



SOCIETY OF ACTUARIES

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**Session 1 PD: Statutory Life and
Annuity Valuation Issues**

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Life and Annuity Valuation Issues 2009 Valuation Actuary Symposium

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(AKA the PBA Steering Committee),*

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Life and Annuity Valuation Issues: PBA Overview

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What is a Principle-Based Approach (PBA)?

- An approach that determines reserves and capital using specific model-based approaches that include the use of the company's own experience when credible
- Goal: to develop reserves and risk-based capital that are reasonably conservative, but not too high as to stifle competitiveness

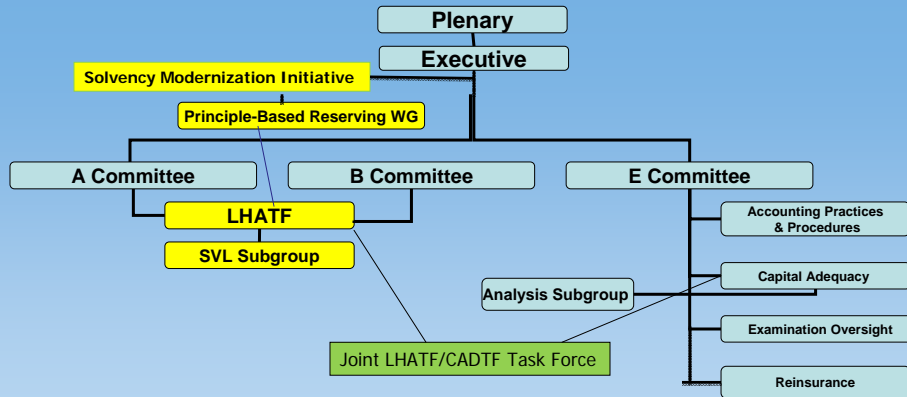


PBA

- Major activity in the last year
- Has been the focus of the NAIC's Life and Health Actuarial Task Force, Life Risk-Based Capital and a Commissioner's Level Working Group (PBR (EX))
- Many sessions at the Symposium devoted to it
- Quarterly Academy webcasts



NAIC Committee Structure



Solvency Modernization Initiative Task Force

- Chaired by Commissioner Gross of Virginia
- Covers international solvency and PBA
- PBR (EX) chaired by Commissioner Hampton of Washington, DC, focuses on shepherding PBA through various NAIC committees
- Documents can be found on NAIC website: www.naic.org



Proposed Updated SVL

- Has been adopted by LHATF, PBR (EX) Working Group, Solvency Modernization Initiative Task Force
- Will allow PBA
- Law is general, details will be in Valuation Manual



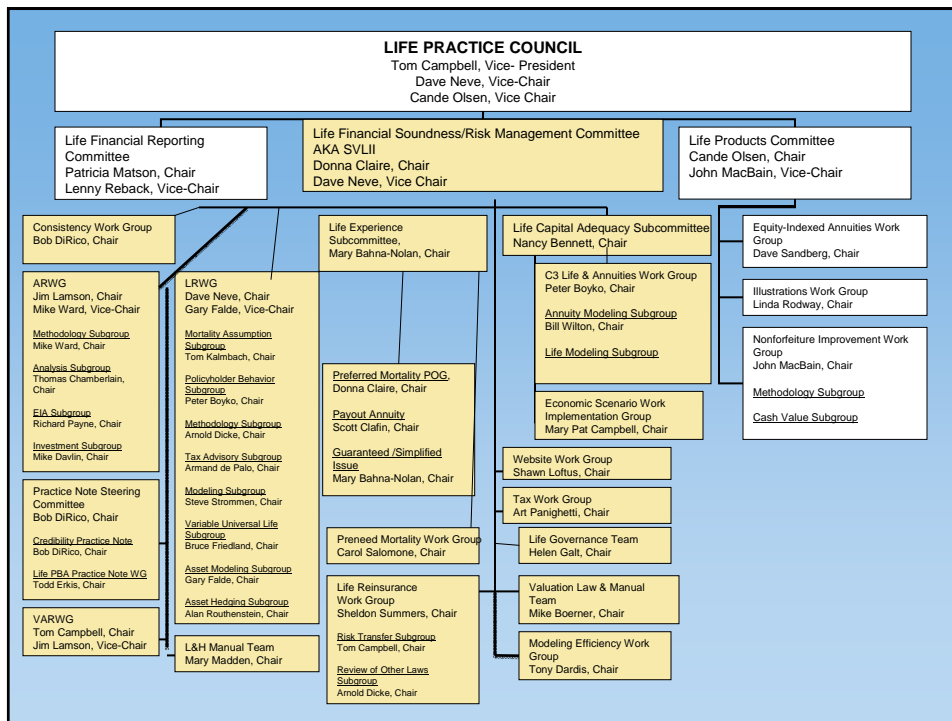
Valuation Manual

- Goal of Valuation Manual is to enable uniform valuation requirements among states
- Standard Valuation Law will enable states to conform with the requirements of the Valuation Manual as they change from year to year without having to adopt by regulation each year
- Would have present and transition valuation requirements
- Target date is December for adoption by LHATF



Valuation Manual: LHATF Subgroups

- Broken into sections:
 - VM-00 Valuation Manual and VM-01 Definitions – group chaired by Mike Boerner
 - VM-20 Life Reserving group chaired by Pete Weber
 - VM-25 Health Reserves and VM-26 Credit Life and Disability group chaired by Julia Philips
 - VM-30 AOMR and VM-31 Reporting and Documentation group chaired by Katie Campbell
 - VM-50 Experience Reporting and VM-51 Experience Reporting Formats group chaired by Fred Andersen



Academy Work Groups Under Life PBA Steering Committee

- Life Reserves
- Annuity Reserves
- Variable Annuity Reserves
- Governance
- Economic Scenarios
- Life Reserves and Capital Practice Note
- Credibility Practice Note
- Consistency
- Reinsurance
- Tax
- Experience Studies Research
- Valuation Manual
- Website
- Modeling Efficiency



Other Academy/SOA/ASB Efforts

- Health Practice Council also working on PBA: LTC plus other health products
- Joint SOA/Academy project on Preferred Mortality, Payout Annuities, Guaranteed/Simplified Issue, Pre-Need
- ASB is working on possible ASOPs related to the PBA effort



Modeling Efficiency Work Group

- Chaired by Tony Dardis
- Goal is to develop modeling methods to make PBA job easier
- Recently sent out a survey to companies
- Starting a project inviting companies to test modeling techniques
- Will develop a Practice Note



Credibility Practice Note Work Group

- Chaired by Bob DiRico
- Describes current and potential actuarial practice regarding ways to determine when own experience is credible and when it should be combined with industry experience
- Practice note is available on Academy website:
www.actuary.org



Economic Scenario Implementation Work Group

- Chaired by Mary Pat Campbell
- Dealing with scenario generator issues at NAIC
- Goal is to have the same generator for RBC C-3 Phase I testing, RBC C-3 Phase 2 interest rates, RBC C-3, and reserving
- Academy goal is having calibration criteria accepted so companies can potentially use own scenario sets



Life Reserves and Capital Practice Note Work Group

- Group chaired by Todd Erkis
- Has been developing practical answers to PBA questions
- Available on Academy website:
www.actuary.org



RBC C-3 Phase I

- 10,000 scenarios sample will be available from Academy
- Proposal is no longer to have the 12 or 50 set samples
- Proposal is to update scenarios for year-end 2010



Principle-Based Approach to Reserves and Capital: Timing

- Some steps have already been taken
- RBC C-3 Phase I and II are principle-based approaches (some revisions possible)
- Equity Indexed Annuities reserving principle-based
- VACARVM 2009
- Other PBA approaches will be phased in over next few years
- Will be a work in progress for a long time as actuarial science/knowledge evolves



Possible PBA Timetable

RESERVES

- Possible adoption of SVL2 by NAIC 2009
- Possible state adoptions in 2010-11
- Effective when super-majority of states have passed

CAPITAL

- C-3 Phase III year-end 2010?



Life and Annuity Valuation Issues: Principle-Based Topics

Tom Campbell



Academy PBA Work Groups

■ Principle-Based Reserve and RBC

Product	Reserves	RBC
Variable Annuities	VARWG	C-3 Phase II
Life Insurance	LRWG	C-3 Phase III
Fixed Annuities	ARWG	C3WG*

■ Supporting PBA Work Groups

■ Consistency, Reinsurance and Tax

* The WGs formerly known as the LCWG and the ACWG were merged into the C3WG with the intent to eventually have one "Phase" apply to all three products.



PBA Reserves for Variable Annuities

■ AG 43 (formerly known as VACARVM)

- 12/31/2009 effective date
- AG 34 and 39 repealed effective 12/30/2009

■ Scope

- All VAs subject to CARVM
- Group VAs not subject to CARVM, but with guarantees
- Products with guarantees that are "similar in nature" to VA guarantees



Expected Next Steps for AG 43

- Practice Note (released July 2009)
 - For the application of AG 43 and C-3 Phase II
 - Updates the 2006 C-3 Phase II practice note
 - Facility for additional questions and updates
- Feedback loop
 - Combined with efforts on C-3 Phase II
 - LHATF subgroup on modeling hedges
- Tax Implications
 - IRS/Treasury Notice 2008-18 (January 2008)
 - Additional guidance is expected



PBA Reserves for Life Insurance

- Valuation Manual Section – VM-20
 - LHATF exposure - www.naic.org/committees_lhatf.htm
 - Amendment Proposal process
- LHATF adoption could be as early as December
 - May spill into 2010
 - NAIC adoption to follow
 - State adoption necessary – SVL and VM



PBA Reserves for Life Insurance

- Applies to new business only
 - Beginning 2012 or 2013??
 - May be limited to certain products
- Stochastic and Deterministic component
 - Stochastic Exclusion Test
- Stochastic uses GPVAD
 - No Working Reserve



PBA Reserves for Life Insurance Open Issues

- Asset default costs
- Discount rate
 - Should they be capped?
 - 3% for equity assets
- Working Reserve – still OK with zero?
- Projecting non-guaranteed elements
- Credit for reinsurance



PBA Reserves for Life Insurance Open Issues

- Margin for less than fully credible assumptions
- Revenue sharing
- Company generated scenarios
- Net premium reserve component (ACLI)



PBA Reserves for Non-variable Annuities

- LHATF now addressing VM-22
- Academy Annuity Reserves Work Group
 - Working with LHATF subgroup to draft PBR for non-variable annuities
 - Considering recommending a Deterministic Reserve that is similar to AG 33, but perhaps with prescribed Elective Benefit incident rates



Guaranteed Lifetime Income Benefits

- LHATF asked ARWG to opine on application of AG 33 to GLIBs (Plan Type)
- Description of Benefit
 - Minimum lifetime withdrawal income benefit included with a fixed annuity
 - Traditional rights retained (e.g., withdrawal)
- Resolution – proposed AG 33 updated for 12/2009
 - Plan Type C (generally) when $AV > 0$
 - Plan Type A when $AV < 0$



GLIB Issue = Need for PBA!

- AG 33 update is a “band-aid”
- PBR will better measure ALM and longevity risk than formula reserves



Consistency Work Group

- Definitions for VM-1
 - Consistent use between sections
- Risk in reserves vs. capital
 - Directly related to contracts or supporting assets; and
 - Capable of materially affecting the reserve
 - Guidance on what this means and examples covering specific risks



Reinsurance Work Group

- Treatment of reinsurance in PBA (risk transfer)
 - LHATF has rejected Academy WG proposal
- Credit for reinsurance
 - Which two do you separately calculate: net, gross, or reinsurance reserve credit?
 - Gross and net make sense, but what if you qualify for stochastic exclusion on a net basis, but not gross?



Reinsurance Work Group

- Are negative net reserves allowed?
- Can stochastic exclusion test be manipulated through reinsurance
- C-3 Phase III – update reinsurance language



Tax Issues

- Academy PBA Tax Work Groups
 - Review of PBA reserve proposals
 - Working with reserve WGs and Steering Committee
- IRS/Treasury Notice 2008-18 (January 2008)
 - Alert companies to tax issues arising from proposed VACARVM and Life PBR
 - Academy's Life Tax Steering Group provided comments
 - VACARVM appears to have fewer issues than Life PBR

Caveat: This discussion on Tax issues represents the speaker's point of view and does not represent Academy positions. Actuaries should discuss these issues with tax professionals before forming their opinion on these issues.



Potential Tax Questions for AG 43

12/31/2010 Valuation

Issue Date	Stat Reserve	Tax Basis
1981 – 2008 ⁽¹⁾	AG 43	AG 34/39
2008 ⁽¹⁾ – 2010	AG 43	AG 43 ⁽²⁾

- 1) What is the AG 34/39 “cut-off” date for the tax basis: 9/23/2008, 1/1/2009 or 12/30/2009?
- 2) How is the tax basis applied? For example:
 - Does the tax basis include the CTE 70 calc or is it only the Standard Scenario?
 - Is any excess of the CTE 70 calc over the Standard Scenario allowed?
 - If so, will the CTE 70 calc need to be modified? Also, can the excess allocated to contract using the required approach in AG 43 available for the stat cap?
 - How is the AFIR brought into the tax basis – if at all?



Additional Tax Questions

- The tax reserve for a given contract may not be greater than the “stat cap” for that contract
 - Does the stat cap include the allocated excess, if any, of the CTE 70 calc over the Standard Scenario?
- Change in Basis
 - Initial – is the change in tax reserve due to the implementation of AG 43 for in-force business considered a change in basis and therefore eligible to be spread?
 - On-going – will the impact of future changes in assumptions, which are a normal part of the CTE 70 calc, be considered a change in basis for tax purpose (may be moot if tax basis is only the Standard Scenario)?



C-3 Phase II Update

- Future changes being discussed
 - Some consistent with “new” VACARVM provisions
- Results subgroup
 - December 2006 preliminary letter
 - Four years of practice
 - Could also affect VACARVM
 - Feedback loop



Potential Feedback Loop Issues

- Company generated scenarios
- Number of scenarios
- Cell and fund compression
- Revenue sharing
- Hedging
- Assumptions
- Expenses
- Standard Scenario
- CTE levels
- Differences in assumptions or methods for reserves vs. capital
- Model validation procedures



PBA Risk-Based Capital Academy C-3 Work Group

- Goal is to consolidate all C-3 requirements within a single PBA framework
- RBC C-3 framework
 - Currently not developing C-1, C-2 or C-4
- Recent focus has been on life requirements (C-3 Phase III)



C-3 Phase III

- Current version exposed for comments
- NAIC Life RBC WG aiming for 2010
 - Adoption as early as December 2009
 - Effective date could be December 2010
- Stochastic scenarios – calibration criteria or prescribed?
- Interaction of reserve and capital requirements

www.naic.org/committees_e_capad_lrbc.htm



C-3 Phase III – Comments

- Is TAR – Reserves the right metric?
- Workload vs. materiality
- Issues when equities are included in the models
- Practice issues, which could be addressed by ASOP or practice note



PBA Risk-Based Capital Next Steps

- NAIC and Interested Party comments on current C-3 Phase III report
- Adoption and 2010 LRBC Instructions changes?
- Work on Non-variable Annuity C-3 RBC



Non-PBA Topics

- Other RBC Issues
- NAIC Capital and Surplus Relief



Other RBC Issues

- Mortgage Experience Adjustment Factor (MEAF) – LR003
 - 50% - 350% changed to 75% - 125% for 2009
- Collateral for Derivatives – LR012
- Term Asset-Backed Securities Loan Facility (TALF) – LR015



NAIC Capital and Surplus Relief

- “Quickly organized” NAIC Working Group
 - In response to financial crisis
- Part of the Financial Condition (E) Committee
 - Formed in November 2008
 - Consider temporary and permanent changes to NAIC solvency framework
- 2008 proposals included reserve, RBC, reinsurance, investment and accounting issues



NAIC Capital and Surplus Relief

- NAIC voted “no” to 2008 proposal as a package
 - States provided their own permitted practices
- Proposals sent back for consideration in 2009
 - Model Reg 815 – Preferred tables for 2001 CSO products
 - Actuarial Guideline 1c – mortality table for Triple X segment
 - Elimination of x-factor constraints within Triple X
 - NAIC Bulletin - allowable collateral for reinsurance
 - CADTF review of C-3 Phase II standard scenario
 - RBC Mortgage Experience Adjustment Factor (MEAF)
 - Deferred Tax Asset



Life and Annuity Valuation Issues: Miscellaneous Updates

Donna Claire



Preferred Mortality Tables

- Joint SOA/Academy project
- LHATF decided to postpone table update to 2010
- Project has a number of tables depending on company experience/Underwriting Criteria Score; UCS info is available on SOA website:
www.soa.org
- Valuation Basic Tables work is done
- Work continuing on margins



Payout Annuity Mortality

- Academy group chaired by Scott Clafin
- Looking to replace the a2000 mortality table
- Payout annuity mortality has improved; group will likely suggest improvement factors be added to valuation table



Guaranteed/Simplified Issue and Pre-Need

- 2001 CSO does not cover non-medical underwriting
- Mary Bahna-Nolan is chairing the academy group proposing a solution
- Pre-need:
 - Interim solution is to go back to using 1980 CSO
 - SOA/Academy group chaired by Carol Salomone using more recent study to develop a proposal for a longer term solution



AOMR

- Making some progress
- About 42 states have passed, with one more (Hawaii) considering
- Will be in L&H Valuation Law Manual



Life & Health Valuation Law Manual

- Gives summary of each state's valuation requirements
- Provides one-stop shop for applicable actuarial guidelines and NAIC model regs
- Available from the Academy at:
www.actuary.org



Life Nonforfeiture Improvement Work Group

- John MacBain is chair of Academy group
- Developed a proposed change to law to accommodate PBA
- Looking at future changes:
 - Look to have flexibility/consumer options
 - Consistent with drive toward “principle-based” reserving
 - Many considerations; will not happen quickly



GRET

- Generally Recognized Expense Table for life illustrations
- SOA studies
- 2010 factors passed on LHATF conference call in August



Actuarial Guideline 44 - Group Term Waiver of Premium

- New table replaces Krieger table
- Allows/requires the use of company experience where credible
- Effective date 1/1/09



Actuarial Guideline 45 – Minimum Cash Values

- Provides guidance for return of premium term minimum cash values
- Effective for all policy forms filed after December 31, 2008, and all policies issued after December 31, 2009, regardless of when the policy forms were filed
- Treats ROP rider designs and built-in designs in a consistent manner
- Minimum cash values are based on the maximum of the cash values produced using current and guaranteed premiums



NY Halloween Letter

- For asset adequacy testing
- Similar to last year, will likely detail certain requirements, e.g.:
 - Passing the NY7; clarify assumptions with margins
 - LTC
 - Assumptions when combining results of variable products with general account products
 - Assumptions on volatile assets
 - C-3 Phase II testing
 - Default assumption



Life & Health Qualification Seminar

- Requirements to sign Statutory Actuarial Statements
 - Applicable economic, regulatory, and legal environments; and
 - The identification, evaluation and management of risk
- Under SOA 2000-2006 syllabus, must pass this course in order to be qualified as having basic education to sign Annual Statements; for latest SOA syllabus, depends on exam track
- Go to www.actuary.org/seminars for more info

