Texas Public Finance Authority

MASTER SWAP POLICY

November 3, 2005

1. Purpose

The purpose of this Swap Policy is to provide a policy for the Texas Public Finance Authority's use of swaps, cap, floors, collars, options and other derivative financial products (collectively referred to herein as "Swaps") in conjunction with the Authority's management of its debt obligations and liabilities. The policy is intended to serve as a source of information and guidance on the issuance and ongoing monitoring of Swaps for the professional staff of the Authority, its Board of Directors, and its client and oversight agencies (such as the Legislative Budget Board, the Bond Review Board, and the Governor's Budget office), as well as the general public and financial institutions wishing to do business with the Authority.

2. Scope

The policy describes the circumstances and methods by which Swaps will be used, the guidelines to be employed when Swaps are used, and who is responsible for carrying out these policies. This policy is intended to be consistent with and implemented in conjunction with the Authority's debt management guidelines and the policies or guidelines of the Texas Bond Review Board.

3. Authority

The Authority's legal authority for using Swaps is based on Chapter 1371 of the Texas Government Code and the Authority's organic law (Texas Government Code, Chapter. 1232 and certain state constitutional provisions applicable to general obligation debt). Under this authority, the Authority may enter into Swaps as authorized by the Board of Directors, in connection with the issuance or payment of certain debt obligations, before, concurrently with, or after the actual issuance of the debt.

4. Permitted Uses

Because of the effects of continual innovation in the financial markets, this Master Swap Policy recognizes that the reasons for use of Swaps may change over time, taking advantage of market developments as they evolve and are tested. The Authority will consider using Swaps for the following purposes:

- (i) Managing the Authority's and/or client agencies' exposure to floating and fixed interest rates;
- (ii) Hedging floating rate risk;
- (iii) Locking in fixed rates in current markets for use at a later date;
- (iv) Reducing the cost of fixed or floating rate debt by creating "synthetic" fixed or floating rate debt;
- (v) More rapidly accessing the capital markets than may be possible with conventional debt instruments;
- (vi) Managing the Authority's exposure to the risk of changes in the legal and regulatory treatment of tax-exempt bonds, including changes in federal marginal tax rates and other changes in tax laws that may affect the value of tax-exempt bonds relative to other investment alternatives;
- (vii) Managing the Authority's credit exposure to financial institutions and other entities through the use of offsetting swaps and other credit management products; and,
- (viii) Other applications to enable the Authority to increase income, lower costs, or strengthen the Authority's balance sheet.

When a Swap is being used rather than conventional bonds in order to produce savings, as a general rule the level of savings should exceed the Authority's traditional fixed rate refunding savings target of 3%. In general savings should exceed what could otherwise be achieved with a comparable structure, including call features, by an additional 2% for a BMA swap and 4% for a LIBOR-based swap (used in conjunction with underlying tax-exempt bonds) to account for normal Swap risks (as detailed below in Section 8). If such risks have been eliminated or significantly mitigated, the savings threshold could be the same as for conventional bonds.

The maximum potential exposure of all Authority swaps should be no more than 15% of outstanding debt for each category of debt (i.e., General Revenue Supported and Self-Supporting). Maximum potential exposure, also referred to as "peak exposure," or "value at risk," will be determined by a standard quantitative measurement that reflects the size, term, and projected volatility of the swaps.

While the Authority may use Swaps to increase or decrease the amount of variable rate exposure on the Authority's balance sheet, the Authority will not enter into Swaps solely for speculative purposes.

5. Procedure

Approval to enter into a Swap will be subject to appropriate authorization from the Board of Directors and from the client agency, where applicable ("the Swap Authorization"). The authorization may be set forth in the resolution of a related bond issue or in the official minutes of a Board meeting, if no bond issue is involved. Prior to entering into a Swap, the Authority will secure any required approvals from the Texas Attorney General's Office. Recommendations to enter into Swaps will be made based on analysis performed by the Authority's professional staff and legal, financial and swap advisors. The analysis should be presented to the Board in writing and include the following elements:

- (i) The appropriateness of the transaction for the Authority and/or client 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, where applicable;
- (ii) Sensitivity analysis in various interest rate environments (lower, higher, steeper yield curve, flatter yield curve and relationship of tax-exempt to taxable rates);
- (iii) Alternatives for funding termination payments;
- (iv) The legal framework for the transaction within the context of Texas statutes, Authority and client agency authorization, and relevant indenture and contractual requirements (including those contained in credit agreements), as well as any implications of the transaction under federal tax regulations;
- (v) Potential effects that the transaction may have on the credit ratings of any Authority obligations;
- (vi) Potential impact on the availability and cost of liquidity;
- (vii) Potential impact on the availability and cost of bond insurance or other forms of credit enhancement;
- (viii) The total peak exposure of outstanding interest rate swaps relative to the total amount of debt outstanding;
- (ix) Impact on the total amount of variable rate exposure;
- (x) Impact on the call option value;[1]
- (xi) The ability of the Authority or client agency to handle the administrative burden imposed by the transaction, including payment processing, accounting and financial reporting requirements; and,
- (xii) Other implications of the proposed transaction as warranted.

The Swap Authorization will authorize the swap agreement and its provisions, establish authorized parameters for notional amount, swap maturity, source of payments, and other relevant provisions. The Swap Authorization will specify the appropriate Authority officials to whom relevant authority is delegated to carry out the necessary steps to enter into, monitor and administer the Swap, and the parameters within which their delegated authority may function.

[1] When considering the relative advantage of traditional fixed rate bonds verses an interest rate swap that creates synthetic fixed rate exposure, the Authority will consider the value of the call option on fixed rate bonds as compared to any call option (or lack thereof) on the swap. Typically, the Authority sells bonds that are callable after 10 years at par, in exchange for paying a higher interest rate to investors.

6. Documentation Guidelines

The Authority will use one of the forms of the International Swap and Derivatives Association, Inc. ("ISDA") Master Agreement as a framework for swap documentation. The swap agreement between the Issuer and each counterparty shall include payment, term, security, collateral, default, remedy, termination, and other terms, conditions, provisions and safeguards as the Issuer, in consultation with its advisors and legal counsel, deems necessary or desirable.

Subject to the provisions contained herein, the terms of any Authority swap agreement shall adhere to the following guidelines:

(i) Downgrade provisions triggering termination shall be reflective of the relative credit strength of the Authority or relevant agency in comparison with the swap provider. This comparison should give weight to the prevailing greater credit strength of public sector entities as compared with private sector financial institutions. In no event should the downgrade trigger be worse than those affecting the swap provider;

(ii) The Authority will strive to minimize or avoid cross default provisions. The specific indebtedness related to credit events in any swap agreement should be narrowly defined and refer only to indebtedness of the Authority that could have a materially adverse effect on Authority's ability to perform its obligations under the swap. Debt should only include obligations within the same or superior lien as the swap obligation;

(iii) Collateral thresholds for the swap provider should be set on a sliding scale reflective of credit ratings. Collateral requirements should be established and based upon the credit ratings of the swap provider or its guarantor;

(iv) Eligible collateral should generally be limited to Treasuries and obligations of Federal Agencies where the principal and interest are guaranteed by the United States. At the discretion of the Authority, other high-quality obligations of Federal agencies, not secured by the full faith and credit of the U.S. government, may be used as collateral; and

(v) The Authority shall have the right to optionally terminate a swap agreement at "market," at any time over the term of the agreement. The swap provider should have no similar right.

7. Counterparty Credit Standards

Unlike conventional fixed-rate bonds, many swap products can create for the Authority a continuing exposure to the creditworthiness of financial institutions that serve as the Authority's counterparties. To protect the Authority's interests in the event of a counterparty credit problem, the Authority will adhere to the following standards:

(i) Use of highly-rated counterparties: Standards of creditworthiness, as measured by credit ratings, recognizing the difference in corporate structures such as self terminating vehicles, will be used to determine eligible counterparties. Differing standards may be employed depending on the term, size and interest-rate sensitivity of a transaction, types of counterparty, and potential for impact on the Authority's or a specific enterprise fund's credit ratings. The Authority will enter into transactions only with counterparties whose obligations are rated in the double-A category or better from at least one nationally recognized rating agency. In cases where the counterparty's obligations are rated based on a guarantee or specialized structure to achieve the required credit rating, the Authority shall thoroughly investigate the nature and legal structure of the guarantee or structure in order to determine that it fully meets the Authority's requirements;

(ii) Collateralization on downgrade: If a counterparty's credit rating is downgraded below the double-A rating category, the Authority shall require that its exposure to the counterparty be collateralized;

(iii) Termination: If a counterparty's credit is downgraded below a second (lower) threshold, even with collateralization, the Authority may exercise a right to terminate the transaction prior to its scheduled termination date. The Authority will seek to require, whenever possible, that terminations triggered by a counterparty credit downgrade will occur on the side of the bid-offered spread which is most beneficial to the Authority, and which would allow the Authority to go back into the market to replace the downgraded party with another suitable counterparty at no out-of-pocket cost to the Authority. In all cases, the Authority will require that its swap documents allow it to terminate a Swap prior to its scheduled termination date on a discretionary basis (i.e. regardless of counterparty credit rating), with the cost of such termination determined based on a standard market methodology;

(iv) Notice of downgrade: The Authority's swap counterparties will be required to notify the Authority in the event a credit agency takes negative action with regard to the counterparty's credit rating, including both an actual downgrading of the credit rating as well as the publication of a notice by a rating agency that the counterparty's rating is in jeopardy of a downgrading (i.e. being placed on Standard & Poor's Credit Watch or being assigned a negative outlook by Moody's or other comparable action by another rating agency);

(v) In order to limit the Authority's counterparty risk, the Authority will avoid excessive concentration of peak 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 any Swap contracts entered into with the Counterparty, as well as "maximum potential exposure" as defined herein. Termination value will be determined at least annually, based on a mark-to-market calculation of the cost of terminating the Swap contract given the market conditions on the valuation date. Aggregate Swap 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 Authority may require counterparties to provide regular mark-to-market

valuations of Swaps they have entered into with the Authority, and may also seek independent valuations from third party professionals; and,

(vi) The Authority will consider other factors, including the legal structure of the counterparty as a corporate entity, jurisdiction, and cross border risk.

8. Method of Procurement

The Authority will choose counterparties for entering into Swap contracts on either a negotiated or competitive basis. A competitive selection process will be used whenever reasonable, 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 Authority, or if competition will not create market pricing effects that would be detrimental to the Authority's interests. Negotiated procurement may be used for original or proprietary products, for original ideas of applying a specified product to an Authority need, to avoid market pricing effects that would be detrimental to the Authority's interests, or on a discretionary basis in conjunction with other business purposes. 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 Swap should be competitively bid, the Authority may employ a hybrid structure to reward unique ideas or special effort by reserving a specified percentage of the swap to the firm presenting the ideas on the condition that the firm match or improve upon the best bid. The Authority will secure outside professional advice from a nationally recognized financial or swap advisor to assist in the process of structuring, documenting and pricing the transaction, and to render an opinion that a fair price was obtained. In all transactions, regardless of procurement method, 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 Authority.

9. Risk Management

In order to mitigate or eliminate the risks inherent in using swaps, the Authority will perform the evaluation and analysis tasks listed below for each swap it enters into and for its overall swap program in the aggregate.

As a general rule, the Authority will monitor and manage the risks of its Swap exposure on an enterprise-wide or "macro" basis. By measuring aggregate exposure, the Authority will seek to evaluate any proposed new transactions within the larger context of their impact at both the client agency level and at the Authority level. Because of the size of the liabilities managed by the Authority, and its established financial systems and controls, the Authority will manage the risks and rewards of a Swap program alongside its overall financial risks and rewards. As part of its risk management process, the Authority will evaluate the aggregate risk of its Swap exposure as measured by maximum potential exposure, and/or realistic worst case scenarios, and as such measurements impact a client agency, if any.

Among the risks that the Authority will monitor, evaluate, and seek to mitigate, are:

Type of Risk	Description	Evaluation Methodology	Mitigation
Counterparty Risk	The risk of a failure of one of the Authority's Swap providers to perform as required under a Swap contract.	The Authority will evaluate the swap providers credit ratings and existing exposure on other transactions.	The Authority will diversify its exposure, impose minimum credit rating standard and require protective documentation provisions. (See above Sec. 6, "Counterparty Credit Standards")
Termination Risk	The risk that a Swap may be terminated prior to its scheduled maturity due to factors outside the Authority's control.	The Authority will review potential sources of early termination, including those resulting from documentation provisions and the likelihood of credit downgrade that could precipitate an early termination.	The Authority will use protective documentation provisions and will evaluate sources of liquidity and market access that could be used in the event a termination payment were required to be made.
Interest Rate Risk	The risk that the Authority's costs associated with variable-rate exposure increase and negatively affect budgets, coverage ratios and cash flow margins. Variable-rate exposure may be created by a Swap from fixed to floating, or a Swap that otherwise creates some type of floating-rate liability. The interest rate risk presented by such a Swap may be increased as interest rates increase generally, as intra-market relationships change, or because of credit concerns relating to the Authority, the relevant client agency, or a credit enhancer.	Prior to taking on interest rate risk, the Authority will measure its capacity for floating rate exposure, based on policy targets for its mix of fixed and floating rate debt and taking into consideration future variable rate needs.	The Authority will maintain floating rate exposure within policy limits, and will make selected use of interest rates hedges, like caps and collars.
Basis Risk	The risk that the floating rate on the Swap fails to offset the floating rate on the underlying asset or liability. Because Swaps are generally based on a floating-rate index, the chosen index should correlate with the floating rate on the underlying instrument, but may not correlate exactly. A common type of basis risk	The Authority will measure and review the historic variation between the floating rate index used in the swap and the underlying floating rate debt it is hedging. In the absence of a sufficient history of underlying debt, it will use relevant comparable floating rate debt. The degree of risks should be evaluated in	The Authority will consider mitigation techniques as warranted, including maintaining a cushion between the floating rate index and the expected trading level of the floating rate debt, creating a reserve to cover potential basis risk mismatches, and including provisions for optional termination.

Type of Risk	Description	Evaluation Methodology	Mitigation
	on Swaps used in conjunction with floating-rate tax-exempt debt is often referred to as "tax risk", or the risk of a mismatch between the floating rate on the tax-exempt debt and a Swap index, such as one based on a taxable index like LIBOR. The correlation between the LIBOR-based rate and the floating rate on the debt may change based on changes in tax law or other market events.	comparison with degree of benefit provided.	
Amortization Risk	The risk presented by a mismatch between the term of the Swap or the notional principal amortization schedule of the Swap and the term or principal amortization schedule of the underlying asset or liability being hedged by the Swap. This risk is increased when the amortization schedule of the underlying asset or liability is uncertain, as in certain forms of debt or assets that are scheduled to be redeemed out of a future revenue stream that is subject to variability.	The Authority will measure the likelihood of a maturity or amortization mismatch, based on a review of the potential for unscheduled debt prepayment or extension, as well as any relevant provisions in the swap which could produce a mismatch.	Wherever possible, the Authority will seek to match the principal schedule of the debt and the notional principal schedule of the swap. Where this is not possible, the Authority will consider including termination options to lessen or eliminate amortization risk.
Rollover Risk	When a Swap is used in conjunction with underlying puttable floating-rate debt, bank facility rollover risk exists if the term of a needed liquidity or credit facility on the debt is shorter than the term of the Swap. The Authority is at risk as to both the availability and the price of successive bank facilities.	The Authority will evaluate the likelihood of unavailability of bank facilities based on the underlying credit of the debt as well as the general market for liquidity facilities.	The Authority may use any of the following mitigation techniques: purchasing longer term facilities for credits where rollover risk is greatest; including alternative floating rate mechanisms, like auction rate securities, in the bond documents; and, staggering the maturity dates of different liquidity facility programs to diversify points of market re-entry.

Pricing Risk	The risk that the Swap may not be priced competitively in comparison to the market for comparable swap transactions.	Prior to entering into a swap, the Authority will make a determination that the transaction can be priced with reasonable transparency and confidence.	The Authority will not enter into overly complex or illiquid transactions where competitive pricing cannot be ascertained. Where it meets Authority objectives (as outlined above in Section 7 "Method of Procurement"), it will use a competitive process. For negotiated transactions, it will seek independent price verification through appropriate professional advice.

The Authority will measure and evaluate the effect of leverage contained within any Swap on the magnitude of any of the above-mentioned risks.

10. Reporting

The Authority will track and regularly report on the financial implications of the Swaps it enters into. An annual report will be prepared for the Board of Directors including:

- (i) A summary of key terms of the agreements, including notional amounts, interest rates, maturity and method of procurement, including any changes to Swap agreements since the last reporting period;
- (ii) The mark-to-market value (termination value) of its Swaps, as measured by the economic cost or benefit of terminating outstanding contracts at specified intervals;
- (iii) The amount of exposure that the Authority has to each specific counterparty, as measured by aggregate mark-to-market value, netted for offsetting transactions;
- (iv) The credit ratings of each counterparty (or guarantor, if applicable) and any changes in the credit rating since the last reporting period;
- (v) Any collateral posting as a result of Swap agreement requirements;
- (vi) Separately for each swap, the actual debt service requirements versus the projected debt service on the swap transaction; and for any swaps used as part of a refunding, the actual cumulative savings versus the projected savings at the time the swap was executed;
- (vii) An updated contingency plan to replace, or fund a termination payment in the event an outstanding swap is terminated; and
- (viii) The status of any liquidity support used in connection with interest rate swaps, including the remaining term and current fee.

In addition, the Authority will perform such monitoring and reporting as is required by the rating agencies or for compliance with FASB or GASB requirements, as applicable.