Life Actuarial (A) Task Force
Amendment Proposal Form*

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

   Dave Neve, chairperson of the American Academy of Actuaries Life Reserves Work Group.
   Removal of references to the "seriatim reserve" in the Valuation Manual

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:

   The following sections of VM-20 and VM-31 from the draft of the Valuation Manual adopted by the NAIC on June 18, 2015:

   VM-20 Section 1C, Section 2G, and Section 7H
   VM-31 Section 3.E.3

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.)

   Please see attached.

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

   In the early drafts of VM-20 before the Net Premium Reserve (NPR) was added to VM-20, the calculation of the deterministic reserve was done on a seriatim basis. The PV of cash flows for each policy was called the "seriatim reserve". However, when the NPR was added to VM-20, the deterministic reserve was modified to be calculated on an aggregate basis, not a seriatim basis. Hence, the concept of the "seriatim reserve" was dropped, and references to the seriatim nature of the deterministic reserve were eliminated. However, several references to the seriatim nature of the deterministic reserve still remain in VM-20. This proposal eliminates these references.

   One of the changes that is part of this proposal eliminates the second paragraph of Section 2G, for the following reasons:

   1. The current wording of the paragraph is confusing, and can be interpreted to require a comparison of the "aggregate deterministic reserve" to the sum of the policy by policy "seriatim reserves" to ensure the former is not less than the latter. However, Section 2G is addressing simplification approaches, such as utilizing a cash flow model that groups policies into modeling cells (such as 5-year issue age brackets) rather than utilizing a seriatim cash flow model. Grouping policies in the cash flow model for simplification purposes is a completely different issue from the differences that arise between the sum of policy-by–policy seriatim reserves (that are floored at zero for each policy) and a reserve approach based on aggregate cash flows. Since the seriatim reserve is no longer required, eliminating this paragraph eliminates this confusion.

   2. The requirements in this paragraph describe a reporting requirement, not a reserve requirement, and thus, needs to be moved to VM-31. The reserve requirement is stated in the first paragraph of Section 2G, and this second paragraph outlines the demonstration that needs to be provided to support that requirement. This proposal also includes revising the paragraph in VM-31 that defines the reporting requirement for the first paragraph of Section 2G.

* 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:			

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VM-20: REQUIREMENTS FOR PRINCIPLE-BASED RESERVES FOR LIFE PRODUCTS

Section 1. Purpose and Definitions

A. These requirements establish the minimum reserve valuation standard for individual life insurance policies issued on or after the operative date of the Valuation Manual and subject to a PBR valuation with a net premium reserve floor under the Standard Valuation Law.

B. These requirements constitute the Commissioner's Reserve Valuation Method (CRVM) for policies of individual life insurance.

C. Definitions

~~24. The term "seriatim reserve" means the amount determined for a given policy that is used as a step in the calculation of the deterministic reserve.~~

Section 2. Minimum Reserve

G. A company may use simplifications, approximations and modeling efficiency techniques to calculate the net premium reserve, the deterministic reserve and/or the stochastic reserve required by this section if the company can demonstrate that the use of such techniques does not understate the reserve by a material amount and the expected value of the reserve calculated using simplifications, approximations and modeling efficiency techniques is not less than the expected value of the reserve calculated that does not use them. This does not preclude use of model segmentation for purposes of determining discount rates.

~~In such case, information shall be available to ensure that a deterministic reserve amount calculated as the total of the seriatim (policy-by-policy, with respect to liability cash flows) reserve calculations produces a reserve not materially different than the deterministic reserve amount calculated using groupings of policies. This does not preclude use of model segmentation for purposes of determining discount rates. VM-31 Section 3.E.3. provides details.~~

Section 7. Cash Flow Models

H. Determination of Net Asset Earned Rates and Discount Rates

1. In calculating the deterministic reserve the company shall determine a path of net asset earned rates for each model segment that reflects the net general account portfolio rate in each projection interval (i.e., monthly, quarterly, annually) in compliance with Section 7, which will depend primarily on:

   a. Projected net investment earnings from the portfolio of starting assets.

   b. Pattern of projected asset cash flows from the starting assets and subsequent reinvestment assets.

   c. Pattern of net liability cash flows.

   d. Projected net investment earnings from reinvestment assets.

2. The company shall calculate the net asset earned rate as the ratio of net investment earnings divided by invested assets subject to the requirements in a–f below. All items reflected in the ratio are consistent with statutory asset valuation and accrual accounting, including reflection of due, accrued or unearned investment income where appropriate.

3. ~~The company may use a grouped liability model to calculate the path of net asset earned rates for the deterministic reserve and then perform the seriatim reserve calculation for each policy based on those net asset earned rates.~~

Guidance Note: Section 7.A.2 permits the use of modeling efficiency techniques to calculate the deterministic reserve and stochastic reserve. This availability for simplification includes ways to determine appropriate net asset earned rates. Small to intermediate size companies, or any size company with smaller blocks of business, have options to create net asset earned rates with modeling efficiency techniques if the results are consistent with Section 2.G.

4. The company shall use the path of net asset earned rates as the discount rates for each model segment in the deterministic reserve calculations in Section 4, and the stochastic exclusion test in Section 6.

5. The company shall use the path of one-year U.S. Treasury interest rates in effect at the beginning of each projection year multiplied by 1.05 for each model segment within each scenario as the discount rates in the stochastic reserve calculations in Section 5.

Guidance Note: The use of different discount rate paths for the ~~seriatim~~deterministic and scenario reserves is driven by differences in methodology. The deterministic ~~seriatim~~ reserve is based on a present value of all liability cash flows, with the discount rates reflecting the investment returns of the assets backing the liabilities. The scenario reserve is based on a starting estimate of the reserve, and assets that support that estimate, plus the greatest present value of accumulated deficiencies. Here, the discount rates are a standard estimate of the investment returns of only the marginal assets needed to eliminate either a positive or negative deficiency.

VM-31 PBR REPORT REQUIREMENTS FOR BUSINESS SUBJECT TO A PRINCIPLE-BASED RESERVE VALUATION

Section 3. PBR Actuarial Report Requirements

E. PBR Actuarial Report Requirements for Individual Life Insurance Policies or Contracts.

The company shall include in the PBR Actuarial Report:

3. The following information regarding the cash flow model(s) used by the company in determining principle-based reserves:

   a. Description of modeling system(s) used.

   b. Description of model segments and rationale for the organization of the policies and assets into model segments.

   c. Description of approach and rationale used to group assets and policies for the deterministic reserve calculation within each model segment.

   A clear indication shall be provided of how the company met the requirements of Section 2.G. of VM-20 with respect to the grouping of policies. It shall be documented that, upon request, information may be obtained that is adequate to permit the audit of any subgroup of policies ~~the deterministic reserve amount~~ to ensure that the ~~a deterministic~~ reserve amount calculated using a ~~as the total of the~~ seriatim (policy-by-policy) liability model ~~, with respect to liability cash flows) reserve calculations~~ produces a reserve amount not materially higher ~~different~~ than the ~~deterministic~~ reserve amount calculated using the grouped liability model.