

**Comments by the American Academy of Actuaries' VAGLB Work Group on the
New York/Connecticut Proposed Revisions to Actuarial Guideline (AG) MMMM**

1. Consistency with Commissioners' Annuity Reserve Valuation Method (CARVM) and the Standard Valuation Law (SVL)

- a. Valuation rate of three percent
 - Complete reversal of overall direction of AG 33/34/MMMM (and eight years of Academy work at the direction of the Life and Health Actuarial Task Force (LHATF))
 - Inconsistent with SVL valuation interest rate requirements
 - Inconsistent with valuation interest rates required for base contract, and other ancillary benefits, using other guidelines
 - Since the assets supporting the Variable Annuities with Guaranteed Living Benefits (VAGLB) reserve are held in the general account, the valuation rates for VAGLB reserves must be consistent with those used for other general account products
 - Not supported by Model Regulation covering guaranteed separate accounts either (105 percent of spot rate is much higher than three percent)
- b. Integrated CARVM
 - Proposal is inconsistent with CARVM requirements
 - Disregards the complex interaction of different types of benefits within an integrated benefit stream (e.g., the proposal assumes 100 percent utilization of the VAGLB, whereas all other components of the reserve may not)
 - In other words, requiring a floor based on Stream X (stream of projected net amounts at risk) will result a potential mismatch with the Separate Account Reserve
 - The result is a reserve that ignores future fees, impact of survivorship and impact of withdrawal benefits reflected in Stream X (see example, attached)

2. Projection rate of three percent

- a. No theoretical basis (ignores underlying return and volatility profile of different types of funds)
- b. Appears to be arbitrary - not consistent with historical returns
- c. Inconsistent with calibration point methodology
- d. Does not properly reflect VAGLB risks for products with path dependent designs (such as ratchets)
- e. Projection using both stochastic/representative/keel and three percent is redundant

3. **Proposal on the accumulation of charges tied to non-formulaic Risk-Based Capital (RBC) adoption**

- a. Prior Academy VAGLB Work Group reports document concerns over the absence of a release for this requirement
 - Work Group also believes the proposed language should reference LHATF's concerns and actions rather than that of Work Group or industry
- b. The Work Group believes the original language properly addressed LHATF's concerns
 - LHATF voted in favor of such direction and language at recent meetings
 - Proposed language removes reference to concern over release of reserves prior to the adoption of revised RBC requirements
 - The non-formulaic RBC solution being developed by the Academy is a preferred method to address RBC concerns, as opposed to attempting to increase reserves through artificial adjustments

4. **Complexity**

- a. Proposal creates a three-tiered reserve structure
 - Adds to an already complex reserve method
- b. No consistency within the different components
- c. No justification that the proposal will provide an appropriate provision for the VAGLB risk

5. **Timing**

- a. If LHATF wishes to pursue the proposal, more work is needed
 - The language is a bit vague -- need to make sure all agree on how to apply
 - Interaction with other benefits (death, withdrawals, etc.) would need to be tested
 - Interaction with language in all other previous guidelines would need to be worked out
 - Release mechanism on accumulation of fees would need to be added
 - Significant additional modeling would need to be done
- b. This may result in additional delays
 - In December 2001, LHATF indicated a desire to quickly wrap this up
 - Further delays will require additional resources, which is inconsistent with the preferred long-term direction (e.g., RBC solution)

AV	900			
VAGLB	1,000			
Roll-up	0%			
Asset Charges	2.00%			
Keel Returns		-0.93%	7.43%	8.88%
Valuation Rate	6.50%			

	7	8	9	10
<u>AG MMMM Reserve Calculation</u>				
AV proj @val rate - M&E	900.0	940.5	982.8	1,027.0
PV of surrender at EOY	900.0	883.1	866.5	850.2

Separate Account Reserve	900.0
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AV proj @ Keel	900.0	873.6	921.1	984.4
VAGLB	1,000.0	1,000.0	1,000.0	1,000.0
NAR				15.6
PV of surrender + NAR	900.0	883.1	866.5	863.1

Integrated Reserve	900.0
Separate Account Reserve	900.0
VAGLB Reserve	-
Total Reserve	900.0

AG MMMM Reserve

Even though there is a NAR, the Integrated Reserve is equal to the AV. There is no VAGLB reserve because the PV of future fees offset.

NY/CT Proposal

AV proj at 3%	900.0	927.0	954.8	983.5
VAGLB	1,000.0	1,000.0	1,000.0	1,000.0
NY NAR				16.5
PV @ 3%	13.7			

Separate Account Reserve	900.0
VAGLB Reserve	13.7
Total Reserve	913.7

NY/CT Proposal

Reserve adds the PV of NAR (stream X) to the AV (stream Y). This ignores future fees and the impact of mortality.

BUT...

PV of (Surrender + NY NAR)	900.0	883.1	866.5	863.9
GPV	900.0			

If you properly match up benefit streams X and Y, the reserve in this example becomes the AV because the PV of future fees offsets the NAR.