December 3, 1997

TO:

ALL CHIEF ACTUARIES OF LIFE INSURANCE COMPANIES AND FRATERNAL ORGANIZATIONS LICENSED IN ILLINOIS

FROM:

LARRY M. GORSKI, FSA, MAAA

RE:

COMMENTS CONCERNING ACTUARIAL MEMORANDA
ET AL. (CB 97-10)

Asset Adequacy Analysis Issues

With regard to future memorandums, product descriptions should provide a detailed explanation of the significant characteristics of each product. They should include descriptions of any important or unusual product features, as well as the amount of reserves associated with each product line (e.g. UL, WL, term, etc.) to help us focus our review. Also, Section 1408.80 of the Actuarial Opinion and Memorandum Regulation (AOMR) requires a description of "the specific risks the appointed actuary deems significant", and "how pertinent risks were analyzed". These sections are important, particularly for companies selling equity indexed products.

With regard to assumptions, some excess lapse rates appear to be unrealistically low. This is especially problematic if future modeled credited rates are allowed to fall significantly below market rates, because it results in underestimating the "costs" associated with following such a crediting rate strategy. In addition, some reinvestment strategies and even crediting strategies described in memorandums bear little relation to reality. Simplification in the modeling is expected, but not assumptions that bear little relation to company practices.

We are again requesting that the Valuation Actuary submit a Memorandum Executive Summary (MES) to the Illinois Department of Insurance by March 15, 1998. The MES is considered a confidential document by our Department, and is destroyed each year upon receipt and review of the following year's MES. For administrative reasons, the MES should not be sent with the annual statement, but should be submitted directly to Mr. Bruce Sartain, ASA, of the Illinois

Insurance Department in Springfield. A sample of the MES is attached to this letter. The request for an MES is a standing request.

Status of Regulation XXX

This summer we surveyed other state insurance departments as to whether they anticipated adopting a XXX-like regulation prior to 1/1/98. The results of that survey indicate the 51% mark

will not be reached by 1/1/98, and therefore our XXX regulation will not require compliance starting with January 1, 1998. We will perform another survey next year and use it as a basis for determining compliance starting with 1999. We plan on amending the Illinois regulation to clarify its intent with regard to the use of unisex mortality tables. That is, after the U.S. Supreme Court decision in Arizona Governing Committee v. Norris, Illinois did not change its reserve requirements to allow unisex mortality in the calculation of minimum statutory reserves. The adoption of XXX is not intended to change that position, and therefore unisex mortality rates for reserving purposes will not be allowed.

New Regulatory Initiative

We have begun drafting revisions to our Part 935 in order to adopt the Annuity 2000 and 1994 GAR tables for use as annuity valuation mortality tables. The 1994 GAR table uses the concept of generational mortality to incorporate assumed future mortality improvements into valuations. The effective date of the revised regulation is expected to be 1/1/99.

Reserves for Equity Indexed Annuity Products

Attached, in Actuarial Guideline form, is the current position of the Life Actuarial Section of the Illinois Department of Insurance as to acceptable formula reserve computational methods for equity indexed annuity products. The first item to note is the scope of the guideline. The scope extends to deferred and immediate annuities and certain variable annuities with floor guarantees.

Also note the methods recognized as being acceptable interpretations of CARVM and the conditions and limitations for their use. Associated with each method is the requirement to provide specific actuarial certification(s). It is important to note that the "Hedged as Required" criteria effectively preclude the use of "option replication" strategies for insurers hoping to use a Type 1 computational method. Another significant item to note is the statement "Variations from the MVRM and EDIM as described in Attachment, are not acceptable interpretations of CARVM." Another item to note is that this guideline applies to all Illinois licensed insurers insuring or reinsuring products within its scope regardless as to where the business is produced.

Due to the changing nature of the equity indexed products, this guideline may change in the future. Also, due to the variety of product design features in the current market, applying the guidelines may be difficult in some cases. If you have any questions concerning the application of this guideline to a specific product, please call Larry M. Gorski at 217-782-1794.

Actuarial Guideline ZZZ

The Application of the Commissioners Annuity Reserve Method
to Equity Indexed Annuities

Background

The purpose of this Actuarial Guideline is to interpret the standards for the valuation of reserves for equity indexed annuities. This Guideline codifies the interpretation of the Commissioners

Annuity Reserve Valuation Method (CARVM) by clarifying the computational methodologies which will comply with the intent of the Standard Valuation Law (SVL).

Equity indexed deferred annuity products provide policyholders with a minimum guaranteed interest accumulation rate on a portion of all premium payments and a portion of the growth, if any, of an equity based index such as the S&P 500. While there is no "typical" equity indexed product, there are design features that are common to most products. Some of these features are a participation rate guaranteed for one or more years, a cap on the portion of the index growth that is credited to policyholders, and a policy term which defines a time period for which current guarantees are applicable.

Equity indexed immediate annuity products provide policyholders with a minimum guaranteed annuitization rate and an opportunity to receive larger periodic payments based on the growth, if any, in an equity index. The product design may include features such as a participation rate, cap or term.

While contract parameters such as participation rate and cap are guaranteed for a period of time, growth of the underlying index is not. Index growth may be positive or negative. This combination of guaranteed parameters and unknown equity index growth makes the application of CARVM to these products problematic.

CARVM defines minimum statutory reserves as "the greatest of the respective excesses of the present value, at the date of valuation, of the future guaranteed benefits, including guaranteed nonforfeiture benefits, ... over the present value, at the date of valuation, of any future valuation considerations derived from future gross considerations, required by the terms of such contract, that become payable prior to the end of such respective contract year. The future guaranteed benefits shall be determined by using the mortality table, if any, and the interest rate, or rates, specified in such contracts for determining guaranteed benefits."

In order that all insurers issuing equity indexed annuity products establish reserves for statutory reporting purposes that are consistent with CARVM minimum statutory formula reserves requirements, this actuarial guideline identifies a computational method that is deemed to be consistent with CARVM in situations when specific operational criteria called "Hedged as Required" criteria are met. In addition, two computational methods are defined that are deemed to be consistent with CARVM in the event the "Hedged as Required" criteria are not met.

Scope

This Actuarial Guideline applies to all equity indexed annuity contracts, regardless of the date of issue, that are subject to CARVM. Separate account variable annuities that provide a guaranteed floor for surrender, withdrawal or maturity values (distinct from the guaranteed floor provided by a "Free Look" provision, if any), are also included within the scope of this Guideline.

Computational Methods

Computational methods deemed to be consistent with CARVM can be classified into two groups, Type 1 methods and Type 2 methods. The following computational method is considered a Type 1 method: the Enhanced Discounted Intrinsic Method (EDIM). Type 1 computational methods are deemed to be consistent with CARVM if the "Hedged as Required" are met. The following methods are considered Type 2 methods: the Commissioners Annuity Reserve Method with Updated Market Values (CARVM with UMV) and the Market Value Reserve Method (MVRM). For a complete description of these methods, please consult Attachment 1.

General Limitations on the Use of Certain Computational Methods

The MVRM and EDIM computational methods are both based on a future value. In the case of MVRM, a projected index is determined. The projected index is then used to determine end of term and interim benefit amounts. CARVM is applied to these benefit amounts. In the case of EDIM, the end of term guaranteed value (a future value) is used to determine an interest rate for calculating terminal reserves for the guaranteed benefits after the initial terminal reserve. Determination of the "term" is an essential component of both computational methods.

The MVRM and EDIM computational methods are considered acceptable interpretations of CARVM under the following conditions:

The policy form design features a single dominant benefit which is the most likely benefit to be provided under the policy form with the determination of the single dominant benefit based on a consideration of product features such as the pattern of guaranteed participation rates, surrender charges, vesting rates, spread deductions, and marketing/advertising material.

The point in time associated with the single dominant benefit most likely to be provided under the contract is used as the terminal point of the current term for purposes of applying the computational method and complying with the "Hedged as Required" criteria, if applicable.

The appointed actuary has demonstrated to the satisfaction of the regulatory officials in each state in which the insurer is required to submit a statutory financial statement, prior to the use of the MVRM or EDIM computational methods, that the requirements above have been met.

Variations from the MVRM and EDIM as described in Attachment 1, are not acceptable interpretations of CARVM.

Type 1 Methods

A Type 1 computational method is deemed to be consistent with CARVM if an insurer using the method complies with the "Hedged as Required" criteria (Attachment 2) and provides a certification as to compliance with the criteria. The certification must be signed by the appointed actuary. The certification shall be provided with each annual and quarterly statutory financial statement filed with the appropriate insurance regulatory official in each state in which the insurer does business.

For purposes of determining compliance with the "equivalence of characteristics" requirement in the "Hedged as Required" criteria, the current term of an equity indexed deferred annuity policy will be determined based on the requirements in the section captioned "General Requirements on Use of Certain Computational Methods." For purposes of applying a Type 1 computational method, the time horizon for present value calculations should be based on the current term of the policy based on the requirements in the section captioned "General Requirements on Use of Certain Computational Methods."

The Enhanced Discounted Intrinsic Method (EDIM) requires an initial reserve amount that is determined by methods that are not specifically included in the EDIM. For purposes of compliance with statutory minimum formula reserve requirements, the initial reserve under EDIM must be set at least equal to the initial reserve produced by either CARVM with UMV, or the MVRM with assumptions used to compute any necessary option market values reasonable as of the date of issue of the policy. The insurer must provide a certification (Attachment 3) as to the reasonableness of the assumptions.

Type 2 Methods

The use of Type 2 method is not conditioned upon the requirement to meet the "Hedged as Required" criteria. However, an insurer using a Type 2 method must provide a certification (Attachment 4) signed by the appointed actuary with each annual and quarterly statutory financial statement filed with the appropriate insurance regulatory official in each state in which the insurer does business. This certification deals with the assumptions underlying the option market values included in the calculation of reserves using a Type 2 method and the consistency in assumptions between these option market values and the statement value of any options owned by the insurer to support the equity indexed annuity business being valued.

For purposes of applying the MVRM computational method, the time horizon for present value calculations should be based on the current based on the requirements in the section captioned "General Requirements on Use of Certain Computational Methods."

Required Change in Method

In the event an insurer that is using a Type 1 computational method for a block of business fails to meet the "Hedged as Required" criteria, the required actuarial certification must disclose this fact. If the reason for failing the "Hedged as Required" criteria is not corrected within one quarterly financial reporting of the initial disclosure of the failure in the actuarial certification, the insurer must use a Type 2 computational method for determining minimum statutory formula reserves for this block of business.

If at a later date, the insurer can demonstrate to the satisfaction of its domiciliary commissioner that it is meeting the "Hedged as Required" criteria, the insurer may, with the approval of the domiciliary commissioner, resume using a Type 1 computational method. In addition, the insurer must notify the appropriate regulatory official in each state in which the insurer does business subject to the change in computational method.

Optional Change in Method

An insurer using either a Type 1 or Type 2 computational method for a block of business, may with the approval of its domiciliary commissioner and after notifying the appropriate regulatory official in all the other states in which the insurer writes this block of business, use a computational method of the other type. If the change in computational methods involves a change from a Type 2 computational method to a Type 1 computational method, the request to the domiciliary commissioner for approval of the change in method must be accompanied with a demonstration of compliance with the "Hedged as Required" criteria.

Plan Type

The use of either a Type 1 computational method or a Type 2 computational method requires a determination of Plan Type for purposes of determining the maximum valuation interest rate. Design features unique to equity indexed annuities, such as an equity enhanced surrender values, vesting schedules, or participation rate, should not used to determine the Plan Type of a policy form. Only those design features specifically identified in Section 4b. Paragraph C of the NAIC Model SVL may be used to assign a Plan Type to a policy form.

The definition of Plan Type A and Plan Type B in the NAIC Model SVL includes the phrase "with an adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company..." The reference to "change in ... asset values" does not include changes in policy values due to changes in the equity index underlying the policy form.

Other Regulatory Requirements

The guidance provided in this Actuarial Guideline concerning statutory minimum formula reserves for equity indexed annuity products supersedes the valuation guidance in Sections 5 and 6 of the NAIC Interest-Indexed Annuity Contracts Model Regulation.

Asset Adequacy Testing of Reserves

To the extent required by law, regulation, or regulatory requirements, reserves established for equity indexed annuity policies must be tested for adequacy using appropriate methods and assumptions.