or the point at which the expected liabilities would exceed the fund's balance. For the scenarios presented here, the Moderate Stress Scenario is expected to reach its maximum capacity in 2026. Because the High Stress Scenario assumes a much higher foreclosure rate starting in 2021, it is estimated that its maximum capacity was already reached during the second half of 2019.

Sunsetting the Program would have the benefit of reducing state administrative costs and would avoid the need to seek taxpayer resources or PACE borrower payments to fund the LR Fund. However, such a policy could risk reducing participation in PACE financing itself, to the extent any local governments chose to withdraw in response (although there is no evidence to suggest this is a likely outcome).

Wait and See

Finally, policy makers may choose to adopt a wait and see approach with respect to the PACE LR Program. Although the current recession is likely to increase foreclosure rates, the extent of any such increase is not yet known. Although adopting the wait and see approach has some benefits, it is subject to an important downside consideration. Specifically, as foreclosure activity increases corresponding claims on the PACE LR Fund also increase, there may be significant pressure on the state from mortgage lenders to

fully fund all claims to the LR Fund. While the state may not have an explicit legal liability to make mortgage lenders whole, the expectation that the state may do so could create political pressure on the state to respond.

DISCUSSION

California's PACE Loss Reserve Program was developed in order to reduce the risk faced by first mortgage lenders, encourage FHFA to accept mortgages with PACE liens, and encourage the growth of residential PACE financing. Although the creation of the LR Fund was not successful in convincing FHFA to approve the purchase of mortgages for properties with PACE liens, the growth in PACE financings generally, along with the continued functioning of the state's residential mortgage market, suggest that the goal of increasing the availability and use of PACE financing while maintaining the ability of borrowers to obtain a first mortgage has been accomplished, while there is little evidence to suggest that these gains would be reversed in the event the LR Program was altered. This leads to the question of whether the PACE LR Program is still needed and, if so, what changes if any should be made to the program.

CAEATFA and the Legislature may wish to consider several policy options, including sunsetting the program, fully funding the LR Fund with additional taxpayer funding or through fees paid by PACE borrowers, or adopting a wait and see approach while leaving the program unchanged.

INTERVIEWS

The following individuals were interviewed as part of the research for this project:

- 1. Deason, Jeff Electricity Markets and Policy Group, Lawrence Berkeley National Laboratory
- 2. Franke, Laure Managing Director, Public Financial Management
- 3. Elias, Jane Energy and Sustainability Community Programs Manager, Sonoma County
- 4. Pool, Stephen Sr. Director, Corporate Compliance and Operational Risk Management, Renovate America
- 5. Vilaplana, Victor Vice President, Finance, Renovate America
- 6. Dailey, Casey Director of Energy and Environmental Programs, Western Riverside Council of Governments
- 7. Sachar, Supriya—Vice President, Operations and Innovation, Ygrene Energy Fund
- 8. Emily Goodwin—Director of Program Development, Ygrene Energy Fund
- 9. Pozdena, Randall Senior Director, EcoNorthwest
- 10. Turley, Sharon Vice President Regulatory Advocacy, California and Nevada Credit Union Leagues
- 11. Staton, Cliff Former Head of Governmental Affairs, Renew Financial
- 12. Bishopp, Colin Executive Director, PACENation
- 13. Mike Lymere Senior Vice President of Government Affairs, Ygrene Energy Fund
- 14. Justin Strachan—Director of Policy & Research, Ygrene Energy Fund