

Life and Health Actuarial Task Force

Amendment Proposal Form*

1. Identify yourself, your affiliation and a very brief description (title) of the issue.

Dave Neve, chair, Academy Life Reserves Work Group – Stochastic Exclusion Test Clarifications

2. Identify the document, including the date if the document is “released for comment,” and the location in the document where the amendment is proposed:

VM-20: Requirements for Principle-based Reserves for Life Products, Working Draft dated 5/13/2010, Section 6.

3. Show what changes are needed by providing a red-line version of the original verbiage with deletions and identify the verbiage to be deleted, inserted or changed by providing a red-line (turn on “track changes” in Word®) version of the verbiage. (You may do this through an attachment.)

See attached.

4. State the reason for the proposed amendment? (You may do this through an attachment.)

Wording has been added to clarify that the amount used in the numerator and denominator of the stochastic exclusion test ratio is equal to an adjusted deterministic reserve that is based on anticipated experience assumptions with no margins. This does not represent a change in the definition of the ratio, only a clarification of the intent. Wording has also been revised in paragraphs 6.B.3 and 4 to clarify that the demonstration requirements need to satisfy that the stochastic reserve would not be greater than the greater of the deterministic reserve and the net premium reserve (not just greater than the net premium reserve).

* This form is not intended for minor corrections, such as formatting, grammar, cross-references or spelling. Those types of changes do not require action by the entire group and may be submitted via letter or email to the NAIC staff support person for the NAIC group where the document originated.

NAIC Staff Comments:

Dates: Received	Reviewed by Staff	Distributed	Considered
Notes:			

Section 6. Stochastic and Deterministic Reserve Exclusion Tests

A. Stochastic Reserve Exclusion Test

1. Groups of policies pass the stochastic reserve exclusion test if
 - a. Annually and within 12 months before the valuation date the company demonstrates that the groups of policies pass the stochastic exclusion ratio test defined in Subsection B of this section;
 - b. For groups of policies other than variable life or universal life with a secondary guarantee, the company provides a certification by a qualified actuary that the group of policies is not subject to material interest rate risk, tail risk, or asset risk. The company shall provide the certification to the Commissioner upon request.
2. A company may not exclude a group of policies for which there is one or more clearly defined hedging strategies from stochastic reserve requirements.
3. If a group of policies is excluded from the stochastic reserve requirements, the company may not include future transactions associated with non-hedging derivative programs in determining the deterministic reserve for those policies.

B. Stochastic Exclusion Tests

1. In order to exclude a group of policies from the stochastic reserve requirements using the stochastic exclusion ratio test allowed under Section 6.A.1.a, a company shall demonstrate that the ratio of (b-a)/c is less than 4% where:

- a. a = the adjusted deterministic reserve described in Paragraph 2.a below, using the baseline economic scenario described in Paragraph 2.b below.
- b. b = the largest adjusted deterministic reserve described in Paragraph 2.a below under any of the other 15 economic scenarios described in Paragraph 2.b below.
- c. c = an amount calculated from the baseline economic scenario described in Paragraph 2.b below that represents the present value of benefits and expenses for the policies, adjusted for reinsurance as appropriate to achieve consistency between the numerator and denominator. For this purpose, the company shall [generally] calculate an adjusted deterministic reserve as described in Paragraph 2.a below for the policies, but excluding the gross premium payments and excluding as appropriate the corresponding portion of such gross premium payments reflected in reinsurance cash flows.

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Guidance Note: As an example of the portion of gross premium payment excluded from reinsurance cash flows, for policies reinsured through a modified coinsurance arrangement where the policy premium is substantially returned to the ceding company through a reserve transfer, the ceding company would not need to reduce this amount for the gross premiums reflected in the reinsurance cash flows.

2. In calculating the ratio in Paragraph 1 above, the company
 - a. Shall calculate an adjusted deterministic reserve for the group of polices for each of the 16 scenarios that is equal to the deterministic reserve defined in Section 4.A, but with the following differences:
 - i. using anticipated experience assumptions with no margins,
 - ii. using the interest rates and equity return assumptions specific to each scenario, and
 - iii. using net asset earned rates specific to each scenario to discount the cash flows.
 - b. Shall use the most current available baseline economic scenario and the 15 other economic scenarios published by the NAIC. The methodology for creating these scenarios can be found in Appendix 1 of the valuation manual.

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~~c.~~ Shall use anticipated experience assumptions within each scenario that are dynamically adjusted as appropriate for consistency with each tested scenario.

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~~d.~~ May not group together contract types with significantly different risk profiles for purposes of calculating this ratio.

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3. Stochastic Exclusion Demonstration Requirements

In order to exclude a group of policies from the stochastic reserve requirements in Section 5 using the method allowed under Section 6.A.1.b above, the company must provide a demonstration in the PBR Actuarial Report in the first year and at least once every three calendar years thereafter that complies with the following:

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a. The demonstration shall provide a reasonable assurance that if the stochastic reserve was calculated on a standalone basis for those policies subject to the stochastic reserve exclusion, the minimum reserve for those policies would not increase. The demonstration shall take into account whether changing conditions over the current and two subsequent calendar years would be likely to change the conclusion to exclude the group of policies from the stochastic reserve requirements.

b. If, as of the end of any calendar year, the company determines the minimum reserve for the group of policies no longer adequately provides for all material risks, the exclusion shall be discontinued and the company fails the stochastic reserve exclusion test for those policies.

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~~c.~~ The demonstration may be based on analysis from a date that proceeds the initial or subsequent exclusion period.

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d. The demonstration shall provide an effective evaluation of the residual risk exposure remaining after risk mitigation techniques such as derivative programs and reinsurance.

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4. The company may use one of the following or another method acceptable to the commissioner to demonstrate compliance with Paragraph 3 above:

a. Demonstrate that the greater of the deterministic reserve and the net premium reserve is greater than the stochastic reserve calculated on a standalone basis.

b. Demonstrate that the greater of the deterministic reserve and the net premium reserve is greater than the scenario reserve that results from each of a sufficient number of adverse deterministic scenarios.

c. Demonstrate that the greater of the deterministic reserve and the net premium reserve is greater than the stochastic reserve calculated on a standalone basis, but using a representative sample of policies in the stochastic reserve calculations.

d. Demonstrate that any risk characteristics that would otherwise cause the stochastic reserve calculated on a standalone basis to exceed the greater of the deterministic reserve and the net premium reserve are not present or have been substantially eliminated through actions such as hedging, investment strategy, reinsurance, or passing the risk on to the policyholder by contract provision.

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C. Deterministic Reserve Exclusion Test

1. Group of policies that do not pass the stochastic exclusion test in Section 6.A do not pass the deterministic reserve exclusion test and the deterministic reserve test is not required to be calculated for that group of policies.

2. Except as provided in Subsection C.1, a group of policies passes the deterministic reserve exclusion test, if the company demonstrates that the sum of the valuation net premiums for the group of policies, determined

according to Section 3, is less than the sum of the corresponding guaranteed gross premiums for such policies.

3. A company may not group together policies of different contract types with significantly different risk profiles for purposes of the calculation in C.2.
4. For purposes of determining the valuation net premiums used in the demonstration in Subsection C.2:
 - a. If pursuant to Section 2 the net premium reserve is the minimum reserve required under Section 2.A of the Standard Valuation Law for policies issued prior to the operative date of the valuation manual, the valuation net premiums are determined according to those minimum reserve requirements;
 - b. If the net premium reserve is determined according to Section 3.A.2:
 - i. The lapse rates assumed for all durations are 0%;
 - ii. For policies with guaranteed gross premium patterns that subject the policy to shock lapses, as defined in Subsection E of Section 3 of VM-20, the valuation net premiums comparison to the guaranteed gross premiums indicated in Subsection B.1. of this Section shall be performed twice, once considering only the initial premium period and another considering the contract over its entire lifetime;
 - iii. The guaranteed gross premium shall be the level gross premium at issue that would keep the policy in force for the entire period coverage is to be provided, based on the policy guarantees of mortality, interest and expenses;
 - iv. If the anticipated mortality for the group of policies exceeds the valuation mortality, then the company shall substitute the anticipated mortality to determine the net premium.