

COMMENTS

FOR

FEDERAL HOUSING FINANCE AGENCY

ADVANCE NOTICE OF PROPOSED RULEMAKING REQUEST FOR COMMENTS

_ _ _

ENVIRONMENTAL IMPACT STUDY REQUEST FOR SCOPING COMMENTS

(RIN) 2590-AA53

YGRENE ENERGY FUND 100 B Street, Suite 210 Santa Rosa, CA 95401 p: 877.819.4736 f: 707.579.4617 www.ygrene.us

PREAMBLE		
	Comment Preamble	. 1
POSIT	ION PAPERS	
	Position One	. 5
	Position Two	. 6
	Position Three	. 7
QUES	TIONS FOR COMMENT	
	Question 1	. 9
	Question 2	11
	Question 3	12
	Question 4	14
	Question 5	17
	Question 6	20
	Question 7	22
	Question 8	24
	Question 9	25
	Question 10	26
	Question 11	27
	Question 12	28
	Question 13	29
	Question 14	30
	Question 15	31
	Question 16	32
ENVIR	ONMENTAL IMPACT STATEMENT	
	EIS Scoping Comments	33
	Question 17	41

TABLE OF CONTENTS

*All comments have relevance to both the FHFA's Proposed Rulemaking and Environmental Impact Study and should be considered in both processes.



COMMENT PREAMBLE

The FHFA proposed Rule and associated Environmental Impact Study are a classic example of the road to Hell being paved with good intentions. The approach taken by FHFA is so extreme and narrow that it can only trigger further confusion, litigation and constraints upon the residential retrofit programs being eagerly pursued by many States and communities. The proposed Rule is also directly counter to the safety and soundness interests of the Enterprises that FHFA was created to protect.

To make matters worse, the FHFA proposed Rule (Rule) is contrary to adopted policies and programs of the Environmental Protection Agency, the Department of Energy, the Department of Housing and Urban Development, the Council on Environmental Quality and other Federal Agencies.

The conflicts with other agencies are not simply a question of policy priorities. They represent substantial violations of Federal law and policies binding upon all Federal Agencies, including FHFA.

The justification for this extreme and counterproductive approach is that FHFA is compelled by their mandate to ensure the Enterprises "operate in a safe and sound manner" (Rule pg. 3959). HERA also states the following:

4617(b)(2)(D). The Conservator also may "take over the assets of and operate the regulated entity in the name of the regulated entity," "perform all functions of the entity" consistent with the Conservator's appointment and "preserve and conserve the assets and property of the regulated entity."

But the actions of FHFA with respect to residential PACE programs are increasing the degree of asset and property risk. In so doing the FHFA action is contrary to the obligation created by HERA. Limiting access to prime PACE programs reduces access to improvements that would reduce the risk of financial or physical loss. This is discussed in greater detail below, but includes flood damage, storm surges, fire damage associated with winter heating and more.

The proposed Rule provides for initiating an Environmental Impact Statement to determine the potential impacts of the Rule. But the FHFA has already failed to comply with basic requirements of NEPA as well as other policies and directives. A fundamental requirement of NEPA is that a "project" cannot be approved until the EIS is completed and accepted as adequate. FHFA turns this principal on its head by explicitly stating that the prior PACE restrictions remain in force .

FHFA has improperly maintained the July 6, 2010 Statement and the February 28, 2011 Directive. FHFA specifically states in the Proposed Rule that both "remain in effect" (Rule pg. 3961).

This is clearly a violation of NEPA requirements that a "project" governed by NEPA cannot begin "project implementation until at least 30 days after the Project EIS has been filed with the Environmental Protection Agency (EPA), which cannot occur prior to the completion of a Final EIS ((1505.2,1406.10).

Even more specific to the Proposed Rule, "no action by an agency or applicant concerning a proposal shall be taken which would have an adverse environmental effect or limit the choice of reasonable alternatives" (1506.1 (a)). As discussed in the Rule Question responses, there are clear and documented impacts under NEPA with respect to the physical environment and the built environment.

This is a clear violation of NEPA procedures and compromises the integrity of the EIS preparation.



FHFA clearly is not legally or practically capable of preparing an EIS of any sort, particularly for a Project with national impacts to the environment, the social fabric and the economy. The Rule as released by FHFA also presents significant overlapping jurisdictions with other Federal Agencies including but not limited to the Department of Energy, Department of the Interior, the Federal Emergency Management Agency, Department of Housing and Urban Development and the Environmental Protection Agency.

Nor is FHFA excused from compliance with NEPA as an independent Federal Agency; NEPA applies to both Agencies of the Executive Branch as well as "independent regulatory agencies". Nowhere in HERA is there language that excuses FHFA from compliance with NEPA.

FHFA appears to also be out of compliance with regard to Federal laws, policies, Presidential directives on pertinent issues such as Greenhouse Gas reduction, sustainability practices, energy efficiency and Environmental Justice standards.

The proposed Rule presents increased risk to the assets of the Enterprises, contrary to the stated intent of the Rule and the regulatory obligations under their Federal mandate.

FHFA has stated the Rule is necessary to their obligation to ensure the Enterprises "operate in a safe and sound manner" (Rule pg. 3959). HERA also states the following:

4617(b)(2)(D). The Conservator also may "take over the assets of and operate the regulated entity in the name of the regulated entity," "perform all functions of the entity" consistent with the Conservator's appointment and

"preserve and conserve the assets and property of the regulated entity."

As written, the language provides that FHFA responsibilities extend to both assets and properties. The proposed Rule speculates that PACE assessments in senior position may jeopardize assets of the Enterprises. But, to the extent that constraining PACE programs delays or impedes both energy and safety retrofits, the potential for substantial asset loss by the Enterprises as a result is clear. And that is exactly what the proposed Rule does. It delays and impedes the energy and safety retrofits that would otherwise be accomplished through PACE.

Recent weather disasters demonstrate the immediate and massive damage to the Enterprise assets in Florida, Louisiana, Texas, the mid Atlantic States the communities along the Missouri River and even the City of New York. FHFA in their explanation for the proposed Rule assumes that a marginal potential for asset devaluation is more important than the staggering losses and costs experienced in the very States where the Enterprises hold the assets at greatest risk. It would be cold comfort to homeowners that FHFA thought they were protecting homeowners from being over-extended, as what is left of their most significant financial investment washes ashore.

The narrow assessment by FHFA also omits the implications of fluctuating energy costs, where rollercoaster prices for electricity, natural gas and fuel oil have enormously more impact upon the monthly budget of thousands of homeowners from coast to coast. The implications are discussed below. Other examples where the potential of physical asset damage or loss include hurricane and tidal surges in States such as Florida, Louisiana and Texas; heat waves and associated fires as well as surges in heatstroke cases in urban areas; ground subsidence in metropolitan and suburban areas due to over-drafting of groundwater and so on.



Less dramatic examples include long term public health issues, such as respiratory conditions like asthma, that disproportionately affect older housing with minimal insulation or asbestos or poorly vented heat and cooking units.

PACE programs can reduce the occurrence of such tragedies and loss by providing a means for making homes more energy efficient from something as simple as better insulation and modern heating units. This directly furthers the stated FHFA goal of maintaining or increasing both asset value and actual property protection.

The proposed Rule is overly broad and is being used to address hypothetical outcomes for which no substantial evidence is offered as cause for a sweeping and draconian proposal. The proposed Rule focuses on the potential for PACE improvements to either jeopardize the capacity to meet mortgage payments or reduce property values, with zero supporting fact-based data and contrary to the preponderance of Federal and State data which demonstrate that such programs reduce utility expenses and volatility and increase property values. At the same time, the FHFA statement accompanying the proposed Rule notes that four States are examples of PACE programs that do not require the PACE lien to be superior to mortgages. All four programs (Vermont, New Hampshire, Oklahoma and Maine) have suffered setbacks subsequent to the FHFA directives in terms of funding, bonding capacity and general concern that the actions of FHFA have destabilized the PACE programs (even those that agree to set the PACE lien in second position). The experience of these four States illustrate that PACE liens in second position simply do not work. For FHFA to assert otherwise is disingenuous.

The proposed Rule does not accurately consider the full range of factors that contribute to the positive factors in a PACE assessment. This includes increased property value, reduced insurance premiums, reduced energy costs, utility District incentives and increased jobs with associated additional revenue into other households.

In closing, neither the proposed Rule nor the NEPA scoping process are satisfactory or appropriate. FHFA proposes a rule-making process with national energy implications based on a speculative theory with not a single study or fact to support their intervention. Thus far, FHFA has ignored the multiple studies that demonstrate the opposite of their assertions.

In pressing forward with the Rule, FHFA is undercutting a series of policy initiatives embraced by virtually every other agency in the Executive Branch, including their sister agency, the Department of Housing and Urban Development.

To accomplish this Rule, FHFA proposes to prepare an Environmental Impact Statement to cover energy and water issues for the entire United States, as well as the indirect impacts of constraining residential retrofit programs that not only involve energy efficiency, but the safety and health of millions of homeowners and renters. Indirect impacts related to flooding, unsafe housing, environmental justice, extreme weather, disaster insurance and more must be folded in as indirect and/or cumulative impacts.

Such an EIS is potentially the largest and most far-reaching NEPA document since the establishment of the Council on Environmental Quality and the initiation of NEPA review. Yet this staggering task is being taken up by an agency that has still not filled the necessary staff positions to address their primary responsibilities, that is already dealing with adverse Inspector General reports, that has declined to coordinate with larger and better qualified agencies (EPA. HUD, Department of Energy and FEMA (to name a few) and which has failed to adopt mandatory agency-specific policies and procedures to implement NEPA. The release of such an EIS by an agency ill-prepared for the job will further delay the staffing and programs of FHFA and divert an extraordinary amount of resources from



other agencies simply to avoid a Final Environmental Impact Statement that could confuse and complicate national energy, health and climate change policies for a decade.



POSITION ONE

Are conditions and restrictions relating to FHFA-regulated entities' dealings in mortgages on properties participating in PACE programs necessary?

No. This becomes clear when one understands how energy relates to property values.

With few exceptions, homes require access to power in order to have value for occupants. Buildings that lack heat, air conditioning, lighting and other energy dependent services lose much of their utility. This basic economic imperative insures that utility bills get paid with higher priority than do mortgages and create, in effect, a senior lien on all occupied property.

There are three ways homeowners can access energy: (i) buy it from a utility company; (ii) spend capital to purchase assets that produce energy on-site; or (iii) utilize a combination of the two.

PACE programs finance the purchase of capital assets that reduce the cost of the energy required for the property – either by reducing demand or producing supply. Reducing the operating cost of the home increases its value commensurately^{1,2,3}. Since the cost of financing the assets replaces cash flow that is effectively already senior to the mortgage, the fact that it retains its priority should be of no consequence to FHFA.

Asset value increases have been widely demonstrated,^{1,3} without quantification of the cost effectiveness of particular improvements. The increase in net asset value of PACE properties reduces the risk and increases the security of mortgage holders. Ironically, conditions and restrictions placed by FHFA that in any way impede the proliferation of energy-related improvements do immediate damage to mortgage portfolios of the GSEs.

FHFA should rescind their advisory letters as soon as possible.

1. The Appraisal Journal, October 1998 Nevin/Watson: "Evidence of Rational Market Valuations for Home Energy Efficiency" pg. 403

2. FHA Energy Efficient Mortgage Fact Sheet http://www.energystar.gov/ia/partners/bldrs_lenders_raters/EEM_Fact_Sheet.pdf

^{3.} LBNL – 4476E Hoen, Ryan Wiser and Capers and Thayer, April 2011 http://eetd.lbl.gov/ea/emp/reports/lbnl-4476e.pdf



POSITION TWO

Are the restrictions that FHFA issued in its Statement on Certain Energy Retrofit Loan Programs (July 6, 2010) damaging the asset value of the GSE's portfolio of mortgages?

Yes. FHFA's Statement created a blanket, nationwide opposition to PACE in complete disregard of the threats posed to the Enterprises' assets by differences in weather, water, energy cost and wind exposure, all of which vary dramatically around the country. PACE retrofits can directly mitigate those threats. The blanket nature of FHFA's Statement has left a significant portion of the Enterprises' portfolio unnecessarily exposed to complete loss.

For example, the Florida PACE law expressly allows wind hardening measures for the substantial number of homes that face annual hurricane risks. In many of those cases, the only way a home can become eligible for insurance against hurricane damage is if a wind hardening retrofit has been completed. For most of those homes, the only potential financing for wind hardening is PACE. By preventing widespread adoption of PACE districts in Florida, FHFA has needlessly exposed nearly all of the Enterprises' coastal Florida assets to the continuing threat of total loss.

Similarly, in the upper New England States, which are disproportionately dependent on fuel oil as the primary heat source, there are many old, poorly insulated homes. FHFA's blanket Statement on PACE has prevented those homeowners from installing energy efficiency retrofits. The inability to mitigate the fuel oil price spikes that have forced many low-income families out of their homes threatens the Enterprises' New England assets.

In the Sunbelt, increasingly frequent heat waves can send electricity bills above \$1,000 per month to keep air conditioners running. The inability to utilize PACE prevents many homeowners from installing solar PV; often the only defense available against skyrocketing energy costs. As a consequence, FHFA's blanket position exposes the Enterprises' portfolio to higher loss risks.

Across the U.S., water shortages increasingly plague property owners. Because most PACE programs offer financing for water conservation measures, they offer a wide range of protections for homeowners and mortgage holders alike. Most obvious is cost. While water rates are low in most parts of the country, they are rising and the attendant sewer charges often make water use a substantial utility cost. Conservation measures can pay for themselves quickly. Creatively implemented improvements can also solve subsidence problems, septic and wastewater management issues and local flooding risks that can act to endanger Enterprise assets.

The Federal Housing Administration Fact Sheet on its Energy Efficient Mortgage program states: "As the single largest expense after a mortgage payment, your utility costs have a direct impact on how large a mortgage you can afford." That is as true after the purchase of a home as it was before. Rising utility costs threaten the financial stability of homeowners across the country and are projected to do so at an accelerating rate. When borrowers are threatened financially, mortgage holders are equally at risk.

^{1.} Heat Waves in the United States: Mortality Risk During Heat Waves, G Brooke Anderson; Michelle L. Bell. March 2011, National Institute of Environmental Health.

^{2. &}quot;Study predicts more U.S. deaths from heat waves; Johns Hopkins Bloomberg Scholl of Public Health; May 3, 2011.

^{3. &}quot;UC Davis Regional Burn Center urges caution to prevent holiday fires, burns", UC Davis Health System.

^{4 &}quot;Winter Energy Costs Task Force Report" Commonwealth of Massachusetts, 2008.

^{5.} Rebuilding Water-Damaged Homes Alliance for Healthy Homes; Alliance For Healthy Homes/Department of Urban Housing and Development; 2009

^{6.} Mitigation – A Report Card on Florida's Quest to Harden Homes; Florida Association of Insurance Agents.



POSITION THREE

Does the FHFA Statement of July 6, 2010 represent an arbitrary abuse of its regulatory authority as well as a fundamentally unsound policy? Yes.

Six months after the FHFA Statement of July 6, 2010, Fannie Mae issued its Selling Guide SEL 2010-15 "to incorporate a new energy improvement feature as a standard offering available to all lenders." The opening paragraph of the Selling Guide states:

"Fannie Mae supports energy efficiency in residential housing and encourages the development of viable financing and securitization opportunities that do not place undue risk on lenders, investors, or homeowners. Fannie Mae's commitment to serving this sector of the housing finance market has continued since the 1970s when energy-related mortgage flexibilities were first offered on a negotiated basis."

The Guide basically says to all lenders that Fannie Mae will approve 100% of the cost of an energy improvement retrofit because the improvement increases the value of the asset by at least as much as the cost. Of course, that is exactly what the research shows and is also the position of FHA^{1,2,3}. What Fannie Mae neglects to acknowledge in its Selling Guide is that a retrofit financed via a PACE tax assessment accomplishes exactly the same thing at significantly less risk to lenders, investors and homeowners.

The reasons that a PACE retrofit poses less risk than incorporating the project cost into the mortgage are straightforward. The PACE repayment obligation stays with the property and does not follow the borrower. A new owner of the property simply takes over any PACE property taxes that are due each year in the same fashion as all other property taxes. Neither sellers nor borrowers need pay off the principal balance when the home changes hands or is refinanced. By contrast, under conforming loan programs, every time a home changes hands or is refinanced the principal balance must be paid in full and a new loan created. In comparison with PACE assessments, this wastes transaction and financing costs associated with the refinanced portion of the mortgage principal related to the energy improvement. The costs are an added burden on the property that both reduces its value and disqualifies some potential buyers.

In the event of a conforming mortgage default or foreclosure the loan principal is accelerated and 100% of the balance becomes due. To avoid an asset loss, in addition to other components of the principal, the entire financed cost of any energy improvements must be recovered in the foreclosure sale. Were the same improvement financed through a PACE assessment, only unpaid tax assessments would be due from the sale proceeds. Under a 20-year amortization schedule, this would amount to only one-half of one percent of the property's value per year. The difference in risk exposure to the Enterprises is clear. Increasing the risk to the GSEs in this fashion is directly contrary to FHFA's responsibility to the country's taxpayers.

What is especially disingenuous about the July 2010 FHFA position opposing PACE is the obvious contradiction of that position represented by the December, 2010 Selling Guide. SEL 2010-15 makes clear that the value of the asset is increased by the full cost of the retrofit. Yet, the questions posed in the ANPR rest on an assumption that the opposite is true. If the "safety and soundness" concerns forming the basis for FHFA's opposition to PACE are absent when Fannie Mae finances 100% of the energy retrofit costs, those concerns must be equally absent, if not more so, with PACE. To claim otherwise is both arbitrary and false.



In the case of PACE financing, private capital is invested to produce a net increase in the asset value of the home. In the case of Fannie Mae's 2010-15 Program, FHFA is effectively asking American taxpayers to put additional money into the bankrupt Enterprises when that money is available from non-taxpayer sources through a better structure that adds more value to the properties.

Whether active or nascent, the July, 2010 FHFA Statement effectively stopped nearly all residential PACE programs in the country. The action prevented development of financing, not only for homes with FHFA mortgages but, maliciously, for the 50% of homes that do not have mortgages owned or guaranteed by the Enterprises as well. For FHFA to aggressively block energy efficiency financing in all residential housing while, at the same time, Fannie Mae is saying it "supports energy efficiency in residential housing" is very hard to reconcile. The FHFA July 2010 action is also in direct opposition to virtually all policy statements on energy from the Administration. What could account for the contradiction? Competition? Control? Clearly not "safety and soundness."

1. The Appraisal Journal, October 1998 Nevin/Watson: "Evidence of Rational Market Valuations for Home Energy Efficiency" pg. 403

2. FHA Energy Efficient Mortgage Fact Sheet http://www.energystar.gov/ia/partners/bldrs_lenders_raters/EEM_Fact_Sheet.pdf

3. LBNL – 4476E Hoen, Ryan Wiser and Capers and Thayer, April 2011 http://eetd.lbl.gov/ea/emp/reports/lbnl-4476e.pdf



Below in italics are the questions that FHFA placed in the Federal Register pursuant to the California District Court decision requiring FHFA "to seek comments on whether conditions and restrictions relating to the regulated entities' dealing in mortgages on properties participating in PACE programs are necessary; and, if so, what specific conditions and/or restrictions may be appropriate." (77 fr 3961) Following each question is our response.

QUESTION 1

Are conditions and restrictions relating to FHFA-regulated entities' dealings in mortgages on properties participating in PACE programs necessary? If so, what specific conditions and/or restrictions may be appropriate? (77 FR 3961)

The answer to the first part of the question is NO. This becomes clear when one understands how energy relates to property values.

With few exceptions, homes require access to power in order to have value for occupants. Buildings that lack heat, air conditioning, lighting and other energy dependent services lose much of their utility. This basic economic imperative insures that utility bills get paid with higher priority than do mortgages and create, in effect, a senior lien on all occupied property.

There are three ways that homeowners can access energy; (i) buy it from a utility company, (ii) spend capital to purchase assets that produce energy on-site, or (iii) utilize a combination of the two.

PACE programs finance the purchase of assets that reduce the cost of the energy required to operate the property – either by reducing demand or producing supply. Decreasing the operating cost of the home increases its value^{1,2,3}. Since the cost of financing the assets replaces cash flow that is effectively already senior to the mortgage, the fact that it retains its priority should be of no consequence to FHFA.

The higher values enjoyed by PACE properties reduce the risk and increase the security of mortgage holders. In fact, value increases have been widely demonstrated^{1,3} without quantification of the cost effectiveness of particular improvements. Ironically, conditions and restrictions placed by FHFA that in any way impede the proliferation of energy-related improvements do immediate damage to mortgage portfolios.

Several studies confirm the relationship between energy efficiency and the market value of homes:

Johnson and Kasormen (1986) demonstrated an increase of \$20.73 in home value for every \$1 annual decrease in fuel bills.

Dinan and Miranowski (1989) showed an \$11.63 increase in home value for each \$1 decrease in the cost to keep a house at 65° F during the average heating season.

Halvorsen and Pollakowski indicated that the 1974 spike in relative cost of fuel oil raised the price the differential between gas and oil heated homes to \$761 in 1974 and as much as \$4,597 in the first half of 1975.

Horowitz and Haeri (1990) demonstrated that home values increased by about \$12.52 for every \$1 decrease in electric bills.



Even Federal Government lending programs recognize the economic benefit of energy-based improvements:

"Homeowners can take advantage of energy efficient mortgages (EEM) to either finance energy efficiency improvements to existing homes, including renewable energy technologies, or to increase their home buying power with the purchase of a new energy efficient home. The U.S. Federal government supports these loans by insuring them through Federal Housing Authority (FHA) or Veterans Affairs (VA) programs. This allows borrowers who might otherwise be denied loans to pursue energy efficiency and it secures lenders against loan default."

(http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US36F&re=1&ee=1)

"FHA's EEM program recognizes the monthly utility cost savings when homebuyers make energyefficient improvements. Borrowers may use the EEM program to finance the cost of energy efficient improvements into their new mortgages, without the need to qualify for additional financing, because cost effective energy improvements result in lower utility bills making more funds available for their mortgage payments."

For several reasons, the answer to the second part of the question is NONE.

PACE financing addresses energy efficiency in homes. It has the effect of reducing an operating cost that has a higher priority than the mortgage. Because PACE funded projects reduce operating costs and increase home values it is totally appropriate that the financing also has priority. Further, since the property improvements provide a public benefit, it is equally appropriate that the States authorize senior tax liens to secure that financing.

The primary consideration of FHFA with respect to PACE should be to encourage property owners to install cost effective energy efficiency and renewable energy improvements as widely and rapidly as possible. The increased property values reduced operating costs and improved livability of the homes will strengthen the Enterprises' portfolios.

^{1.} Nevin/Watson: "Evidence of Rational Market Valuations for Home Energy Efficiency" pg. 403

^{2.} FHA Energy Efficient Mortgage Fact Sheet http://www.energystar.gov/ia/partners/bldrs_lenders_raters/EEM_Fact_Sheet.pdf



How does the lien-priming feature of first-lien PACE obligations affect the financial risks borne by holders of mortgages affected by PACE obligations or investors in mortgage-backed securities based on such mortgages? To the extent that the lien-priming feature of first-lien PACE obligations increases any financial risk borne by holders of mortgages affected by PACE obligations or investors in mortgage-backed securities based on such mortgages, how and at what cost could such parties insulate themselves from such increased risk? (77 FR 3961)

As a preface to Question #2, FHFA makes the following statement:

"FHFA is concerned that PACE programs that involve subordination of any mortgage holder's security interest in the underlying property to that of the provider of PACE financing may increase the financial risk borne by the Enterprises as holders of mortgages on properties subject to PACE obligations, as well as mortgage-backed securities based on such mortgages. FHFA believes that any such increase in the financial risk on mortgages and mortgage-backed securities already in the Enterprise portfolios, especially if imposed without Enterprise consent, may present significant safety and soundness concerns." (77 FR 3961)

That FHFA could make such a statement indicates a serious failure to think through the existing priority of energy bills and the relationship between energy efficiency and home values. Cost effective PACE improvements have a positive effect on the security of the Enterprises' portfolio and should be embraced by FHFA.

The Federal Housing Administration (FHA) both encourages and insures, through its Energy Efficient Mortgage (EEM) program, exactly the same energy efficiency and renewable energy improvements that are financed through PACE. "FHA's EEM program recognizes the monthly utility cost savings when homebuyers make energy-efficient improvements. Borrowers may use the EEM program to finance the cost of energy efficient improvements into their new mortgages, without the need to qualify for additional financing, because cost effective energy improvements result in lower utility bills making more funds available for their mortgage payments."

In its Selling Guide Announcement 2010-15, issued December 1, 2010, Fannie Mae explicitly recognizes the increased asset value that results from cost effective energy efficiency and renewable energy retrofits. The Guide informs all lenders that the full cost of effective energy measures can be included in Fannie Mae conforming mortgages. For FHFA to claim that "safety and soundness concerns" are generated by energy efficiency and renewable energy improvements financed through PACE, but not those financed by Fannie Mae, is highly disingenuous.

FHFA should encourage homeowners to utilize PACE programs for installation of cost effective energy efficiency and renewable energy improvements on their property. Since the security of the GSE portfolio that FHFA is charged with protecting improves commensurately with the speed at which PACE retrofits are completed, FHFA should promptly create a pricing incentive that encourages rapid adoption of PACE legislation in States that don't presently have it and rapid deployment of PACE programs by municipalities in States that have adequate legislation in place.

1 FHA's Energy Efficient Mortgage, Fact Sheet http://www.energystar.gov/ia/partners/bldrs_lenders_raters/EEM_Fact_Sheet.pdf

2 "Energy Savings Insurance and the New ASTM BEPA Standard," by Anthony J. Buonicaore, P.E., Managing Director, Buonicore Partners, LLC. Paper # 11-003, November 15, 2011



How does the lien-priming feature of first-lien PACE obligations affect any financial risk that is borne by holders of mortgages affected by PACE obligations or investors in mortgage-backed securities based on such mortgages and that relates to any of the following:

• The total amount of debt secured by the subject property relative to the value of the subject property (i.e., Combined Loan to Value Ratio for the property or other measures of leverage);

When the utility cost savings from a PACE-secured energy efficiency or renewable energy (EE/RE) project results in a positive Net Present Value (NPV), the financial risk born by mortgage holders is reduced - the more positive the NPV the greater the risk reduction. The combination of reduced utility costs and installed improvements increases property values.

It would be a distortion to include the full principle balance of the PACE assessment as part of the "Combined Loan" since unpaid assessments are never accelerated. Only delinquent payments, penalties and interest are due upon sale or as the result of a delinquency. FHFA should establish underwriting criteria for homes with PACE liens that accurately reflect the full financial performance of the home. When the Enterprises' security is either unaffected or improved FHFA should not interfere in any way.

• The amount of funds available to pay for energy-related home-improvement projects after the subtraction of administrative fees or any other program expenses charged or deducted before funds become available to pay for an actual PACE-funded project (FHFA understands such fees and expenses can consume up to 10% or more of the funds a borrower could be obligated to repay under some PACE programs);

PACE administrative fees and other expenses are proper concerns for the municipality adopting a PACE program, but are irrelevant to FHFA. Concern of the agency could only arise if the net energy costs were higher after the project than before. Given that an EE/RE project is simply replacing a cash flow to the utility with a cash flow to the bond investors, the sole issue on which the Enterprises could claim an interest is the net change. If it is equal or positive, then the Enterprises' security is improved. If it is negative, then the Enterprises' security could be marginally impacted. However, since the full principle of the PACE assessment is not subject to acceleration, a fraction of the total assessment could never amount to a significant amount due at the time of sale or in a foreclosure.

• The timing and nature of advancements in energy-efficiency technology;

Market forces appropriately address the timing and nature of advancements in energy-efficiency technology. They are not a relevant to FHFA's regulatory role. Presumably, the reason behind FHFA including the issue is the possibility that property owners would use PACE financing to install EE/RE improvements based on technologies that could subsequently be outperformed by more advancements selling at lower prices. The errors underpinning FHFA's thinking in this regard are twofold:

Mortgage holder security derives from the financial performance of the property. If the NPV of the improvements is positive at the time of their installation, then the mortgage holder's security is improved and there is no basis for interference in any way with the municipality's efforts to fulfill a clear public purpose.

The timing of installation and the selection of technologies that deliver lower energy costs are decisions properly left to market forces. Any attempt by FHFA to intervene in the market's selection of which





EE/RE technologies will perform best and which ones will advance on what timetable would be extremely ill advised.

• The timing and nature of changes in potential homebuyers' preferences regarding particular kinds of energy-efficiency projects;

Homebuyer preferences are functions of market forces. No serious economist would assert that a regulatory agency could accurately anticipate homebuyer preferences over the multi-decade time frame in which EE/RE assets perform. No serious policymaker would base an action on such an assertion.

• The timing, direction and magnitude of changes in energy prices;

Changes in energy prices pose subtle issues for FHFA. In determining the security impact of EE/RE improvements the only legitimate interest of FHFA is whether the NPV of the EE/RE improvements is positive. The factors that go into calculation of the NPV are relevant and the "timing, direction and magnitude of changes in energy prices" should be incorporated into the NPV analysis. However, any attempt by a Federal financial regulator to either anticipate future energy costs and prices, or predict the timing and magnitude of local or State government actions impacting the cost of energy, are likely to be both inaccurate and counterproductive.

• The timing, direction and magnitude of changes of property values, including the possibility of downward adjustments in value;

Evidence and studies show that PACE retrofits increase market values of homes^{1,2}. Since property values go up with PACE improvements, any market declines will be proportional and FHFA's relative position will not change. In fact, in a soft market, homes that perform well from an energy cost standpoint are more likely than inefficient homes to maintain their value. If, at the same time, energy prices hold or increase, the portion of the home value attributable to energy improvements can be expected to increase. Retrofits that reduce utility costs have value independent of real estate market fluctuations.

2. LBNL-4476E

^{1. &}quot;Evidence of Rational Market Valuations for Home Energy Efficiency" The Appraisal Journal, October, 1998

^{3.} Testimony of Kenneth Gear, Executive Director, Leading Builders of America, June 20, 2010



To the extent that the lien-priming feature of first-lien PACE obligations increases any financial risk that is borne by holders of mortgages affected by PACE obligations or investors in mortgage-backed securities based on such mortgages and that relates to any of the following, how and at what cost could such parties insulate themselves from that increase in risk:

• The total amount of debt secured by the subject property relative to the value of the subject property (i.e., Combined Loan to Value Ratio for the property or other measures of leverage);

Clearly, all parties are best insulated when borrowers reduce rather than increase demands on their income. Since energy bills have a higher effective priority than do mortgages, risk to mortgage holders depends on whether the NPV of the retrofit is positive or negative. The Federal Housing Administration recognizes this principle in its Energy Efficient Mortgage (EEM) program, which requires that such improvements be cost effective (have a positive NPV) in order to be included in the mortgage and insured by FHA. Under the EEM program, 100% of the improvement cost is added to the mortgage and treated as an increase in the market value of the property.

The same is true for Fannie Mae's "Energy Improvement Features on Existing Properties" described in Selling Guide SEL 2010-15, dated December 1, 2010. Since FHFA provides the energy improvement feature as a standard offering to all lenders, its failure to acknowledge that PACE energy retrofits increase asset values by at least as much as their cost seems more about control and competition than risk.

The EEM program allows the cost of energy improvements to equal 5% of the property value. Many State PACE laws also limit retrofit costs to a percentage of property value. Some base limits on cost effectiveness of the improvements that can be demonstrated by an energy audit. Since a PACE retrofit increases property value by at least as much as the NPV of the energy cost savings^{1,2,3}, allowable PACE assessments should be based on achieving a positive NPV.

PACE financed improvements provide other benefits; (i) reduce the borrower's vulnerability to fossil fuel price increases, (ii) reduce fire and casualty risks by updating old, less safe equipment and (iii) improve air quality and occupant comfort. While not reflected in NPV calculations, these benefits do, as shown in the LBNL-4476E study, enhance subsequent market valuations.

When underwriting PACE properties, lenders must consider that assessment liens do not accelerate the principal upon default. Mortgage holders have the ability to intervene long before a PACE lien could present a risk to their underlying security.

Combined Loan to Value Ratios or other measures of leverage used to underwrite home loans need to take into consideration both the increases in property values and the special benefits and characteristics of PACE assessments.

There are no actions that "such parties" should take to "insulate themselves," and there are no costs. Unreasonably underwriting PACE assessments will most likely degrade the Enterprises' security by reducing the number of properties eligible for the very PACE projects that serve to increase the value of the assets underpinning the Enterprises' portfolio of mortgages.

• The amount of funds available to pay for energy-related home-improvement projects after the subtraction of administrative fees or any other program expenses charged or deducted before funds become available to pay for an actual PACE funded project (FHFA understands such fees and



expenses can consume up to 10% or more of the funds a borrower could be obligated to repay under some PACE programs).

There is no basis for FHFA to attempt to insulate the Enterprises from costs of PACE programs established under the legitimate authority of local branches of government. As noted above, a positive NPV is more than sufficient protection for the Enterprises' interests. It would be wholly inappropriate for FHFA to attempt to impose standards that would increase administrative costs for tax assessment programs. Certainly the Enterprises do not attempt to do so with respect to sewer, road, school or other programs paid for with tax assessment bonds, all of which are senior to mortgages and none of which have offsetting revenue streams to support the property owners' ability to make the required tax payments.

• The timing and nature of advancements in energy-efficiency technology;

PACE improvements reduce rather than increase risk to the Enterprises' portfolio. They do so by reducing energy costs through installation of cost effective energy efficiency and renewable energy technologies. Market forces influence the process of selecting appropriate technologies. This is a tried and true approach to dealing with questions of the "timing and nature of advancements in energy-efficiency technology." It is sufficient that the energy saved as a result of a PACE improvement was cost effective at the time it was installed as indicated by the positive NPV of the project.

• The timing and nature of changes in potential homebuyer preferences regarding particular kinds of energy-efficiency projects;

PACE improvements reduce rather than increase risk to the Enterprises' portfolio. They do so partly as a result of market decisions regarding property owner preferences for particular kinds of energyefficiency projects. Taste influences consumer decision-making, not just in energy efficiency but in all areas. Architectural styles, home sizes, landscaping design and electronic sound systems all represent changing preferences that not only impact market demand but could even present risks to mortgage holders. Areas where tastes seem to change little, if at all, include the desire for efficient, low-cost building operations and comfortable, healthy interior environments – both of which are dramatically improved by PACE retrofits. It would be arbitrary and counter-productive for FHFA to suggest that PACE improvements might reduce asset value with respect to "taste" as if PACE improvements are akin to architectural treatments. If FHFA is prepared to regulate PACE assessments for the vagaries of house style, then they should also be prepared to adopt and enforce standards for paint chips.

• The timing, direction and magnitude of changes in energy prices;

PACE improvements directly and specifically insulate properties from increases in energy prices, the volatility of which poses a risk to property owners. The retrofits replace highly variable, rapidly rising energy costs with lower, fixed energy costs. Any actions taken by FHFA that either reduce the number of retrofits or slow the rate of EE deployment in the name of insulating the Enterprises from the risk of energy price volatility will have precisely the opposite effect.

• The timing, direction and magnitude of changes of property values, including the possibility of downward adjustments in value?

The best evidence available to date^{1,2} strongly supports the fact that, independent of the "timing, direction and magnitude of changes in property values" in general, EE and RE retrofits increase property values more than the cost of the retrofits². It makes logical sense that an improving independent variable such as energy performance would operate independently of property value



changes generally. Accordingly, FHFA would be ill advised to impede the ability of property owners to insulate themselves from one of the few market forces they can actually control.

- 2. LBNL-4476E
- 3. Fannie Mae Selling Guide SEL 2010-15, dated December 1, 2010

^{1. &}quot;Evidence of Rational Market Valuations for Home Energy Efficiency" The Appraisal Journal, October, 1998



What alternatives to first-lien PACE loans (e.g., self-financing, bank financing, leasing, contractor financing, utility company "on-bill" financing, grants and other government benefits) are available for financing home-improvement projects relating to energy efficiency? On what terms? Which do and which do not share the lien-priming feature of first-lien PACE obligations? What are the relative advantages and disadvantages of each, from the perspective of (i) The current and any future homeowner-borrower, (ii) the holder of an interest in any mortgage on the subject property and (iii) the environment?

A number of alternatives to first-lien PACE assessments are available for financing energy efficiency home improvement projects. However, none have the lien-priming feature of PACE and, as the ACEEE study showed, none have achieved significant penetration rates:

"Loan programs are a mechanism used to help achieve energy savings in the building sector by providing financing to pay for energy efficiency retrofits. While several programs have many years of experience and have issued thousands of loans, this market has yet to come to scale. There is a lack of information, uniformity and standards that make it difficult for private lenders to evaluate the risk these types of loans present. The lack of uniformity also makes it difficult to package these small loans into larger portfolios for sale to larger financial institutions on the secondary market. Without access to private capital there will be limited funding for efficiency retrofits—and the associated jobs, energy and cost savings and environmental benefits will not be realized."¹

All of the alternatives to PACE are flawed in one way or another, with the result that only PACE programs, with senior liens on the property tax rolls, have the potential to reach meaningful scale. What follows is a summary of the flawed alternatives and a description of the attributes of PACE that make it an essential tool for solving the country's energy problems.

1) In order to be scalable – to fund the trillion-dollars in energy retrofits needed to reach a large percentage of the existing housing stock – investment products must be standardized and fungible. Properly run PACE programs produce financial instruments that meet these criteria. To be highly rated, an asset class needs security and an utterly reliable payment stream. PACE property tax assessments, with super-seniority and extremely high collection rates, can attract the required capital in the asset backed securities market. No other financing method (bank financing, leasing, contractor financing, utility company "on-bill" financing, grants, or other government benefits) can do this.

As the ACEEE study noted:

"Based on our research we were able to make some general observations. Key findings include:

- Most programs are not penetrating the market of potential customers;
- Some residential programs have high rates of application decline;
- · Residential loan program participants tend to be "reactive;"
- Project bottlenecks sometimes occur due to burdensome and inflexible program requirements;
- Minimum program size can attract additional lenders;
- Good loan terms don't assure the success of a program;
- The housing market crash has tightened the lending market;
- Some programs with interest rate buy-down have found the costs to be high;
- There is a lack of uniform criteria for evaluating credit of small businesses and institutions.¹"



ACEEE further noted:

"Participation rates are generally low across programs. The percentage of total customers in the classes served by programs compared to the total number of program participants reveals that only two of the programs surveyed had rates that exceeded 3% of the customers targeted by the programs and more than half of the programs had participation rates below 0.5%...¹"

2) In the current heavily constrained credit market, too many homeowners cannot qualify for loans that require extensive credit underwriting. Properly administered PACE programs utilize a combination of credit and asset underwriting that make it possible for most responsible property owners to qualify. With uses of funds constrained to permanently attached energy efficiency and renewable energy improvements (some States allow measures that address local issues), property values and net cash flows generally increase sufficiently to offset the project cost. These differences between PACE and the alternatives mean that projects can be completed responsibly under PACE, whereas under the alternatives they simply don't get done.

3) An asset-backed security that runs with the land rather than with a particular borrower solves a number of problems that plague alternative financing options. PACE assessments offer the following:

- Simple, standardized, asset-based underwriting that facilitates participation by institutional investors in the secondary markets;
- Fast processing and approval policies that reduce or eliminate the high rates of application decline that burden credit-based financing structures;
- Property tax assessment-based security that stays with properties on sale so future beneficiaries of the improvements help pay for them;
- Inherent security through PACE tax assessments that makes interest-rate-buy down and other credit enhancements unnecessary. Programs can use 100% private capital and bridge the size and term limitations that burden government and utility incentive programs.

4) Alternatives to PACE have been available for years and have failed to achieve any meaningful scale or penetration rate. This should be more than sufficient reason to immediately rescind the FHFA letters. Given the nationwide momentum that was building so rapidly at the time FHFA issued its July 2010 policy statements, one can expect that hundreds of thousands of tons of CO2 now pollute the atmosphere that would not be there without FHFA's position. Every day that FHFA is permitted to contravene 100 years of States' rights precedents adds to the problem.

5) Most alternative programs offered by utilities or governmental agencies provide rebates, credits and other incentives that depend upon significant, cash-forward contributions from the owner. This greatly limits participation. PACE financing is the only structure that provides minimal or no up-front cost. As proposed, the Rule disproportionately impacts lower income and fixed-income households. This is not only bad energy policy. Restricting PACE financing is a de facto governmental policy that discriminates against protected classes.

6) FHFA's discussion of the key issue of lien position cited four States with PACE laws that rely on junior liens (Vermont, New Hampshire, Oklahoma and Maine). Under FHFA policy, such programs are apparently allowed to proceed. However, these States have seen significant contraction in their programs since the July 2010 letters and subsequent FHFA actions to constrain PACE financing.



Oklahoma reported that, "Localities in Oklahoma have suspended most PACE programs due to the Federal Housing Finance Agency's ...July 2010 (sic) letters concerning the senior lien status associated with most PACE programs." This situation is even more striking in light of the fact that Oklahoma attempted to resolve the FHFA issue by switching to junior lien status.

New Hampshire adopted a PACE law in November of 2010. Durham was the first city to pursue a program, expecting "...to move forward a Property Assessed Clean Energy (PACE) program that will provide the opportunity for more property owners to finance significant energy-efficient retrofitting and/or progressive improvements. Stay tuned for updates!" Almost two years later, no communities in NH have adopted a PACE District even though New Hampshire also moved to a junior lien structure.

Maine has activated a PACE program. Over 100 communities representing more than 50% of the State's population have joined the program. The problem is, slightly more than100 homeowners in the entire State have participated. Total project volume is about \$1.2 million. The reason for this performance is lack of sustainable funding. The Maine program relies on a small amount of ARRA grant money to fund projects. As soon as the money was used up, any property owner that wanted to participate had to wait for an earlier borrower to pay off their loan. Like most government-funded programs, Maine's PACE effort is neither scalable nor sustainable.

^{1.} WHAT HAVE WE LEARNED FROM ENERGY EFFICIENCY FINANCING PROGRAMS? Sara Hayes, Steven Nadel, Chris Granda and Kathryn Hottel September 2011 Report Number U115, ACEEE

^{2.} Supreme Court ruling on EPA authority to regulate CO2 as an environmental pollutant

^{3. 2011} Annual Report of the Efficiency Maine Trust



How does the effect on the value of the underlying property of an energy-related home-improvement project financed through a first-lien PACE program compare to the effect on the value of the underlying property that would flow from the same project if financed in any other manner?

PACE financing runs with the land. Unlike alternative financing structures, it need not be repaid when properties are sold. Because the assessments are long term, property owners know they won't be forced to pay the principal before receiving the full value of the reduced utility bills. If they do sell the property, the borrower is relieved of the obligation and the buyer, who now enjoys the benefits of the home's efficiency, takes over the payments. These characteristics make PACE liens excellent instruments for long-term investors – high security, reliable payment administration and low risk of early repayment. This means the cost of capital should be low. Unlike alternative financing structures and independent of the financial benefits that accrue from the energy efficiency projects, PACE assessments add value to financed property simply as a result of the structure of the financing.

The economic value of a retrofit project, regardless of the manner in which it is financed, accrues from the ongoing reduction in a property's operating cost. With the lower capital cost inherent in PACE financing, any given investment results in a greater operating cost reduction than is produced when alternative financing structures are used. All else being equal that translates directly into a higher value for the PACE financed property.

Fannie Mae's Selling Guide (SEL 2010-15) makes it clear that Fannie Mae believes the increase in property values from energy efficiency retrofits is 100% of the project cost. The guide goes on to say that since "Fannie Mae supports energy efficiency in residential housing...the Selling Guide is being updated to incorporate a new energy improvement feature as a standard offering available to all lenders."

When compared to PACE, however, the Fannie Mae program provides a smaller benefit to the underlying value of the property. The reasons are straightforward. By including the cost of the energy improvement in the mortgage, SEL 2010-15 forces all subsequent buyers of the property to take out larger loans than would be required to buy the same property financed through PACE. This is because PACE assessments, do not require payoff of the principal when a property changes hands or is refinanced. Mortgages, on the other hand, must be fully paid off by the new mortgage. The attendant risks, along with transaction and financing costs associated with the larger loan, must then be added to the net project cost with each sale or refinancing of the property. Those costs must be subtracted from the underlying value of the property.

The use of a larger mortgage rather than a PACE assessment for the same energy improvement forces the cost of the improvement into a lender's credit-based underwriting process. This process unavoidably reduces the number of homes that will qualify for financing when compared to the primarily asset-based underwriting process used by PACE. Since the improvement is regarded by Fannie Mae as increasing the value of the underlying property by 100% of the cost of the improvement and since Fannie Mae supports energy efficiency in residential housing the net result is fewer homes gaining energy efficiency than would be the case if PACE were used.

The above discussion applies to individual properties. However, the truly critical aspect of Question 6 arises when looking at the entire portfolio of the Enterprises. Of approximately 130 million housing units in the U.S., two thirds are owner occupied, with 20% of those owned free and clear of any mortgage. That leaves about 69 million homes with secured debt. The Enterprises own or guarantee about half of



the single family mortgages in the country. In round numbers, about 35 million homes could utilize private capital, through PACE, to complete energy efficiency retrofits. This would have the effect of improving the value of the Enterprises' portfolio without any additional investment by the Enterprises. A conservative EE/RE retrofit of \$10,000 per home would result in a \$350 billion private investment into the single-family portfolio of the GSEs. This would increase the total asset value by at least that amount. Further, since the increased value derives from operating cost reductions it is insulated from market fluctuations in the general real estate market.

The PACE funded investment replaces volatile energy costs with a non-volatile tax payment. Because the projects generate a positive net present value, the property values increase. There is simply no other way the net asset value of all the Enterprises' holdings can be improved at zero cost and zero risk to the Enterprises. The strategic significance of that fact must be taken into account by FHFA during the rule making process.



How does the effect on the environment of an energy-related home-improvement project financed through a first-lien PACE program compare to the effect on the environment that would flow from the same project if financed in any other manner?

Identical projects have identical environmental benefits no matter how they are financed. However, only first-lien PACE programs offer the potential for meaningful scale and it is scale that makes the difference.

Utility programs offering rebates usually require that property owners fund the up-front cost of the work. This results in scaled-down projects, higher energy use, greater GHG emissions, inefficient energy and water use and continuing exposure to rising energy costs. Federal and State sponsored tax credit and tax deduction programs suffer from the same problems. Failure to provide a comprehensive solution limits homeowner acceptance and access.

The need to pay up-front project costs inequitably affects lower-income households and neighborhoods. This raises the question of compliance with Executive Order 12898 that requires Federal Agencies to make "...achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human and environmental effects of its programs, policies and activities on minority populations and low-income populations..." ((59 Fed.Reg.7629 (1994), 3.C.F.R. § 859). Depriving lower-income households or neighborhoods access to PACE financing leaves these populations confronted with greater risks to health and security. The higher social, environmental and economic impacts would present an increase in environmental impacts under NEPA.

Where and when available, credit-based bank financing programs generally create volatile, short-term debt that follows the borrower rather than the property. Underwriting criteria fail to take into account energy cost savings and increases in property values that result from the financed projects. It can reasonably be said that long-term equity-based bank financing is simply not widely available for homeowners.

As the September 2011 ACEEE study found, "this market has yet to come to scale," and "most programs are not penetrating the market of potential customers." This lack of penetration results from the fact that most programs disenfranchise homeowners for one reason or another.

Installing clean energy retrofits reduces negative environmental impacts from burning fossil fuel. These negative impacts take many forms.

1) The most serious environmental impact from fossil fuel energy generation is climate change. Since the Supreme Court and the Clean Air Act have declared CO2 a pollutant gas, there is simply no alternative to eliminating the carbon footprint from the U.S. building sector. Only first-lien PACE offers the financing characteristics needed to fund the required 20% to 30% reduction in the amount of energy consumed. Accordingly, the FHFA actions blocking the financing that enables rapid EE/RE retrofits of our building stock are directly responsible for the CO2 emitted in the consumption of 695 billion kWh of electricity and in the burning of 1,795 billion cubic feet of natural gas annually. FHFA must answer in its rule making how it will mitigate the resulting climate damage.

2) Environmental impacts from burning fossil fuels also attack public health. "The U.S. health burden caused by particulate pollution from fossil-fuel power plants (mean number of cases per year): 30,100



premature deaths; 5,130,000 lost workdays; 603,000 asthma attacks; 59,000 acute bronchitis cases; 9,720 hospital admissions for cardiovascular problems; 4,040 hospital admissions for pneumonia."¹

1. Scientific American, September 2011, pg. 96

2. Based on a price of electricity of 11 cents per kilowatt hour

3. Based on a price of natural gas of \$11.20 per thousand cubic feet of gas



Do first-lien PACE programs cause the completion of energy-related home improvement projects that would not otherwise have been completed, as opposed to changing the method of financing for projects that would have been completed anyway? What, if any, objective evidence exists on this point?

Yes. Energy-related home improvement projects will be completed with first-lien PACE financing, but they will not otherwise be done. The ACEEE study from last September, looking at multiple programs in multiple States, noted:

"Participation rates are generally low across programs. The percentage of total customers in the classes served by programs compared to the total number of program participants reveals that only two of the programs surveyed had rates that exceeded 3% of the customers targeted by the programs and more than half of the programs had participation rates below 0.5%."

Accordingly, there is no basis for asserting that first-lien PACE programs would be "changing the method of financing for projects that would have been completed anyway," because there simply are no projects in meaningful numbers being completed.

As Barclays Capital noted in its September 14, 2009 letter:

"We have been asked to comment on the potential market implications suggested by the Federal Housing Finance Agency ("FHFA"), et al that PACE bond liens should be pari passu or subordinate to the lien of a first mortgage lender. After careful analysis of the municipal bond market and the ratings industry, we conclude that there would be little to no meaningful bond buyer interest in pari passu or subordinated PACE liens and therefore the PACE bond market would be highly unlikely to develop.

To summarize our opinion, based on our understanding of key rating agency criteria and recent bondholder investment trends, we strongly believe that the seniority of the PACE assessment lien to that of a first mortgage lender is crucial to structuring a capital markets financing acceptable to both the rating agencies and to investors and to growing the relatively new market."

Barclays has been proven correct in their opinion that the first-lien position that only PACE, among the various potential financing structures, can offer is crucial to drawing investors at scale.

In addition to the lack of meaningful scale of investment, alternative financing structures examined by ACEEE suffer from capital competition and split incentive flaws, among others. Simply put, none of the other financing structures are robust enough to create meaningful participation rates, even if they were structurally capable of attracting a significant quantity of capital. That fact has been amply demonstrated in the 18 months since the FHFA letters of July 2010. Were there other methods of financing that work at scale, they would have emerged. The ACEEE nationwide review found that none have.



What consumer protections and disclosures do first-lien PACE programs mandate for participating homeowners? When and how were those protections put into place? How, if at all, do the consumer protections and disclosures that local first-lien PACE programs provide to participating homeowners differ from the consumer protections and disclosures that non-PACE providers of home-improvement financing provide to borrowers? What consumer protection enforcement mechanisms do first-lien PACE programs have?

Responsible PACE programs employ underwriting criteria to establish that the assessment is appropriate for both the property and the property owner. Because PACE energy improvements increase property values in excess of the project cost, if the net present value of projected energy cost savings is positive there is little need for additional consumer protection measures.

What is especially troubling about this question is FHFA's failure to examine the issue with respect to the existing underwriting standards of the Enterprises. The Federal Housing Administration Fact Sheet on its Energy Efficient Mortgage program states: "As the single largest expense after a mortgage payment, your utility costs have a direct impact on how large a mortgage you can afford." Despite this fact, the Enterprises do not include utility costs along with principal, interest, taxes and insurance (PITI) as part of the "Back End Ratio" calculation used to determine if a potential borrower can afford to buy the home. Given the high degree of variability in utility costs around the country and the projected increases in those costs in the future, failure to underwrite to those costs when evaluating the ability of a borrower to reliably make the mortgage payments is simple negligence.

Were FHFA to responsibly underwrite for utility costs it would better protect its own consumers and the assets of the Enterprise. It would also understand that properly administered first-lien PACE assessments do not threaten its portfolio.



What, if any, protections or disclosures do first-lien PACE programs provide to homeowner-borrowers concerning the possibility that a PACE-financed project will cause the value of their home, net of the PACE obligation, to decline? What is the effect on the financial risk borne by the holder of any mortgage interest in a subject property if PACE programs do not provide any such protections or disclosures?

Published studies demonstrate that the value of a home, net of a PACE obligation, increases rather than declines as a result of energy efficiency and renewable energy retrofits^{1,2}. Given this substantial and consistent evidence the burden is on FHFA to show otherwise. Since first-lien PACE financed projects improve participants' home values there is no consumer protection issue.

In fact, financial risks borne by mortgage holders increase when property owners are not encouraged to cost effectively retrofit their properties. That is exactly the advice given by FHA as part of its Energy Efficient Mortgage program³. Absent a showing of solid data and analysis demonstrating that the FHA Fact Sheet is wrong in advising borrowers to perform energy efficiency improvements, FHFA is acting contrary to one of its central governmental functions - preserving the asset value of the Enterprises. If the proposed Rule compromises the value of Enterprise assets, then it violates the specified responsibilities and purpose of FHFA.

^{1. &}quot;Evidence of Rational Market Valuations for Home Energy Efficiency" The Appraisal Journal, October, 1998

^{2.} LBNL-4476E

^{3.} FHA's Energy Efficient Mortgage, Fact Sheet http://www.energystar.gov/ia/partners/bldrs_lenders_raters/EEM_Fact_Sheet.pdf



What, if any, protections or disclosures do first-lien PACE programs provide to homeowner-borrowers concerning the possibility that the utility-cost savings resulting from a PACE-financed project will be less than the cost of servicing the PACE obligation? What is the effect on the financial risk borne by the holder of any mortgage interest in a subject property if first-lien PACE programs do not provide any such protections or disclosures?

Since energy costs are a permanent and integral component of every home, the appropriate question is: Do protections or disclosures made by first-lien PACE programs to homeowner-borrowers concerning the possibility that the utility-cost savings resulting from a PACE-financed project will be less than the cost of servicing the PACE obligation need to be different than protections or disclosures responsible lenders should make with respect to utility price volatility in the region that could result in higher energy costs?

Utility companies and PACE both provide energy - utilities through centralized facilities, PACE with capital assets built into the home. In either case, the utility costs must be met for the home to be habitable. This means that when a homeowner doesn't have enough money to pay both energy costs and the mortgage, the utility bill is the senior lien.

A responsible lender would take utility cost volatility and inevitably rising prices into consideration when determining how large a mortgage each borrower can afford. The lender should then disclose any risks from future energy cost increases that could threaten the borrower's ability to continue to make loan payments. It is negligent and threatens Enterprise assets that FHFA ignores this issue in its underwriting.

Disclosures and protections provided by PACE programs are inherently different because the cost of the energy provided by retrofits is fixed for the life of the assessment, then drops to zero. As a consequence, energy audits are a common element in PACE programs. They serve to determine the most cost-effective opportunities for energy retrofits and they project relative energy savings. PACE programs provide homeowners with more efficient buildings, opportunities and incentives to save energy and advice on the financial benefits that accrue from doing so. However, they do not mandate behavior.

Through PACE, homeowners get an important benefit. Because the price of the energy that results from the projects does not go up, they can control their energy costs. PACE disclosures provide homeowners with the information they need to maximize this benefit.





What, if any, protections or disclosures do first-lien PACE programs provide to homeowner-borrowers concerning the possibility that over the service life of a PACE-financed project, the homeowner-borrower may face additional costs (such as costs of insuring, maintaining and repairing equipment) beyond the direct cost of the PACE obligation? What is the effect on the financial risk borne by the holder of any mortgage interest in a subject property if first-lien PACE programs do not provide any such protections or disclosures?

Utility companies and PACE both provide energy - utilities through centralized facilities, PACE with capital assets built into the home. Both energy sources face costs to insure, maintain and repair equipment. Utilities pass those costs on to customers in the form of higher rates that are subject to spikes in response to unplanned events. Homeowners have no control over these cost increases.

The cost of energy produced as a result of PACE retrofits is fixed for the life of the assessment, after which it is free. Homeowners have control over all aspects of the project including the measures installed and the likely maintenance and insurance costs required to maintain them. In contrast with uncontrollable utility cost increases, property owners can plan ahead and have insurance and warranties to mitigate unexpected problems.

But retrofits financed through responsible PACE programs provide broader benefits that enhance security for holders of mortgage interests. Following are a few:

- Increased property values resulting from energy installations.
- Protection from unexpected utility cost increases.
- Hazard insurance for energy efficiency and renewable energy installations.
- Long-term energy cost stability.
- Non-acceleration provisions that mitigate loss risks for mortgage holders.
- Enhanced marketability in the resale market.
- Flat tax payments for maximum predictability.
- Healthier and happier homeowners.

Reliance on large, centralized power producers for all residential energy needs carries risks for holders of mortgage interests. When homes are improved with renewable energy and energy efficiency retrofits, their emancipation utility companies reduces these risks. FHFA's failure to disclose to buyers of pooled GSE assets the true risks from complete dependence on utility companies and the lack of protection for non-PACE homes is negligent.



What, if any, protections or disclosures do first-lien PACE programs provide to homeowner-borrowers concerning the possibility that subsequent purchasers of the subject property will reduce the amount they would pay to purchase the property by some or all of the amount of any outstanding PACE obligation? What is the effect on the financial risk borne by the holder of any mortgage interest in a subject property if first-lien PACE programs do not provide any such protections or disclosures?

Evidence suggests that purchasers of properties with existing energy efficiency and/or renewable energy retrofits actually pay a premium equal to more than the direct cost of the improvements^{1,2}. Besides the empirical evidence, common sense suggests that purchasers would be willing pay prices reflecting the net present value of the energy cost savings attributable to those improvements. Fannie Mae took effectively the same position in its Announcement 2010-15, issued on December 1, 2010, which offers "to incorporate a new energy improvement feature as a standard offering available to all lenders" and informs lenders that Fannie Mae will finance 100% of the cost of the energy improvement feature³.

Since neither the research nor the logic point to subsequent purchasers paying less than the net present value of the energy cost savings that the improvements deliver over their life, Question 13 should be re-written. FHFA should consider what protections or disclosures are provided to buyers of homes that do not have energy efficiency and renewable energy improvements retrofits. What is the likelihood that such properties will sell for less than otherwise comparable homes having PACE retrofits. The FHA Fact Sheet on Energy Efficient Mortgages advises borrowers that retrofit homes are more valuable than homes without retrofits. Failure to incorporate this information into the disclosures provided to borrowers by lenders directly increases the financial risk to holders of the mortgage interests.

Before insinuating, in the face of substantial evidence to the contrary, that homes with energy retrofits risk lower selling prices than otherwise comparable properties, the Agency should produce evidence. This analysis should explain why and how the existing studies and the Fannie Mae Selling Guide are wrong. Absent such a showing by the Agency, Question 13 asks respondents to accept a false premise. This seems inappropriate in a Rulemaking process intended to elicit factual advice to government agencies contemplating new rules.

^{1. &}quot;Evidence of Rational Market Valuations for Home Energy Efficiency" The Appraisal Journal, October, 1998

^{2.} LBNL-4476E

^{3.} Fannie Mae Selling Guide, Announcement 2010-15, issued December 1, 2010



How do the credit underwriting standards and processes of PACE programs compare to that of other providers of Home-improvement financing, such as banks? Do they consider, for example: (i) Borrower creditworthiness, including an assessment of total indebtedness in relation to borrower income, consistent with national standards; (ii) total loan-to-value ratio of all secured loans on the property combined, consistent with national standards; and (iii) appraisals of property value, consistent with national standards?

The underwriting standards applied by responsible PACE programs are superior to those of other purveyors of home-improvement financing, including banks. This statement recognizes that PACE is very different from conventional home-improvement financing. The most relevant underwriting standard for PACE is the restriction that funds only be used for installation of energy efficiency and renewable energy improvements permanently attached to the property. The consequence of this requirement is that there is a direct monetary return from the improvements. This is very different from a home improvement loan that pays, for example, to remodel the kitchen. PACE assessments require only basic credit underwriting.

PACE funded improvements increase home values and improve cash flows for homeowners^{1,2,3,4,5,6,7}. Other types of home improvements may not improve values at all. One owner's bathroom remodel might be done in a style that does not appeal to buyers in the resale market, with the result that the money spent on the improvement is not only lost but becomes a deterrent to resale. Energy efficiency and renewable energy improvements, on the other hand, are purely functional. They produce permanent reductions in the operating cost of the home and they convey a monetary benefit to all subsequent owners. The reduced operating costs translate into higher asset values, but a sale is not necessary to reap the benefits of lower utility bills. They start immediately and last for the life of the installed measures.

By comparison, energy costs in homes without energy retrofits increase every year, sometimes dramatically. Given that FHFA guidelines do not underwrite for energy costs, it is understandable that they feel the necessity for strict credit underwriting to insure borrowers can keep up with these cost risks. A consequence of FHFA's refusal to embrace PACE is that the one area where homeowners have the power to control the inflationary cost spiral is denied to all but the most affluent.

Without FHFA interference, repayment obligations stay with the property in the event of a resale. For this reason, underwriting standards should focus on the asset. Following are examples:

- All record property owners execute the assessment documents
- No delinquencies on secured mortgages for previous 3 years
- No property tax delinquency
- No bankruptcy
- No unpaid involuntary liens
- Notice of the senior lien to all mortgage holders.
- Assessments net of all qualified incentive programs.
- Total of secured debt not to exceed 85% of FMV
- Total of secured debt plus PACE assessment not to exceed 95% of FMV
- Analysis showing project energy savings prior to approval

2. Lawrence Berkeley National Lab-4476E

^{1. &}quot;Evidence of Rational Market Valuations for Home Energy Efficiency" The Appraisal Journal, October, 1998

^{3.} Fuerst and McAllister, Real Estate Economics, 2011, V39 1: pp. 45–69

^{4.} JOSRE, Vol 1, No 1-2009

^{5. &}quot;Energy Efficiency and Real Estate, Opportunities for Investors" Mercer report for Ceres, 2010

^{6. &}quot;Commercial and Institutional Green Building," McGraw Hill Construction & U.S. Green Building Council 2008

^{7. &}quot;Income, Value and Returns in Socially Valuable Office Properties" Pivo and Fisher, 2009



What factors do first-lien PACE programs consider in determining whether to provide PACE financing to a particular homeowner-borrower seeking funding for a particular project eligible for PACE financing? What analytic tools presently exist to make that determination? How, if at all, have the methodologies, metrics and assumptions incorporated into such tools been tested and validated?

PACE is asset-based rather than credit-based financing because (i) the energy efficiency and renewable energy improvements funded through PACE programs increase the asset value of the property and (ii) the payment obligations run with the land, not the borrower. Accordingly, the factors appropriate to asset-based financing are primarily to be examined. Following are examples of appropriate underwriting criteria for PACE programs:

- All record property owners execute the assessment documents.
- No delinquencies on secured mortgages for previous 3 years
- No property tax delinquency
- No bankruptcy
- No unpaid involuntary liens
- Notice of the senior lien to all mortgage holders
- Assessments net of all qualified incentive programs
- Total of secured debt not to exceed 85% of FMV
- Total of secured debt plus PACE assessment not to exceed 95% of FMV
- Analysis showing project energy savings prior to approval

The various data sources available to determine whether a property, project and owner meet underwriting guidelines have been part of standard industry practice for decades. They include public record searches, credit service reviews, database services, proprietary software solutions, etc. The Department of Energy has established and reviewed tools and methodologies for determining the cost effectiveness of energy efficiency and renewable energy systems. Building rating systems such as the HERS protocols used by Fannie Mae's SEL 2010-15 Energy Improvement Feature are widely known. Some are incorporated into State laws with both energy efficiency and renewable energy models. Accordingly, State and local governments have a number of validated metrics and tools from which to choose when they select program implementation strategies.





What factors and information do first-lien PACE programs gather and consider in determining whether a homeowner-borrower will have sufficient income or cash flow to service the PACE obligation in addition to the homeowner-borrower's pre-existing financial obligation? What analytic tools presently exist to make that determination? How, if at all, have the methodologies, metrics and assumptions incorporated into such tools been tested and validated?

Only capital assets that increase the energy efficiency of a home or produce energy from renewable sources qualify for PACE financing. In either case, the energy output from the improvements offsets energy that was previously purchased from a utility company. PACE financing is not "in addition to the homeowner-borrower's pre-existing financial obligation." PACE financing simply replaces a pre-existing financial obligation with a new one of the same or smaller size. Accordingly, the best indicator of "whether a homeowner-borrower will have sufficient income or cash flow to service the PACE obligation" is the record of previous payments to the utility company. For that, as well as for project design purposes, utility bills for the home are analyzed prior to approval of PACE assessments.

For subsequent owners of the property, the PACE assessment is a public record that appears on property tax rolls. It is automatically included, along with loan principal, interest, other property taxes and insurance payments (PITI) in the analysis used by lenders to determine whether a borrower has sufficient cash flow to afford the loan. Appropriate methodologies, metrics and assumptions applied to PITI have been part of the standard practice for responsible lenders for decades. By using the PACE financing mechanism, the home's energy costs are brought into standard underwriting practice as part of PITI. By contrast, FHFA does not presently require lenders to underwrite to such items as variable interest rates on loans, energy costs, garbage, sewer and water rates, etc. Given the substantial impact that changes in costs for these items can have on homeowner cash flows, such failure by the Enterprises is negligent and results in misleading information about the security of many assets bundled into the securities held by GSE's investors.



Comments upon Advance Federal Housing Finance Agency (FHFA) request for scoping comments with respect to preparation of an Environmental Impact Statement (NOI) regarding a proposed rulemaking to restrict PACE programs

EIS SCOPING COMMENTS

Thank you for the opportunity to comment through the Environmental Impact Statement (EIS) process provided by the National Environmental Policy Act (NEPA). The geographic scope of the proposed Rule, combined with the complexities in impact determination and mitigation suggest this will be a lengthy process that produces a lengthy document. The problem is compounded by the scope of Federal Agencies that are directly or indirectly affected by the proposed Rule.

FHFA is essentially proposing a nationwide EIR that will address national energy issues, water demand and projections, technologies and programs to address these issues, government programs to provide incentives for energy and water efficiency and reliability, potential impacts with respect to the PACE financing structures (which of necessity will have to be examined at the individual State level) and other water and energy programs offered by local, State and utility programs to encourage retrofitting.

Since the primary concern as stated in the LOI is potential impact upon Enterprise assets, the assets and properties must be described in terms of number, value, demand, location, economic risk and physical risk aspects.

The EIS will also have to account for and reconcile with laws, programs and policies of Federal Agencies that have any regulatory or financial interest in energy, water, housing, public health, environmental justice, sustainability and job creation.

ADMINISTRATIVE CONFLICTS WITH NEPA

As discussed above, the sweep of the proposed EIS will be substantial. There are no apparent Agencyspecific guidelines to support FHFA in pursuing such an endeavor. NEPA requires that all Federal Agencies adopt guidelines to focus the NEPA process to the specific responsibilities of each agency. There is no evidence of such a policy being adopted and applied by FHFA. This is in significant distinction from the NEPA procedures adopted by the Department for Housing and Urban Development (HUD). The HUD NEPA guidelines identify procedures, delegation of power and so on.

A Federal Agency is required to prepare procedures to comply with NEPA and to supplement the NEPA regulations. These procedures for NEPA compliance can only be adopted after public review and comment (40 C.F.R 1506.6(a)). NEPA provides a long and specific list of issues to be addressed in the Agency procedures ((40 C.F.R 1507.3(b)(c).

Given the scope of review associated with a nationwide and multi-issue EIS (including local variables), the ability of FHFA to produce a satisfactory EIS is a fair question. The FHFA is already struggling to hire sufficient staff to simply do the basics required by HERA to the degree that there have been Congressional hearings and adverse reports from the Inspector General tasked to oversee FHFA. NEPA allows multiple agencies to be involved in the preparation of complex EIS reports, particularly when the proposed Project influences the responsibilities and jurisdiction of other Federal Agencies. This would be the appropriate time to confer with other interested agencies such as the Environmental Protection Agency (EPA), Department of Energy (DOE), HUD, Federal Emergency Management Agency (FEMA), Department of the Interior, Bureau of Reclamation, Council on Environmental Quality (CEQ) and others.



It is also unclear if the FHFA has addressed compliance with Federal policies with regard to environmental justice. Executive Order 12898 mandates that all Federal Agencies consider the disproportionately high adverse human health or environmental effects of agency programs on minority and low-income populations. It is not sufficient to address this at EIS preparation. The Order also requires that each agency develop an agency-wide environmental justice strategy (The NEPA Book; Bass, Herson, Bogdan; pg. 148).

Another apparent violation of NEPA procedures is the requirement to designate one person within each agency to be the NEPA officer. Every Federal Agency must also designate a staff person to oversee NEPA compliance. (40 C.F.R 1506.6(a)).

Considering the little in-house preparation for a massive and complicated NEPA endeavor, it is difficult to imagine a timely and satisfactory completion of the EIS process.

*Another NEPA conflict exists with respect to the NOI and the proposed Rule.

FHFA has improperly maintained the July 6, 2010 Statement and the February 28, 2011 Directive in force while preparing an EIS to examine the impact of adopting the policies that FHFA has already enforced. FHFA specifically states in the Proposed Rule that both "remain in effect" (Rule pg. 3961).

This is clearly a violation of NEPA requirements that a "project" governed by NEPA cannot begin "project implementation until at least 30 days after the Project EIS has been filed with the Environmental Protection Agency (EPA), which cannot occur prior to the completion of a Draft EIS ((1505.2,1406.10). This has been affirmed by the March 6, 2012 memo from the CEQ to "all Federal Departments and Agencies" that states that "NEPA should not become an after-the-fact process that justifies decisions that have already been made"(40 C.F.R §1502.2(g)).

Even more specific to the Proposed Rule, "no action by an agency or applicant concerning a proposal shall be taken which would have an adverse environmental effect or limit the choice of reasonable alternatives" (1506.1 (a)).

FHFA is seemingly also in violation of this provision, since the record indicates that the interim measures imposed by FHFA have essentially shut down all residential PACE programs that rely upon a first position lien. As a result, an enormous number of properties have been at risk to storm damage, fire damage, subsidence damage, interior air pollutant sources and other health and safety concerns.

It is clear that FHFA has seriously undercut the integrity of the NEPA process by implementing the "project" (in this case the Directive of February 2011 and the July 2010 Statement) before the Scoping Process, much less waiting for the FEIS. This is the very situation meant to be avoided; "Federal Agencies must not prejudice the selection of the proposed action by committing resources prior to the NEPA decision" (Ibid, pg. 122).

Nor is FHFA excused from compliance with NEPA as an independent Federal Agency; NEPA applies to both Agencies of the Executive Branch as well as "independent regulatory agencies". Nowhere in HERA is there language that excuses FHFA from compliance with NEPA. The premature activation of the proposed PACE restrictions creates a number of problems beyond the jurisdiction of FHFA since the action taken is contrary to adopted policies and programs of the Environmental Protection Agency, the Department of Energy, the Department of Housing and Urban Development, the Council on Environmental Quality and other Federal Agencies. These are precisely the issues that should have been resolved during agency consultation process, rather than present it as a fait accompli.



FAILURE TO STATE PROJECT OBJECTIVE IN FEDERAL REGISTER POSTING

Specifying the Project "Objective" is a critical part of EIS preparation. The Objective makes it possible to determine and assess the balance between Project benefits and impacts. In addition, the Project Objective is an indispensable part of the EIS alternatives analysis. The value of an alternative is first tested against the standard of addressing the Project Objective.

DETERMINATION OF BASELINE

The determination of a baseline is a critical element of the EIS process. All project impacts are tested against the baseline circumstance. The baseline is essentially a snapshot of the environmental, economic and social conditions at the time of the LOI.

The LOI released by FHFA states that the area of study is the entirety of the United States, which would then be assessed by regions with respect to three rates of installations of PACE retrofits. The LOI provides no details as to the number of regions or what basis is used for distinguishing the different regions. If the uptake of PACE improvements is the sole criteria, than the analysis needs to not only address "regions" but the specific circumstances of each PACE legislation and program. The "region" - specific data may assist with addressing broad issues of economic vigor, climatic patterns, geography and types of PACE improvements most need, but will not suffice to address the particulars of the almost 30 PACE States. For example, most PACE programs place the PACE financing ahead of the primary mortgage (the stated concern of FHFA), but the various programs offer different standards of credit-worthiness or borrowing limits with respect to equity.

Based on the above, the physical baseline may be able to be addressed by region, but the direct, indirect and cumulative impacts must also be addressed at the State level. This then leads to the next essential area of review, which is the regulatory environment in which each PACE program does or will operate. If FHFA is concerned about the marginal difference in monthly payments due to PACE improvements, they must also fold in the economic incentives offered by most States for the installation of energy and water saving improvements. These incentives include rebates, tax incentives, refunds, favorable billing terms, incentive pricing and other elements that augment and reinforce the potential net benefits of PACE retrofit programs. These issues also have to be applied at the level of State PACE programs.

The baseline must also examine the current regional (and State-by-State) housing markets in terms of sales prices, available financing and days on market, terms and inventory. These factors have significance to the relative risk that that a home purchaser (or PACE participant) will suffer financially from the incremental changes with respect to a PACE retrofit project. The baseline should also reflect any programs offered by HUD and the Department of Agriculture and others that offer favorable terms to homebuyers, which are by their nature intended to buyers who might not qualify for a conventional loan.

An extension of that issue is the current housing inventory directly held by the Enterprises must be profiled, including location, condition, value and terms on which such properties are being placed in the market for purchase.

The determination of the Baseline also raises a different issue and complication, since the FHFA is proceeding with an EIS while the PACE restrictions of the Directive of February 2011 and the July 2010 Statement are still in force. As discussed earlier, it is a procedural violation of NEPA to implement the Project in advance of completing the NEPA process. The baseline issue that arises now is that the Directive and Statement both served to dramatically suppress residential PACE activity and thus



skewed the baseline. PACE program operators have uniformly indicated that the prior FHFA actions reduced or halted all PACE activity. The distortion is worse when considering that even PACE programs that have agreed to subordinate the PACE lien behind the primary mortgage are contracting or stopping PACE contracts (New Hampshire and Oklahoma). The result is that the test of impacts under NEPA starts from restricted PACE environment as opposed to the environment described by the LOI as the "No Action Alternative".

The only way to determine a proper baseline at this point is to rescind the FHFA restrictions, allow the market to respond and then assess the impacts from the actual Rule as proposed.

SCOPE OF REVIEW

The LOI proposes to include an analysis of "regions" to assess the impact of potential PACE penetration and the potential impacts under NEPA. The determination of what defines a "region" must address the following variables:

- Climatic conditions and extreme weather conditions
- Energy usage, cost per unit, source reliability and volatility
- Water usage, supply reliability, unit costing and volatility, quality, transmission loss, supply security, etc.
- Presence of existing PACE programs including target users, target industries, operational rules and standards and scope
- Presence of public sector/utility programs to address GHG emissions
- Distribution of low income and minority populations
- Volume and distribution of Enterprise assets as well as losses in the last 24 months



PROTECTION OF ENTERPRISE ASSETS

The justification for the Project is that FHFA is compelled by their mandate to ensure the Enterprises "operate in a safe and sound manner" (Rule pg. 3959). HERA also states the following:

4617(b)(2)(D). The Conservator also may "take over the assets of and operate the regulated entity in the name of the regulated entity," "perform all functions of the entity" consistent with the Conservator's appointment and "preserve and conserve the assets and property of the regulated entity."

But the actions of FHFA with respect to residential PACE programs actually increase the degree of asset and property risk. In so doing, the FHFA is acting contrary to the obligation created by HERA. Any examination of relative asset risk in the EIS must also address the relative risk to Enterprise assets and properties. HERA specifies both assets and properties, which requires that the EIS examine historic and potential asset loss by virtue of physical damage or destruction. The availability and cost of insurance should be examined by region, as well as opportunity cost of any government-secured insurance programs that provide coverage where private insurers will not provide access. This should also be examined in the context of Federal laws, policies and programs with respect to environmental justice.

Recent climatic weather disasters demonstrate the immediate and massive potential for damage to the Enterprise assets in Florida, Louisiana, Texas, the Mid-Atlantic States, communities along the Missouri River and even the City of New York. FHFA, in their explanation for the proposed Rule, assumes that a marginal potential for asset devaluation is more important than the staggering losses and costs experienced in the very States where the Enterprises hold the assets at greatest risk. It would be cold comfort to homeowners that FHFA has protected them from being over-extended, so and thus secured their most significant financial investment, or at least that part that washes ashore.

The narrow assessment of FHFA also omits the implications of fluctuating energy costs, where rollercoaster prices for electricity, natural gas and fuel oil have enormously more impact upon the monthly budget of thousands of homeowners across the nation. The implications are discussed below.

Major metropolitan areas are subject to very volatile energy costs with significant winter spikes. Numerous Federal and State studies confirm that many households respond to this by reducing use of energy source from public or private utilities. The substitute is reliance on space heaters, woodstoves, briquette burners and other heat sources that present dangers of carbon monoxide poisoning or house fires. This problem is acknowledged by housing and public safety agencies that track fires and injuries.

While the health and well being of homeowners is not part of the charge of FHFA, presumably they would not be satisfied with value-secured housing whose occupants have died of carbon monoxide poisoning.

Other examples where the potential of physical asset damage or loss include hurricane and tidal surges in States such as Florida, Louisiana, Texas; heat waves and associated fires as well as surges in heatstroke cases in urban areas; ground subsidence in metropolitan and suburban areas due to overdrafting of groundwater and similar and so on.



Less dramatic examples include long term public health issues, such as respiratory conditions like asthma, that disproportionately affect older housing with minimal insulation or asbestos or poorly vented heat and cooking units.

PACE programs can reduce the occurrence of such tragedies and loss by providing a means for more energy efficient homes from something as simple as better insulation modern heating units. This directly furthers the stated FHFA goal of maintaining or increasing asset protecting both asset value and actual property.

SUSTAINABILITY

The EIS should identify Federal sustainability policies to assess compliance of the Project and its alternatives. Policy conflicts should be considered potential impacts and examined by region and agency.

ENVIRONMENTAL JUSTICE

The EIS should identify Federal environmental justice policies to assess compliance of the Project and its alternatives. Policy conflicts should be considered potential impacts and examined by region and agency.

DIRECT IMPACTS

The following should be reviewed as potential direct impacts of the Project:

- Reduction in installation of energy or water efficiency retrofits
- Reduced job creation relative to the same
- Constrained resources to provide resilience of Enterprise assets
- Sustained regional energy volatility

INDIRECT IMPACTS

The EIS must examine the following as potential indirect impacts, with review distinguishing regions as well as accounting for lower income or minority communities, neighborhoods:

- Continued asset loss of the Enterprises to flood, fire, mud slides, storms and other adverse weather conditions
- Winter energy demand and price volatility leading to interior air quality issues, health impacts to children, senior and other vulnerable populations;
- Increased groundwater pumping in regions of the country already experiencing land subsidence from over drafting, such as Arizona, California, Colorado and others
- Increased medical and health impacts from unsafe or antiquated appliances associated with soot, carbon monoxide and other air contaminants prone to concentration in closed spaces;
- Increase in mold and other toxins in post-flood environments, particularly with no replacement energy sources.

All issues raised as direct impacts are included here as potential indirect impacts.

In addition, all comments submitted on the Proposed Rule and associated 16 questions are included here as potential indirect impacts question.



CUMULATIVE IMPACTS

The EIS must examine the following as potential cumulative impacts, with review distinguishing regions and PACE States as well as accounting for lower income or minority communities and neighborhoods:

- All items listed above under Indirect Impacts
- Loss of water quality and quantity due to regional climate changes
- Declining air quality and failure to meet air quality targets (Federal or State)
- Increase environmental health problems associated with more frequent extreme weather events and resulting disease vectors, contamination of homes, extended infrastructure problems, including vulnerable populations of the elderly, poor, immigrants.
- Extended reliance on energy sources that are volatile in pricing, vulnerable in delivery and extraction and result in continuing production of greenhouse gases.
- Increased costs or greater supply constraints to agricultural producers, resulting in price increases that will place additional financial pressures on households, compromise nutrition and health.
- Temperature increases that will result in changing agricultural production with resulting shift is critical food and fuel production.
- Shifts in biological niches that will accelerate invasive plants and animals shifts, increased cost to address invasive species and associated health issues (such as expanded habitat for the Brown Recluse Spider)
- All issues raised as direct impacts or indirect are included here as potential cumulative impacts. In addition, all comments submitted on the Rule and associated 16 questions with respect to long-term outcomes are included here as potential cumulative impacts.



NO ACTION ALTERNATIVE

FHFA should adopt the No Action Alternative. The No Action Alternative is to withdraw the July 6, 2010 Statement and the February 28, 2011 Directive. This would allow the Enterprises to purchase mortgage loans secured by properties with outstanding first-lien PACE and PACE-like obligations.

Numerous positive environmental effects will begin to accrue upon adoption of the No Action Alternative. Also, the financial risk borne by holders of any interest in a mortgage on PACE-affected properties will decrease.

Prior to the July 2010 Statement, states covering most of the country's population and housing stock were gearing up to offer PACE programs, and many private sector entities were positioning to finance and implement those programs. The July 2010 Statement and the February 2011 Directive had the net effect of stopping those programs and thereby preventing retrofit of the residential sector at any meaningful scale. Although it is impossible to say exactly what portion of the housing stock would have been retrofit by now, it is clear what benefits can be achieved if the Statement and Directive are withdrawn and the states, municipalities and companies previously willing to finance and install retrofits using the PACE structure were to resume their efforts in earnest:

- 1. Environmental effects of the No Action Alternative ¹
 - a. Cost effective retrofits in the residential sector reliably reduce energy consumption by approximately 30%
 - b. Greenhouse Gas Emissions reductions in the residential sector that will result from cost effective retrofits = 382 million metric tons
- 2. Economic effects and risk reduction impacts of the No Action Alternative¹
 - a. \$182 billion of investment into cost effective capital assets will go into the residential sector from private, non-GSE sources.
 - b. 1,892 trillion Btu of annual energy savings will be created in the residential sector, thereby reducing the energy cost volatility risk exposure of any holders of mortgage interest.

Clearly, the above benefits of the No Action Alternative are enormous, which makes the consequences of failure to withdraw the July 2010 Statement and the February 2011 Directive enormously damaging. The burden of proof is on FHFA to show otherwise.

^{1 &}quot;United States Building Energy Efficiency Retrofits," March 2012, The Rockefeller Foundation and DB Climate Change Advisors, Deutsche Bank Group



What specific alternatives to FHFA's existing statements about PACE should FHFA consider? For each alternative, as compared to the Proposed Action, what positive or negative environmental effects would result and how would the level of financial risk borne by holders of any interest in a mortgage on PACE affected properties change?

The NOI issued by FHFA invites commenters to submit Project alternatives. NEPA provides that credible alternatives should address the Project objectives and respond to potentially significant impacts. The NOI correctly includes the "No Action Alternative", which is described as " withdrawing" the 2010 Statement and 2011 Directive (Federal Register Notice, pg. 3963). But the FHFA NOI fails to State any specific Project Objectives, thus complicating the ability to respond with alternatives that would respond to the stated objectives. This is also complicated by conflicts between the description of the proposed Rule and the description of the proposed Project to be examined under NEPA. This confusion is also addressed in the discussion of the Baseline Condition for the purposes of determining Project impacts.

The LOI describes a "No Action Alternative" as allowing PACE prime programs to proceed. This is inconsistent with the Project Description as described in the proposed Rule as posted. The present status is not unrestricted PACE activities but rather the bundle of restrictions reflected in the FHFA's Statement of 2010 and Directive of 2011 remaining in force. This inconsistency was noted above with respect to the determination of the Baseline condition. The degree of confusion as to the "Baseline" condition as opposed to the "No Action Alternative", combined with the absence of a specific Objective argues for reposting of the Proposed Rule to clarify what FHFA believes to be the current circumstance. The absence of the required FHFA NEPA guidelines has clearly contributed to this confusion.



While we dispute the claim that HERA authorizes FHFA to propose this Rule, we offer four project alternatives with respect to the EIS alternatives analysis. These alternatives are presented in absence of an LOI providing a clear Objective statement from which to guide formation of alternatives.

- 1. Withdraw the July 2010 Statement and February 2011 Directive ("No Action Alternative") and identify and monitor PACE programs over time to determine the relative risk as discussed in the various questions posed with respect to the ANPR. Since FHFA has presented no substantial evidence that first lien PACE programs present a significant risk to the Enterprises, the analysis process could resolve issues regarding property devaluation, risk to lenders, cost-efficiency and verification of improvements, comparing the relative asset risk of PACE loans as a function of capacity to pay versus physical asset value lost in regions of high risk absent PACE financed improvement (such as wind hardening projects in Florida).
- 2. Adopt Department of Energy standards as guidelines for qualifying for first-position PACE liens. This would allow various pending PACE Districts to craft program criteria or standards that best meet local or regional circumstances while remaining within the acceptable bounds set by the DOE.
- 3. Allow first position PACE liens to proceed where there is a provision or mechanism to compensate for any losses to the Enterprises that are directly attributable to the PACE lien. This is consistent with the prior offers from the Department of Energy and the White House. This would satisfy the stated needs of FHFA and is clearly not speculative since such a proposal has already been offered to FHFA.
- 4. Revise the standards for loan qualification to include and reflect localized energy costs and volatility. As discussed in the response to Question 9 (pg. 25), energy demand is one of the highest household costs, yet is largely not reflected in loan qualification. The effects on the Enterprises of a first position PACE lien cannot be properly analyzed until the quantifiable effects of household energy cost and demand are known and accounted for.