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I. Introduction

The Federal Housing Finance Agency (FHFA) module for *Single-Family Mortgage Securitization Management* is designed as a resource and reference for FHFA examiners. It contains background information and a workprogram intended for the examination of Fannie Mae and Freddie Mac (the Enterprises). The workprogram includes a broad range of worksteps within five categories, and examiners should identify and perform those worksteps most relevant to reach conclusions on the level of risk and the quality of risk management given the scope of the examination.

This module focuses on the operational risk associated with securitization processes used by the Enterprises, Seller/Servicers, and other parties as part of single-family mortgage securitization management. A Seller/Servicer is defined as an approved bank or non-bank entity with a contractual relationship with an Enterprise that performs selling, servicing, or both functions. The scope of this module does not include the various components of credit risk management, credit loss management, counterparty (Seller/Servicer) risk management, and risks related to security trading activities associated with securitization processes.

The Enterprises' missions include supporting liquidity and stability in the secondary mortgage market. Securitization, the pooling of relatively illiquid mortgages and selling the related cash flows as tradeable securities, offers the means by which the Enterprises provide liquidity to the mortgage market. Securitization allows the Enterprises to distribute credit risk through the sale of structured products based on each Enterprise's risk tolerance and the capital market's credit risk appetite. As such, a primary goal of securitization for the Enterprises is to transfer the capital investment and associated funding risk to investors and other third parties in a safe and sound manner.

The secondary mortgage market structure enables funds to flow from financial markets, through primary lenders, to consumers for financing residential property purchases and refinances. Securitizing residential real estate mortgages is the primary function of both Enterprises. Single-family mortgage securitizations may be single-class or multiclass securities. In either case, the securities represent an ownership interest in the underlying pools of mortgage loans or other mortgage-backed securities (MBS¹).

Under its 2008 Amended and Restated Senior Preferred Stock Purchase Agreement with the U.S. Treasury Department, as amended to date (PSPA), each Enterprise is restricted in the total amount of mortgage assets it may own. At December 31, 2012, the unpaid principal balance of the

¹ Freddie Mac has traditionally referred to its MBS products as PCs (Participation Certificates). For purposes of this module, the term MBS refers to both Fannie Mae and Freddie Mac mortgage-backed securities.

mortgage assets owned by each Enterprise was limited to \$650 billion. The Enterprises are required to reduce their mortgage assets to 85 percent of the maximum allowable amount permitted as of December 31 of the immediately preceding calendar year until the amount is reduced to \$250 billion. As a result of these restrictions, both Enterprises seek to limit the amount of loans held long term in their mortgage portfolios and securitize most loans purchased shortly after acquisition. Some loans may have characteristics that preclude securitization and are held in an Enterprise's mortgage portfolio for the life of the loan.

An Enterprise's single-family mortgage securitization standards and practices are found in its internal business policies and procedures, credit and risk management policies, and its selling and servicing guides. The selling and servicing guides are the primary vehicles for documenting mortgage securitization requirements to Sellers and Servicers². The Enterprises also provide updates via bulletins and announcements on their respective websites regarding new requirements.

Each Enterprise should have appropriate governance to oversee securitization management policies and risks. An Enterprise should have appropriate controls regarding the processes for securitizing loans at acquisition and from its mortgage portfolio directly. In addition, appropriate controls should exist for capital market securitization structuring activities.

Background Information

Securitization Overview

Mortgage securitization provides both standardization and differentiation in mortgage finance to enable the efficient transfer of capital between mortgage originators, who wish to sell their mortgages, and investors, who seek a competitive return on investment. The Enterprises' role in the secondary mortgage market supports the standardization of product terms in the primary origination market as well as in the capital markets. Standardization in the capital markets enables investors to have a clear understanding and disclosure of the expected returns, terms, and risks associated with their investments. As the mortgage securitization market has evolved, more complex securitization vehicles have been introduced to differentiate and customize mortgage cash flows and investments to the specific preferences of investors. This enables additional liquidity in the market, which ultimately increases the availability of capital.

With a securitization, an Enterprise receives a guarantee fee (also referred to as g-fee) based on

² The term Servicer may refer to either a Master Servicer or Servicer. Fannie Mae acts as its own Master Servicer, contracting with Servicers to provide the direct borrower interface. Freddie Mac contracts with Master Servicers which may also serve as Servicers and interface with borrowers or the Master Servicers may contract with sub-servicers to perform that function.

the outstanding balance of the security for the life of the security. The g-fee is determined based on a product and credit analysis performed prior to securitization, as well as negotiations between the Seller and the Enterprise. Alternatively, the g-fee may be fixed at the product level across all Sellers. There is an upfront g-fee payment received at acquisition, referred to as a loan-level price adjustment, or delivery fee. An additional fee is received each month. These fees provide compensation for assuming the credit risk on mortgage loans underlying single-family securities, in addition to the costs related to holding capital, mortgage pool administration, transaction fees, and reporting. The Seller retains the risk of repurchase or put-back associated with violations of representations and warranties that the underlying mortgages meet all Enterprise eligibility requirements. In addition, Enterprise revenues derive from transaction fees associated with single-family multiclass re-securitizations.

An Enterprise pays Servicers a fee to perform loan servicing functions. Loan servicing functions include collecting monthly payments of principal, interest, and sometimes, taxes and insurance. The Servicer subsequently pays the taxes and insurance on the property. In addition, servicing activities include performing special functions for loans that become delinquent, including collections, loss mitigation, and management of foreclosure, if applicable. In aggregate, the servicing revenue stream on a portfolio of loans is commonly referred to as mortgage servicing rights (MSRs), and this stream is a marketable asset. MSRs derive their value from a variety of attributes, including the expected life of the mortgage, the mortgage rate and its comparison to current market rates, and the expected stream of ancillary income produced by loan servicing.

Single-class Securities Issuance

Generally, with a single-class security, one or more single-family mortgages with similar characteristics are securitized into a single security. The investors in the security receive the principal and interest (P&I) payments from the underlying mortgages each month. These securities are commonly referred to as pass-through securities because remittances of the P&I on the underlying mortgages are passed through to investors as paid, net of servicing and g-fees. Alternatively, some MBS are paid on a scheduled basis, with servicers advancing P&I regardless of mortgagor delinquency. The pass-through and scheduled concepts are the same for multifamily and single-family mortgage securitizations.

An Enterprise may also issue single-class pass-through securities collateralized by groups of existing MBS. The cash flows from the underlying MBS provide the cash flows for the Giants (Freddie Mac) or Megas (Fannie Mae) pools. The underlying securities may be single-family or multifamily MBS, previously issued Giant or Mega pools, or Ginnie Mae securities. Fannie Mae ceased issuing Ginnie Mae-backed Megas as of December 31, 2005.

Multiclass Securities Issuance

Multiclass securities are securities where the cash flows from single-family or multifamily mortgages are divided or structured into various classes of securities. Each class represents an undivided beneficial ownership interest in the assets of the related security trust and entitles the holder of a security in that class to a specific portion of cash flows.

Structured Securities

Multiclass securities can be structured into classes based on risk. These structures provide unique cash flow and risk preferences customized to the needs of investors. For example, principal-only (PO) or interest-only (IO) classes, where an investor only receives principal or interest payments, respectively, may be beneficial to meeting investor needs.

Certain investors may require highly-rated or low credit risk securities with largely predictable cash flows and prefer senior securities guaranteed by an Enterprise. Given a guarantee of credit loss protection, the senior class typically offers the lowest yield in the structured security. Another investing segment may seek higher-yielding securities and accept the corresponding higher risk and cash flow volatility.

Securities may also be structured with sequential payment and planned or targeted amortization classes. In sequential payment class structures, one or more classes receive all or a disproportionate percentage of the principal payments on the underlying mortgage assets for a period of time until that class or classes are retired. For planned or targeted amortization classes, the structures involve the creation of classes bearing more predictable amortization schedules across different prepayment scenarios, reducing prepayment risk, extension risk, or both. Further, structures may include leveraged tranches. For example, a tranche's yield may be a multiple of LIBOR, thus magnifying interest rate movements as compared to the market's movement. If rates move by 100 basis points and the tranche is levered 2x, for example, then the yield of the bond would move 200 basis points.

Real Estate Mortgage Investment Conduits (REMICs)

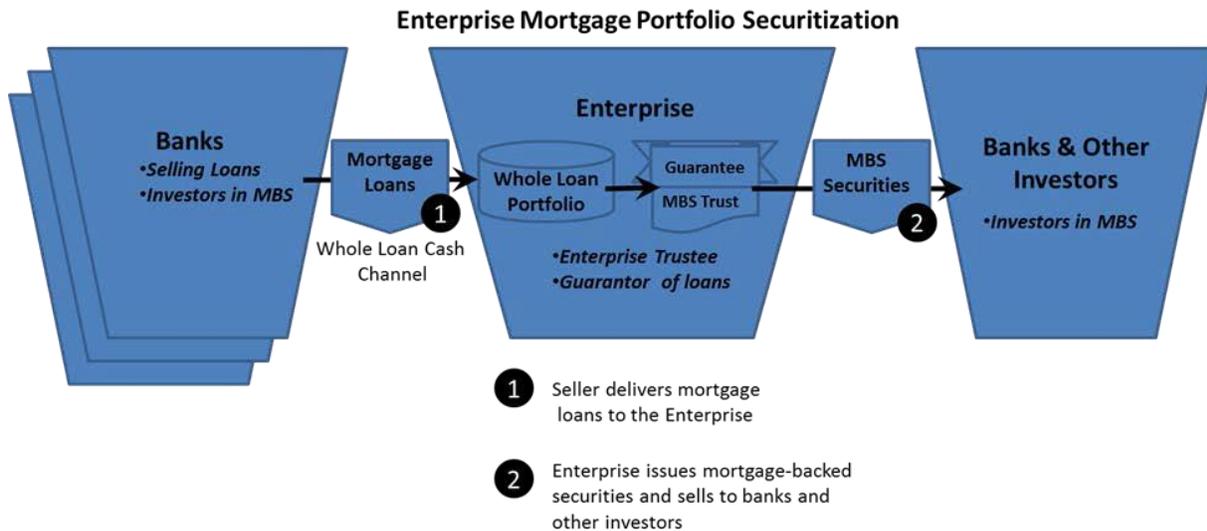
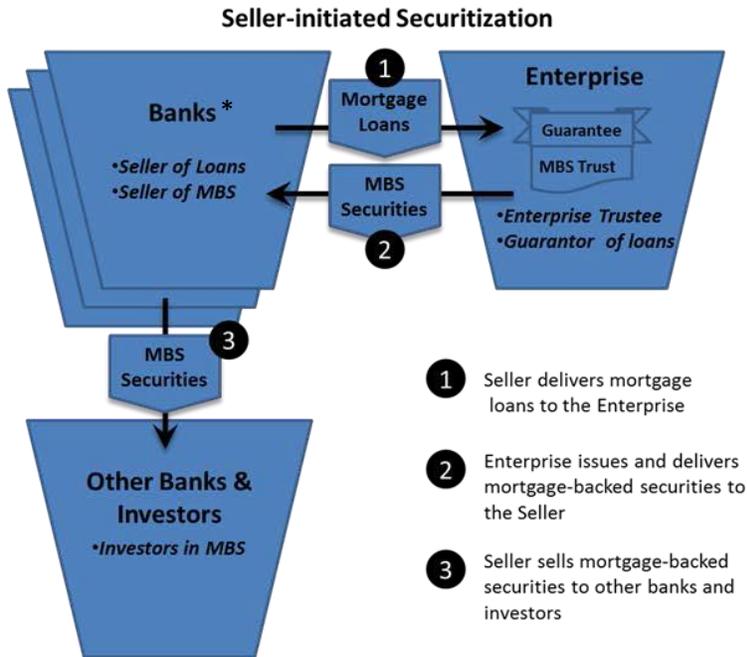
REMICs are multiclass MBS where the cash flows from the underlying assets are specifically allocated to individual tranches, or classes of securities, of varying maturities, coupons, or payment priorities. Depending on how the REMIC is structured, the maturity of the underlying mortgage loans and/or MBS may match or extend beyond the maturity term of the REMIC classes.

Enterprise Mortgage Acquisition Options

An Enterprise may purchase a mortgage loan or group of mortgages from a Seller in exchange for cash payment or MBS (seller-initiated securitizations). Mortgages purchased for cash are retained in an Enterprise's mortgage portfolio until it decides to pool and securitize the loans (Enterprise mortgage portfolio securitizations), although some mortgages remain on the books for the life of the loan. An Enterprise does not charge an explicit g-fee for a cash purchase as it does with a securitization at acquisition, but it factors the risk of default into the purchase price.

The diagram below illustrates the Enterprises' processes for securitization options:

Enterprise Single-Family Securitization Processes



* Note: Non-banks also sell loans to the Enterprises (Step 1)

Seller-Initiated Mortgage Securitizations

Document Requirements and Expectations

A Seller's relationship with an Enterprise is governed by the terms of a master agreement with the Enterprise and transaction-specific terms agreed to via an electronic system or a written contract for each mortgage pool purchased. The master agreement typically defines terms such as minimum and maximum volumes of mortgages to be delivered (and whether the volumes are mandatory or on a best efforts basis), eligible products, and pricing. The pool-related agreement sets forth the terms and conditions for the delivery of a specific pool of mortgages and may establish the required characteristics of the pool. These often include the mortgage product type, contract amount, servicing option, g-fee, buy-up/buy-down options, and remittance type. The remittance type specifies whether the Servicer forwards only the actual cash flows received from the borrower or forwards funds when due, regardless of borrower performance.

The pool-related agreement may also outline a Seller's representations and warranties, for example, that the loans in the pool meet an Enterprise's standards for underwriting and loan eligibility, including amortization, age, and interest rate. The terms may also specify whether the mortgages delivered in the pool have other credit enhancements (e.g., private mortgage insurance or government agency insurance).

Another important pool-related document for a Seller lists all the mortgages included in the pool (often referred to as a pool schedule). The pool schedule may also indicate the Servicer of the pool. The Servicer is often the same entity as the Seller, but may be different depending on the Seller's business structure and operation. See the module *Managing Seller/Servicer Relationships* for additional information.

Sellers are parties to a document custodial agreement, a tri-party agreement among the Seller, an Enterprise, and a document custodian. The document custodian is responsible for certifying the pool prior to issuance of the security and maintains custody of the original mortgage documents. Although selected by the Seller, the document custodian must meet certain criteria prescribed by the Enterprise, such as a secure and fireproof physical location, access controls, and systems to track the possession of documents.

Sellers are expected to follow the Enterprises' respective selling and servicing guides and any special instructions noted in trade confirmations or other settlement notices. In addition, Sellers that initiate a trade agree to adhere to the Securities Industry and Financial Markets Association's (SIFMA's) *Uniform Practices for the Clearance and Settlement of Mortgage-Backed Securities and Other Related Securities*, also known as the good-delivery guidelines. Organizations such as

SIFMA³ also publish general information regarding the fundamentals of Enterprise securities. The module *Managing Seller/Servicer Relationships* has additional descriptions of delivery responsibilities.

Pricing Seller-Initiated Securitizations

The Seller is responsible for determining which mortgages it delivers to an Enterprise. For the Seller, this process is referred to as a best execution analysis. Sellers have models to evaluate the impact of various pooling scenarios that consider MBS prices, buy-up and buy-down multiples posted by the Enterprises, the Seller's g-fee, servicing costs, and the characteristics of the Seller's mortgage pipeline.

The coupon or pass-through rate on each Enterprise MBS is quoted as a percentage in 50 basis point increments. Loan-level g-fee buy-ups and buy-downs allow lenders to pool a wider range of note rates under one coupon. Sellers can buy up g-fees, meaning they agree to remit a g-fee higher than the contractual fee applicable for a particular servicing option and remittance cycle, in return for a one-time, upfront payment from an Enterprise. Alternatively, Sellers may buy down or agree to remit a lower g-fee than the applicable contract fee in exchange for a one-time, upfront payment to an Enterprise. The module *Managing Seller/Servicer Relationships* has additional information regarding servicing options and remittance cycles.

An Enterprise uses market information, in addition to its own balance sheet needs and restrictions, to determine the pricing for buy-up and buy-down multiples. With a buy-up transaction, the Enterprise is purchasing an asset, the cash flow stream from the excess yield. This asset is sensitive to prepayment risk in the event the mortgages pay off before the Enterprise has received the cash flow from the higher g-fee to recoup the cost of the upfront payment to the Seller. It is common for an Enterprise to cap the number of basis points it will buy-up to manage its exposure to the risk that a mortgage prepays before generating g-fee income that equals or exceeds the initial upfront payment.

Loan-Level Price Adjustments

In addition to the g-fee, an Enterprise may receive acquisition-related fees, whether securitization or cash loan purchase, from loan-level price adjustments. Loan-level price adjustments are risk-based pricing adjustments for various mortgage attributes. These fees allow an Enterprise to be more specific in pricing certain credit risk characteristics. They also allow an Enterprise to be compensated upfront for the credit risk, as opposed to receiving compensation over time. Loan-

³ See SIFMA's <http://investinginbonds.com> (follow "Learn More" under "Types of Bonds," then follow "Mortgage-Backed Securities (MBS) and CMOs").

level price adjustments are paid by the Seller at the time of securitization based on the features of the individual loans in the pool. Cash out refinances, investor properties, and lower-credit score mortgages are examples of loan characteristics that might be considered in determining loan-level price adjustments.

Document Custody

When a Seller delivers loans into a pool that will back a security, it must send loan closing documents for each mortgage to the document custodian for certification and retention. The document custodian reviews the documentation to verify that all of the required documents were received, properly executed, and reconcile to the data submitted on the pool schedule. Provided there are no document or data errors, the document custodian transmits a certification to the Enterprise that it examined and has in its possession the required documents for the mortgages in the pool. If a data error, a missing document, or an improperly executed document is identified by the document custodian, the Seller submits corrections. When the Seller delivers loan data to an Enterprise, it represents and warrants that the data are correct and that the loans will be delivered and serviced according to the agreed terms.

Disposition of the Security at Acquisition

At the time of securitization, a Seller may decide to hold the issued securities in its investment portfolio (swap-and-hold transaction), or sell the securities to the Enterprise or another investor as part of the transaction (swap-and-sell transaction). At settlement, with a swap-and-hold transaction, the Enterprise issues a security and delivers it electronically to an account at an institution that the Seller specifies. For swap-and-sell transactions, when the Seller plans to sell the security to a third party, the Seller provides the third party with the required disclosure documentation and indemnifies the Enterprise against losses associated with any breach of securities disclosures or settlement requirements by the Seller.

When a Seller sells its security, it does so through either a “to be announced” (TBA) trade or a specified trade. With a TBA trade, the lender delivers any security meeting the TBA eligibility requirements defined by SIFMA. The vast majority of Enterprise MBS trades occur in the TBA market. In a TBA trade, the buyer and seller of MBS agree on a sales price and a settlement date with only a few basic characteristics of the security agreed upon: issuer, maturity, coupon rate, and the face value of the security to be delivered. The TBA market enables thousands of different single-class securities, backed by millions of individual mortgages, to be commoditized for trading purposes into only a few types of contracts.

In a stipulated trade, the Seller defines the product type, amount of the transaction, coupon rate, settlement date, and unique characteristics (*e.g.*, seasoning or maximum loan balance) of the pool that will back the security. A specified trade is one in which a specific pool or security is referenced

and only that security may be delivered in satisfaction of the transaction.

Enterprise Mortgage Portfolio Securitizations

In addition to securitizing mortgages when acquired from a Seller, an Enterprise may also choose to securitize previously-purchased mortgages held in its portfolio. Each Enterprise maintains a capital markets group responsible for coordinating with investment banks and securities dealers to identify and meet the particular needs of investors. An Enterprise's sales desk and other business units collectively determine the demand for certain types of MBS and whether the loans in portfolio could be securitized to match that demand. For securities created from loans in portfolio, an Enterprise has discretion over which loans to include in the pool, thereby maximizing pricing execution.

Enterprise-initiated securitizations require fewer documents than Seller-initiated securitizations. A master custodial agreement between an Enterprise and a document custodian is executed for certification of pools and custody of the mortgage documents. Enterprise-initiated securitizations also include a pool schedule, which indicates the Servicer of the pool.

Master Trust Agreement and Documentation

An Enterprise holds securitized mortgages in trust, executing a master trust agreement (trust agreement), which historically has sometimes been referred to as a trust indenture. The mortgage loans from each pool are held in a unique trust, identified by a pool-specific CUSIP⁴ number.

An Enterprise acts as trustee for its MBS trusts. The trust structure segregates the mortgage loans underlying the MBS from other assets of the Enterprise. Each trust operates in accordance with the trust agreement or any trust indenture. Each trust is also governed by an issue supplement, which provides defined terms for the MBS and describes the related mortgage loans. The trust agreement or the trust indenture, together with the issue supplement and any amendments, as well as any documents that are incorporated by reference, are considered the trust documents that govern an individual security trust.

Under the terms of the trust agreements and the selling and servicing guides, an Enterprise has the option, or in some instances the obligation, to purchase certain mortgage loans from the trust, most commonly delinquent loans. An Enterprise considers market conditions and potential economic benefit when deciding whether to exercise its option. Loans are purchased from the trust at a price equal to the unpaid principal balance of the loan plus accrued interest. Such purchases eliminate further P&I distributions to security holders on those loans.

⁴ Securities are identified by a nine-digit CUSIP (Committee on Uniform Security Identification Procedures).

Servicer Responsibilities and Reporting

A number of critical operational processes occur following the issuance of securities. These processes are necessary to manage an Enterprise's operational risk.

Monthly post-issuance processes include cash management, reporting, and remittance requirements. As previously discussed, Servicers are responsible for collecting P&I payments from the borrower. These payments are tracked, accounted for, and aggregated to a pool balance that corresponds to the MBS. Depending on the securitization structure, the Enterprise or the Master Servicer is responsible for the aggregation and reporting of security balance information. An Enterprise or Master Servicer is also responsible for the aggregation and subsequent distribution of mortgage P&I each month. The role of an Enterprise or Master Servicer is defined in the trust documents and described for investors in the prospectus. An Enterprise will typically monitor the processes that have been delegated to the Master Servicer, managing certain aspects of reporting and remitting.

With a pass-through MBS, at the end of each month, the Servicer will report the security balance to the Enterprise. The balances are aggregated and automated edit checks are performed to validate the reporting. It is not uncommon for the pool and security balance to be temporarily out of balance due to timing differences. This can occur because securities holders are paid on a scheduled basis and the underlying mortgage payments may be received before or after the scheduled payment date. For example, when a loan is delinquent, the Servicer may use its own funds to pay the delinquent P&I to the Enterprise and amortize the security to reflect the remittance. This action causes the pool and security balance to become temporarily out of balance. Adjustments to the end-of-month pool balance that occur after the cutoff date, such as returned checks to the borrower, may also create imbalances. It is crucial for the Servicer to perform a monthly pool-to-security balance reconciliation to understand and monitor these imbalances.

Early in the month, an Enterprise will report all security balances and other payment factors to various financial publishing companies (*e.g.*, Bloomberg). This information is publicly distributed to inform investors of the respective cash flows to be distributed later in the month.

It is important for an Enterprise or Master Servicer to monitor each Servicer's loan-level and security-level reporting each month. Enterprise or Master Servicer automated controls and processes should ensure this information aligns. An Enterprise process should exist to track and resolve discrepancies.

An Enterprise should also perform periodic audits to confirm that the information reported by a Servicer reconciles with the balances and activity in the custodial accounts. Custodial accounts are established and maintained by the Servicer to temporarily hold P&I, taxes, and insurance funds for securitized loans until they are either disbursed to an Enterprise or paid to a third party, as appropriate. Custodial accounts should be properly established and maintained with an eligible

depository institution in accordance with an Enterprise's servicing guide and trust agreements. Unless prohibited by law, custodial funds are available on demand or invested in eligible assets that mature prior to the remittance date.

Following receipt of P&I each month from the Servicer, an Enterprise will hold the funds with an eligible depository institution in a custodial account on behalf of a trust until the funds are disbursed to security holders. The custodial account requirements are defined in the trust agreement. An Enterprise must appropriately classify these funds and invest solely in eligible assets as defined in the trust agreement. Internal oversight should track, account for, and disburse funds that are held in trust by an Enterprise. Some processes can be automated given the scheduled nature of certain securitization cash flows to provide for greater efficiency and to reduce the chance for manual error.

Each month, the Servicer will also deposit the g-fee due to an Enterprise in an account that may be accessed by the Enterprise. The Servicer should have adequate accounting processes to account for these funds and ensure they are available for the Enterprise on the agreed upon date.

II. Regulatory Environment

The primary rules, regulations, and references of FHFA pertaining to single-family mortgage securitization activities are listed below. Other resources that may be helpful to examiners are also listed.

FHFA Rules and Regulations relevant to single-family mortgage securitization activities:

- FHFA Prudential Management and Operations Standards, Standard 6: Management of Asset and Investment Portfolio Growth; Appendix to 12 CFR Part 1236
- FHFA Prudential Management and Operations Standards, Standard 7: Investments and Acquisitions of Assets; Appendix to 12 CFR Part 1236
- FHFA Prudential Management and Operations Standards, Standard 8: Overall Risk Management Processes; Appendix to 12 CFR Part 1236

FHFA Examination and Guidance Resources relevant to single-family mortgage securitization activities:

FHFA Advisory Bulletins:

- AB-2014-07: Oversight of Single-Family Seller/Servicer Relationships (12/01/14)
- AB-2014-02: Operational Risk Management (2/18/14)
- AB-2013-01: Contingency Planning for High-Risk or High-Volume Counterparties (4/1/2013)
- AB-2012-03: FHFA Examination Rating System (12/19/2012)

- AB-2012-01: Categories for Examination Findings (4/02/2012)

Other Resources relevant to single-family mortgage securitization activities of Fannie Mae and Freddie Mac:

- Fannie Mae Single-Family Selling Guide. Available at: <https://www.fanniemae.com/content/guide/selling/index.html>
- Fannie Mae Single Family Servicing Guide. Available at: <https://www.fanniemae.com/content/guide/servicing/index.html>
- Fannie Mae Representations and Warranties Framework Summary. Available at: https://www.fanniemae.com/content/fact_sheet/representation-warranty-framework-summary.pdf
- Freddie Mac Single-family Seller/Servicer Guide. Available at: <http://www.freddiemac.com/singlefamily/guide/>
- Freddie Mac Mortgage Participation Certificates. Available at: http://www.freddiemac.com/mbs/docs/pcoc_042315.pdf
- Freddie Mac Mortgage Securities Products. Available at: <http://www.freddiemac.com/mbs/html/product/>
- Securities Industry and Financial Markets Association. Available at: <http://www.sifma.org/>

III. Examination Workprogram

The workprogram for the *Single-Family Mortgage Securitization Management* examination module is detailed below. Examiners are expected to develop procedures that satisfy the specific objectives of the examination. The procedures should support the examination work program and, when executed, provide sufficient evidence to support a conclusion regarding the objective. Examiners should not exclusively rely upon representations made by management or work performed by other internal or external parties to support conclusions regarding an examination objective.

Examination procedures should include testing designed to confirm that policies, processes, controls, or models operate as intended. This may be achieved through transaction testing or other testing methods. In limited circumstances, examiners may determine that testing cannot be reasonably conducted. Examples of such circumstances include cases where there is insufficient data, a program or product is too new to test, or when testing cannot be scaled to a manageable level. In these instances, examiners are expected to document in the examination procedures, with the examination manager's approval, the rationale for not conducting testing.

An examiner may leverage testing performed by internal and external parties, such as internal or external audit functions, if (i) the testing used to support the examiner's conclusions is clearly applicable in the scope of the examination activity, and (ii) the examiner has assessed the methodology and results of any testing that is used to support the examiner's conclusions.

NOTE: *Text in italics referenced in a workstep represents illustrative guidance that serves as suggestions for specific inquiry.*

1. Scope of Examination Work Performed

- 1) Review workpapers from the most recent examination when the scope included a review of the single-family mortgage securitization processes.
- 2) Assess the status or review the remediation progress based on management's commitments of any outstanding examination findings (*e.g.*, Matters Requiring Attention, Violations, or Recommendations) pertaining to the securitization of single-family loans.
- 3) Review internal audit or quality assurance reports for outstanding issues relating to the securitization of single-family loans.
- 4) Review any applicable portions of FHFA-issued Advisory Bulletins or other examination guidance (See II. Regulatory Environment).
- 5) Review meeting minutes of the board of directors and relevant board and management committees for any issues relating to the Enterprise's securitization of single-family loans, monitoring Seller/Servicer or counterparty performance, and maintaining adequate policies to control for securitization-related operational risks.
- 6) Review recent publicly-available information and material regarding single-family mortgage securitization, as well as publicly-produced articles of interest regarding the Enterprise's single-family mortgage securitization operations and activities. This information could include 10K and 10Q financial statements, the selling and servicing guide for each Enterprise, as well as whitepapers and articles produced by trade groups and the media.
- 7) Evaluate any significant changes in policy that have been implemented since the last examination or are being considered that may affect the Enterprise's risk profile related to the Enterprise's securitization of single-family loans, specifically, with respect to product type, monitoring high-risk or high-volume Seller/Servicer performance, and maintaining adequate policies to control for securitization-related operational risks.
- 8) Access the Division of Conservatorship Status Tracking and Reporting (DOC STAR) system to determine whether decisions by the Conservator (Conservatorship Directives) should impact the scope of the examination work.

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- 9) Review internal management reports, internal risk ratings, and scorecards that address securitization. Perform or review business process mapping, development of organizational charts, and diagramming of key controls.
 - 10) Collaborate with the model risk examiners if the examination scope includes an independent assessment of the model results produced by the Enterprise's pricing models or an assessment of model governance. See the Examination Manual module *Risk Modeling* for additional details.
 - 11) Summarize the work performed in the examination of the *Single-family Mortgage Securitization Management* module workprogram. To the extent there were modifications to the originally planned scope based on concerns identified during the examination, document those changes and the reasons for such changes.

2. Description of Risks

Examiners should develop an understanding of existing risks at the Enterprise from securitization operations. This information may be obtained through a review of current and historic Enterprise risk assessments or other risk-related reports.

- 1) Determine whether relevant securitization operational risks are identified in the Enterprise's risk assessments or other risk-related reports. Consider whether these reports capture operational risks that may result from inadequate or failed internal processes, people, and systems or external events, such as:
 - a. Issuance of securitization offerings and products that are inconsistent with corporate policies and the selling and servicing guide requirements;
 - b. Ineligible mortgages underlying securitization offerings;
 - c. System breakdowns and shortfalls in servicing (*e.g.*, late or incorrect investor remittances);
 - d. Weak seller performance relative to the requirements and processes for pooling and creating securities.
- 2) Determine whether the Enterprise's risk assessments or other risk-related reports quantify the level of securitization risks and identify trends.

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- 3) Determine adherence to trust agreements or other trust documents, adequate custodian adherence to the master custodial agreement, and alignment of g-fees with pool purchase agreements.

3. Risk Management

1) Risk Identification Process

- a. Based on work steps performed under **Description of Risks**, consider the adequacy of the Enterprise's risk identification process with respect to securitization activities. *(Has the Enterprise appropriately identified all areas of potential risk and established appropriate controls to mitigate the risks resulting from the securitization-related processes? Is risk exposure monitored on an ongoing basis? Does the Seller or Enterprise report on risk exposure to the appropriate business units within the Enterprise, the board of directors or designated board committee, and FHFA?)*
- b. Determine if the Enterprise has appropriately identified, monitored, and managed operational risk issues related to the single-family mortgage securitization processes. *(Do Enterprise personnel consider the extent to which securitization risks overlap, are interrelated, and span across multiple business lines within the organization? Are risk decisions evaluated both at an individual risk level as well as in terms of the aggregate impact? Do risk management personnel have access to the appropriate and relevant information pertinent to the securitization risks they are responsible for managing?)*

2) Organizational Structure

- a. Identify the key personnel and their primary duties, responsibilities, and technical expertise to determine if resources are effectively deployed to execute the Enterprise's single-family mortgage securitization business strategies, including those related to various stages of the securitization transaction (e.g., pool formation or purchase, delivery, issuance, and settlement). *(Do managers possess the experience, required skills, and acumen for their securitization-related responsibilities?)*
- b. Evaluate the staffing and skill level, segregation of duties, and cross-training of personnel to determine if resources are sufficient to execute the Enterprise's securitization business strategies (including the processes involved in forming the underlying mortgage pools, guaranteeing the timely payment of P&I, creating the

MBS, and selling the securities formed). *(Do staff members have appropriate training and experience to carry out their responsibilities within the Enterprise? What steps has the Enterprise taken to address identified deficiencies in staff expertise?)*

- c. Determine the adequacy of coordination among functions, such as the sales desk, independent pricing validation, information technology, treasury and cash management, and accounting to determine if securitization (including the processes involved in forming the underlying mortgage pools, issuing the MBS, and selling the securities) procedures are coordinated in an efficient and effective manner. *(Do different departments within the Enterprise coordinate efforts to monitor limits on volume or credit risk exposure with respect to various MBS products (e.g., fixed versus adjustable-rate mortgage loans) and types (e.g., REMICs versus pass-through securities?)*
- d. Evaluate management committees and review their delegated authorities for reasonableness. *(Are they effective in identifying and reporting the level and trends of risk in the securitization processes (including pool formation or purchase, delivery, issuance, and settlement)? Are there specific instances of risk (or potential risk) that were not identified by the Enterprise's personnel or not considered by management? If so, has management taken appropriate action to prevent the recurrence of such events in the future?)*

3) Policy and Procedure Development

- a. Evaluate the Enterprise's practices for maintaining securitization policies and processes (including pool formation or purchase, delivery, issuance, and settlement). *(Have there been instances where these policies or processes have not been consistently applied to all Sellers? Have Enterprise personnel identified such instances and taken appropriate corrective action? If the inconsistent application is related to approved variances, did the Enterprise perform a risk analysis prior to approving the variance or waiver and identify and document an appropriate reason for granting the variance?)*
- b. Determine whether or not the Enterprise has appropriate policies and procedures for its securitization pricing. *(Is pricing for g-fees, loan-level price adjustments, and buy-up and buy-down multiples supported by these policies and procedures?)*
- c. Assess whether or not the Enterprise has appropriately established policies and processes for the issuance of securities. *(Are loan schedules reviewed and validated? Are edits reviewed and cleared according to policy guidelines? Are*

securities issued within the timeframes documented in policies and procedures?)

- d. Review any new securitization initiatives or products offered by the Enterprise. *(What new risks are presented to the Enterprise as a result of these new securitization initiatives? Have appropriate policy and processes been established to address these additional risks? Have any required Division of Conservatorship decisions been obtained?)*

4) Risk Metrics

- a. Evaluate any risk metrics established related to securitization. *(Are metrics appropriate, considering significant aspects of potential risk to the Enterprise? Do the metrics consider risk by securities product, loan type, geography, and property type? Do these metrics consider potential operational risks?)*
- b. Determine if risk metrics are consistent with the risk appetite of the Enterprise and sound risk management practices. *(Do risk parameters established for single-family mortgage securitization activities result in risk exposure beyond the Enterprise's overall risk appetite?)*
- c. Determine the adequacy of management's efforts to oversee adherence with risk metrics. *(Are breaches reported promptly to management and to the board or board committee, as appropriate?)*

5) Reporting

- a. Review regularly produced reports related to the Enterprise single-family mortgage securitization activities and performance. *(Do regularly produced reports include an evaluation of the Enterprise's adherence to established risk metrics? Are the oversight reports by Seller/Servicers used appropriately to evaluate potential risk?)*
- b. Consider whether the Enterprise is appropriately reporting monthly securitization data to investors and securities custodians. *(Is issuance data for new securities captured accurately and reported timely to investors and third parties involved in the issuance process? Are monthly security reporting requirements, including security balances, payment factors (percent of original pool balance outstanding), and remittance information captured accurately and reported timely to investors and other third parties involved in the monthly reporting process?)*

6) Internal/External Audit

- a. For internal audits completed in the single-family mortgage securitization area since the previous examination, consult with the Office of the Chief Accountant (OCA) regarding any findings about the adequacy of the scope and testing performed by internal audit.
- b. Coordinate with OCA to determine whether or not external audit performed work related to single-family mortgage securitization processes and whether or not OCA performed an evaluation of the adequacy of the scope and testing completed by external audit.

7) Information Technology

- a. Identify and assess the automated and manual systems and applicable controls for processing and supporting securitization transactions (*e.g.*, pool formation or purchase, delivery, issuance, and settlement). (*Are authorities and responsibilities clearly defined? Are delegations current? Do information systems provide the information needed to make informed and timely decisions? Are authorized change processes followed as data is acquired from sub-systems?*)
- b. Determine if the Enterprise has developed and tested a business continuity plan for the single-family mortgage securitization-related areas. (*Are systems specific to single-family mortgage securitizations considered in the business continuity plan (e.g., pricing, trading and settlement, and electronic data delivery)? Does the Enterprise have appropriate contingency procedures to ensure the single-family mortgage securitization-related processes would continue to operate despite unexpected interruptions?*)
- c. Determine if the Enterprise has developed a quality assurance framework. (*Has the Enterprise's management evaluated the accuracy of information received from the Seller for Seller-initiated securitizations? Have appropriate steps been taken to address concerns identified by management? If the pricing data for the pool is modified by Enterprise staff after delivery by the Seller, are adjustments appropriate and documented?*)

8) Compliance

- a. Evaluate if the Enterprise has appropriately complied with pertinent regulations and adhered to regulatory guidance. (*What was the underlying cause for any violation or non-adherence? Has the Enterprise strengthened internal controls to prevent*

recurrence?)

- b. Determine whether the efforts of the board, or a board committee, and management are appropriate to confirm compliance with policies and procedures related to the Enterprise's single-family mortgage securitization processes. *(Have the board and management taken appropriate steps to address instances of non-compliance? Are appropriate processes in place to confirm compliance with trust documents?)*
- c. Determine conformity with Standard 6 (Management of Asset and Investment Portfolio Growth), Standard 7 (Investments and Acquisitions of Assets), and Standard 8 (Overall Risk Management Processes) of the Appendix to 12 CFR Part 1236 Prudential Management and Operations Standards. *(Has the mortgage securitization portfolio and pipeline experienced significant change in composition? What potential risks result from such change in the securitization pipeline? Have the board and management appropriately identified these risks and taken action to mitigate the risks to the Enterprise?)*

9) Pool Formation and Securitization

- a. Review volume limits, to include product or risk thresholds, established for the Enterprise's securitization portfolios. *(Does the Enterprise have adequate policies and procedures for imposing volume limits on the amount of MBS executions and large structured securities transactions? Are volume limits based on certain risk attributes? Does the Enterprise consistently monitor volume limits it has imposed?)*
- b. Review accounting reports from a monthly securitization payment cycle to ensure that the Enterprise's payment management activities align with its procedures and the terms of the trust agreement. *(Did the Enterprise appropriately identify and track P&I funds received from the Servicer from the time of receipt until the time of disbursement later in the month? Were these funds accounted for properly and held in a custodial account established for trust funds? Were the funds held with an eligible depository and available on demand or invested in eligible investments as defined in the trust agreement? Was the disbursement to security holders and withdrawal of Enterprise funds completed timely and accurately?)*

10) Pricing

- a. Review the results of the most recent test(s) conducted on the Enterprise's single-family mortgage securitization pricing model. *(Did the Enterprise appropriately test its pricing processes for reasonableness and accuracy? Does the pricing*

model for securities rely on data analytics? Do the data analytics appropriately support the final pricing decisions? Is the data available in a timely manner and validated appropriately?)

11) Delivery and Document Custody

- a. Review the Enterprise's single-family mortgage securitization documentation and data submission requirements and standards. *(Do these standards include transaction criteria and eligibility requirements, delivery timelines, and limits on amounts executed? Does the Enterprise consistently monitor adherence to the standards it has imposed?)*
- b. Review the results of an Enterprise's audit of a Seller that functions as its own document custodian. *(Did the Enterprise perform the review to determine compliance with all document custody functions, including adequate separation and trust powers? Did the document custodian act independently from the Seller's pooling and secondary functions?)*

4. Testing

- 1) Review a sample of issued securities and determine if the Enterprise is monitoring the Servicer's cash management processes and activities for securitization funds. *(Does the Enterprise periodically review and validate that the Servicer's mortgage accounting records reconcile to custodial account balances and activity for securitization funds? Does the Enterprise ensure this information aligns with the Servicer's loan-level and pool-level reporting each month? Does the Enterprise review and determine that custodial funds for securitizations are held with an eligible depository and meet eligible investment requirements? Does the Enterprise monitor monthly remittances from the Servicer for P&I funds to ensure the amounts are accurate and issues (e.g., account overdrafts) are addressed in a timely manner?)*
- 2) Review a sample of loans as part of a recent single-family mortgage securitization transaction to determine if securitization activities, both as part of the issuance and as part of post-issuance functions, were performed consistent with the provisions of the trust documentation and the selling and servicing guides. *(Does the Enterprise ensure that ownership of the underlying mortgage assets are properly transferred to the MBS trust? Are P&I funds advanced to the trust in those situations where the borrower is delinquent? Is the transfer of P&I transferred to the trust appropriately and in a timely manner?)*

- 3) Review a sample of recent single-family mortgage securitization transactions to determine if the securities issued adhered to the Enterprise's corporate policies and selling and servicing guide securitization requirements. *(Was the transaction consistent with provisions outlined in the trust agreement and other applicable documents, the pool schedule, and other relevant transaction documents and parameters? Did the securitization adhere to required pricing practices?)*
- 4) Select a sample of recent single-family mortgage securitization transactions and determine whether the underlying loans met the Enterprise's eligibility requirements. *(Did the Enterprise perform a thorough product and eligibility analysis before allowing the transaction to proceed? Were there any variances from eligibility requirements and, if so, were these properly approved and accounted for in the Enterprise's securitization policies and procedures and in agreement with the Seller's master agreement?)*
- 5) Review a sample of recently-issued securities and determine if the monthly reporting process was completed accurately and within required timeframes. *(Were the security balances captured by the Enterprise from the Servicer, prior to the deadline prescribed by the Enterprise in the respective servicing guide? Was the security balance validated for accuracy? Were the security balance and payment factors reported externally to the designated publishing entities timely? Were Enterprise payment distributions to investors remitted in accordance with published timeframes? Were g-fees remitted from the Servicer accurately and timely?)*
- 6) Review a sample of recent single-family mortgage securitizations and compare to the Enterprise's pricing model(s) as well as to the Seller's master agreement. *(Are the g-fees in the pooling schedule reasonably consistent with internal pricing models and the Seller's master agreement? Do the buy-up and buy-down multiples used for the securitization agree with the Enterprise's tables/grids? Do the loan-level adjustments reconcile to the Enterprise's published list of loan-level price adjustments and any other pricing terms in the Seller's master agreement?)*

5. Conclusions

- 1) Summarize conclusions for all examination work performed, including work performed by other FHFA staff as it relates to the Enterprise's single-family mortgage securitization activities. Develop a memorandum describing the risks to the Enterprise resulting from securitization and the Enterprise's management of the related securitization risks. The memorandum describes the basis of conclusions reached and summarizes the analysis completed. Within the memorandum, discuss the types of risk

the Enterprise is exposed to (*e.g.*, market, credit, operational); the level of risk exposure; the direction of risk (stable, decreasing, increasing); and the quality of securitization management practices (strong, adequate, weak). A memorandum is prepared irrespective of whether the examiner's assessment is positive or negative. Conclude on the responsiveness to previous examination findings

- 2) Based on examination work performed, develop conclusions communicating any concerns identified during the examination. These should identify the most significant risks to the Enterprise and the potential effect to the Enterprise resulting from the concerns identified. Significant findings should describe a specific end result that will resolve the issue. Communicate preliminary conclusions to the Examiner-in-Charge. Discuss any concerns with Enterprise personnel to ensure the conclusions and analyses are free of factual errors.
- 3) Develop a list of follow-up items to evaluate during the next examination. In addition to findings (if any), include concerns noted during the examination that do not rise to the level of a finding. Potential concerns include issues the Enterprise is in the process of addressing but require follow-up work to ensure actions are completed appropriately. In addition, potential concerns might include anticipated changes to the Enterprise's practices or anticipated external changes that could affect the Enterprise's future oversight of its securitization practices.