

GUIDELINES FOR INTEREST RATE AND FORWARD PURCHASE AGREEMENTS

I. BACKGROUND

State statutes direct the State Funding Board to establish guidelines, rules or regulations with respect to interest rate swap agreements, other interest rate hedging agreements and forward purchase agreements that may be entered into by certain local governmental entities. State statutes require that if such a Governmental Entity intends to enter into such an agreement and submits such a request, the Comptroller is required to determine whether the proposed agreement complies with the Guidelines and to report thereon to the Governmental Entity. A Governmental Entity must request the report of the Comptroller prior to the adoption by the Governing Body of a resolution authorizing such agreements. The Guidelines are set forth below.

The Guidelines do not govern contracts or other investment agreements based on statutes other than the Forward Purchase Authorizing Statutes or the Interest Rate Authorizing Statutes, whether or not they relate to the Governmental Entity's debt. Even the simplest Interest Rate Agreement is a highly complex financial instrument that requires a high level of financial sophistication and the ability to maintain that level of sophistication for the duration of any derivative instrument. It is the responsibility of the Governmental Entity and its officials to insure they possess the skill and knowledge to execute and maintain an Interest Rate Agreement over its entire life.

The Guidelines do not relate to the appropriateness of the transaction or the legal authority of the Governmental Entity to enter into the Interest Rate or Forward Purchase Agreement. It is the Governmental Entity's responsibility to determine the appropriateness of the transactions and the legal authority to enter into the Agreement. The decision to enter into the Agreement is strictly the decision of the Governmental Entity's CEO and Governing Body.

II. DEFINITIONS

"Accountant" shall mean a professional staff member of the Governmental Entity possessing at least a bachelor's degree or higher in accounting or other bachelor's degree or higher licensed as a Tennessee CPA. This person shall be able to prepare independently US Governmental Generally Accepted Accounting Principles compliant financial statements with complete debt and derivative disclosures.

"Authorizing Statutes" shall mean the Forward Purchase Authorizing Statutes and Interest Rate Authorizing Statutes, a list of which is attached as Attachment C. "Chief Executive Officer" or "CEO" shall mean the chief elected official of the Governmental Entity, or if there is no such elected official, the chairman or

presiding officer of the Governing Body of the Governmental Entity.

"Chief Financial Officer" or "CFO" shall mean the Finance Director or other comparable official of the Governmental Entity overseeing the Governmental Entity's financial management specified by either law or charter or by direction of the CEO or Governing Body, who shall either (1) hold certification as a CMFO, or CGFM, or CPFO, or be a CPA with five (5) years of governmental accounting experience with three (3) years in Tennessee; or (2) hold a masters in business administration or a juris doctorate with five (5) years of public finance experience. This person shall be able to understand US Governmental Generally Accepted Accounting Principles compliant financial statements. This person shall be able to understand the monitoring process and provide the Governing Body with guidance concerning an Interest Rate Agreement transaction from the entrance decision, execution, monitoring, and termination decision to the impact on the Governmental Entity's financial condition and position.

"Comptroller" shall mean either the Comptroller, the Office of the Comptroller of the Treasury of the State of Tennessee, or the Comptroller's designee, as appropriate for the context.

"Counterparty" shall mean the party to an Interest Rate Agreement other than the Governmental Entity.

"Debt management report" shall mean a written debt management report of the Governmental Entity as of the end of the fiscal year including, but not limited to, the following:

1. A listing of each outstanding obligation by type and disclosing amount initially authorized, combined interest rate for fixed rate debt, actual basis for variable rate debt, principal and interest payment for the coming budget year, outstanding principal amount at the beginning and end of budget year, and fund of payment;

and a listing the max rate provision associated with the VRDNs. It is important to note that part of the weakness of the structure of the variable rate market is that no one really paid attention to the structuring of the max rate because of a low probability of an adverse event occurring that would trigger the max rate. This is part of the reason there was a disconnect/ substantial negative carry between swaps and VRDNs during this liquidity/ credit crunch. Thus, the State of TN should require smarter structuring of the max rate... for example, "minimum of 100% of one month LIBOR + 100 bps or 12%".

This is a key element in structuring the VRDN component of an interest rate swap.

2. Total amount of debt of the Governmental Entity by fund, by type, and by security;
3. Total amount of variable rate debt of the Governmental Entity with percent of variable rate debt by fund, by type, by security, and by total

outstanding debt;

4. Analysis of the effect of rising interest rates on variable rate debt of the Governmental Entity including impact on financial condition and position;
5. Analysis of risk in maintaining variable rate debt on financial condition and position;
6. Analysis of debt portfolio principal and interest payments on next five years projected budgets; and
7. Governmental Entity's documentation of its compliance with its debt policy including all disclosure requirements for the prior fiscal year.

"Derivative management report" shall mean a written report of the Governmental Entity as of the end of the fiscal year that includes, but is not limited to, all of the following:

1. Analysis of the impact of outstanding Interest Rate Agreements on the prior year's financial condition and position of the Governmental Entity;
2. Analysis of the impact of outstanding Interest Rate Agreements payments on the coming budget year with stress testing for risks associated with the Interest Rate Agreements and changes in market conditions;
3. Analysis of the impact of basis risk on transaction;
4. Analysis of early termination, involuntary termination, default, and cost considerations associated with outstanding Interest Rate Agreements;
5. Analysis of hedge effectiveness;
6. Summary of monitoring for all outstanding Interest Rate Agreements in the prior year;
7. Update on method and assumptions for determining market/termination value and any other estimates or rates associate with Interest Rate Agreements; and
8. Governmental Entity's documentation of its compliance with its derivative policy including all disclosure requirements for the prior fiscal year.

9. an important consideration here is for the user of the interest rate agreements to disclose collateral requirements associated with swap agreements. Collateral calls have hampered the liquidity of some issuers in this dislocated market and thus collateral posting by municipal issuers should be limited in its use. The real collateral for swap providers is the revenue stream of a municipal issuer in which they can be repayed overtime in a worst case scenario rather than requiring securities or cash which can impair the operating ability/liquidity of any issuer.

"Forward Purchase Agreement" shall mean an agreement providing for the purchase of bonds or other obligations of a Governmental Entity that provides for delivery of such bonds or other obligations on a date greater than ninety (90) days from the date of execution of such agreement.

"Forward Purchase Authorizing Statutes" shall mean the Tennessee legislative acts and statutes authorizing Forward Purchase Agreements in accordance with State Funding Board Guidelines as identified from time to time by the Board and

attached as Attachment C.

"Governing Body" shall mean the legislative body of the Governmental Entity.

"Governmental Entity" shall mean any governmental entity authorized to enter into an Interest Rate Agreement or Forward Purchase Agreement pursuant to an Authorizing Statute. In the case of a conduit financing, "Governmental Entity" shall include both the conduit issuer and the borrower.

"Independent Swap Advisor" shall mean an entity that only provides advisory services with proven experience in the area of derivative transactions for issuers of debt. An Independent Swap Advisor's fiduciary duty in the transaction is strictly to the Governmental Entity. In the case of a conduit financing, the conduit issuer, its staff, consultants and contractors shall not serve as the Independent Swap Advisor to the borrower. The Independent Swap Advisor must disclose all relationships to any participant in the transaction. Additionally, the Independent Swap Advisor must disclose due to its advisory services any investigations it may be a target of, charges brought, convictions or guilty pleas of any key staff, or any other actions brought against it.

It is important for the State to recognize that there are two types of swap agents: Swap Advisors and Swap Facilitators. Swap Advisors market their business directly to and procure it directly from issuers. Thus, there is no conflict of interest (a true swap advisor can say no to a transaction that doesn't make sense) and the issuers best interest is represented. Swap Facilitators market their business through swap providers and thus create a De Facto conflict of interest in that they won't be doing business with a swap provider if they don't work with the swap provider. The State should consider ferreting out Swap Facilitators with disclosure ... all "Independent Swap Advisors" should be required to specifically disclose (for example) all transactions over the last 7 years and disclose the swap provider associated with each transaction and whether the swap agent had gained the business through the issuer or was recommended to the issuer through the swap provider.

The State should also require a higher standard of expertise for swap advisors –as it has for governmental users of swaps- as most swap advisors do not have the appropriate level of experience.

Other issues:

- 1. Independent Swap Advisors that are employed in an institution that has a swap counterparty as a part of its institution represents a conflict of interest.**
- 2. The payment of transaction fees (ie, 5 bps) + hourly advisor fees (ie, \$30,000) should be weighed against fees paid on a retainer basis without transaction fees (ie, \$100,000).**

"Independent Swap Counsel" shall mean an entity who has legal experience in the area of derivative transactions and whose fiduciary duty in this transaction is

strictly to the Governmental Entity. In the case of a conduit financing, the conduit issuer, its staff, consultants and contractors shall not serve as the Independent Swap Counsel to the borrower. Independent Swap Counsel must disclose all relationships to any participant in the transaction. Additionally, Independent Swap Counsel due to its services must disclose any investigations it may be a target of, charges brought, convictions or guilty pleas of any key staff, or any other actions brought against it.

"Interest Rate Agreement" shall mean an interest rate swap or exchange agreement, an agreement establishing an interest rate floor or ceiling or both and any other interest rate hedging agreement, including options to enter into or cancel such agreements, as well as the reversal or extension thereof.

"Interest Rate Authorizing Statutes" shall mean Tennessee legislative acts and statutes authorizing Interest Rate Agreements in accordance with State Funding Board Guidelines as identified from time to time by the Board and attached as Attachment C.

"Monitor" shall mean a professional staff member possessing at least a bachelor's degree or higher in economics, finance, public administration with a concentration in financial management, or accounting being either a Chartered Financial Analyst (CFA), GARP Financial Risk Manager (FRM), PRIMA Professional Risk Manager (PRM™), CGFM, CPA, or CPFO. This staff member shall be able to understand or to prepare and interpret derivative and variable-rate debt monitoring reports and communicate the impact of changes in the derivative or underlying debt on the Governmental Entity's financial condition and operations. This staff member shall be able to prepare US Governmental Generally Accepted Accounting Principles debt and derivatives disclosures.

III. PROCEDURE FOR SUBMISSION AND COMPLIANCE REPORTING

A. Form of Submission.

Any request for a report of compliance with these Guidelines for Interest Rate Agreements or Forward Purchase Agreements shall include such information as is required in these Guidelines and shall be submitted and signed by the Chief Executive Officer (CEO) of the requesting Governmental Entity. For purposes of either an Interest Rate Agreement or a Forward Purchase Agreement, if a conduit borrowing is involved, both the conduit issuer and the borrower(s) shall separately prepare and submit requests for reports of compliance and separately shall meet all requirements of these Guidelines. Only an independent financial advisor, Independent Swap Advisor, or Independent Swap Counsel may assist the Governmental Entity and its staff in preparing a request, but only the CEO, and no other person or entity, shall submit a request by mail or in any other manner. A request submitted by other than the Chief Executive Officer will not be deemed to have been properly submitted, and the Comptroller shall immediately return the request with an explanation of the proper procedure.

The CEO, the Chief Financial Officer (CFO), the chair of the Governing Body, and the chairs of the finance committee and the audit committee shall review all requests prior to submission to the Comptroller. If the CEO is the chair of the Governing Body, the Governing Body shall appoint another member to review the submission. If there is no finance committee, the Governing Body shall appoint another member to perform a review. If the Governmental Entity has a Municipal or County Manager or Administrator, this employee shall also review the request. The documented reviews, including the reviewers comments, shall be included as part of the request.

The request must supply the information required by the appropriate attached Appendix as specified by these Guidelines, as well as any other information reasonably requested by the Comptroller. The request shall contain the actual signature of the CEO. All communications concerning the request shall be between the Comptroller and the CEO or CFO, if so designated by CEO. A meeting scheduled to approve an Interest Rate or Forward Purchase Agreement by the Governmental Entity cannot be held during the 15-day review period. If the Comptroller is informed a meeting has been scheduled to be held during the review period, the request shall not be deemed to have been received and shall be returned to the Governmental Entity.

B. Acknowledgment by Comptroller.

The Comptroller will record the request on the date received and will issue a timely acknowledgment only to the Chief Executive Officer who submitted the request, indicating the date the request was received and referring to the 15-day period statutory review period. If the request is deemed incomplete after acknowledgement or at time of receipt, the request will not be deemed to have been received and the Comptroller shall inform the Chief Executive Officer that the request was incomplete and identify the item(s) not included. The 15-day statutory review period shall not begin until a complete request is submitted.

C. Identification of Authorizing Statute.

In its request, the Governmental Entity shall identify the Forward Purchase Authorizing Statute or Interest Rate Authorizing Statute under which the request is being submitted and identify the specific type of Forward Purchase Agreement or Interest Rate Agreement for which the request is being submitted.

D. Conditions for Entering into an Interest Rate or Forward Purchase Agreement.

1. Qualifying Debt Structure: **(swaps should be allowable for any legal debt structure within the State)**

- a. Qualifying debt shall be structured with at least level debt service. Debt that is determined to be “back loaded” shall not qualify to enter into an interest rate agreement.
- b. Qualifying debt may have an initial construction period of no more than three years matching actual construction time.
- c. Principal payments shall match anticipated available liquidity during the Governmental Entity’s fiscal year.

2. The Governmental Entity’s financial statements:

- a. The financial statements for the term of the Agreement shall be prepared in compliance with US Governmental Generally Accepted Accounting Principles with an unqualified auditor’s opinion. Financial statements for the two fiscal years prior to the request to enter into an Interest Rate Agreement shall have been prepared in compliance with US Governmental Generally Accepted Accounting Principles with an unqualified auditor’s opinion.
- b. If the Accountant does not independently prepare the Governmental Entity’s financial statements, the Governmental Entity shall have them prepared by a public accountant not its auditor.
- c. A Governmental Entity that uses a public accountant to prepare its financial statements shall explain why the Accountant did not prepare the financial statements.

3. The Governmental Entity’s required minimum number of fulltime staff:

- a. Accountant; and
- b. CFO.

4. The Governing Body having an audit committee.

5. Debt Management and Derivative Policies:

- a. The Government Entity by action of its Governing Body shall have adopted appropriate written enforceable debt and derivative management policies meeting the standard of the model finance transaction management policies developed by the State Funding Board under the authority of Tenn. Code Ann. Section 9-21-151.

A qualified independent swap advisor should be hired to assist the State Funding Board in developing standards for derivative policies.

- b. Copies of these policies must be included with a request for a letter of compliance. The Governmental Entity shall include a statement describing how the proposed transaction complies

with such policies.

E. Report by Comptroller.

After reviewing the request, the Comptroller shall issue a report, referencing the Forward Purchase Authorizing Statute or Interest Rate Authorizing Statute, stating that the request by the Governmental Entity either substantially complies with these Guidelines or substantially does not comply with these Guidelines. The report stating that a request substantially complies with these Guidelines and the request submitted must be presented to the Governing Body at the time of adoption of the resolution authorizing such Agreement and be included in the record of the meeting.

Any report of the Comptroller relates only to substantial compliance with the Guidelines at the time of the request and does not relate to the appropriateness of the transaction or the legal authority of the Governmental Entity to enter into the Agreement.

If the request does not comply with these Guidelines, the report shall identify the areas of non-compliance. A new request with any areas of non-compliance corrected by the Governmental Entity may be submitted and a new 15-day period for the Comptroller to review the request shall commence on the date of receipt of the complete request.

F. Appeals Process.

If the report of the Comptroller states that the request does not comply with these Guidelines, then the Governmental Entity may file a written request for appeal to the Assistant Secretary of the State Funding Board in the Division of Bond Finance, Office of the Comptroller of the Treasury. Such request shall specify in detail the basis on which the Governmental Entity believes a report of compliance is justified. A meeting of the State Funding Board shall be held to consider the written appeal request within 30-days of receipt of the appeal request, or as soon thereafter as a quorum can be achieved.

G. Reporting

1. Execution – Upon entering into an Interest Rate Agreement, the Governmental Entity shall report the derivative in accordance with the requirements of Tenn. Code Ann. Section 9-21-151 to the State Director of Local Finance no later than 45-days after the execution of the Agreement. The Governmental Entity shall file with the Director a copy of the interest rate (ISDA) master agreement with the Interest Rate Agreement memo identifying the transaction and the reasons for executing it. The Governmental Entity shall maintain a permanent copy of this

report containing the memo and Agreement. If an Interest Rate Agreement is used to create synthetic fixed rate debt, the Government Entity shall be required to provide the average coupon rate it would have paid on a fixed-rate bond issue on the day the Interest Rate Agreement was entered.

This report should include a quantification of “expected” pv savings for the swap relative to bonds expressed as a % of refunding or refunding par and meet minimum requirements. See below.

2. Option - The Governmental Entity shall make a report no later than 15-days after the exercise of an option to the State Director of Local Finance. This report will detail the reasons for executing the option, the details of the transaction including any costs related to exercise and the impact on its financial position and operations.

3. Material Events- Upon the occurrence of any of the following as they relate to the Agreement or the identified indebtedness, the Governmental Entity shall within five (5) business days report to the State Director of Local Finance and to the local Governing Body:

- a. Vacancy or change in the position or role of monitor;
- b. Downgrade in the rating of any party to the Agreement or transaction;
- c. Default in the performance of any party to the Agreement or the transaction, including non-payment related defaults;
- d. Principal and interest payment delinquencies;
- e. Unscheduled draws on debt service reserves reflecting financial difficulties;
- f. Unscheduled draws on credit enhancements reflecting financial difficulties;
- g. Substitution of credit or liquidity providers, or their failure to perform;
- h. Adverse tax opinions or events affecting the tax-exempt status of the security;
- i. Modifications to rights of securities holders;
- j. Bond calls;
- k. Defeasances;
- l. Release, substitution, or sale of property securing repayment of the securities; and
- m. Failure to provide annual financial information as required by these Guidelines, transaction documents, or by law.

4. Quarterly – The Governmental Entity shall submit monthly to the local Governing Body a report documenting its monitoring activities, which report is to be presented at the next meeting of the Governing Body

and included the minutes of the meeting. The report shall include any material events affecting the underlying debt or any parties to the transaction, as well as a status update regarding replacement of any parties. Such reports shall be submitted to the State Director of Local Finance on a quarterly basis.

5. Annually – The Governmental Entity shall submit annually to the local Governing Body and to the State Director of Local Finance:

- a. Debt and Derivative Management Reports as defined in these Guidelines, by January 15 of each year;
- b. Annual Operating and Capital Budget in the manner of Tenn. Code Ann. Section 9-21-403 by August 31 of each year; and
- c. Audited Annual Financial Statements by January 15 of each year.

6. Termination - If the Governmental Entity terminates an Interest Rate Agreement or Forward Purchase Agreement, the Governmental Entity jointly with its Independent Swap Advisor shall submit within 15-days a report to the Comptroller identifying the business purpose for such termination, any payments made or received by any parties to the Agreement, any other costs, and the impact on its financial position and operations. The report must include the methods and underlying assumptions, data used in the actual calculation of the amount of such payments made or received by any parties to the Agreement, and a summary analysis of the transaction and its effectiveness.

All such reports (except for the Termination Report) shall be submitted only by the Governmental Entity's CEO, with preparation assistance from the CFO and staff, Independent Financial or Swap Advisor or Independent Swap Counsel. The Comptroller may provide additional guidance concerning reporting beyond these Guidelines. The Comptroller may alter these reporting requirements to meet oversight needs and market conditions, including but not limited to addition reports and timing of reports. Such alterations shall be posted on the State Funding Board or Comptroller's website. The Governmental Entity shall be responsible for periodically viewing the website for updates on requirements.

H. Failure to Meet Guidelines.

Any Governmental Entity failing to meet the requirements of the Guidelines, including the reporting requirements of Paragraph G above, shall be placed on a list of Governmental Entities in noncompliance. Those Governmental Entities on the list shall be ineligible to request Letters of Compliance or to enter into any additional Interest Rate or Forward Purchase Agreements, including those for which they have previously received a positive report of compliance but have not yet executed the Agreement. The Governmental Entity may present to the State Funding Board a plan of how it will insure future compliance with the Guidelines, and the State Funding Board may remove the Governmental Entity from the list of noncompliance.

IV. GUIDELINES SPECIFIC TO INTEREST RATE AGREEMENTS

A. Conditions to Entering into an Interest Rate Agreement

1. Size: Outstanding or to be issued debt with a principal amount of at least \$50,000,000 at the time of execution of the initial Interest Rate Agreement.

The State should reconsider this limitation on notional amount as this minimum notional amount can eliminate an efficient refunding of a larger bond issue or impair an issuers ability to properly manage interest rate risk in its debt portfolio.

It is clear that this limitation is designed to protect small issuers that may not be suitable for a swap transaction. Thus, the State should consider constructing this limitation based on the minimum size of an issuer. For example, the limitation can be tied to the total size of an issuers outstanding debt in its portfolio... “Issuers with a debt portfolio smaller than \$15,000,000 shall be prohibited from entering swap agreements.”... or some other measure that distinguishes unsuitable small issuers from suitable issuers.

2. Type:

- a. Variable-rate with the method for determining the variable interest rate and the proposed or actual continuing and one-time costs disclosed.
- b. Fixed-rate debt with proposed or actual continuing and onetime costs fully disclosed.

3. Governmental Entity Staffing:

- a. The Governmental Entity shall be required, in addition to the Accountant and the CFO, to have a Monitor.
 - 1.) An Independent Swap Advisor not involved with the proposed Interest Rate Agreement shall determine if the monitor has a basic knowledge of derivatives and risks and can explain the proposed Interest Rate Agreement detailing the risks and potential impact on the Governmental Entity's financial position and condition. This determination shall be documented and shall be included with the Application.

This implies that will be two Independent Swap Advisors will be required to be hired by the Governmental Entity. This can be costly. The State should consider the form of payment for the Independent Swap Advisor... perhaps a contract based on a retainer with no transaction fees rather than a small hourly based contract and separately transaction fees. This can lower the overall cost of proper swap advice, keep the execution of the transaction with the Independent Swap Advisor who is acting on behalf of advising the client and minimize conflicts of interest.

2.) An Independent Swap Advisor shall work with the Monitor in planning, designing and execution of the Interest Rate Agreement.

b. Independent Swap Counsel with a fiduciary duty only to the Governmental Entity shall be involved in designing and executing the Governmental Entity's Interest Rate Agreement.

4. Permitted business purposes:

a. With Respect To Outstanding Debt:

1.) Variable-rate debt:

a.) Hedge against increases in the variable-rate paid by the Governmental Entity using an Interest Rate Agreement or using an interest rate cap or collar.

b.) Objective is to refund at the lowest possible fixed-rate using Interest Rate Agreements or caps and collars with a decrease of at least 100 basis points between the actual fixed-rate and the synthetic rates without incurring refunding costs.

c.) Calculations shall include the fees associated with variable rate debt as part of the variable rate debt interest cost.

2.) Fixed-Rate Debt: Create synthetic variable-rate debt using an interest agreement that produces a decrease in interest rate payments of at least 200 basis points without paying any refunding costs and has underlying short-term investments that will match the principle amount of the debt to allow asset liability management. The returns on the short-term investments are meant to pay the variable-rate payment.

There are two forms that swaps can be used: as refundings and for new money deals. For refundings, perhaps this can be more granular and be tied to the minimum % of par PV savings requirement for fixed rate bond issues for each Governmental Entity. For example, if the minimum % of par pv savings threshold is 2% for a fixed rate bond refunding, then perhaps SIFMA swaps have a higher threshold (perhaps 4% pv savings) and % LIBOR swaps are even higher (perhaps 6% pv savings). For new money transactions, perhaps the minimum requirement to use swaps rather than bonds can be a % of par test as well. For example, swap pv savings –relative to bonds- must be equal 3% of par amount.

Introducing an absolute spread can eliminate the benefits of using swaps in low interest rate environments or have other unintended limitation consequences.

There should be other tests employed when using basis swaps rather than % LIBOR fixed pay swaps.

b. With Respect To New Issue Debt:

1.) Variable-rate debt:

a.) Objective is to borrow at the lowest possible fixed-rate using Interest Rate Agreements or caps and collars with a decrease of at least 100 basis points between the actual fixed-rate and the synthetic rates.

b.) Calculations shall include the fees associated with variable rate debt as part of the variable rate debt interest cost.

2.) Fixed-Rate Debt: Create synthetic variable-rate debt using an interest agreement that produces a decrease in interest rate payment of at least 200 basis points without paying any additional variable-rate fees and any continuing fee being significantly less than those for variable-rate debt and has underlying short-term investments that will match the principle amount of the debt to allow asset liability management. The returns on the short-term investments pay the variable-rate payment.

Synthetic floating can also be used to diversify the overall debt portfolio rather than just offset floating rate assets. Also, 200 bps is quite wide to justify the use of synthetic floating rate rather than VRDNs as we have seen in this market that synthetic floating rate debt does not have put risk or require ongoing credit enhancement or remarketing. Perhaps a test that is equivalent to PV savings as a minimum % of par to justify synthetic floating should be employed here as well.

Also, when considering swaps versus bonds on new debt, perhaps the same % of par tests as the previous section can be employed here as well.

5. General Interest Rate Agreement Requirements

a. No Interest Rate Agreement shall be entered into unless such agreement relates to a specific identifiable indebtedness of the Governmental Entity either (i) that is outstanding or (ii) that will be incurred or authorized contemporaneously with either the execution or effective date of the Interest Rate Agreement and the Agreement is contingent on the issuance of such debt.

b. The Interest Rate Agreement shall have a life no more than five (5) years and shall not extend beyond the life of the indebtedness.

This introduces interest rate risk at the five year point when floating rates will have to be rehedged with a swap or bond issue and every five year point thereafter and can be a substantial hidden cost. Perhaps there are better mechanisms to limit the risks/ use of

swaps that can be made a standard in the derivative/ swap policy (ie, there can be a swap termination amount limitation as a % of total bonds outstanding so that the issuer cannot do another swap without mitigation if current swap termination amounts exceed this limitation.)

For example, the PV01 for a \$50,000,000 25 year swap in five years (the unhedged portion of a new issue hedged only with a five year swap) is about \$43,000. If rates rise in five years and beyond for their remaining life of the bond issue by a 200 bps, then the hidden cost to the Governmental Entity is about \$8,600,000. If the long-dated swap that hedges the bond issue to maturity is used, then this hidden cost is eliminated and the issuer sees the change in interest rates in the form of the swap termination amount. So State is attempting to minimize swap termination risk by limiting the term of the swap to 5 years, but introducing an interest rate call or hidden costs with this limitation. The key in any swap agreement is to manage swap termination risk ... to do so, it is critically important that the use of collateral is minimized or eliminated, the swap termination amount can be funded by bonds and the ability of either party (swap provider or Governmental Entity) to terminate the swap is removed, and (but not limited to) ratings based ATEs should be as low as possible.

The dislocation between bonds and swaps generated by the credit crunch is rare and not likely to be repeated. Also, it is important to note that just because an swap termination payment may be owed by a Governmental Entity, it does not mean the Governmental Entity lost a bet on rates... swaps are fixed rate hedges that lock-in rate and any replacement contract can pay the swap termination payment and maintain the integrity of the originally locked-in rate hedges by the swap.

- c. The notional amount of the Interest Rate Agreement must reflect the amortization of principal of the related indebtedness.
- d. The termination or market value of any interest rate agreement entered into with the specified identifiable debt from a request for compliance shall be \$0.00 on the date the interest rate agreement is entered.

This is unrealistic as the immediate swap termination amount is equal to fees paid and swap provider revenue on the swap transaction... so no swaps would be executed unless these fees are paid with cash from the Governmental Entity.

- e. Basis risk between actual variable-rate and counter-party's payment rate shall be documentable and verifiable.
- f. The formula used for the payments in a synthetic fixed-rate Interest Rate Agreement can be changed by filing a new request for a report of compliance on the transaction and receiving a positive report of compliance then filing a new Tenn. Code Ann. Section 9-21-151 derivative disclosure.
- g. Only one Interest Rate Agreement can be outstanding at a time for a specific identifiable indebtedness.

Although this is a political issue in nature, this should be reconsidered as the netting of a % LIBOR/ SIFMA basis swap plus a floating-to-fixed swap SIFMA swap done on the same bond issue with two separate swap counterparties is -in practice- the same as a % of LIBOR floating-to-fixed interest rate swap on that same bond issue with one swap counterparty... thus, this may limit the flexibility of the Governmental Entity to properly manage its interest rate swap exposures... this issue is really a swap counterparty exposure issue and ought to be considered in this limitation form.

there are other examples of netting...

h. No Interest Rate Agreement shall be for speculative reasons, e.g.

1) basis swap: Governmental Entity speculates on its view of the interest rate market by paying the leg of the swap it believes will decrease against receiving the leg it believes will increase;

% LIBOR/ SIFMA basis swaps carries standard risks that Governmental Entities already take...so it should be acceptable.

2)Fixed-to-Variable Swap: Governmental Entity speculates on its view of the interest rate market by swapping into a floating rate it believes will decrease against a fixed rate;

These types of swaps are acceptable for creating synthetic floating to manage asset-liabilities or to change the mix of fixed-floating rate debt.

3) Swaption; or

Swaptions are useful tools to refund outstanding debt and should not be disallowed... using the cash to plug a deficit should be discouraged.

4)Other speculative reasons exist.

Yield curve plays (Ie, cms basis swaps) or any stand alone swaps used to bet on a change in interest rates –hopefully the intent of the above- or other derivative related variable is speculative.

B. Supporting Analysis.

A Governmental Entity shall submit an analysis and description of how the Interest Rate Agreement is intended to accomplish its business purpose taking into account the various risks posed by the interest rate agreement and underlying debt. The analysis must support that the potential benefits of the Interest Rate Agreement do the outweigh risks **(this is best measured as a % of par PV savings test as discussed above)** ; if not, the request shall not be considered to meet the Guidelines. For a proposed debt issue this analysis shall include a comparison of all alternatives considered by the Governmental Entity and the reasons for the alternative chosen. This analysis shall also include stress testing of the Interest Rate Agreement based on changes in market condition and the risks

to support the Governmental is aware of the various risk impact on the Governmental Entity's financial position and condition. The Governmental Entity shall include the impact of its risk management plan on mitigating risks and cost of the plan. The Governmental Entity must produce this analysis themselves; but, an Independent Swap Advisor ~~and Swap Counsel may~~ must be used in performing the analysis. The Governmental Entity shall have the analysis reviewed by an Independent Swap Advisor (which is not serving as the Independent Swap Advisor on the transaction for the Governmental Entity) as to the reasonableness of its methodology, assumptions, and conclusions. This independent review shall also report on any risks not reported in the Governmental Entity's analysis and any difference on the conclusion concerning the impact of the Interest Rate Agreement on the Governmental Entity's financial condition and position.

C. Procurement of Interest Rate Agreements.

Governmental Entities may enter into an Interest Rate Agreement through negotiation with a Counterparty or through a competitive bidding process, as provided by law **and market conditions**.

D. Form of Documentation.

To document any Interest Rate Agreement, a Governmental Entity shall utilize the standard documentation prepared by the International Swaps and Derivatives Association, Inc. ("ISDA"), such as the Master Agreement, Schedule and Confirmation, with such modifications and supplements as the Governmental Entity deems necessary to accomplish the purposes of the Interest Rate Agreement and as approved by the Comptroller.

E. Risks Associated with Interest Rate Agreements.

Any Governmental Entity proposing to enter into an Interest Rate Agreement shall be responsible for understanding the risks associated with entering into such an Agreement. The Governmental Entity shall identify those risks associated with a proposed Interest Rate Agreement by listing and describing the risks impact in the analysis required to support the accomplishment of the Governmental Entity's business purpose.

F. Standards for Counterparty Selection and Security for Financial Interest.

Except as provided in the next sentence, any Counterparty to an Interest Rate Agreement shall be required to have either a counterparty, a long-term debt, or a claims paying rating at the time the Interest Rate Agreement is entered into of not less than an "AA/P-1" category from a nationally recognized ratings service. In the event a proposed Counterparty does not have or fails to maintain either a

counterparty, a long-term debt, or a claims paying rating equal to or higher than an “AA/P-1” category, the Counterparty to the Interest Rate Agreement shall be required to collateralize the termination value of the Interest Rate Agreement with eligible collateral or shall provide a guaranty, surety, or other credit enhancement for its obligations under the Interest Rate Agreement from a guarantor, surety or other credit enhancement provider with a long-term debt or claims paying rating equal to or higher than an “AAA/P-1” category.

Eligible collateral shall mean direct obligations of the United States or any agency thereof. At all times the eligible collateral shall have a market value (as evidenced by weekly valuations required by Section IV-H) at least equal to 102% of the termination value of the Interest Rate Agreement. If collateral is required, the Governing Body shall designate a custodian bank independent of the Counterparty to hold such collateral on behalf of the Governmental Entity.

The custodian bank shall be selected from one of the institutions designated by the State Treasurer of Tennessee as a Trustee Custodian pursuant to Tenn. Code Ann. Section 9-4-108. The Governing Body shall execute a written custodial agreement with the custodian bank to provide for the custody of collateral required from a Counterparty. The custodial agreement shall make specific reference to the applicable Interest Rate Agreement and shall identify the type of collateral that the custodian bank may accept on behalf of the Governmental Entity. The custodial agreement shall also provide that (1) the bank will compare the collateral delivered by the Counterparty to that which has been identified by the Governmental Entity and will accept only such collateral which has been so identified, (2) the bank will certify to the Governmental Entity that such collateral is being held on behalf of the Governmental Entity, (3) the bank will assume entire responsibility for any loss arising from the transfer or safekeeping of such collateral during the period it is held by the bank pursuant to the custodial agreement, except for any loss which may arise from any event determined to be beyond the bank’s control, (4) the bank will furnish the Governmental Entity written reports concerning any activity in the custodial account, and (5) no collateral shall be removed from the account without the prior approval of the Governmental Entity.

If the rating of the Guarantor or Surety is lowered below an “AAA/P-1” category or is suspended after an Interest Rate Agreement is entered into, the Counterparty shall be required to collateralize in the manner described above the termination value of the Interest Rate Agreement or provide a substitute entity with a counterparty, a long-term debt, or a claims paying rating equal to or higher than an “AAA/P-1” category within five (5) business days of such downgrade or suspension.

G. Credit Enhancement, Liquidity and Reserves.

The Guidelines do not require, except in those cases where the Counterparty is

required to provide collateral, guaranty, surety, or other credit enhancement to secure the termination value of an Interest Rate Agreement, either the Governmental Entity or the Counterparty to obtain credit enhancement or a liquidity facility in connection with entering into an Interest Rate Agreement or to maintain any reserves in connection with such agreement. The guarantor/surety shall have and maintain a rating of not less than "AAA/P-1". The Governmental Entity shall include a plan to replace any guarantor/surety whose rating falls below "AAA/P-1" with and without refunding of the specific identifiable including the cost of terminating the debt with a refunding and costs of replacing the guarantor/surety without a refunding.

If the Governmental Entity uses bond insurance in conjunction with the underlying debt the insurer shall maintain a rating of not less than "AAA/P-1". The analysis of the proposed transaction and derivative shall include the impact of the insurer falling below "AAA/P-1".

H. Financial Monitoring.

Unless the Counterparty has provided collateral to secure its obligations under an Interest Rate Agreement as required by Section IV-F hereof, the Counterparty shall agree to provide the Governmental Entity with at least monthly mark-to-market calculations showing the current termination value of the Interest Rate Agreement. If the Counterparty, Guarantor, or Surety has provided collateral to secure its obligations under an Interest Rate Agreement as required by Section IVF hereof, the Counterparty shall agree to provide at least weekly valuations of the collateral and the termination value of the Interest Rate Agreement. The Governmental Entity shall establish an independent process for monitoring and reviewing the valuations required by these Guidelines. The Governmental Entity shall clearly describe the process established and shall identify in its request both the Governmental Entity employee designated as the Monitor and the Independent Swap Advisor responsible for such process who shall submit monthly reports to the Governmental Entity's Governing Body. With respect to every Interest Rate Agreement, this process shall monitor the following:

1. Counterparty Credit Rating and financial condition;
2. Guarantor/Surety Credit Rating and financial condition;
3. Report of Collateral Valuation determined by the Independent Swap Advisor;
4. Report of Market/Termination Value determined by the Independent Swap Advisor;
5. Report of Hedge Effectiveness determined by an Independent Swap Advisor; and
6. Impact on Governmental Entity's financial condition and position.

I. Application and Source of Payments.

If a Governmental Entity receives a non-periodic payment in connection with entering into or performing under an Interest Rate Agreement relating to taxexempt

debt, including any termination payment, the Governmental Entity shall consult with nationally recognized bond counsel as to whether there are any restrictions on the application or investment of such payment (unless the Governmental Entity has been advised previously by such counsel that no such restriction exists). A Governmental Entity required to make any payment, including a non-periodic payment, under an Interest Rate Agreement, shall make such payment only from sources as are identified in the Interest Rate Agreement and otherwise are legally available for such payment.

J. Skill and Knowledge Requirements.

Any Governmental Entity proposing to enter into an Interest Rate Agreement is responsible for understanding the risks associated with entering into such an Agreement. **The Governmental Entity's CEO and Governing Body (through a designated member of the Governing Body and a designated member of the Audit Committee) are responsible for obtaining a basic understanding of any Interest Rate Agreement and the underlying debt. The Governmental Entity is responsible for maintaining staff able to properly understand, monitor, and disclose Interest Rate Agreements as well as hiring the necessary Independent Swap Advisors.**

K. Information Sheet.

Each request by a Governmental Entity to enter into an Interest Rate Agreement shall be accompanied by a completed information sheet in the form of Appendix A attached hereto, and shall include such information as is necessary for the Comptroller to make a determination of compliance pursuant to these Guidelines.

Other comments:

- 1. ALL issuers should be required to hire an Independent Swap Advisor as swaps are extremely complex and only fully understood by a professional that has intimate experience with them.**
- 2. The State should have minimum professional standards for Swap Advisors (ie, must have seven years of practical interest rate derivative experience as an interest rate derivative trader or marketer at a swap provider).**
- 3. The structure of the Swap Advisory business should be specifically considered. One thought is that the State should control the pool of swap advisors that conduct business in the State of Tennessee through an rfp process and then make them available to the Governmental Entities that are contemplating the use of interest rate swaps. This eliminates the influence of swap providers and reduces any conflict of interest created in the Swap Advisor selection process.s**

V. GUIDELINES SPECIFIC TO FORWARD PURCHASE AGREEMENTS

A forward purchase agreement is a form of a swap: fixed-to-floating rate swap. As such, the State of TN should consider including the risk evaluation as a responsibility of the Governmental Entity's Independent Swap Advisor.

A. Conditions to Entering into Forward Purchase Agreements.

Any Governmental Entity is authorized to enter into a Forward Purchase Agreement otherwise authorized by law provided such Forward Purchase Agreement:

1. Is for fixed-rate debt (with proposed continuing and one-time costs fully disclosed) with a principal amount of at least \$25,000,000; and
2. Is entered into for the business purpose of reducing the reasonably anticipated lower net cost of borrowing with respect to the debt.

B. Supporting Analysis.

Any request by a Governmental Entity to enter into a Forward Purchase Agreement shall analyze and describe how the Forward Purchase Agreement is intended to accomplish the business purpose account the various risks posed by the interest rate agreement and underlying debt. The analysis must support that the potential benefits of the Forward Purchase Agreement outweigh risks; if not, the request shall not be considered to meet the Guidelines. For a proposed debt issue this analysis shall include a comparison of all alternatives considered by the Governmental Entity and the reasons for the alternative chosen. No Forward Purchase Agreement shall be entered into unless such agreement relates to a specific identifiable indebtedness that the Governmental Entity reasonably anticipates will be issued under applicable law. The Governmental Entity must produce this analysis themselves; but, an independent financial advisor and bond counsel may be used in performing the analysis. The Governmental Entity shall have the analysis reviewed by an independent financial advisor not serving as the financial advisor for the Governmental Entity on the transaction as to the reasonableness of its methodology, assumptions, and conclusions. This independent review shall also report on any risks not reported in the Governmental Entity's analysis and any difference on the conclusion concerning the impact of the Forward Purchase Agreement on the Governmental Entity's financial condition and position.

C. Procurement of Forward Purchase Agreements.

Governmental Entities may enter into a Forward Purchase Agreement through negotiation or through a competitive bidding process, as provided by law.

D. Form of Documentation.

The Forward Purchase Agreement shall be in the form and content similar to a standard bond purchase agreement and shall clearly define the rights and obligations of each party to the Forward Purchase Agreement in the event of failure to perform by either party. All material terms and conditions must be contained within the Agreement and not within another document.

E. Risks Associated with Forward Purchase Agreements.

Any Governmental Entity that enters into a Forward Purchase Agreement shall be responsible for understanding the risks associated with entering into such an Agreement. The Governmental Entity shall also identify those risks associated with any proposed Forward Purchase Agreement by listing and describing the risks impact in the analysis required to support the accomplishment of the Governmental Entity's business purpose.

F. Standards for Selection.

Governmental Entities may enter into Forward Purchase Agreements with any party that has a combined capital and surplus of not less than \$25,000,000 at the date of execution of the Forward Purchase Agreement. The Governmental Entity will include in its request submitted to the Comptroller evidence indicating the combined capital and surplus of such party. The Governmental Entity shall also include a copy of the latest audited financial report of such party and any interim financial reports considered necessary.

G. Application and Source of Payments.

If a Governmental Entity receives a non-periodic payment in connection with entering into or performing under a Forward Purchase Agreement relating to taxexempt debt, including any termination payment, the Governmental Entity shall consult with nationally recognized bond counsel as to whether there are any restrictions on the application or investment of such payment (unless the Governmental Entity has been advised previously by such counsel that no such restriction exists). A Governmental Entity required to make any payment under a Forward Purchase Agreement, including non-periodic payments, shall make such payment only from sources as are identified in the Forward Purchase Agreement and otherwise are legally available for such payment.

H. Skill and Knowledge Requirements.

Any Governmental Entity proposing to enter into a Forward Purchase Agreement is responsible for understanding the risks associated with entering into such an Agreement. **The Governmental Entity's CEO and Governing Body, are responsible for obtaining a basic understanding of any Forward Purchase Agreement and the underlying debt. The Governmental Entity is responsible for maintaining staff able to properly understand and execute Forward**

Purchase Agreements as well as the subsequent debt issuance. The Governmental Entity is responsible for hiring independent financial advisor(s).

I. Information Sheet.

Each request by a Governmental Entity to enter into a Forward Purchase Agreement shall be accompanied by a completed information sheet in the form of Appendix B attached hereto and shall include such information as is necessary for the Comptroller to make a determination of compliance pursuant to these Guidelines.

History

Adopted September 27, 2000, effective October 15, 2000;
Amended July 30, 2002, effective August 1, 2002; and
Amended _____, 2009, effective _____, 2009.

Attachments

- A- Interest Rate Agreement Information Sheet
- B- Forward Purchase Agreement Information sheet
- C- Authorizing Statutes