

California Housing Finance Agency

MASTER HEDGE POLICY

I. Purpose

The purpose of this Master Hedge Policy (the “Policy”) is to establish guidelines for the use and management of various derivative financial products (“Hedges”) in conjunction with the California Housing Finance Agency’s (“CalHFA” or the “Agency”) management of its loan commitment pipeline.

The Policy and its contemplated Hedges are intended to cover only future hedging activities of the Agency’s loan commitments. This policy is not intended to encompass the Agency’s existing portfolio of interest rate swaps. This policy is not intended to completely eliminate the Agency’s interest rate risk. For example, the Agency will continue to bear some interest rate risk in situations where the closing of loans and/or delivery of mortgage-backed securities precede the issuance of bonds.

The use of Hedges allows CalHFA to mitigate the risk of its exposure to movements in interest rates as part of managing the Agency’s single family and multifamily loan commitment pipelines. The short-term goal of the Policy is to ensure a pre-defined target profit on loan originations. The long-term goal of the Policy is to generate a stable profit margin range for the Agency’s lending activities.

The Policy sets forth a framework for the utilization of Hedges with particular emphasis on their content and execution. As a framework, the intent of the Policy is to set forth guidance while maintaining the flexibility needed to effectively use and manage Hedges under changing market conditions.

II. Scope

The Policy describes the circumstances where Hedges may be used, the methods and guidelines to be employed when Hedges are used and the management and reporting responsibilities of staff and others necessary in carrying out the Policy.

III. Legal Authority

A. Authority

CalHFA may enter into Hedges in order to reduce the amount of interest rate risk. CalHFA has statutory authority to enter into Hedge.

B. Approval

CalHFA may enter into Hedges in connection with management of the Agency's loan commitments. The Agency's Executive Director, Director of Financing and Financing Risk Manager are authorized to enter into Hedges consistent with the Agency's normal management process.

The Policy shall govern CalHFA's use and management of all Hedges. While adherence to the Policy is required in applicable circumstances, the Agency recognizes that changes in the capital markets, Agency programs, and other unforeseen circumstances may from time to time produce situations that are not covered by the Policy and will require modifications or exceptions to achieve policy goals. In these cases, management flexibility is appropriate, provided the Board is informed of any significant departures from previous practice.

The Policy shall be reviewed and updated periodically and presented to the Board for approval. The Director of Financing is the designated administrator of the Policy, and shall have the day-to-day responsibility and authority for structuring, implementing, and managing Hedges.

CalHFA shall be authorized to enter into Hedges only with qualified Hedge counterparties, as described in Section VII below. The Director of Financing shall have the authority to select the counterparties, so long as the criteria set forth in the Policy are met.

The Executive Director, the Director of Financing or the Financing Risk Manager may delegate individuals to authorize the execution of trades on CalHFA's behalf. Delegated individuals will have approval to authorize trades below certain trade limitations defined in the Hedging Procedures document. Authorization by the Executive Director, the Director of Financing or the Financing Risk Manager will be required when these trade limitations are exceeded. Trade limitations are set on:

1. The notional amount of any one specific trade;
2. The aggregate notional threshold amount for any one specific business day.

Initially, the trade limitations will be relatively small and, over time, will be increased as the program volume increases.

IV. Use of Hedges

A. Appropriate Usage

CalHFA will use Hedges solely to mitigate the interest risk associated with running a lending program. As part of the hedging program, CalHFA may amend, terminate or enter into offsetting transactions in order to manage market, counterparty and credit risk associated with its Hedges.

B. Prohibited Strategies

CalHFA shall not enter into Hedges where one or more of the following conditions exist:

1. The Hedge serves a purely speculative purpose, such as entering into a hedge for the sole purpose of trading gains;
3. There is insufficient pricing data available to allow the Agency and its advisors to adequately value the hedge instrument.

C. Procedure

Recommendations to enter into Hedges will be made based on CalHFA's analysis of the loan commitment pipeline. Recommendations will consider the following elements:

1. The appropriateness of the transaction for the Agency based on the balance of risks and rewards presented by the proposed transaction, including a description of the transactional structure, a description of the risks it presents, and risk mitigation measures;
2. California statutes, Agency resolutions, and indenture and contractual requirements (including those contained in credit agreements), as well as any federal tax considerations;
3. Potential effects that the transaction may have on the credit ratings assigned by the rating agencies to any Agency obligations;
4. The potential impact of the transaction on any areas where the Agency's capacity is limited, now or in the future, including the use of variable-rate debt, bank liquidity facilities or letters of credit, and bond insurance;
5. The ability of the Agency to handle any administrative burden that may be imposed by the transaction, including accounting and financial reporting requirements; and,

6. Other implications of the proposed transaction as warranted.

V. Permitted Hedges

A. Permitted Hedges for Single Family

1. All permitted Hedges for single family are intended to be cash settled and are not contemplated to remain in place over a long-term period (e.g., swaps associated with long-dated variable-rate bonds). Hedges will be used to protect against adverse movements in interest rates that may occur over short-term periods. Such period may be as long as six months.
2. TBA (To Be Announced)

A TBA would be used to hedge interest rates on single family loan commitments. A TBA is a forward mortgage-backed securities trade. Pass-through securities issued by Freddie Mac, Fannie Mae and Ginnie Mae trade in the TBA market. The term TBA is derived from the fact that the actual mortgage-backed security that will be delivered to fulfill a TBA trade is not designated at the time the trade is made. The securities are "to be announced" 48 hours prior to the established trade settlement date. A TBA used to hedge single family commitments would be in effect for less than 90 days. The nominal term of the underlying mortgage-backed security (MBS) for a TBA trade for single family commitments shall not exceed 30 years.

On the TBA settlement date, if the TBA is "in-the-money," CalHFA will receive a payment, but if the TBA is "out-of-the-money," CalHFA will make a payment. Because CalHFA may owe the counterparty a payment, the counterparty bears additional credit risk to the Agency. That is, these transactions could result in additional collateral posting requirements to the counterparties.

B. Permitted Hedges for Multifamily

1. All permitted Hedges for multifamily are intended to be cash settled and are not contemplated to remain in place over a long-term period (e.g., swaps associated with long-dated variable-rate bonds). Hedges will be used to protect against adverse movements in interest rates that may occur over short-term periods. Such period may be as long as 36 months.
2. Forward Rate Option

Forward rate options would be used to hedge multifamily permanent-only loan commitments. A forward rate option is an option on a forward swap

whereby the issuer has the right, but not the obligation, to enter into a cash-settled swap similar to that described in the rate lock description above. The rate on the swap is decided when the option is purchased. The rate is typically set at a level above the current market rate and serves as insurance against rates rising above the designated rate. A forward rate option used to hedge multifamily commitments would have a forward starting date less than 36 months. The nominal term of the underlying swap shall not exceed 40 years. An upfront payment by CalHFA is required with a forward rate option, but upon termination, CalHFA would not face the risk of having to make a payment. The hedge can only result in CalHFA receiving a payment or, at worst, expiring worthless.

On the forward starting date (the “Exercise Date”), if the option is “in-the-money,” CalHFA will exercise the option and receive a payment, but if the option is “out-of-the-money,” CalHFA will not exercise the option and allow the option to expire. Because CalHFA cannot owe the counterparty any payment on the Exercise Date, the counterparty does not bear any additional credit risk to CalHFA. That is, these transactions will not result in additional collateral posting requirements by CalHFA to the counterparties.

VI. Hedging Limitations, Exposure Limitations and Costs

A. Hedging Limitations: Single Family Reservation Pipeline

The Reservation Pipeline is defined as loans previously purchased plus those loans for which a reservation has been received and is in an “active” (not cancelled, denied or other inactive status) status and not yet sold. The Reservation Pipeline must be hedged at a minimum of 80% and a maximum of 120% of the loans expected to be purchased after adjusting for fallout, and no more than 100% of the total Reservation Pipeline.

B. Exposure Limitations: Single Family Hedging Activities

1. Limitations on Hedging Losses

The single family hedging program shall not reduce the predefined target profit on lending activities. CalHFA has determined that savings from the in-house hedging program will be between 0.25% and 0.75% of the hedged Reservation Pipeline. For management purposes, we expect the savings will be 0.50% of the hedged Reservation Pipeline.

For management purposes, CalHFA will track the cumulative savings resulting from the anticipated .50% savings of running the hedging program in-house over time, and after the initial 6-month program ramp up period, the net realized financial losses, if any, shall not exceed these

cumulative savings. In the event that the realized losses do exceed the cumulative savings, CalHFA shall initiate the process of discontinuing the in-house hedging program and outsource the hedging function. The process of discontinuing the in-house hedging program may require the Agency to continue to enter into hedges for new loan commitments during the transition to outsource the program, which will be completed as soon as possible.

2. Limitations on mark-to-market exposure

CalHFA shall initiate the process of discontinuing the in-house hedging program and outsource the hedging function if the mark-to-market on the outstanding hedges for single family loan commitments exceeds \$10 million (only when an amount is due and payable by the Agency if the hedges were to be terminated immediately). The process of discontinuing the in-house hedging program may require the Agency to continue to enter into hedges for new single family loan commitments during the transition to outsource the program, which will be completed as soon as possible.

C. Hedging Costs: Multifamily Hedging Activities

An upfront payment by CalHFA is required with the Forward Rate Option. CalHFA shall not contribute more than 1.50% of the expected loan balance to purchase the hedge. It is expected that CalHFA will collect a rate lock fee from the borrower which will be applied to purchasing the hedge.

D. Exposure Limitations: Multifamily Hedging Activities

1. Limitations on Negative Mark-to-Market Exposure

CalHFA shall discontinue the in-house hedging program if the mark-to-market on the outstanding hedges for multifamily loan commitments is greater than \$5 million (only when an amount is due and payable by the Agency if the hedges were to be terminated immediately).

VII. Counterparties

Hedge products may create, for the Agency, exposure to the creditworthiness of financial institutions (when the mark-to-market of the Hedges are “in-the-money” to the Agency; i.e., when CalHFA is due a payment upon immediate termination) that serve as the Agency’s counterparties on Hedge transactions. In general, the Agency will utilize the following standards in selecting counterparties:

A. Credit Standards

Standards of creditworthiness, as measured by credit ratings, will determine eligible counterparties. Differing standards may be employed depending on the term, size and interest-rate sensitivity of a transaction, type of counterparty, and potential for impact on the Agency's or a specific enterprise-fund's credit rating. As a general rule, the Agency will enter into transactions only with counterparties whose obligations are rated in the A category or better from at least two nationally-recognized rating agencies. In cases where the counterparty's obligations are rated based on a guarantee or specialized structure to achieve the required credit rating, the Agency shall thoroughly investigate the nature and legal structure of the guarantee or structure in order to determine that it meets the Agency's requirements in full.

B. Diversification of Exposure

The Agency will seek to avoid excessive exposure to a specific counterparty by diversifying its counterparties and monitoring the potential termination value of each counterparty both in absolute dollar values and in percentages of the entire portfolio.

C. Termination

When a counterparty fails to maintain its ratings above a certain specified threshold, the Agency may exercise a right to terminate the transaction prior to its scheduled termination date. The Agency will seek to require, whenever possible, that terminations triggered by a counterparty credit downgrade will occur in financial terms that are favorable to the Agency and which would allow the Agency to go back into the market to replace the downgraded party with another suitable counterparty at no out-of-pocket cost to the Agency.

VIII. Internal Management of Obligations and Exposure

Achieving the Agency's goals to meet state housing needs while protecting interest rates committed to borrowers requires the Agency to address several risks. The provisions of the Policy are designed to create a framework for evaluating and addressing these risks with hedging and ongoing management. The following paragraphs describe pertinent risks and the means through which the Agency may mitigate them.

Counterparty Risk is the risk that a counterparty will fail to make required payments. In order to limit the Agency's counterparty risk, the Agency will seek to avoid excessive concentration of exposure to a single counterparty or guarantor by diversifying its counterparty exposure over time. Exposure to any counterparty will be measured based on the termination value of all Hedge contracts entered into with the counterparty. In addition, the Agency will determine and monitor the Maximum Potential Exposure, which is a reasonable worst-case value of a mark-

to-market calculation of the cost of terminating the Hedge contracts, on a quarterly basis. Aggregate Hedge termination value for each counterparty should take into account netting of offsetting transactions (i.e., fixed-to-floating vs. floating-to-fixed). As a matter of general principle, the Agency may require counterparties to provide regular mark-to-market valuations of Hedges they have entered into with the Agency, and may also seek independent valuations from third party professionals.

Hedge Mismatch Risk is the risk that the settlement payment on the hedge fails to offset the change in the actual cost of the deferred debt financing. This risk arises because debt instruments are issuer and market-specific while the market for hedges is generally limited to generic market indexes whose price movement may vary from that of any individual instrument.

Interest Rate Risk is the risk that unhedged rates committed to through the single family loan reservation process or the multifamily loan commitment process may rise, producing either losses in income or absolute losses. The Agency may enter into Hedges to mitigate this interest rate risk. The Agency may also choose to incur an acceptable level of interest rate exposure. In defining the desired amount of rate exposure, the Agency will consider its ability to withstand losses in a rising rate environment.

Market Risk is the risk that under a termination event, the Agency will not be able to obtain a replacement Hedge. Market risk can be divided into general market risk and market access risk. General market risk may occur because the Hedge market has suffered a loss of liquidity or collapsed, making it difficult or impossible to obtain a replacement hedge. Market access risk is the risk that following an early termination, the Agency will not be able to obtain a replacement Hedge because its credit has deteriorated or it is shut out of the market for other Agency-specific reasons. To mitigate this risk, the Agency will carefully monitor its credit and act to maintain its rating.

Non-Delivery Risk/Fallout Risk is the risk that the committed loans are not delivered thus the Hedges effectively become an investment, which exposes the Agency to the mark-to-market of the Hedges. Typically, fallout moves in an inverse relationship to mortgage rates, that is, if mortgage rates decrease after rate lock then fallout will increase but if mortgage rates increase after rate lock then fallout will decrease.

Size Risk is the risk that the amount of loan commitments that deliver is significantly above or below the anticipated size, leaving the loan commitment over-hedged or under-hedged, and the issuer is left with a potentially costly settlement upon termination.

Termination Risk is the risk that due to some event or exercise of a right the Hedge may terminate or be terminated prior to its scheduled expiration, which

could result in a termination payment becoming payable by the Agency. To mitigate this risk, the Agency will enter Hedges with appropriate termination provisions. If a Hedge terminates, the Agency must decide whether to replace the Hedge. The Agency would evaluate the nature and scope of its interest rate risk without the terminated Hedges and its ability to make any termination payments without entering a replacement. Since any termination payment owed by the Agency will generally be funded by payment from the replacement counterparty, the Agency considers its exposure to be market risk (as defined above) and the aggregate value of the bid-ask spread or the difference between the payments it would receive and make on each Hedge.

Timing Risk is the risk that loan extensions or early closings leave the loan commitment under-hedged or over-hedged and the issuer is left with a potentially costly settlement upon termination.

As a general rule, the Agency will manage the risks of its Hedge exposure on an enterprise-wide or “macro” basis, and will evaluate individual transactions within the larger context of their impact across the relevant enterprise. In each case, the degree of risk should be evaluated in comparison with degree of benefit provided.

IX. Disclosures and Financial Reporting Requirements

The Agency will track the financial implications of the Hedges it enters into, taking steps to ensure that there is full and complete monitoring and disclosure of all Hedges to the Board, to rating agencies, and in disclosure documents. The disclosure shall include a clear summary of the special risks involved with Hedges and any potential exposure to interest rate volatility or unusually large and rapid changes in market value. With respect to its financial statements, the Agency will adhere to the guidelines for the financial reporting of Hedges, as set forth by the Government Accounting Standards Board.

Internal disclosures: A regular report will be prepared for the Board including:

- A. A summary of outstanding Hedges and their counterparties;
- B. The mark-to-market value (termination value) of its Hedges, as measured by the economic cost or benefit of terminating outstanding contracts as of a designated valuation date;
- C. The mark-to-market value (termination value) that the Agency has to each specific counterparty, as measured by aggregate mark-to-market value, netted for offsetting transactions;
- D. The Maximum Potential Exposure that the Agency has to each specific counterparty, as measured by aggregate mark-to-market value, netted for offsetting transactions;

- E. The credit ratings of each counterparty (or guarantor, if applicable) and any changes in the credit rating since the last reporting period; and
- F. Any collateral posting as a result of Hedge agreement requirements.

X. Selecting and Procuring Interest Rate Hedges

The Agency will choose counterparties for entering into Hedge contracts on either a negotiated or competitive basis. As a general rule, a competitive selection process will be used if the product is relatively standard, if it can be broken down into standard components, if two or more providers have proposed a similar product to the Agency, or if competition will not create market pricing effects that would be detrimental to the Agency's interests. Negotiated procurement may be used for original or proprietary products, for original ideas of applying a specified product to an Agency need, to avoid market pricing effects that would be detrimental to the Agency's interests, or on a discretionary basis in conjunction with other business purposes. The Agency will strive to use standard Hedge products wherever possible in order to increase price transparency and liquidity.

Consideration may be given in negotiated transactions to those counterparties who have demonstrated their willingness to participate in competitive transactions and have performed well. If it is determined that a Hedge should be competitively bid, the Agency may employ a hybrid structure to reward unique ideas or special effort by reserving a specified percentage of the Hedge to the firm presenting the ideas on the condition that the firm match or better the best bid. To provide safeguards on negotiated transactions, the Agency should generally secure outside professional advice to assist in the process of structuring, documenting and pricing the transaction, and to verify that a fair price was obtained. In any negotiated transactions, the counterparty shall be required to disclose all payments to third parties (including lobbyists, consultants and attorneys) who had any involvement in assisting the counterparty in securing business with the Agency.

XI. Hedging Procedures

Hedging procedures will be implemented and changed, from time to time, to reflect current market conditions and operational practices. This document will be shared with the Board when it is available in final form and also when material changes are made to the document.