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## Summary of Changes to Model Regulation and Actuarial Guidelines Principles-based Reserve for Life Products from the American Academy of Actuaries' Life Reserves Work Group

Presented to the National Association of Insurance Commissioners'  
Life and Health Actuarial Task Force

San Antonio, TX – December 2006

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The Life Reserves Work Group (LRWG) has continued to refine and modify the principles-based reserving approach for life products since the prior drafts of the Model Regulation and Actuarial Guidelines were exposed for comment in September of 2006. The LRWG has received numerous suggestions from regulators and interested parties that were reflected in the attached drafts.

**The LRWG requests that LHATF expose for comment these updated drafts at the December LHATF meeting.**

**Major changes to the Model Regulation include:**

- 1) Modified the scope to exclude Credit Life, Industrial Life, Pre-need and Final expense policies (Section 3.B.), and added possible definitions for these four product categories in a drafting note.
- 2) Moved the option for the commissioner to exempt a form/product from the PBR regulation to a drafting note (Section 3).
- 3) Revised the definition of “Accumulated Deficiency” for the GPVAD calculation from “Working Reserve less accumulated assets” to equal “the negative of the accumulated assets”. As a result of this change the concept of a Working Reserve is no longer needed, and has been dropped (Section 5).
- 4) Moved the section on general Margin requirements from Guideline PBR-VAL (Section III) to the Model Regulation (Section 7.B) and made several modifications to the new combined section to improve the wording, and to put greater emphasis on the importance of the impact of the aggregate Margin on the Reported Reserve as opposed to the Margins on each assumption. A drafting note has been added to suggest that LHATF consider defining a prescribed minimum for the aggregate Margin.
- 5) Added additional guidance on determining the Margin Ratio (Section 7.B.7.)
- 6) Expanded the requirements for setting margins on Non-Guaranteed Elements (Section 7.J.) and moved all of NGE requirements that were in Guideline PBR-VAL to the Model Regulation. Changed the term “NGE Re-determination Margin” to “NGE Spread”.
- 7) Moved all of the requirements dealing with the stochastic modeling exclusion that were in Guideline DIS to the Model Regulation, and expanded the list of acceptable approaches to demonstrate the appropriateness of the exclusion to include non-stochastic approaches (Section 7.H.5.).
- 8) Added the requirement to prescribe a "best estimate" assumption for assumptions that are prescribed in order to quantify the impact of Margins on the reserve (Section 7.B.[5 and 6]).
- 9) Clarified that the requirement to quantify the impact of Margins on the Reported Reserve will apply to four categories of Risk Factors: mortality, policyholder behavior, expenses, and asset returns (Section 7.B.5.).
- 10) Expanded the requirements regarding the selection of Starting Assets (Section 7.E.1.).
- 11) Net Spreads (after default costs and investment expenses) on reinvestment assets are now proposed to be prescribed rather than being based on the actuary’s Prudent Best Estimate and subject to an aggregate cap (Section 7.C.5.).
- 12) Incorporated the treatment of fraternal benefits to be similar to FIT for fraternal companies.
- 13) Added the definitions of “Projection Year”, “Projection Start Date” and “Starting Assets”

**Major changes to Guideline PBR-VAL include:**

- 1) Section III on General Considerations has been re-written to clarify which Risk factors are prescribed, which Risk Factors must be modeled stochastically, and to address the level of granularity when setting assumptions. Wording in from this section of the September draft was moved to Section 7.B. of the Model Regulation.
- 2) The Mortality Assumption section (Section IV) has been modified to:
  - a. Modify the wording to improve consistency of terms, and to clarify the description of the approach.
  - b. Revise the description of the credibility method to more accurately describe the Canadian Normalization method.
  - c. Move the requirement to modify the mortality rates for impaired lives arising from policyholder behavior (e.g. higher mortality at the end of a level term period) to just before the selection of the Valuation Table, rather than after the selection of the Valuation Table.
  - d. Define the “best estimate” assumption in order to quantify the impact of the mortality Margin.
  - e. Streamlined the requirements to dealing with determining the mortality Margin, recognizing that some of these requirements would be more appropriately placed in a new PBR ASOP.
- 3) The Policyholder Behavior Assumption section (Section V) has been significantly re-organized and shortened to remove “educational” material, and to recognize that much of the guidance in this section would be more appropriately placed in a new PBR ASOP.
- 4) Expanded the description of the requirements to determine asset default assumptions (Section VII.B.)
- 5) Dropped aggregate cap requirement on net spreads on reinvestment assets since net spread is now proposed to be a prescribed assumption. (Section VII.C.)
- 6) Since the prescribed ultimate Treasury rates for the Deterministic Reserve is proposed to be based on the new recalibrated C3 P1 interest rate generator, the specific interest rates previously shown in the table will change, and thus, and have been removed (Section VII.D.1).
- 7) Defined the prescribed path of equity returns for the Deterministic Reserve (both GA returns and SA returns) to be the 10-year Treasury rate plus the prescribed net spread, grading from the current 10-year Treasury rate to the prescribed 10-year Treasury rate used for the prescribed path of interest rates (Section VII.D.2).
- 8) Added a new section to define "best estimate" assumption for prescribed assumptions in order to support the calculation of the impact of Margins on the Reported Reserve (Section VII.F).
- 9) Moved all the guidance to establish Non-Guaranteed Elements assumptions to the Model Regulation.

**Major changes to Guideline DIS include:**

- 1) Moved all requirements for the stochastic modeling exclusion in Section II to the Model Regulation.
- 2) Expanded disclosure requirements for default cost assumptions and Starting Assets.