



February 21, 2023

Ms. Rachel Hemphill  
Chair, Life Actuarial Task Force (LATF)  
National Association of Insurance Commissioners (NAIC)

Re: Proposed Changes to VM-20 outlined in APF 2023-03

Dear Ms. Hemphill,

The American Academy of Actuaries<sup>1</sup> Life Reserves Work Group (LRWG) appreciates the opportunity to comment on the proposed changes to VM-20 as outlined in APF 2023-03. The LRWG notes that the proposed change to Section 5.B.3 of VM-20 that floors the scenario reserve by the aggregate cash surrender value (“CSV”) of the policies modeled in the projection is unnecessary and therefore suggests proceeding without its adoption. One of the reasons given for this change is consistency with VM-21, which has a CSV floor on the scenario reserve. Both VM-20 and VM-21 are consistent in that they have incorporated a CSV floor – in VM-20 the floor is applied to the net premium reserve (“NPR”) – but the approaches used in flooring at CSV floor are different.

The LRWG believes it is appropriate to impose a CSV floor on the ending reserve amount (whether it be on a seriatim basis or an aggregate basis) for regulatory or other purposes. As mentioned above, for VM-20 this is accomplished by imposing a CSV floor on the ending NPR amount on a seriatim basis. In our view, to impose such a floor on an interim component within a risk-based reserve calculation creates a distortion in the intended mechanics of the reserve. In this case, the underlying theoretical basis of the stochastic reserve, as a true principle-based reserve, is to measure the range of outcomes from a set of stochastically generated economic scenarios, and to allow the “unfloored” outcomes to be averaged. Imposing a CSV floor on each scenario reserve does not permit the proper averaging of stochastic outcomes that underlies the objective of using the greatest present value of accumulated deficiencies (“GPVAD”) to measure the appropriateness of the starting asset amount.

As an interim component of the risk-based stochastic reserve calculation, the scenario reserve is used to determine whether the starting asset amount (which equals an estimate of the final modeled reserve) is too high or too low for a given scenario. The mechanism used to determine whether the starting asset amount is too high or too low is the GPVAD. The GPVAD can be negative (meaning the starting asset amount is too high for the scenario) or positive (meaning the starting asset amount is too low for the scenario). Across the entire set of scenarios that comprise the 30% used for the

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<sup>1</sup> The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

70CTE calculation, the starting asset amount for some scenarios may be too high, and may be too low for others. The purpose of averaging all the scenario reserves within the 30% bucket is to determine an average starting asset amount that produces an average GPVAD of zero in the tail.

In summary, the stochastic reserve mechanics were designed to follow a true principle-based approach, based on the underlying risk-based stochastic outcomes. Imposing a non-risk-based floor on an interim component of the reserve calculation would violate the intent and purpose of the underlying theory of the reserve. In addition, both VM-20 and VM-21 have incorporated a CSV floor, but have done so using different approaches—and thus, the need for both VM-20 and VM-21 to have a CSV floor on the scenario reserve for consistency reasons is not necessary.

The Life Reserves Work Group appreciates your attention to the issues raised in this letter and looks forward to discussing them further with you. Should you have any questions or comments in response to this letter, please contact Amanda Barry-Moilanen, life policy analyst ([barrymoilanen@actuary.org](mailto:barrymoilanen@actuary.org)).

Sincerely,

Dylan Strother, MAAA, FSA  
Chairperson, Life Reserves Work Group

Angela McShane, MAAA, FSA  
Vice Chairperson, Life Reserves Work Group

American Academy of Actuaries