Final uniform statewide financial underwriting guidelines for clean energy loans made by localities under §15.2-958.3 of the Code of Virginia

As required by Chapter 427 of the 2015 Acts of Assembly

Prepared by the Virginia Department of Mines, Minerals and Energy

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Executive Summary

During the 2015 session of the Virginia General Assembly, the legislature and governor approved legislation modifying §15.2-958.3 which among other things, directed the Virginia Department of Mines, Minerals and Energy (DMME) to develop uniform statewide financial underwriting guidelines for clean energy (property assessed clean energy or PACE) loan programs developed by localities pursuant to §15.2-958.3. In developing the guidelines, DMME elicited input from groups representing real estate, energy efficiency, banking, local governments, and other interests or industries and included in the guidelines certain specific criteria as required by law. These criteria included: savings to investment ratio, loan-to-value ratio, assessment to assessed value ratio, technical assessment requirements and disclosure to future owners. The guidelines and criteria are summarized in the table below (Table ES-1) and were developed to specifically apply to non-residential PACE financing programs pursuant to §15.2-958.3.

In developing the financial underwriting guidelines, DMME balanced the need for local government discretion with the need for uniform guidelines to support the growth of PACE programs. Because PACE loans are repaid through special property tax assessments placed on a property, local governments will have discretion in setting programmatic requirements and ensuring that underwriting guidelines reduce risk of default and support local program objectives. DMME also recognized that for some criteria such as savings to investment ratio, or loan to value ratio, the parties involved in the transaction should have the flexibility to determine whether they wish to proceed with the transaction. Ultimately, regardless of the underwriting guidelines mentioned herein, existing lienholders, PACE capital providers, borrowers, and local or third party administrators will need to agree whether to provide PACE financing.

Table ES-1: Summary of Uniform Statewide Financial Underwriting Guidelines for PACE Loans

Underwriting Criteria	Guideline
Total Loan to Value Ratio (LTV)	≤90% of the assessed or appraised property value (including the PACE loan). Debt-Service Coverage Ratio ≥ 1.0. Exceptions evaluated on a case-by-case basis.
Special Assessment to Assessed Value Ratio	≤20% of the assessed or appraised property value. Exceptions evaluated on a case-by-case basis.
Savings to Investment Ratio (SIR)	≥1.0. Exceptions evaluated on a case-by-case basis. Localities and administrators to determine how to characterize "savings."
Technical Assessment	Requirements based on the size and scope of the project as well as the requirements of the lender and administrator.
Disclosure to Future Owners	Localities to record the special assessments in a way that makes them discoverable in a title search.

The development of uniform statewide financial underwriting guidelines for PACE loans in Virginia is only one piece of establishing a functioning PACE financing program. In addition to developing financial underwriting guidelines, localities will need to develop or work with a third party administrator and lending institutions to identify eligibility criteria for property owners and eligible costs that can be included in the PACE loan. Some of these requirements are established by law while others will need to be identified in the locality's enabling ordinance. Among other criteria, in order for PACE assessments to achieve priority tax lien status, state law requires a written subordination agreement by all existing mortgage holders and evidence that a property owner is current on property loans and tax payments and is not insolvent or in bankruptcy proceedings. Also, the title of the property cannot be in dispute.

The purpose of this guidance document is to provide localities that are interested in developing a PACE financing program enough information to start a dialogue about the underwriting process and guidelines necessary to facilitate PACE projects. PACE financing can be very attractive to commercial property owners and lenders because it offers favorable terms, enhances the property value, and from the perspective of capital providers is a relatively secure investment. Mortgagees with existing liens on properties will need to agree to subordinate their lien status to a PACE lien before a borrower can close on PACE financing. Although more details need to be developed in order to start a PACE program, these financial underwriting guidelines are designed to help localities, administrators, and capital providers determine which projects can be financed to encourage investments in energy and water efficiency improvements and mitigate risk.

Introduction

The Virginia Department of Mines, Minerals and Energy (DMME) as directed in [Chapter 427] of the 2015 Virginia Acts of Assembly has established the following uniform statewide financial underwriting guidelines for loans made pursuant to [§15.2-958.3] of the Code of Virginia. In developing these guidelines, DMME incorporated input from representatives of the Virginia Bankers Association, the Virginia Energy Efficiency Council, the Virginia Association of Realtors, the Virginia Municipal League, the Virginia Association of Counties, and the Virginia Association for Commercial Real Estate. DMME also received input from the Metropolitan Washington Council of Governments, several local jurisdictions, and members of the public. As directed by the legislation, the guidelines include the evaluation of the following criteria: total loan to value ratio, voluntary special assessment (PACE assessment) to assessed value ratio, savings to investment ratio, the requirement for energy assessments, and the disclosure of an assessment to future owners.

In Virginia Property Assessed Clean Energy (PACE) financing can be used to finance renewable energy, energy efficiency, and water usage efficiency improvements. The underwriting guidelines proposed by DMME are not mandatory. Localities, in consultation with their administrator and participating capital providers, may modify these underwriting guidelines in order to better fit the specific needs and goals of their jurisdiction's PACE program.

When developing a PACE financing program, localities, PACE financing program administrators and lenders will need to set objectives to manage and minimize risk. Because PACE financing programs require local government support to function, they need to support local goals and objectives. According to [§15.2-958.3,] a locality's enabling ordinance for a PAC E program "shall include but not be limited to…[the] kinds of renewable energy production and distribution facilities, energy usage efficiency improvements, or water usage efficiency improvements for which [PACE] loans may be offered." By extension localities have discretion in terms of identifying the savings associated with PACE-financed projects.

PACE financing, like any financing product, carries the risk of default. Localities, PACE administrators and capital providers need to develop policies and protocols to manage the risk of default. These guidelines are intended to be sufficiently detailed to provide guidance to localities interested in developing a PACE program but general enough to provide discretion to administrators and capital providers to meet specific program objectives while minimizing risk of default. These underwriting guidelines were developed to specifically apply to non-residential PACE financing programs.

PACE financing for commercial property owners

PACE allows for the financing of up to one hundred percent of the upfront costs of making energy improvements to a property and is repaid through a voluntary special assessment that is placed on a property's tax bill regardless of whether the financing originates from a public or private entity. These assessments are secured in the form of a property tax lien, which is placed on the property only if there is a written subordination agreement by all existing mortgage holders. For simplicity, "PACE assessment" refers to the voluntary special tax assessment. Depending on a commercial owner's specific lease structure, commercial property owners may benefit from PACE loans in a triple-net lease environment because the repayment obligation of the PACE assessment can be passed through to tenants. Commercial property owners may also benefit because the financing and accompanying assessment transfer to the next owner when a property is sold.

Commercial property owners are sometimes reluctant to make energy improvements to their buildings because the landlord would be responsible for the upfront capital costs while the tenant benefits from the lower utility bills that result from such improvements. This is the so-called "split incentives" problem where the landlord would not necessarily be able to benefit from the generated savings. Because many commercial leases allow for special tax assessments to be passed on to tenants, PACE assessment payments can be passed on to the tenants who benefit from the energy improvements.

Another reason property owners hesitate to make energy investments is that clean energy improvements, such as energy efficiency or renewable energy technologies, often have payback periods in excess of five or six years, which are typical terms for most commercial property loans. In addition to having longer terms (typically equal to the weighted average of the expected life of the measures financed) that can be as long as 20 or 30 years, PACE assessments transfer with the sale of the property, so the next owner would be responsible for assuming the PACE assessment payments.

PACE assessment payments can be structured in a way such that the annual cost savings exceed the annual assessment payments, resulting in a positive cash flow for a property. In addition, some of the improvements financed through PACE loans can make space that was previously unusable or uninhabitable usable and able to generate more income for the owner.

Because PACE assessment payments can be passed through to tenants, transferred to future property owners, and used to make investments that may generate positive cash flows, commercial property owners who make planning decisions for periods that are typically shorter than the life of a particular energy conservation measure or energy improvement may benefit from the flexible financing options provided by PACE.

PACE financing and private financial institutions

Private financial institutions may be interested in offering PACE financing because it is a financial instrument that finances improvements that enhance and protect the collateral of banks. Because many PACE-financed projects improve comfort and desirability of a property, PACE can enhance and increase property values. Many of the improvements financed with PACE are improvements that owners and mortgagees want implemented because they improve the desirability of the building. Replacing boilers or chillers, upgrading to high-efficiency lighting, or installing photovoltaic panels or solar thermal hot water heating equipment can all increase property values while generating a positive cash flow.

PACE assessments are secured in the form of a tax lien, which means that in the event of a default and ensuing foreclosure, delinquent PACE assessments are to be repaid first after ad valorem taxes. Primary mortgagees are protected because PACE assessment liens can only achieve priority status if all existing lienholders on a property consent to subordinating their lien status to the PACE lien. Because PACE assessment liens are treated as special tax liens, they are "non-accelerating." Typical mortgages and other types of loans contain *acceleration clauses* that require the borrower to pay off the loan immediately if certain conditions are met, such as if the borrower misses too many payments. Because PACE assessments are "non-accelerating," if a borrower defaults and the property goes into foreclosure, the foreclosure proceeding will only pay the PACE capital provider the amount that is due in arrears (only delinquent payments). Should the property be acquired by the future owner, the future owner would assume the PACE loan payments. In this way, both the risk undertaken by the PACE capital provider and the primary mortgagee are mitigated by trying to ensure that enough value remains in the property after the tax lien has been satisfied in order to allow the primary mortgagee to recover its investment.

The law allows PACE assessment liens to effectively achieve the same priority status as property tax liens on a property only if existing lienholders consent to the PACE lien through a written subordination agreement recorded with the special assessment lien. This means that regardless of the financial underwriting guidelines in place for capital providers to provide PACE financing, the borrower still needs to secure lender consent through a written subordination agreement from any existing lenders who hold liens on the property. As a result, the underwriting guidelines adopted by localities need to be acceptable both to a PACE capital provider and the current lienholders on a property.

The Investor Confidence Project

The Investor Confidence Project (ICP) is a project of the Environmental Defense Fund that many other states including Texas have used to develop protocols and guidelines for financing energy efficiency projects. DMME makes reference to the ICP Efficiency Project Framework when suggesting protocols for energy assessments and audits.

Virginia Uniform Statewide Financial Underwriting Guidelines

Chapter 427 directs the Virginia Department of Mines, Minerals and Energy to develop uniform statewide underwriting guidelines. In developing these guidelines, DMME solicited input from various stakeholders. The legislation stipulates that the guidelines include: total loan to value ratio, special voluntary assessment (PACE loan) to assessed value ratio, savings to investment ratio, requirements for a technical assessment, and requirements to disclose the voluntary special assessment to future owners. The phrase "voluntary special assessment" pertains to the PACE assessment and the guidelines will use the term "PACE assessment" for simplicity.

Also, it is important to note that the underwriting guidelines are voluntary. Localities may choose to adopt them in full or in part. As mentioned before, Virginia's PACE law requires that existing mortgage holders consent through a recorded written subordination agreement prior to a voluntary special assessment for a PACE loan achieving priority tax lien status on a property to which they already have a mortgage. This means that the primary mortgagee will also have the opportunity to evaluate whether the loan can be repaid by the borrower.

Total Loan to Value Ratio (LTV)

Total loan to value ratio is the ratio of the total debt secured by a property (including the PACE financing) to the assessed or appraised property value. The purpose of setting a maximum LTV ratio is to ensure that there is sufficient collateral to secure the PACE assessment in the event of a default. The loan value should include the amount of PACE financing. The locality should exercise its discretion about whether to use assessed or appraised values. For example assessed values may vary considerably based on the vacancy rate at a property, and in this case, it may be more accurate to use appraised value as the basis for determining the value of the property. Regardless, **the maximum allowable LTV should be 90% of the assessed or appraised property value**.

To further mitigate risk of default, DMME recommends adding an additional measure of a borrower's ability to pay in the form of a *debt service coverage ratio (DSCR)*. DSCR is defined as net operating income (yearly gross revenue minus operating expenses) divided by the total debt service, **including** the PACE financing. A DSCR of greater than or equal to one indicates that a property generates enough revenue to cover its debt service. Requiring a DSCR greater than one can further reduce risk of delinquency and default because it shows that the property raises enough revenue to cover its debt service payments. **DMME recommends a DSCR equal to or greater than 1.**

Together setting the maximum allowable LTV at 90% coupled with a DSCR of greater than or equal to 1 should provide sufficient risk mitigation for lenders and borrowers. Localities should have the flexibility to increase the LTV limit or reduce the DSCR threshold on a case-by-case basis only if there are no existing debts on the property.

Voluntary Special Assessment (PACE Financing) to Assessed Value Ratio

The voluntary special assessment (PACE financing amount) to property value ratio is the PACE financing amount divided by the assessed or appraised value. Setting a maximum PACE financing amount to assessed value ratio provides additional protection by reducing the risk of default. **The PACE financing amount to property value ratio should be no more than 20%.**

Similar to LTV above, the locality should use its discretion when using assessed versus appraised value. Furthermore, a local program administrator may choose to waive the 20% threshold on a case-by-case basis if all parties agree. This may also take place if there is no current mortgage or debt obligation or other extenuating circumstance.

Savings to Investment Ratio (SIR)

Savings to investment ratio (SIR) refers to the ratio of overall project savings to overall project costs. An SIR greater than one indicates a project whose savings are greater than the costs. Although the SIR can help property owners evaluate the value of a PACE project, SIR is less important for financial underwriting because lenders want to ensure that borrowers will be able to repay their loans even if the costs are greater than the savings.

There are examples of projects that would be good candidates for PACE financing although their SIR is less than one. For example, a project that would include improving the health, safety, or occupancy of the building would generate revenue or produce benefits to the owner that are not included in the savings calculation. SIR for the project may be less than one, but the improvements may allow for increased cash flow to the owner and thus still preserve or even improve the owner's ability to pay for the loan.

As a result**, DMME recommends that if localities chose to use SIR in their PACE programs, the SIR should be greater than one, but allow the inclusion of ancillary benefits in addition to utility savings.** The SIR should be applied to the entire project, and not just individual energy conservation measures. **In addition, the administrator should be allowed to issue a waiver for projects where the SIR is less than one if the parties involved agree that it is acceptable to have such an SIR.**

Requirements for a Technical Assessment

Requiring technical assessments such as an energy audit of a PACE financed project can help ensure that a project is feasible and that it delivers the expected savings. DMME recognizes that some projects, such as single-measure projects, are simpler and require a basic assessment while others are more complex and require a more sophisticated assessment. Rather than requiring a single type of assessment such as an American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Level II or Level III audit, the technical assessment protocols should be based on the specific characteristics of the building and project. Localities may wish to use the recommendations of the Investor Confidence Project (ICP) Efficiency Project Framework to determine which protocols are suitable provided the building type and the size and scope of the project. To ensure that projects deliver savings, **DMME recommends that localities require that PACE borrowers submit a technical energy assessment that is based on the size and type of the building and the size and scope of the project. Local governments and their administrators can decide whether and when to require independent third party assessments and the extent to which the costs of the assessment can be included in the PACE financing amount. For other clean energy projects such as solar photovoltaic or solar thermal water heating, the locality, administrator and lender should work together to develop an acceptable assessment methodology that considers the size and scope of the project.**

The ICP Efficiency Project Framework designates standards and best practices for various stages of an energy project from baselining energy use and projecting savings to measuring and verifying savings after the project is complete. These standards are different for each building type or risk model and they designate protocols for determining an energy usage baseline; projecting energy savings; overseeing design, construction and verification of the measures; monitoring operations and maintenance; and lastly measuring and verifying savings after the project has been completed. Localities can apply the ICP Large, Standard, and Targeted protocols for baselining energy usage and projecting savings that are outlined in the ICP Efficiency Project Framework to individual projects based on project scope according to guidelines described in Figure 1.

Figure 1: ICP Efficiency Project Framework specifies requirements for baselining and projecting energy savings size and scope of project.

	LARGE PROTOCOL	STANDARD PROTOCOL	TARGETED PROTOCOL
PROJECT TYPE			
Retrofit scope	☐ Whole building	☐ Whole building	☐ Single measure or end-use, or limited interactivity
Retrofit cost	☐ Greater than $1 million	☐ Less than $1 million	☐ Less than $1 million
Typical savings	☐ Greater than 15%	☐ Any level	☐ Less than 15%
Building type	☐ Commercial or multifamily	☐ Commercial or multifamily	☐ Commercial or multifamily
BASELINING CORE REQUIREMENTS			
Standards	☐ ASTM BEPA	☐ ASTM BEPA	☐ ASTM BEPA
Accuracy	☐ ASHRAE Guideline 14-2002	☐ ASHRAE Guideline 14-2002	☐ ASHRAE Guideline 14-2002
Baseline development	☐ Whole building	☐ Whole building or project specific	☐ Whole building or project specific
Baseline asset/operational/ performance data used	☐ For all systems	☐ To inform savings calculations	☐ To inform savings calculations
BASELINING– RATES, DEMAND, AND LOAD PROFILES			
Energy Purchasing	☐ Description of rate class	☐ Description of rate class	☐ Description of rate class
Load Profile (for each energy type)	☐ Annual load profile showing monthly consumption and peak demand	☐ Annual load profile showing monthly consumption and peak demand	☐ Annual load profile showing monthly consumption and peak demand
Time of Use (if applicable)	☐ TOU summary by month	☐ TOU summary by month	☐ TOU summary by month
SAVINGS CALCULATION			
Standards	☐ Model compliant with ASHRAE Standard 140	☐ Not applicable	☐ Not applicable
Energy savings	☐ Whole building energy simulation model (DOE-2, Trace, etc.)	☐ Building energy simulation or non-energy model calculation methods (spreadsheet calcs, etc.)	☐ Building energy simulation or non-energy model calculation methods (spreadsheet calcs, etc.)
Savings Calibration	☐ Calibration to utility bills	☐ Comparison of ECM savings to end-use energy	☐ Comparison of ECM savings to end-use energy
Credentials	☐ ASHRAE BEMP, AEE BESA, PE, or 5+ years experience	☐ ASHRAE BEAP, AEE CEM or CEA, PE or 5+ years experience	☐ ASHRAE BEAP, AEE CEM or CEA, PE or 5+ years experience

Notes: TOU means "Time-of-use"
Source: The Investor Confidence Project, 2015. http://www.eeperformance.org/technical-summary.html

For example, a commercial whole building retrofit with a cost of over $1 million would submit an energy assessment that follows the ICP Large Commercial Protocol for baselining and energy savings projections, which would entail a more comprehensive assessment. On the other hand, a single measure commercial building project of less than $1 million would use the ICP Targeted Commercial Protocol whose protocols are less stringent. Requiring onerous or costly energy assessment for all projects regardless of size or measure could discourage the development of smaller energy projects that could result in substantial savings, and failing to require comprehensive and industry-accepted assessments for larger more complex projects could result in a project's failure to produce savings and thus increase the risk of default on a loan. Allowing for different assessments based on size and scope of the project mitigates risk and avoids crowding out smaller projects with onerous assessment requirements.

Although the ICP has protocols for measurement and verification of savings, DMME is not recommending any specific measurement and verification protocols for energy projects at this time. DMME understands that robust measurement and verification protocols are vital to ensuring accountability and to building confidence in energy efficiency projects, and the agency encourages participants with larger projects to include measurement and verification in their projects. For smaller projects, measurement and verification activities that adhere to widely accepted protocols such as the International Performance Measurement and Verification Protocol (IPMVP) Option C can be very costly. In some cases, the costs of measurement and verification for a single project can exhaust most or all of the projected savings of a project. As a result**, DMME recommends encouraging borrowers to consent to allowing the local program administrator and their utilities to share their application information (including the energy assessment) and detailed monthly energy consumption data (at the meter level for the property, without regard to any sub metering) for three years before and three years after the PACE financed project with an independent third party for evaluative purposes, assuming that this data is readily available. Third parties who use this data should be required to enter non-disclosure agreements with the utility and local administrator to ensure that detailed individual consumption data is not made publicly available. Only aggregated performance data about the entire program should be shared publicly.**

Disclosure of the Voluntary Special Assessment (PACE Assessment) to Future Buyers

Because a PACE assessment "runs with the land," a seller does not necessarily need to pay off the PACE obligation before selling their property. In the event of a sale, the PACE obligation would transfer to the new owner who would assume responsibility for making the assessment payments. If future buyers are not aware of a PACE lien on a property, they may not be aware of the financial obligation they would have to satisfy additional payments on their property tax bill. In addition, if a prospective buyer is financing their purchase with a mortgage, the mortgagee would need to consent to the existence of a PACE lien on the property. In Virginia, it is typical for a title search to occur prior to settlement in order to identify any existing liens on a property. **DMME**

recommends that localities record PACE liens in a way that would make such liens easily discoverable in a title search.

Other considerations and conclusion

The development of uniform statewide financial underwriting guidelines for PACE financing in Virginia is only one piece of establishing a functioning PACE financing program. In addition to developing financial underwriting guidelines, localities will need to work with their administrator and lending institutions to identify eligibility criteria for property owners and eligible costs that can be included in the PACE financing. Some of these requirements are established in §15.2-958.3 of the Code of Virginia while others will need to be identified in the locality's enabling ordinance. Among other criteria, in order for a PACE lien to achieve priority tax lien status, state law requires a written subordination agreement by all existing mortgage holders, as well as evidence that a property owner is current on property loans and tax payments, evidence that a property owner is not insolvent or in bankruptcy proceedings and evidence that the title of the property is not in dispute.

The purpose of this guidance document is to provide localities that are interested in developing a PACE financing program enough information to start a dialogue about the underwriting process and guidelines necessary to facilitate PACE financing. PACE financing can be very attractive to commercial property owners and lenders because it offers favorable terms, enhances the property, and from the perspective of lenders is a relatively secure investment. Mortgagees with existing liens on properties will need to agree to subordinate their lien status to a PACE lien before a borrower can secure PACE financing. Although more details need to be developed in order to start a PACE program, these financial underwriting guidelines are designed to help localities, administrators, and lenders determine which projects can be financed to support PACE projects and mitigate risk.