LRWG Report to LHATF

June 8, 2006

Dave Neve, F.S.A., M.A.A.A.

Tom Kalmbach, F.S.A., M.A.A.A.

Co-Chairs, AAA Life Reserves Work Group

Objectives of this session

1. **Review and discuss the following:**
   – Updated drafts of Model Regulation and Actuarial Guidelines.
   – LRWG recommendation on the approach to establish margins for prudent best estimate assumptions.
   – Pros and Cons of the Gross Premium Valuation (GPV) method versus the Greatest PV of Accumulated Deficiencies (GPVAD) method.

2. **Request that LHATF take the following actions:**
   – Decide the approach to establish margins on prudent best estimate assumptions.
   – Seek guidance on using GPV method or GPVAD method for life reserves.
   – Vote to expose for comment updated drafts of Model Regulation and Actuarial Guidelines.

Summary of LRWG Changes to Model Regulation

1. Defined the approach to project asset cash flows on General Account equity investments. Section 7.C.3.b. and Section 7.E.
2. Added the considerations needed to reflect the special aspects of variable products. Section 7.C.2.b.and Section 7.G.3. and Section 7.H.5.
3. Added the option to perform reserve calculations on a date that precedes the valuation date. Section 7.A.3.
4. Expanded and clarified the approach to select the interest rate and equity return scenarios for stochastic modeling (which includes the option of "Predetermined Scenario Sets" to provide an alternative for companies to reduce the number of required Scenarios). Section 7.D.2.

Summary of LRWG Changes to Model Regulation

5. Added a requirement for companies to annually submit results of experience studies. Section 9.

6. Updated the definition of “Principles-based” to match the definition developed by the Academy’s Consistency Work Group that will be used for all products. Section 1.C.

7. Updated the definition of “Prudent Best Estimate” to match the definition developed by the Academy’s Consistency Work Group that will be used for all products. Section 5.S. and Section 7.B.1.

8. Added a requirement to disclose the impact of aggregation. Section 7.H.8.

Summary of LRWG Changes to Model Regulation

9. Added a requirement to disclose the estimate of the aggregate assumption Margin. Section 7.B.2.

10. Added a requirement to disclose the embedded spread over Treasuries on starting assets. Section 7.C.4.

11. Added a requirement of a prescribed cap on the aggregate weighted average spread over Treasuries on reinvestment assets. Section 7.C.5.

Summary of LRWG Changes to Model Regulation

12. Other Changes
    - Added the requirement that the Actuarial Report be treated as confidential information. Section 6.B.3.
    - Added a requirement that the starting asset amount shall not be less than a prescribed percentage of the final Reported Reserve.
    - Clarified that the modeling of hedges is permitted for both the Deterministic Reserve and the Stochastic Reserve. Section 7.E.6.
    - Clarified that the path of Net Asset Earned Rates will exclude Separate Account investment returns (i.e. only based on investment returns of General Account assets). Section 7.F.1.
    - For policies subject to the stochastic modeling exclusion, the amount from the Deterministic Reserve calculation needs to be added to the Stochastic Reserve.

Approach to Establish Margins for Prudent Best Estimate Assumptions

Possible approaches

1. Leave the determination of assumption margins up the professional judgment of the actuary, following guidance provided by existing ASOPs and any new PBA ASOP(s) being developed.

2. Same as 1), but add specific language to the life insurance reserves PBA regulation and/or guidelines that provides additional requirements that the actuary must take into consideration when setting margins. Stops short of defining numeric caps, floors and/or ranges on each margin.

Approach to Establish Margins for Prudent Best Estimate Assumptions

Possible approaches , cont.

3. Same as 2) but require numeric caps, floors or ranges on margins for selected assumptions. LHATF would need to determine which assumptions should have prescribed numeric margins and what the specific margin levels or ranges should be.

4. In addition to the approach described in either 1), 2) or 3) for setting individual assumption margins, require that individual margins be adjusted if the aggregate impact of all margins (including any prescribed and implicit margins) falls outside a prescribed limit or range.

Approach to Establish Margins for Prudent Best Estimate Assumptions

LRWG Recommendation: Approach #2.

- Leave the determination of assumption margins up to the professional judgment of the actuary, following guidance provided by existing ASOPs and any new PBA ASOP being developed.
- Add specific language to the PBA regulation and/or guidelines that provides additional requirements that the actuary must take into consideration when setting margins. These additional requirements could be in addition to, or duplication of, guidance provided by ASOPs.
- There would not be prescribed requirements on specific numeric margin levels, either on individual assumption margins or in the aggregate.

Approach to Establish Margins for Prudent Best Estimate Assumptions

LRWG Recommendation: Approach #2

It would be anticipated that in concert with this recommendation there would be a process in place that would result in the reporting and collection of margins used in order to facilitate determination of the range of practice and enable the regulator to assess whether the range of practice is within acceptable tolerances.

Approach to Establish Margins for Prudent Best Estimate Assumptions

Rationale for Recommendation

1. More consistent with the objectives of a principles-based approach than approach #3 or #4.

2. Provides greater degree of regulatory control compared to approach #1 in those areas where regulatory guidance is desired.

3. Avoids the difficult task of defining specific levels or ranges on individual margins or the aggregate impact of all margins.

Approach to Establish Margins for Prudent Best Estimate Assumptions

Rationale for Recommendation

4. Helps ensure greater consistency between companies in the level of statutory conservatism than approach #1.

5. Since a principles-based approach requires that assumptions be updated as experience emerges over time, as the level of uncertainty decreases (or increases) over time, this approach allows the actuary to adjust margins accordingly.

Action Item #1:

LRWG recommends that LHATF decide the approach that will be used to determine margins for valuation assumptions for life product reserves.

Gross Premium Valuation (GPV) versus Greatest PV of Accumulated Deficiencies (GPVAD)

Recommendation: Continue using the GPV method for determining life product reserves.

Rationale for the recommendation:

1. The benefits and guarantees of life products do not lead to the large interim deficiencies that can arise for variable annuities. An exception might be in situations where guaranteed benefits are offered on variable life contracts that are similar to those offered on variable annuities.

2. For many products, the GPVAD reserve is likely to be equal to, or very close to, the GPV reserve.

Gross Premium Valuation (GPV) versus Greatest PV of Accumulated Deficiencies (GPVAD)

Rationale for recommendation, cont:

3. Many of the risks that give rise to future interim deficiencies for life products are related to policyholder behavior (e.g. lapses, premium patterns) that can be adequately addressed by proper conservatism in valuation assumptions for these items.

4. Avoids the need to address the issue of defining the working reserve, particularly in light of the large diversity in the types of life products, such as products with and without cash values, products in a closed block, etc.

5. The GPV method is closer to CRVM than the GPVAD method -- unlike variable annuities where the GPVAD method is consistent with the concepts of CARVM.

Action Item #2:

LRWG requests guidance from LHATF on using GPV method or GPVAD method to calculate principles-based reserves for life products.

Action Item #3:

LRWG recommends that LAHTF vote to expose for comment the updated versions of:

1. Model Regulation for Principles-based approach for Life Insurance Reserves
2. Actuarial Guideline on setting assumptions – AG PBR
3. Actuarial Guideline on disclosure requirements – AG DIS
4. Actuarial Guideline on margin requirements – AG MAR