The following comment is provided in response to the Federal Housing Finance Agency (FHFA) proposed rule (Number: RIN-2590-AB09) that would implement four liquidity and funding requirements for Fannie Mae and Freddie Mac (the Enterprises).

My understanding of proposed rule: FHFA believes that a robust Government Sponsored Entity (GSE) liquidity framework will improve market confidence in the GSE's ability to fulfill their mission, providing countercyclical support to housing finance markets in times of stress while also minimizing the likelihood that they will need further taxpayer support. FHFA envisions that an appropriate framework would incent the GSEs to build their liquidity portfolios in good times so that it is available to be deployed as necessary in times of stress. Such actions are a necessary requirement for the GSEs to exit conservatorship and return to private ownership. There are some areas, described below, where public comments should allow FHFA to refine the proposed rule so that it best serves the intended purpose.

In 2008, the Basel Committee published Principles for Sound Liquidity Risk Management and Supervision (often shortened to Sound Principles). The publication was in response to the rapid change in liquidity that occurred in mid-2007, the results of which put severe stress on the banking system and which necessitated the central bank to intervene in money markets and support individual financial institutions. The Sound Principles emphasize the need for diversification in funding sources, the need for contingent funding plans, design and use of severe stress tests, and public disclosure to promote market discipline. FHFA's proposed rule follows in the spirit of these Sound Principles.

In particular, FHFA's proposed rules will increase the likelihood that the GSEs function in a manner that reflects their importance to the financial system. Indeed, the GSEs serve as a crucial link in the financial intermediary chain, directing the vast flow of payments to Agency Mortgage-Backed Security (MBS) holders. Any disruption in the ability to move cash in a timely manner could have systemic ripple effects, imperiling both private wealth and risking the need for future government or central bank support at taxpayer expense. Liquidity Risk Standards are prudent, and Basel III is a logical starting point.

While the aims of the proposed rule are laudatory, there are a few areas that may require further consideration to ensure that their purpose is carried out effectively.

First, the proposed rule states: "To determine decreased cash inflows and increased cash outflows due to higher numbers of delinquent borrowers and to higher loan buy-out from MBS trusts, the proposed rule would require the GSEs to formulate their projections assuming stressed conditions corresponding to the more severe of FHFA's Dodd-Frank Act Stress Test (DFAST) assumptions or other supervisory stress assumptions as ordered by FHFA."

For background, DFAST GSE results have been historically published by FHFA on the website. The GSEs started such a stress testing regime a couple years after the banks started their own. Linking to DFAST scenarios makes sense conceptually; regulatory stress testing and prudent risk management should be mutually reinforcing. However, without further clarification, the stress scenarios may not be directly applicable. DFAST liquidity risk is largely handled through a one-time Global Market Shock at the beginning of the stress test simulation, and this stress is separate and distinct from economic

assumptions used in the severely adverse supervisory stress assumptions. The latter are used for projection of the stressed results of Pre-Provision Net Revenue (PPNR). The liquidity stress intended in the FHFA rule measure the impact of both idiosyncratic and market-wide shocks that would result in the GSEs inability to issue new debt; in PPNR projections for DFAST, however, new debt is assumed to be issued. This is problematic because, as the design of the test is meant to stress the inability to issue new debt, that assumption is contradicted directly by the nature of how it is used in DFAST. Further, in supervisory scenarios where house prices deteriorate and credit spreads widen, there may be an assumed flight to quality which make GSE debt cheaper rather than more expensive. These stress assumptions serve a different purpose in DFAST because liquidity risk is largely covered by Global Market Shock (GMS). In sum, FHFA should provide additional guidance to clarify this requirement and further the purpose of making DFAST and Liquidity Risk Management truly integrated.

Second, the proposed rule attempts to address rollover risk. Specifically, the rule attempts to address a situation where a financial institution uses short-term funding for longer-term assets. The rollover risk is that short-term funding becomes costly or unavailable, and thus any plan to rollover expiring short-term debt to new short-term debt would become expensive (if not impossible). If this were to happen, the financial institution would need to sell assets. The situation would be further complicated if the market suffered a scarcity of liquid assets, forcing the GSEs to sell less-liquid assets into distressed markets; such sales would be at distressed price and could potentially (and quickly) erode the GSE's capital positions.

To encourage the GSEs to manage rollover risk, we propose some questions to consider further when setting these regulations:

QUESTION: Could oversight over the risk of selling less-liquid assets be more directly addressed through setting parameters on GSE assets and/or capital disincentives to discourage the purchase of such less-liquid assets? Less-liquid assets in the crisis were largely composed of Private Label Securities (PLS). In retrospect, PLS was not an asset class fully consistent with the mission of the GSEs. While the GSEs regularly buy their own securities to increase liquidity and keep rates low, buying PLS was for purposes of growing the balance sheet and reaching for yield. In times of low credit loss, and with proper Interest Rate Risk Management (IRRM), the GSEs could effectively lock-in a net interest margin. Thus, there was an opportunity to increase profit by adding to the balance sheet while increasing the average asset yield. Since Conservatorship, there are now caps on the GSE portfolios. So, this should be less of an issue.

QUESTION: Should Seller Servicer requirements also adopt service liquidity standards? Another type of less-liquid assets come from the purchases of non-performing loans (NPL) out of securities. This is done to help security performance. However, this risk can also perhaps be more directly addressed by other means. For instance, purchases of NPLs might be only allowed certain liquidity ratios were met. In addition, the systemic risk related to delinquent loans has been shown in the pandemic to be more acute with servicers, especially non-bank servicers, who rely on GSE advances. In fact, both the GSEs and Ginnie Mae added programs to help servicers avoid illiquidity due to the rapid increase in forbearance rates. Adopting servicer liquidity standards could be part of new Seller Servicer requirements and could lessen the burden on the GSEs.

QUESTION: By locking in longer-term funding, guarantee-fees (g-fees) may be forced to rise as well; could other risk mitigation techniques be more effective that don't put pressure on g-fees? To expand on the question, a reason to be careful with disincentivizing short-term funding in lieu of longer-term funding is that it can increase the cost of capital. Short-term funding extended with derivatives is an efficient funding strategy that often outperforms long-term funding. New hedge accounting standards

have made it even more preferential for the GSEs to use derivatives, as accounting volatility is no longer an unavoidable feature of funding with derivatives. So, if the GSEs are forced to fund long to meet liquidity standards, the cost of capital could increase which would put upward pressure on guaranteefees (g-fees).

To elaborate on why this is, we present an illustration of the impact on g-fees from disincentivizing short-term funding. First, the decomposition of the cost associated with g-fees is a single digit basis points of float costs, single digit expected losses, where the predominant cost is capital costs. Capital costs can be further decomposed into capital dollars and cost of capital. In shorthand, one can think of capital as unexpected loss, which is equal to stress loss less expected loss.

Equation 1:

Break - even g - fees = Capital Cost + Expected Loss + Float Costs,

Equation 2:

Capital Cost = Capital × Cost of Capital

Equation 3:

Annualized Capital = (Unexpected Loss – Expected Loss) ÷ Average Life

Using the Basel Asymptotic Single Risk Factor (ASRF) formula, a Probability of Default of 1 percent, a Loss Given Default (LGD) of 40 percent, the standard Asset Valuation Correlation (AVC) of 15 percent, and a 99.9 percent tail, results in capital or unexpected loss of 425 basis points. Assuming an average life of 5 years, we see 8 bps of annual cost for g-fees associated with expected loss. Using a cost of capital of 10 percent, we see 42.5 bps of capital cost. If these were the only two costs, the break-even g-fee would be 50.5 bps. Now, if you cut the cost of capital to 5 percent, the new capital cost is 21.25—and the new break-even g-fee drops to 29.25 bps.

Illustrative capital calculation using Basel ASRF:

-PD: 1 % -LGD: 40% -EL: 0.40% -AVC: 15% -UL: 4.25%

Assuming 10 percent cost of capital: Break-even g-fee = 42.5 + 8 = 50.5 bps