

# Report of the Interim Solutions Subgroup of the American Academy of Actuaries' VAGLB Work Group

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This report was prepared by a subgroup of the Academy's Variable Annuities with Guaranteed Living Benefits (VAGLB) Work Group of the Life Valuation Subcommittee. The following individuals were instrumental in its preparation:

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#### DRAFT ACTUARIAL GUIDELINE MMMM -- 8/2/2002 version

### RESERVES FOR VARIABLE ANNUITIES WITH GUARANTEED LIVING BENEFITS

#### I. Background

The purpose of this Actuarial Guideline (Guideline) is to interpret the standards for the valuation of reserves for Guaranteed Living Benefits included in variable deferred and immediate annuity contracts (VAGLBs). This Guideline provides an interpretation of the National Association of Insurance Commissioners' (NAIC) Model Standard Valuation Law (SVL) for VAGLBs and is intended to be temporary.

The methodology does not specifically address how "base variable annuity reserves" (i.e., reserves for variable annuity contracts calculated by ignoring VAGLBs) should be calculated. Rather, it only addresses the calculation of reserves for VAGLBs to be held in the General Account.

In addition, this Guideline interprets the standards for the valuation of reserves when the VAGLB risk is reinsured.

#### II. Scope

This Guideline applies to variable deferred and immediate annuity contracts that provide one or more guaranteed living benefits. This Guideline does not apply to those Group Annuity contracts that are not subject to the Commissioners' Annuities Reserve Valuation Method (CARVM).

VAGLB designs falling under the scope of this Guideline include, but are not limited to, currently offered provisions commonly referred to as Guaranteed Minimum Accumulation Benefits (GMABs), Guaranteed Minimum Income Benefits (GMIBs), Guaranteed Minimum Withdrawal Benefits (GMWBs), and Guaranteed Payout Annuity Floors (GPAFs).

#### III. Text

#### A. Contract Reserve

The Contract Reserve is the total reserve held by the company in support of the entire variable annuity contract, and equals the sum of 1. and 2., where:

- equals the reserve for the variable annuity contract ignoring both the future revenues and benefits from the VAGLBs [Optional language for LHATF to consider: "and after comparison to the cash value of the contract".]. In the event that there are no explicit VAGLB charges, a charge should be imputed; and
- 2. equals the greater of a) and b), where:
  - a) equals the sum of the aggregate VAGLB charges from the date of issue to the valuation date for VAGLB benefits in-force (i.e., contracts still in-force and still eligible for the VAGLB).
     In the event that there are no explicit VAGLB charges, a charge should be imputed.

The appointed actuary must be prepared to defend the amount of any imputed VAGLB charges in relation to the benefits provided.

b) equals the reserve determined by the appointed actuary as the result of the asset adequacy analysis requirement in subsection C.

The excess of the Contract Reserve over the results of item 1. above must be held in the General Account. (This is in addition to any amounts in item 1. that are required to be held in the General Account).

#### B. Reserve for Ceded and Assumed Reinsurance

If all or a portion of the VAGLB risk is reinsured on a proportional basis, the ceding company is entitled to a corresponding proportional reinsurance reserve credit based on the VAGLB reserve held before consideration of reinsurance.

Adjustments may need to be made to the reserve credit taken by ceding companies where the underlying reinsurance treaty contains non-proportional elements.

For companies where VAGLB risk is assumed, the Contract Reserve will be the greater of:

- 1. The sum of the aggregate VAGLB gross reinsurance premiums from the effective date of the treaty to the valuation date for VAGLB benefits in-force (i.e., contracts still in-force and still eligible for the VAGLB).
- 2. The reserve determined by the appointed actuary as the result of the asset adequacy analysis requirement in subsection C.

#### C. Asset Adequacy Analysis Requirement

The appointed actuary must perform a standalone asset adequacy analysis of the VAGLB risks. Such analysis shall be performed reflecting all benefits and guarantees in the contract associated with the VAGLB, as well as all expenses and asset based charges associated with the VAGLB. The analysis shall be performed consistent with the requirements of Section 6 of the NAIC Model AOMR, including the requirement that the analysis conform to the Actuarial Standards of Practice as promulgated from time to time by the Actuarial Standards Board.

Where the VAGLB is reinsured, the asset adequacy analysis should reflect the reinsurance, consistent with the NAIC Model AOMR.

#### IV. Applicability

This Guideline is effective December 31, 2002 and affects all contracts issued on or after January 1, 1981.

Since the requirements of this Guideline are intended to be temporary, this Guideline is in effect until the earliest of (i) the date it is revised, (ii) the date it is repealed, or (iii) January 1, 200 X.