Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force Amendment Proposal Form*

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

American Academy of Actuaries, PBR Model Governance Work Group. Clarify in the valuation manual (VM-20 Section 3.C) that the universal life with secondary guarantees (ULSG) net premium reserve (NPR) lapse rate is intended to be based on shadow account values on the valuation date and that the lapse rate will not vary by duration.

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: Section 3.C.3.c.i; January 1, 2018 NAIC Valuation Manual

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.)

Section 3.C.3.c.i in VM-20 provides a formula to determine the ULSG NPR lapse assumption, which is based on fund values of the secondary guarantee (actual secondary guarantee (ASG), level secondary guarantee (LSG), fully funded secondary guarantee (FFSG)). Currently, it is not clear in VM-20 as to whether the lapses in future durations are based on fund values as of the valuation date (i.e., resulting in constant lapse rates in all durations) or based on projecting future fund values (resulting in varying lapse rates across durations).

The objective of this APF is to clarify this section of VM-20. We believe the ULSG NPR lapse rate should be based on the secondary guarantee fund values as of the valuation date (i.e., resulting in constant lapse rates in all durations), because it is not clear what premium payment patterns would otherwise be assumed if future fund values need to be projected.

NAIC Staff Comments:

| Dates: Received | Reviewed by Staff | Distributed | Considered |
|-----------------|-------------------|-------------|------------|
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| Notes: | | | |
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^{*} 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.

VM-20: Section 3.C.3

3. Lapse Rates

- c. For NPR amounts calculated according to Section 3.B.6, the lapse rate, L_{x+t}, used at time t for an insured age x at issue <u>for all durations subsequent to the valuation date t</u> shall be determined as follows:
 - i. Determine the ratio Rx+t where:

$$Rx+t=[FFSG_{x+t}-ASG_{x+t}]/[FFSG_{x+t}-LSG_{x+t}]$$
 but not > 1 and not <0

Where:

 $FFSG_{x+t}$ = the fully funded secondary guarantee on the valuation date at time t for the insured age x at issue

 ASG_{x+t} = the actual secondary guarantee on the valuation date at time t for the insured age x at issue

 LSG_{x+t} = the level secondary guarantee on the valuation date at time t for the insured age x at issue

Guidance Note: The FFSG_{x+t}, ASG_{x+t}, and LSG_{x+t} are based on the secondary guarantee values as of the valuation date and will remain constant throughout the cash flow projection. This will result in a constant lapse assumption, calculated as of the valuation date, that does not vary by duration throughout the cash flow projection for the NPR calculation.

ii. The lapse rate for the policy for durations t+1 and later shall be set equal to:

$$L_{x+t} = R_{x+t} \cdot 0.01 + (1 - R_{x+t}) \cdot 0.005 \cdot r_{x+t}$$

Where r_{x+t} is the ratio determined in Section 3.B.5.d.ii.