

**Proposed Actuarial Guideline from the  
American Council of Life Insurers (ACLI) and the Committee of Annuity Insurers (CAI)  
(January 27, 2022)**

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**Actuarial Guideline ILVA  
The Application of Model 250 to Variable Products Supported  
by Non-Unitized Separate Accounts**

**Background**

Variable annuities are exempted from the scope of NAIC Model 805, *Standard Nonforfeiture Law for Individual Deferred Annuities*. The Model does not define the term "variable annuity". NAIC Model 250, *Variable Annuity Model Regulation*, provides requirements for nonforfeiture benefits for those variable annuities defined as "contracts that provide for annuity benefits that vary according to the investment experience of a separate account or accounts maintained by the insurer as to the policy or contract."

Section 7B of Model 250 provides that "to the extent that a variable annuity contract provides benefits that do not vary in accordance with the investment performance of a separate account" the contract shall satisfy the requirements of Model 805.

The application of the Model 250 to a traditional variable annuity with unit-linked values is straightforward. The unit-linked feature provides an automatic linkage between annuity values and the investment experience of a separate account. Market values of the separate account assets are the basis of contractual benefits, including surrender values.

In recent years, a number of insurers have introduced new annuity products with index-linked crediting features. Credits are based on the performance of an index, subject to the limits of certain parameters (cap rates, participation rates, etc.) when the index return is positive, and a level of downside protection when the index return is negative. These annuity products are not unit-linked and do not invest in the underlying indices whose performance forms the basis for the index-linked credits. However, derivative instruments can be used to replicate the index-linked credits. Changes in the values of these derivative instruments over the course of a crediting period can create an indirect relationship between asset values and annuity benefits.

There is no established terminology for these annuity products. These products go by several names, including hybrid annuities, structured annuities, registered index-linked annuities, or index-linked variable annuities, among others. This guideline refers to them as index-linked variable annuities (ILVA).

The fact that ILVA products are not unit-linked means they don't have values determined by the market values of the underlying assets. They provide a structure instead where underlying assets held by the insurer will be managed to ensure that contractual liabilities can be satisfied. During an indexed crediting term, they provide interim values defined by contractual provisions to account for withdrawals, death benefits, etc. that may occur during an index term.

ILVA products are registered with the SEC because they are subject to the *Securities Act of 1933*, but they are not considered variable annuities under the *Investment Act of 1940* because they do not provide a pass-through of separate account investment experience. As stated previously, a variable annuity under Model 250 means a policy or contract that provides annuity benefits that vary according to the investment experience of a separate account or accounts managed by the company for policies and contracts. Model 250 by its terms does not require that:

1. Annuity benefits vary directly with, or reflect a pass-through of, the investment experience of a separate account or accounts (i.e., daily unit-linked values), or
2. Assets be invested to perfectly replicate index credits provided.

The purpose of this guideline is to clarify the application of Models 805 and 250 to ILVAs. Specifically, the guideline provides conditions under which a non-unit-linked product can be considered to provide annuity benefits that vary according to the investment experience of a separate account, and therefore meet the requirements of a variable annuity under Model 250 and be exempt from Model 805.

### **Scope**

This guideline applies to any annuity contract exempt from Model 805 and subject to Model 250, on the basis that it is variable and that it is not unit-linked. This guideline is not meant to clarify Model 255 (*Modified Guaranteed Annuity Model Regulation*) and does not exclude ILVAs from qualifying under Model 255.

This guidance applies to index-linked crediting features that are provided through contracts or policies supported by an underlying non-unit-linked separate account(s) (with or without unit-linked subaccounts) or contracts or policies added to such by rider, endorsement, or amendment. This guidance applies to both insulated and non-insulated separate account products.

This guideline does not apply to products subject to the requirements of NAIC Model 805, *Standard Nonforfeiture Law for Individual Deferred Annuities*.

### **Definitions**

“Interim Value” means the value, attributable to one or more index options, used in determining contractual values such as the death benefit, transfer amount, withdrawal amount, annuitization amount or surrender value at any time other than the start date and end date of an index term.

“Index Strategy” means a method used to determine index credits with a specified index or indices and cap, trigger, contingent yield, buffer, barrier, floor, participation rate, spread, fee, margin or other index crediting elements.

“Index Option Base” means the well-defined base value in an index option on any date. This value reflects any Index Strategy allocations at the start of the Index Term, adjusted for any subsequent transaction activity (withdrawals, fee deductions, index credits, etc.).

“Index Term” means the period of time from the term start date to the term end date. A term may end due to contract holder actions or product features (e.g., a specified end date, a “lock-in” feature, etc.).

“Derivative Asset Proxy” means a package of hypothetical derivative assets designed to replicate index credits provided by an Index Strategy at the end of an Index Term.

“Interest Rate MVA” means a market value adjustment that reflects the change in the market value of hypothetical fixed income assets due to interest rate and/or credit spread movements, as well as investment and reinvestment risk.

## **Principles**

This guideline is based on the following principles:

1. The Interim Value methodology must provide equity to both the contract holder and the company based upon the risks assumed during an Index Term.
2. There may exist a hypothetical portfolio of derivative assets designed to replicate the index credits provided by an Index Strategy at the end of an Index Term.
3. The Interim Value methodology must demonstrate a relationship between the value of the hypothetical portfolio of derivative assets and the contract benefits over the course of an Index Term. This relationship should be materially consistent in a variety of economic environments.

## **Text**

Interim values can be determined using multiple methods. Two potential methods consistent with the above principles are described below. Other methods can be used provided that consistency with the principles can be demonstrated.

### **Example Method 1**

In the first method, the Interim Value is based on the value of the derivative assets designed to replicate index credits at the end of the Index Term, as represented by the market value of the Derivative Asset Proxy. Because the initial cost to purchase the derivative assets represents a fixed cost to hedge a benefit provided at the end of the Index Term, the initial value of the Derivative Asset Proxy may be amortized over the length of the Index Term.

The Interim Value (without accounting for any applicable Interest Rate MVA) at any time during an Index Term is the Index Option Base, plus the current value of the Derivative Asset Proxy, less the unamortized initial value of the Derivative Asset Proxy. Note that many reasonable methods exist to amortize the initial value of the Derivative Asset Proxy. Examples include (but are not limited to):

1. Linear amortization over the Index Term
2. Accrual of a zero-coupon bond yield over the Index Term

Assumptions used to value the Derivative Asset Proxy may include implied volatility, risk-free rate, dividend yield, and other parameters required for the valuation method of the derivatives. These assumptions:

1. Must be supported by market prices of the underlying derivative instruments at the start of the Index Term. If well-defined market prices and/or closed form valuation models do not currently exist due to the nature of the Index Strategy, then the method for estimating must be described in the Actuarial Memorandum;
2. May be static throughout the Index Term or may be dynamic. If dynamic assumptions are used, the assumptions must be based on market prices or estimated values of the Derivative Asset Proxy at the time of valuation;
3. May include provisions for frictional costs (transaction costs, bid/ask spread, etc.) that impact the value of the Derivative Asset Proxy if exited prior to the end of the Index Term.

The Interim Value may also include an Interest Rate MVA and/or other provisions to manage risks and costs of exiting before the end of the Index Term, such as a pro-rata ceiling limit.

On the term end date, the Interim Value (without accounting for any applicable Interest Rate MVA) must equal the Index Option Base (including index credits).

### **Example Method 2**

The second Interim Value method approximates the value of the Derivative Asset Proxy and defines the Interim Value during an Index Term in a transparent and simple fashion based on index performance, the crediting parameters for a given Index Strategy, and the time elapsed in the Index Term. It provides accrual from the initial Index Option Base to the Index Option Base plus the intrinsic value of the Derivative Asset Proxy. The Interim Value will generally move with the value of the derivative assets designed to replicate index credits at the end of the Index Term.

Under this method:

1. On the term end date, the Interim Value (without accounting for any applicable Interest Rate MVA) must equal the Index Option Base (including index credits).
2. During the Index Term, the Interim Value (without accounting for any applicable Interest Rate MVA) must grade into the upside crediting potential (cap rate, participation rate, etc.) and the downside protection (buffer protection, floor protection, etc.) at least as quickly as linearly.

### **Certifications**

The company (or actuary) must describe the Interim Value methodology and the assumptions used to calculate its value at any time. The company must provide an actuary's certification that the provisions of this guideline are being met.