



AMERICAN ACADEMY *of* ACTUARIES

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## MEMORANDUM

**To:** NAIC Life and Health Actuarial Task Force  
**From:** Academy Annuity Nonforfeiture Implementation Work Group  
**Subject:** Draft Model Regulation  
**Date:** 10/21/03

**Background:**

The following is a draft model regulation of the Standard Nonforfeiture Law for Individual Deferred Annuities put together by the Academy's Annuity Nonforfeiture Implementation Work Group. Also included in this material (as appendices) are draft actuarial certifications of compliance.

It should be noted that, the work group has looked only at the initial and redetermination rate. We have not worked yet on the equity index section. The authority (section 1) may need more work - there has not really been agreement on specific wording for that. Also, the whole thing should be viewed as a draft and starting point, although it is coming together fairly well. Our goal will be to take feedback from LHATF and incorporate that into a suggested model regulation at the 2003 Winter NAIC meeting. The certifications also have not been thoroughly reviewed, nor have they changed from the 2003 Fall NAIC meeting, but any comments from LHATF on them would also be valuable.

**ANNUITY NONFORFEITURE MODEL REGULATION**

Section 1	Authority
Section 2	Purpose
Section 3	Definitions
Section 4	Initial Method
Section 5	Redetermination Method
Section 6	Equity Indexed Benefits
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**Section 1 Authority**

This regulation is promulgated by the Commissioner of Insurance pursuant to Sections [insert applicable references to Section 4D of the Standard Nonforfeiture Law for Individual Deferred Annuities] of the [insert jurisdiction] Insurance Laws.

**Section 2 Purpose**

The purpose of this regulation is to adopt rules to provide for further adjustments to [insert applicable references to Section 4B of the Standard Nonforfeiture Law for Individual Deferred Annuities] and to implement the provisions of [insert applicable references to Section 4C of the Standard Nonforfeiture Law for Individual Deferred Annuities].

**Section 3 Definitions**

- A. “Basis” carries two meanings.
- (1) When used in the context of an initial or redetermination method, “basis” means the date or average over a specified period that is used in referencing the value of the five-year Constant Maturity Treasury Rate.
  - (2) When used in the context of equity indexed benefits, “basis” means the point in time used for establishing the value of the equity indexed options. This refers to the parameters for risk free rate, dividend yield, and index volatility.
- B. “Date triggered method” means a method for determining the initial rate or redetermination rate that is dependent only upon a date or dates of the index and not driven by the value of the index on a given date.

- C. “Initial method” means the basis upon which the initial minimum nonforfeiture interest rate is established and the period for which it applies.

[Drafting note: It is acceptable for the period within the initial method to last for the entire length of the contract. This is equivalent to not having any redetermination rates or redetermination periods.]

- D. “Initial rate” means the minimum nonforfeiture interest rate applicable at contract issue.
- E. “Minimum nonforfeiture amount” means the minimum value required under the [insert applicable references to Section 4B of the Standard Nonforfeiture Law for Individual Deferred Annuities] of the [insert jurisdiction] Insurance Laws. It reflects net considerations, the nonforfeiture rate, and other items as specified in [insert applicable references to Section 4A of the Standard Nonforfeiture Law for Individual Deferred Annuities] of the [insert jurisdiction] Insurance Laws.
- F. “Nonforfeiture rate” means the interest rate used in determining the minimum nonforfeiture amount. This will be determined at issue (initial rate) and, if applicable, each subsequent redetermination period (redetermination rate).
- G. “Redetermination method” means the redetermination date, basis, and period for all future redetermination rates.
- H. “Redetermination rate” means the nonforfeiture rate applicable at redetermination.
- I. “Substantive participation in an equity indexed benefit” means an annual cost of 25 basis points or more attributable to the equity indexed benefit.
- J. “Value triggered method” means a method for determining the initial rate or redetermination rate that is dependent upon the underlying value of the index rather than a time period. An acceptable value triggered method is one that moves consistently up or down with changes in interest rates, subject to statutory minimums and maximums.

#### Section 4 Initial Method

- A. The Commissioner shall be informed of the initial method to be used at the time that the contract form is filed. This initial method is not subject to approval as long as it is a date triggered method or value triggered method as defined above.
- B. The Commissioner shall be informed of any subsequent changes to the initial method at least 90-days prior to executing the change in method. A change in initial method would be applicable only to new issues (or new certificates in the case of a group contract) subsequent to the effective date of the change in method.

- C. The initial method is not required to be disclosed in the contract form.
- D. The initial rate is not required to be disclosed in the contract form.

#### Section 5 Redetermination Method

- A. The redetermination method, if any, shall be disclosed in the contract form. While the redetermination method must be filed with the Commissioner in accordance with jurisdictional filing requirements, it is not subject to approval as long as any value triggered method moves consistently up or down with changes in interest rates, subject to statutory minimums and maximums.
- B. A company that chooses to change the redetermination method for a previously issued contract can only do so if it is in the favor of the contract owner in all possible scenarios. This change must be filed with the Commissioner for approval in accordance with jurisdictional filing and approval requirements.
- C. Changes in the redetermination method for future issues (or certificate in the case of a group contract) are allowed at any time subject to jurisdictional filing and approval requirements.

#### Section 6 Equity Indexed Benefits

- A. If a company chooses to take the additional offset provided under [insert applicable references to Section 4C of the Standard Nonforfeiture Law for Individual Deferred Annuities], the company must choose either the cost basis approach or the market value approach for demonstrating compliance with the requirements in [insert applicable references to Section 4C of the Standard Nonforfeiture Law for Individual Deferred Annuities].
- B. If a company chooses to change the approach, the company shall file the change for approval with the Commissioner.
- C. The cost basis approach utilizes the following steps:
  - (1) Take the contract's guaranteed product features, such as the guaranteed participation rate, guaranteed caps, etc.
  - (2) As the basis for the option cost, use the point in time at the beginning of the current index term. The company can not change this basis in the middle of the index term.
  - (3) Make no adjustments for persistency, death, utilization, etc.
  - (4) Calculate the option cost of the liability on this basis under these assumptions.

- (5) Calculate an annuity immediate certain for the length of the index term. For the interest rate assumption in the annuity immediate certain, use the same basis for the five-year Constant Maturity Treasury rate as is used underlying the rate calculated in [insert applicable references to Section 4B of the Standard Nonforfeiture Law for Individual Deferred Annuities].
- (6) Divide the option cost of the liability from step 4 by the annuity immediate certain from step 5. This is the annual cost basis value.
- (7) If the annual cost basis value meets the criteria for substantive equity indexed participation, then an offset is available equal to the lesser of 100 basis points and the annual cost basis value.
- (8) With approval from the Commissioner at the time that this approach for compliance is filed with the Commissioner, the company may also make an irrevocable election to apply this offset for the life of the contract. The offset will then apply for the life of the contract, regardless of the changes in option costs or interest rates.
- (9) If the company does not make this irrevocable election, then the offset shall be recalculated for each index term.
- (10) The company shall file certification [insert reference] at the time that the contract form is filed.
- (11) The company shall also annually file certification [insert reference] with regard to ongoing compliance.

D. The market value approach utilizes the following steps:

- (1) Take the contract's non-guaranteed product features, such as the current participation rate, current caps, etc.
- (2) As the basis for the option cost, use the point in time at the beginning of the current index term. The company can not change this basis in the middle of the index term.
- (3) Reflect best estimate assumptions for the likelihood of payoff of the equity-indexed components.

[Drafting note: For example, persistency is reduced by voluntary lapsation and deaths. Also, if the product is structured so that equity indexed benefits are only applied on annuitization, then the likelihood of payoff would only reflect the extent to which the company anticipates providing the contract owner with those equity-indexed benefits. Other factors that influence persistency should also be reflected.]

- (4) Calculate the option cost of the liability under these assumptions.

- (5) Calculate an annuity immediate certain for the length of the index term. For the interest rate assumption in the annuity immediate certain, use the same basis for the five-year Constant Maturity Treasury rate as is used underlying the rate calculated in [insert applicable references to Section 4B of the Standard Nonforfeiture Law for Individual Deferred Annuities].
- (6) Divide the option cost of the liability from step 4 by the annuity immediate certain from step 5. This is the annual market value.
- (7) If the annual market value meets the criteria for substantive equity indexed participation, then an offset is available equal to the lesser of 100 basis points and the annual market value.
- (8) The offset shall be recalculated for each index term.
- (9) The company shall file certification [insert reference] at the time that the contract form is filed.
- (10) The company shall also annually file certification [insert reference] with regard to ongoing compliance.

#### Section 7 Effective Date

The effective date of this regulation is [insert date].

## **DRAFT for DISCUSSION PURPOSES**

### Actuarial Certification of Compliance with Annuity Nonforfeiture Regulation

For use with Equity Indexed Annuity policy forms at time of filing using either the Cost Basis or Market Value method.

I, (state name and professional designation) am responsible for evaluating compliance with the Annuity Nonforfeiture Law for Individual Deferred Annuities and the Annuity Nonforfeiture Regulation for (name of insurance company). I am familiar with the Standard Nonforfeiture Law for Individual Deferred Annuities and the Annuity Nonforfeiture Regulation as they pertain to equity indexed annuities. I have reviewed (identify policy form) and the contract features that relate to the equity index feature. I have reviewed the application of the (identify methodology – Cost Basis or Market Value) method and assumptions used to support the additional offset that is permitted to be used with equity indexed annuities.

Based on my review, I certify that the (state additional offset in basis points) offset as permitted in (reference section in the laws and/or regulations of the state in which this certificate is being filed that corresponds to Section 4 Paragraph C of The NAIC Model Standard Nonforfeiture Law for Individual Deferred Annuities) was used to determine nonforfeiture values provided under (identify policy form) and this offset meets the requirements of (identify state regulation that corresponds to the NAIC Model Annuity Nonforfeiture Regulation) as it relates to equity indexed annuities. (In the event the market value method is used the following additional statement is needed – “I have reviewed the persistency assumption used in the pricing of this product and it is consistent with the persistency assumption used to support the additional offset.”)

I have considered the following contract parameters and economic variables in my review and my certification is valid for the following ranges of values. (Identify contract parameters and economic variables considered and the range of values for each under which the certification is rendered.)

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(Name of actuary)

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(Signature of actuary)

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(Date of certification)

## **DRAFT for DISCUSSION PURPOSES**

### Actuarial Certification of Compliance with Annuity Nonforfeiture Regulation

For use in certifying on-going compliance with the Annuity Nonforfeiture Regulation.

I, (state name and professional designation) am responsible for evaluating compliance with the Annuity Nonforfeiture Law for Individual Deferred Annuities and the Annuity Nonforfeiture Regulation for (name of insurance company). I am familiar with the Standard Nonforfeiture Law for Individual Deferred Annuities and the Annuity Nonforfeiture Regulation as they pertain to equity indexed annuities. I have reviewed the equity index features of (identify all policy forms covered by this certification) for ongoing compliance with the requirements of (identify state regulation that corresponds to the NAIC Model Annuity Nonforfeiture Regulation) that deal with the additional offset relating to equity indexed annuities. I have reviewed the application of the Market Value Basis method and assumptions used to support the additional offset that is permitted to be used with equity indexed annuities.

Based on my review, I certify that the additional offset used to determine nonforfeiture values provided under the policy forms identified above met the requirements of (identify state regulation that corresponds to the NAIC Model Annuity Nonforfeiture Regulation) as it relates to equity indexed annuities during (identify calendar year).

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(Name of actuary)

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(Signature of actuary)

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(Date of certification)

**DRAFT for DISCUSSION PURPOSES**

Actuarial Certification of Compliance with Annuity Nonforfeiture Regulation

For use in certifying on-going compliance with the Annuity Nonforfeiture Regulation.

I, (state name and professional designation) am responsible for evaluating compliance with the Annuity Nonforfeiture Law for Individual Deferred Annuities and the Annuity Nonforfeiture Regulation for (name of insurance company). I am familiar with the Standard Nonforfeiture Law for Individual Deferred Annuities and the Annuity Nonforfeiture Regulation as they pertain to equity indexed annuities. I have reviewed the equity index features of (identify all policy forms covered by this certification) for ongoing compliance with the requirements of (identify state regulation that corresponds to the NAIC Model Annuity Nonforfeiture Regulation) that deal with the additional offset relating to equity indexed annuities. I have reviewed the application of the Cost Basis method and assumptions used to support the additional offset that is permitted to be used with equity indexed annuities.

Based on my review, I certify that the additional offset used to determine nonforfeiture values provided under the policy forms identified above met the requirements of (identify state regulation that corresponds to the NAIC Model Annuity Nonforfeiture Regulation) as it relates to equity indexed annuities during (identify calendar year).

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(Name of actuary)

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(Signature of actuary)

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(Date of certification)