

# **Interpretations of the Emerging Actuarial Issues (E) Working Group**

## **Introduction**

The Emerging Actuarial Issues (E) Working Group responds to questions of application, interpretation and clarification with respect to *Actuarial Guideline XXXVIII—The Application of the Valuation of Life Insurance Policies Model Regulation* (AG 38). Following an abbreviated public comment and review period of no less than 7 days, the Working Group will adopt by consensus formal interpretations on issues presented before it. These interpretations will then be reported to the Financial Condition (E) Committee, which, after adopting, will direct the Financial Analysis (E) Working Group to follow the interpretations in performing its reviews of the reserving methodologies under AG 38. These interpretations will not become effective until formally adopted by the Financial Condition (E) Committee. In no event shall a consensus opinion of the Working Group supersede or otherwise conflict with AG 38.

Interpretations INT-01 through INT-24 were adopted in 2012, with the exception of INT-21 which was adopted in 2013. New Interpretations they will be added to this document as they are adopted.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-01**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D(b)*

### **Issue / Question**

1. The Guideline does not seem to preclude a company from using the Alternative Reserve Methodology for yearend 2012, thus avoiding the Primary Reserve Methodology calculations, even if in prior valuations their total reserve held was not at least as great as the total reserve determined in accordance with the November 1, 2011 Life Actuarial (A) Task Force (LATF) statement. In other words, at yearend 2012 a company can switch to any alternative reserve methodology as long as the total reserve held is at least as great as the total reserve determined in accordance with the November 1, 2011 LATF statement using the required lapses and mortality. Is that a correct interpretation?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Yes. The requirements as written provide for use of either 8D(a) or 8D(b) for the 12/31/12 valuation.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-02**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

December 19, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 20, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation*  
Section 8D(b)

### **Issue / Question**

1. If a company uses the Alternative Reserve Methodology for yearend 2012, can they switch to the Primary Reserve Methodology for future valuations? What, if anything, should be reported in Exhibit 5A- Changes in Basis of Valuation for yearend 2012 or in future years as a result of these AG 38 revisions and any switch to the Primary Reserve Methodology or to the Alternative Reserve Methodology?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. A company, pursuant to the requirements of AG 38, 8D, may switch between the Primary Reserve Methodology and the Alternative Reserve Methodology.

3. For 12/31/12 or subsequent reserve valuations any change to or from the Primary or Alternative reserve methodologies should be reported in Exhibit 5A.

4. The company should check with their domestic state whether approval is required for any subsequent change to or from the Primary or Alternative reserve methodologies for reserves after 12/31/12.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-03**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D(b)*

### **Issue / Question**

1. The Alternative Reserve Methodology calls for deficiency reserve mortality to be based on the VM-20 deterministic reserve mortality. Since XXX calls for segments to be based on deficiency reserve mortality this could affect segment lengths. However, at least the spirit of AG46, which came out when the 2001 CSO Preferred Risk tables came out, seems to allow for segments to continue to be based on the mortality table in use when the policy was issued. Does AG46 apply here and thus the original mortality basis for the segment lengths can continue to be used?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. The original mortality basis for determining the segment length can continue to be used. 8D is not intended to be more restrictive in determination of segments.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-04: Section 8D**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38-The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D*

### **Issue / Question**

1. The Guideline states “The requirements of this Section 8D apply to a company on December 31, 2012, and on any subsequent valuation date if (1) on the applicable date, the in force face amount (direct plus assumed) of universal life insurance to which this Section 8D would otherwise apply exceeds 2% of the company’s face amount of individual permanent life insurance in force...”. Does the referenced individual permanent life insurance exclude term insurance?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Yes. Term is excluded.

# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 12-05

### Date Adopted by Emerging Actuarial Issues (E) Working Group

December 19, 2012

### Date Adopted by Financial Condition (E) Committee

December 20, 2012

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation Section 8D*

### Issue / Question

1. Subsection 8Da states that the Primary Reserve is determined by adding any excess of (2) over (1), where (1) is the reserve according to the methodology and assumptions used to calculate the reserves reported as of December 31, 2011. In the following three scenarios, what is the basis for the determination of (1)? Assume that scenarios 1 and 2 involve universal life with secondary guarantees (ULSG) policies issued between July 1, 2005 and December 31, 2006, with a higher set of cost of insurance (COI) charges being triggered if the shadow account value ever becomes 0 after issue:

- a. Issue 1) Reserves have always been calculated using the wrong methodology for determining the ratio in the fourth step of Section 8B. In applying Section 8D, would the reserves for 8Da1 be based on the correct methodology or on the methodology actually used by the company for year-end 2011?
- b. Issue 2) A policy has a negative account value but has not lapsed due to the secondary guarantee. The shadow account value eventually drops to 0 and then becomes negative, and the policyholder pays a premium during the grace period intended on keeping the policy in force. The company invokes the higher secondary guarantee charges to calculate the shadow account value, but the policyholder argues that the lower shadow account COI charges apply due to the premium being paid during the state required grace period; i.e. that during the grace period the policyholder has the opportunity to pay a premium based on the lower COI charges rather than based on the much higher set of COI charges. This is litigated, and a ruling is made that the higher COI rates cannot be charged unless the shadow account value has not been positive for a period of time greater than the grace period. Based on this ruling, the assumption in the AG38 calculation that the higher set of COI charges would be triggered at the end of the first policy year would not be valid. Would the reserves for 8Da1 continue to be based on the assumption that the higher COI charges would be triggered after the first policy year, or would they be modified to reflect the lower COI charges?
- c. Issue 3) Policies with multiple sets of COI charges have only been issued in 2012. What is the basis for the value of (1)?

## **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Issue 1): The reserves determined by the company under 8D(a)(1) are intended to be consistent with the methodology used by the company for the 12/31/2011 valuation. If a calculation error has been made in applying the 2011 methodology, this error should not be repeated in applying this methodology for the 2012 year-end valuation.

3. Issue 2): Where a valid court decision has interpreted the provisions of a policy, those interpretations should be reflected in future reserve calculations. In effect, the court ruled that the company made a mistake in applying certain policy provisions. Therefore, the 2012 reserve calculations should incorporate the correct view of the affected policies' provisions as determined by the court. As in 1) above, any error in the 2011 reserve calculations due to this company mistake should not be perpetuated in the 2012 reserve calculations.

4. Issue 3): In this case, the value of (1) would be based on the company's methodology for reserving these policies for 2012 quarterly reporting.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-06**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D(b)*

### **Issue / Question**

1. Is the report documenting the special 2012 sensitivity test described at the end of Section 8D required to be a stand-alone document or can it be included in the required Section 8D Actuarial Memorandum?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Considering the special nature of the 2012 sensitivity test, the documentation should be contained either in a stand-alone document or included as a separate appendix in the Actuarial Memorandum



# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-07**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D(b)*

### **Issue / Question**

1. If all of a company's universal life with secondary guarantees (ULSG) policies subject to Section 8D are the same identical policies that are subject to Section 8C, are they still required to perform the separate Section 8C stand-alone asset adequacy analysis or does the Section 8D Primary Reserve Methodology calculation suffice?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Such policies are still required to perform the separate Section 8C stand-alone asset adequacy analysis. Section 8D, second paragraph, clarifies that Section 8D is "in addition to any testing that may be required under Section 8C."

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-08**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D(a)*

### **Issue / Question**

1. For companies using the Primary Reserve Methodology, is it expected that the full deterministic reserve calculations will be performed every quarter or just annually?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. This methodology would be used at least annually, with appropriate approximations used as permitted pursuant to quarterly statutory reporting requirements.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-09**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D(a)*

### **Issue / Question**

1. If the deterministic reserve “wins” for the Primary Reserve Methodology calculation, what impact should that have on tax reserves?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. This question involves determination of values under the requirements of the Internal Revenue Code. The NAIC has no comment on how those values should be determined.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-10**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D(a)(2)*

### **Issue / Question**

1. In relation to the Valuation Manual, Item 2. under the Primary Reserve Methodology section references "...or in any version subsequently adopted by the NAIC..." Please clarify exactly what constitutes "adopted by the NAIC." Does it have to be adopted by Executive/Plenary or just the A Committee or just Life Actuarial (A) Task Force (LATF)? "version" includes amendments that have been adopted, correct?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Adopted by the NAIC means the Valuation Manual and any amendments adopted through Executive & Plenary as of the 7/1 preceding the year-end valuation date.

# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 12 -11

### Date Adopted by Emerging Actuarial Issues (E) Working Group

December 19, 2012

### Date Adopted by Financial Condition (E) Committee

December 20, 2012

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation*

### Issue / Question

1. My question is on section 8E, regarding when a product would fall under method 1 or method 2. If you have a shadow account product that has either a single set of charges, or multiple sets of charges, and the product meets the crediting rate limitations defined in method 1, is there anything that could cause the product to be deemed to be subject to method 2? To put it another way, when I read section 8E, it seems that any shadow account product meeting the interest crediting limits would fall under method 1. This is because all shadow accounts have either a single set of charges or multiple sets of charges, so all shadow account products that meet the interest crediting limitation would fall under policy design 1 or policy design 3. Is this a correct interpretation, or if not, why?

### Interpretation of Emerging Actuarial Issues (E) Working Group

2. This interpretation is not completely correct. In drafting the revisions to AG 38, regulators were aware of the possibility that all existing and future product designs might not fit the three generic product designs noted in AG 38, independent of the crediting rate limitation. Method II was intended to provide a default reserve methodology for these other product designs, together with the more generic product designs containing interest crediting guarantees higher than the company-selected interest index plus 3 percent. The considerations in satisfying the actuarial opinion requirements contained in Section 8E should enable the opining actuary to determine the appropriate reserving methodology for a particular universal life with secondary guarantees (ULSG) product design.

# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 12-12

### Date Adopted by Emerging Actuarial Issues (E) Working Group

November 20, 2012

### Date Adopted by Financial Condition (E) Committee

December 1, 2012

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation Section 8D(b)*

### Issue / Question

1. Section 8D(b), Alternate Methodology, requires the company to determine its deficiency reserve under Model 830 using mortality and lapse assumptions according to the same requirements for determining the deterministic reserve in the Valuation Manual. Does this require the company to determine its Triple-X segments (under the segmentation method) using the  $q_x$  and lapse rates of the VM, or simply use these  $q_x$  and lapse rates in calculating the deficiency reserve once the segments are determined using the company's current approach for determining such segments?

### Interpretation of Emerging Actuarial Issues (E) Working Group

2. The original mortality basis for determining the segment length can continue to be used. 8D is not intended to be more restrictive in determination of segments.

Note: This response is similar to that for question Actuarial INT 12-3.

## **Interpretation of the Emerging Actuarial Issues (E) Working Group**

### **Actuarial INT 12-13**

#### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

December 19, 2012

#### **Date Adopted by Financial Condition (E) Committee**

December 20, 2012

#### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation*

1. Issue / Question Given all of the focus that the Guideline places on what premiums to use for these universal life with secondary guarantees (ULSG) reserve calculations, we are having unexpected difficulty finding published guidance on what premiums to assume in the deterministic reserve calculations for the Primary Reserve Methodology. Does such guidance exist and if so, where can we find it?

2. This question specifically asks for published guidance, but if none exists perhaps, the Working Group could provide such guidance or at least common practices/approaches they are aware of. Guidance is needed to create consistency amongst how companies are approaching this step of the calculation.

#### **Interpretation of Emerging Actuarial Issues (E) Working Group**

3. For 8D(a)(2) reserve calculations, the company should use the expected premium to be paid by the policyholder, determined either policy by policy or by appropriate policy groupings. The Valuation Manual adopted by the A Committee on 8/17/12 provides requirements regarding premiums for the deterministic reserve calculation. Such requirements include those in Section 4(A), Section 7(B), and Sections 9(A) and 9(D).

## **Interpretation of the Emerging Actuarial Issues (E) Working Group**

### **Actuarial INT 12-14**

#### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

#### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

#### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8E*

#### **Issue / Question**

1. In the case of a Method I type product that is currently being sold and will continue to be sold unmodified after 12/31/12, the company would have to do a standalone asset adequacy analysis under Section 8C for issues 1/1/07 through 12/31/12 but they would not have to do a standalone asset adequacy analysis for issues after 12/31/12 even though it is the same product. Correct?

#### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Yes. It is a correct interpretation that the stand-alone asset adequacy analysis in 8C does not include policies issued after 12/31/12.



# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-15**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

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### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8E(II)*

### **Issue / Question**

1. The minimum schedule of premiums required to be identified/tested for in Method II is something that is expected to be needed to be done separately for every age/sex cell, correct?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Yes. The schedule of minimum gross premiums should be based on all appropriate attributes unique to the policy being valued.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-16**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8E*

### **Issue / Question**

1. If all of a company's currently approved universal life with secondary guarantees (ULSG) policy forms fall under the same Method I policy design, pass the Index Test, and meet the minimum premium requirements, can a single Actuarial Opinion and a single Company Representation be submitted that lists each policy form or does a separate Actuarial Opinion and a separate Company Representation need to be submitted for each form?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. This is up to the state of domicile. Some groupings may make sense but any special qualification or language needed should result in a separate opinion and representation.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-17**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8E(II)*

### **Issue / Question**

1. Is the greatest deficiency reserve test to be performed on a seriatim or product level basis? What if we see mixed results (For example, 70% pattern 1 and 30% pattern 2)

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. The test should be performed on a seriatim basis, except to the extent it may be practical to group policies with identical attributes. It is possible that several combination premium patterns will be identified as having broad applicability. Regardless, each policy should assume a premium pattern that produces the greatest deficiency reserve as of the issue date consistent with good faith testing and review.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-18**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8E(II)*

### **Issue / Question**

1. For the combination premium patterns, what does it mean "...to have access to better charges and credits...."? Can this be ignored if the product only has one set of charges?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Better charges and credits can be understood as lower charges and/or higher credits that may be triggered based on the magnitude of the premium paid, the shadow account or other measures generally dependent on policyholder behavior. For example, a higher interest rate might apply to amounts above or below some defined premium dollar limit in particular policy years or based simply on the level of the shadow account. Higher or lower premium payments could lead directly to the most favorable interest rate (or weighted average interest rate) accessible within product design constraints. Better charges and credits would generally lead to lower minimum gross premiums and potentially greater deficiency reserves. For purposes of this question this requirement cannot be ignored, particularly if there are multiple sets of credits in addition to the assumed single set of charges.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-19**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

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### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation Section 8E(II)*

### **Issue / Question**

1. When testing combination premium patterns, do premium patterns that break segments need to be considered?

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. It is not necessary to reverse engineer premium patterns solely to create unfavorable segment breaks. However, segment breaks that result from premium patterns consistent with the applicability of favorable charges and credits must be considered.

# **Interpretation of the Emerging Actuarial Issues (E) Working Group**

## **Actuarial INT 12-20**

### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

November 20, 2012

### **Date Adopted by Financial Condition (E) Committee**

December 1, 2012

### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8E(II)*

### **Issue / Question**

1. Do patterns with dump-in premiums need to be tested? If so, how should the dump-in premium be reflected in the determination of the uniform percentage (i.e., do you include the dump-in premium in determining the k percentage)

### **Interpretation of Emerging Actuarial Issues (E) Working Group**

2. Premium patterns that involve dump-in premiums must be considered, and testing may be appropriate. In the absence of more definitive guidance, the uniform percentage should be determined in accordance with Actuarial Guideline 21

## **Interpretation of the Emerging Actuarial Issues (E) Working Group**

### **Actuarial INT 13-21**

#### **Date Adopted by Emerging Actuarial Issues (E) Working Group:**

January 30, 2013

#### **Date Adopted by Financial Condition (E) Committee:**

February 20, 2013

#### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D (a)(2a)*

#### **Issue / Question:**

Should the VM-20 deterministic reserve starting asset requirement related to the 2% collar be applied before or after the Primary Reserve Methodology caps on starting and reinvestment assets are applied?

#### **Interpretation of Emerging Actuarial Issues Working Group:**

Subsection a.2.a) (I) of Section 8D requires the determination of one of two portfolios of existing assets to support the initial reserve estimate for the block. Once this initial asset portfolio is determined, the deterministic gross premium reserve is determined using as the discount rates the net investment returns generated by the future projected cash flows calculated using the selected initial portfolio and future net reinvestment rates established according to subsection a.2.a) (II) of Section 8D.

If the resulting reserve falls within the +/- 2% collar (referenced in VM-20) relative to the initial reserve estimate (and corresponding level of initial assets), the calculated reserve is the final reserve. If the calculated reserve breaches the +/- 2% collar, the actuary must either provide a detailed rationale as to why the calculated reserve is appropriate or redo the reserve calculation assuming revised initial reserve and asset levels.

In performing the additional reserve calculation(s), use the same asset portfolio (adjusted upward or downward as below based on the results of the deterministic reserve calculation), either that of subsection a.2.a) (I) (i) or a.2.a) (I) (ii), as chosen for the initial reserve calculation.

If the initial or subsequently determined reserve is greater than the prior reserve estimate and the asset portfolio used in the deterministic reserve calculation is:

- I. as described in subsection a.2.a)(I)(i), then the prior asset portfolio shall be adjusted upward using assets as described in subsection a.2.a)(I)(i) to the extent such assets remain available in the company's portfolio after which such assets shall be adjusted upward as needed using assets as described in subsection a.2.a)(I)(ii). The recommended method for adjusting the prior asset portfolio upward is to do so in a pro rata fashion. Any other method proposed for adjusting the prior asset portfolio upward must be clearly documented in the Actuarial Memorandum and shall not involve changing the asset composition of the prior asset portfolio but shall constitute only additions to that portfolio.
- II. as described in subsection a.2.a)(I)(ii), then the prior asset portfolio shall be adjusted upward as needed in a pro rata fashion using assets as described in subsection a.2.a)(I)(ii).

Regardless of which portfolio is chosen for the initial deterministic reserve calculation, if the initial or subsequently determined, reserve is less than the prior reserve estimate, then the prior asset portfolio shall be adjusted downward as needed in a pro rata fashion.



# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 12-22

### Date Adopted by Emerging Actuarial Issues (E) Working Group

December 19, 2012

### Date Adopted by Financial Condition (E) Committee

December 20, 2012.

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation*  
Section 8E/8D

### Issue / Question

1. Consider the following: A universal life policy with a secondary guarantee requires that a shadow account be maintained at a positive level for the secondary guarantee to remain in effect. Once the shadow account value goes down to zero, the secondary guarantee terminates and cannot be reactivated. There is only one set of charges and credits that apply to the shadow account. In determining reserves for this policy under section 8E, would the assumption be made that the secondary guarantee terminates at the end of the first policy year since, if only the minimum premium is paid, the shadow account value would be zero at the end of the first policy year?
2. If the policy was written before 2012, would it be subject to section 8D?

### Interpretation of Emerging Actuarial Issues (E) Working Group

3. For issues in or after January 1, 2013, 8E would be applicable. But the policy, as described, would not fit into Method I because the minimum premium derived according to Method I would not satisfy the secondary guarantee requirements. Calculation of the reserve using Method I requires that the minimum premium keep the secondary guarantee in effect. Therefore, it must be reserved according to Method II.
4. For issues between July 1, 2005 and December 31, 2012 (inclusive), any regulatory response regarding applicability of Section 8D would require analysis of the policy form and dialog with the valuation actuary.

# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 12-23

### Date Adopted by Emerging Actuarial Issues (E) Working Group

December 19, 2012

### Date Adopted by Financial Condition (E) Committee

December 20, 2012

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation Section \*E*

### Issue / Question

1. Under 8E, Method I, Policy Design #1 applies for policies containing a secondary guarantee that uses a shadow account with a single set of charges and credits. For those policies, the minimum gross premium for any policy year is the premium that, when paid into a policy with a zero shadow account value at the beginning of the policy year, produces a zero shadow account value at the end of the policy year, using the guaranteed shadow account charges and credits specified under the secondary guarantee. Presumably, this will result in a yearly renewable term (YRT)-like pattern for the minimum premium.
2. The actuarial opinion required by 8E includes the statement "the minimum gross premiums determined under Policy Design # \_\_\_ are not inconsistent with the minimum premiums, charges and credits that are expected to apply under the policy." What is meant by "expected to apply"?
3. Since it is not likely that the policyholder will fund the policy using the YRT-like pattern that is the minimum premium, it does not seem as if "expected to apply" means "expected to be paid." It appears that "expected to apply" should be interpreted to mean that the YRT-type pattern will either fund the secondary guarantee or it is less than the minimum amount necessary to fund the guarantee.

### Interpretation of Emerging Actuarial Issues (E) Working Group

4. The phrase "expected to apply" is intended to mean that the minimum premiums determined (\$0-to-\$0) are based on charges/credits generally consistent with those expected to apply to premium scales likely to be received from policyholders. For example, high premium loads at later durations would not be expected to apply for products with charges and credits that encourage a limited-pay or single-pay premium pattern. Other design features that should give the opining actuary pause, and could draw regulatory scrutiny, include negative charges and credits or unusual patterns of charges and credits. In addition, the actuary should not favorably opine on a product for Method I reserves with variables resulting in minimum gross premiums that would be inconsistent with the premiums a reasonable person would pay to limit advance funding. If the actuary is unable to opine favorably, the reserves should be calculated under Method II.

# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 12-24

### Date Adopted by Emerging Actuarial Issues (E) Working Group

December 19, 2012

### Date Adopted by Financial Condition (E) Committee

December 20, 2012

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation*

### Issue / Question

1. A shadow account product has a design feature where the premium load is expressed as a fixed percentage of premium up to the target premium, where the target premium is reasonably consistent with level premium funding of the lifetime guarantee. In effect, there is a fixed dollar cap on the annual premium charge. The literal form of the charge is simply a specified percentage of premiums up the target premium and 0% thereafter. This will always mathematically produce the same result as the capped charge described above. Please clarify that a fixed dollar cap for the premium load, regardless of how the cap is expressed, does not make such a product incompatible with Policy Design # 1.

### Interpretation of Emerging Actuarial Issues (E) Working Group

2. A flat percentage of premium charge, subject to an annual maximum, would be compatible with Policy Design (PD) #1 provided the actuary is able to issue an unqualified actuarial opinion. The specified percentage rate subject to an annual maximum may be construed as a single rate even though an alternative expression of this charge could be viewed as involving a second rate equal to zero. However, it should be noted that the actuary might be unable to opine favorably in the case of designs with credit/charge structures that encourage limited-pay premium schedules.

3. The above interpretation does not extend to designs using a flat percentage load for premiums up to a break point and a different (non 0%) load for premiums above that. Such a design should be considered as PD#3, as would any design with tiered interest rate credits or other tiered credits/charges.

## **Interpretation of the Emerging Actuarial Issues (E) Working Group**

### **Actuarial INT 13-25**

#### **Date Adopted by Emerging Actuarial Issues (E) Working Group:**

January 30, 2013

#### **Date Adopted by Financial Condition (E) Committee:**

February 20, 2013

#### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8E*

#### **Issue / Question:**

Does the exemption for UL policies with short guarantee periods (see below) still apply in Section 8E of AG38?

This language is from the XXX model reg (Model 830)

3.A.(2) This regulation shall not apply to any universal life policy that meets all the following requirements:

- (a) Secondary guarantee period, if any, is five (5) years or less;
- (b) Specified premium for the secondary guarantee period is not less than the net level reserve premium for the secondary guarantee period based on the CSO valuation tables as defined in Section 4F and the applicable valuation interest rate; and
- (c) The initial surrender charge is not less than 100 percent of the first year annualized specified premium for the secondary guarantee period.

#### **Interpretation of Emerging Actuarial Issues Working Group:**

Yes.

# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 12-26

### Date Adopted by Emerging Actuarial Issues (E) Working Group

April 8, 2013

### Date Adopted by Financial Condition (E) Committee

Pending

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D*

### Issue / Question:

Section 8D(a) references the deterministic reserve calculation in the VM20 valuation manual in the definition of the Primary Reserve Methodology. As part of the asset assumptions used in the deterministic reserve calculation, page 82 of the VM20 manual describes the derivation of the Illustrative Current Market Benchmark Spreads. We have reviewed the JP Morgan US Liquid Index data referenced, and the final published values appear to be derived from the underlying data for the index as opposed to referencing published table views. Does the Working Group agree that using an updated table would be preferred? Would the Working Group consider publishing an updated table as of 9/30 or providing additional details on how the table values (shown on page 89) were derived? The values for Table G (page 90) for the below investment grade bonds were taken directly from the source index so they are easy to replicate.

### Interpretation of Emerging Actuarial Issues Working Group:

For the 12/31/12 AG 38, 8D valuation it may be assumed that the 9/30/09 Tables H & I approximate both Tables F & G and Tables H & I as of 12/31/12. This assumption is based on benchmarking with current spread information from other sources as of 12/31/12. It is understood that strict technical compliance for each and every asset may not be possible due to modeling limitations. Professional judgment should be used to produce results that comply with the spirit of this standard, i.e., no lessening of conservatism. For example, if a company has access to current data sources and can reconstruct Tables F and G as of 12/31/12 then this would be an acceptable approach. In any event, appropriate explanation and justification should be provided for the methodology that was employed and the results that were obtained. The NAIC intends to provide updated tables for future year end AG 38, 8D, valuations.

## **Interpretation of the Emerging Actuarial Issues (E) Working Group**

### **Actuarial INT 12-27**

#### **Date Adopted by Emerging Actuarial Issues (E) Working Group**

February 12, 2013

#### **Date Adopted by Financial Condition (E) Committee**

April 8, 2013

#### **Reference**

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation, Section 8D*

#### **Issue / Question:**

If the modified VM-20 deterministic reserve ends up being the minimum reserve held in the AG 38 8D calculation, can a reinsurance reserve credit also be calculated under the guidance of VM-20 (in particular for YRT reinsurance)?

#### **Interpretation of Emerging Actuarial Issues Working Group:**

The Section 8D reserve methodology (VM-20 deterministic) applies for calculating the company's aggregate gross reserve before reinsurance. AG 38, 8D, does not address how the credit for reinsurance is determined. The approach to determine the credit for YRT reinsurance shall be documented in the stand-alone Actuarial Memorandum required by AG 38, Section 8D(c).

# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 13-28

### Date Adopted by Emerging Actuarial Issues (E) Working Group

February 12, 2013

### Date Adopted by Financial Condition (E) Committee

April 8, 2013

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation*

### Issue / Question:

A product has a shadow account product design feature where, in addition to the fixed charges and credits associated with the policy, there is a shadow account premium charge in the event that the policyholder underfunds the policy. This premium charge is expressed as a fixed percentage of the premium shortfall when compared to a given level premium.

Please clarify whether a shadow account charge expressed as a fixed percentage of the premium shortfall is regarded as “multiple sets of charges” or as a “single set of charges” and thus whether such a product is compatible with Policy Design # 1 or Policy Design # 3.

### Interpretation of Emerging Actuarial Issues Working Group:

This charge and treatment as Policy Design 1 does not appear consistent with the type of charge and treatment addressed by adopted INT 24 (formerly referred to as Pending Submission 6 prior to its adoption).

INT 24 deals with a single charge that all policyholders will incur which stops after a certain level of premiums have been paid. The charge described here is not incurred by all policyholders and provides the potential for a reserve premium being subject to the full impact of this charge whereas the premiums actually expected to be paid would not incur this charge.

More information is needed to fully assess the applicable Policy Design but based on the information provided Policy Design 3 appears appropriate.

# Interpretation of the Emerging Actuarial Issues (E) Working Group

## Actuarial INT 13-29

### Date Adopted by Emerging Actuarial Issues (E) Working Group

April 4, 2013

### Date Adopted by Financial Condition (E) Committee

April 8, 2013

### Reference

*Actuarial Guideline 38- The Application of the Valuation of Life Insurance Policies Model Regulation*

*Section 8E I) 3 Actuarial Opinion and Company Representation section*

### Issue / Question:

A company currently issues a ULSG product that is clearly a Policy Design #3. Two hypothetical examples of the charge/credit structure are shown in Tables 1 and 2 below. Under either structure, the policy form:

- Is clearly Policy Design #3
- Does not run afoul of the “Index plus 3%” of 8E

The purpose of the bifurcated cost of insurance charge structure in Table 1 or bifurcated premium charge structure in Table 2 is to optimize management of policyholder premium paying pattern behavior. The exact insurance charge for any given policy under the Table 1 design is either COI 1 or COI 2, where the rate is determined by comparing the actual fund value to a pre-defined fund value. If the actual fund value is in excess of the pre-defined fund value, COI 1 is used, otherwise COI 2 is used. Similarly, the exact premium charge amount for any given policy under the Table 2 design is PremPct1 for amounts paid up to a target amount plus PremPct2 for amounts paid in excess of the target amount.

The company’s approach to establishing statutory reserves has always been to determine AG XXXVIII Step 1 minimum premiums based on the lowest charges from Table 1 (or Table 2). The actuary concludes that everything in the reserving practices of the company with respect to this policy form is in compliance with the letter and spirit of AG XXXVIII, and except for the third statement in the Actuarial Opinion (of Section E), the actuary feels s/he could sign such an attestation. The third statement declares “the minimum gross premiums determined under Policy Design #3 are not inconsistent with the minimum premiums, charges and credits that are expected to apply”.

What is the actuary expected to do in such a situation?



TABLE 1					TABLE 2				
	COI_1	COI_2	Interest	Prem Load		COI	Interest	Up to Target PremPct1	In excess PremPct2
45	0.000066	0.000231	3.75%	15%	45	0.000149	4.00%	15%	5%
46	0.000108	0.000378	3.75%	15%	46	0.000243	4.00%	15%	5%
47	0.000146	0.000511	3.75%	15%	47	0.000329	4.00%	15%	5%
48	0.000180	0.000630	3.75%	15%	48	0.000405	4.00%	15%	5%
49	0.000212	0.000742	3.75%	15%	49	0.000477	4.00%	15%	5%
50	0.000242	0.000847	3.75%	15%	50	0.000545	4.00%	15%	5%
51	0.000276	0.000966	3.75%	15%	51	0.000621	4.00%	15%	5%
52	0.000316	0.001106	3.75%	15%	52	0.000711	4.00%	15%	5%
53	0.000364	0.001274	3.75%	15%	53	0.000819	4.00%	15%	5%
54	0.000422	0.001477	3.75%	15%	54	0.000950	4.00%	15%	5%
55	0.000486	0.001701	3.75%	15%	55	0.001094	4.00%	15%	5%
56	0.000556	0.001946	3.75%	15%	56	0.001251	4.00%	15%	5%
57	0.000632	0.002212	3.75%	15%	57	0.001422	4.00%	15%	5%
58	0.000712	0.002492	3.75%	15%	58	0.001602	4.00%	15%	5%
59	0.000796	0.002786	3.75%	15%	59	0.001791	4.00%	15%	5%
60	0.000882	0.003087	3.75%	15%	60	0.001985	4.00%	15%	5%
61	0.000972	0.003402	3.75%	15%	61	0.002187	4.00%	15%	5%
62	0.001070	0.003745	3.75%	15%	62	0.002408	4.00%	15%	5%
63	0.001180	0.004130	3.75%	15%	63	0.002655	4.00%	15%	5%
64	0.001310	0.004585	3.75%	15%	64	0.002948	4.00%	15%	5%
65	0.001470	0.005145	3.75%	15%	65	0.003308	4.00%	15%	5%

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**Interpretation of Emerging Actuarial Issues Working Group:**

As indicated in INT 23, the actuary who is unable to opine favorably would be required to calculate reserves in accordance with Method II.