**NAIC 2009 Fall National Meeting**

Principles-Based Reserving
Education Session
7:30-9:00
Maryland Ballroom D



## NAIC PBA Educational Session

**PRESENTERS**

**Philip Barlow**, FSA, MAAA
Chair of the Life Risk Based Capital Working Group
Associate Commissioner for Insurance for the
DC Department of Insurance, Securities and Banking

**Larry J. Bruning,** FSA, MAAA, CLU
Chair of the Life and Health Actuarial Task Force
Chief Actuary, Kansas Insurance Department

**Nancy Bennett**, FSA, CERA, MAAA
Senior Life Fellow
American Academy of Actuaries



## Outline

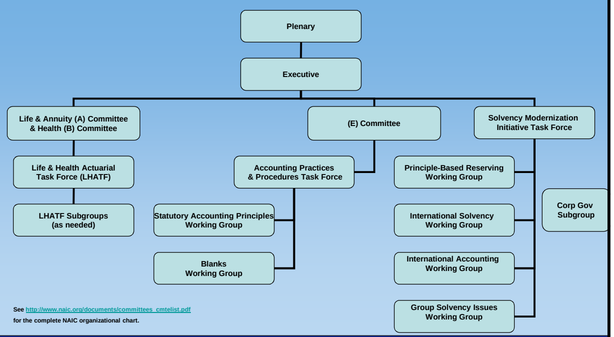
- Introduction and Background-Philip Barlow
  - Principles-Based Reserving Working Group
  - Success of current system, changes, impact of changes, current status, guardrails
  - Major Questions Asked by Opponents of PBR
- PBR 101-Larry Bruning
  - What is it, why needed, impact on consumers, industry, regulators, costs
- American Academy of Actuaries Role with PBR-Nancy Bennett
  - Actuarial Standards of Practice
  - PBA Governance
- Next Steps-Larry Bruning
  - Legislative steps, Timeline, Remaining Items



## Introduction

The Principle-based reserves project has involved many NAIC Committees, Task Forces and Working Groups. Because of the diverse impact on NAIC activities, the Principles-Based Reserving (EX) Working Group was established to facilitate and coordinate the work of the various groups. The following slide identifies many of the groups that have been most heavily involved in the project.

## NAIC Committees involved in PBR




See http://www.naic.org/documents/committees_cmtelist.pdf
for the complete NAIC organizational chart.

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## What is the role of the PBRWG?

**The Principle-based Reserve Working Group Charges (in part):**

- To serve as a coordinating body with all NAIC technical groups involved with projects related to a principles-based approach to regulation
- Consider policy and practice issues related to principles-based regulation for life insurance …, including but not limited to the impact on areas such as corporate governance, examination and analysis, as well as staff resources and other insurance department administrative concerns.
- Focus on balancing theoretical approaches with effective regulatory practices…
- Evaluate necessary changes to existing state insurance laws, regulations or administrative policies to effectuate a principles-based regulatory framework.

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## Why were the formulaic reserves successful?

- Most insurers sold similar products with basic features and generally a dominant benefit that determined the reserve.
- Assets tended to be conservative and also tended to be similar between insurers.
- The valuation assumptions (generally a mortality table, interest rate and valuation methodology) produced reserves that were conservative for the products described above.
- Reserves were relatively easy for regulators to audit and monitor.

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## What has changed?

- Advances in technology allow insurers to increase the complexity of product design with more complex benefits, and guarantees.
- The more complex benefits and guarantees require insurers to engage in more sophisticated investment strategies, including hedging strategies.
- These changes result in different risk exposures for insurers on both sides of the balance sheet.
- Advances in underwriting allow insurers to develop more stratifications of mortality than can be covered by the required mortality tables.
- Secondary guarantees, additional benefits, policyholder elections, and other features that are not directly recognized in the formulaic reserves take on more significance.

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## What is the result?

- The formulaic reserve for some products that consumers find beneficial result in reserves in excess of what may be considered reasonably conservative.
- Benefits, options and guarantees that involve significant risks have little or no reserves under the formulaic reserve calculation.
- Insurers design complicated and possibly confusing products to produce lower reserves than other products offering similar benefits.
- LHATF spends a significant amount of time determining how to fit these product innovations into the existing formulaic reserve process.
- Product designs that are beneficial for consumers are not pursued because they cannot fit into the formulaic reserve calculation.
- As will be discussed in more detail later, the principle-based approach will address all of these concerns.



## Where are we currently?

**Standard Valuation Law (SVL)**

- Implementation of the principle-based approach requires states to adopt changes to the SVL which includes the introduction of a Valuation Manual where most of the detail resides.
- The SVL was adopted by LHATF at the Summer NAIC meeting and by both PBRWG and Solvency Modernization Initiative (EX) Task Force on a joint conference call on July 28, 2009.
- The SVL was adopted by the Life Insurance and Annuities (A) Committee on September 9, 2009 subject to two conditions:
  - the Valuation Manual be completed by the end of 2009; and
  - the Valuation Manual include safeguards for minimum prescribed formulaic reserves.
- Executive and Plenary will address the SVL at this meeting.
- The SVL takes effect following adoption by at least three-fourths of the members of the NAIC and 75% of the total direct premium written.



## Where are we currently?

**Valuation Manual (VM)**

- “A” Committee requires a complete VM by the end of 2009.
- The complete VM includes all lines covered by the SVL, although initially all lines will not be principle-based.
- For non-principle-based lines, the existing formulaic reserves will be incorporated in the VM.
- Principle-based requirements for variable annuities are complete and requirements for life products are nearing completion.
- No other lines are being contemplated for inclusion in the initial VM.



## What protections are in place as we move to PBR?

- Deterministic Reserve Calculation
  - Calculated assuming a single economic scenario.
  - Serves as a floor for the stochastic amount.
- Net Premium Reserve
  - Being developed by the ACLI.
  - Serves as a basis for tax reserves.
- Corporate Governance Requirements
  - Included in both the SVL and VM.
  - Provides guidance for governance responsibilities of the board, company management, and qualified actuaries with respect to PBR.
- PBR is prospective only, so its impact in early years will be minimal.

## What are some of the concerns that have been raised?

- PBR simply provides reserve relief for Life Insurance Companies
  - The goal of PBR is to get reserves in line with the risks of the products.
  - Some products may get reserve relief, but only to the extent the formulaic reserve are unduly conservative.
  - New benefits, options and guarantees that involve significant risks, but do not fit in the formulaic reserve process (so have little or no reserves) will generate reserves appropriate to their risk and without waiting for a tweak to the formula by LHATF.



## What are some of the concerns that have been raised?

- PBR is costly for small insurers to implement
  - There are features built in to PBR to reduce the burden on small companies.
    - **Exclusion tests** – the VM includes options for small insurers to bypass the principle-based requirements for product lines based on either:
      - Size of the block of business
      - Risk profile of the product line
    - **Single state exemption** – the commissioner may exempt product lines from PBR requirements.



**Questions ?**



## NAIC PBA Educational Session

Larry J. Bruning FSA, MAAA, CLU

Chair of the Life and Health Actuarial Task Force

Chief Actuary, Kansas Insurance Department

lbruning@ksinsurance.org

## Principle-Based Approach to Valuation

- What is PBA ?
- Why do we need PBA ?
- What will PBA do for Consumers ?
- What will PBA do for the Industry ?
- What will PBA do for Regulators ?
- What are the Implementation Costs of PBA ?



## What is PBA ?

- New Valuation Methodology for calculating Reserves:
  - Captures all Material Risks
  - Utilizes Risk Analysis Techniques (Modeling, Simulation)
  - Permits use of Credible Company Experience Data
  - Permits use of Company Risk Management Programs
  - Establishes Reserves based on Magnitude of underlying Risks
  - Maintains Solvency Objectives of Statutory Regulation



## What is PBA ?

- New Valuation Methodology Process:
  - Material Risk Identification
  - Economic Scenario Generation
  - Financial Model Building
  - Anticipated Experience Assumptions
  - Appropriate Margins' Determination
  - Risk Measurement (CTE Metric)
  - Sensitivity Testing
  - Documentation (Actuarial Memorandum)



## Why do we need PBA ?

- Eliminate flaws in current Formula-Based Reserve Methodology
  - Reserve methodology virtually unchanged for 150 years
  - Increased Complexity in Product Design requires constant change (new regulations, new actuarial guidelines)
  - Does not address all insurance risks
  - One size fits all companies and products does not work
  - Reserve too conservative for some products and benefits
  - Reserve not adequate for some products and benefits

## Why do we need PBA ?

- Good Public Policy
  - Strengthens Solvency Protection
  - Impacts Product Price
  - Increases Product Availability
  - Increases Competition among Companies
  - Promotes Development of Principle-Based Products
  - Improves balance between Solvency and Cost
  - Strengthens Regulatory Oversight
  - Focuses on “What could happen” rather than “What did happen”



## Why do we need PBA ?

- Allows U.S. to remain competitive in the global insurance market
  - Development of an International Principle-Based Regulatory System
  - U.S. regulatory system must participate in the International Development process



## What will PBA do for Consumers ?

- Consumers
  - Protect Consumers by Strengthening Solvency
  - Impact Product Price (Competition, Balance between Solvency and Cost)
  - Pricing directly Reflects Risks
  - Expanded Product Offerings
  - Flexibility through Principle-Based Products



## What will PBA do for Industry ?

- Industry
  - Provides a uniform Valuation Methodology for all Companies
  - Provides consistency across all States
  - Reserve directly reflects level of Risk
  - Permits use of Credible Company Experience Data
  - Permits use of Company Risk Management Programs
  - Improves balance between Solvency and Cost
  - Provides Flexibility through Principles-Based Products

## What will PBA do for Regulators ?

- Regulators
  - Strengthens Solvency
  - Eliminates Flaws in Formula-Based Reserve Methodology
  - Increases Regulatory Flexibility
  - Reduces need for Regulatory Change to address Product Flexibility or Complexity
  - Focus on “What Could Happen” rather than “What Did Happen”
  - Increased Data Collection and better understanding of Company Risk



## What are the Implementation Costs of PBA ?

- Consumers
  - Positive and negative price changes in products due to effective risk assessment
  - Don’t anticipate any significant additional costs due to the methodology change
- Industry
  - Overall system costs (models, computer time, etc)
  - Experience Reporting of Company Experience Data
  - Some changes to annual statement exhibits
  - Some changes to accounting principles



## What are the Implementation Costs of PBA ?

- Regulators
  - Regulator Education and Training
  - Centralized Regulatory Review Process
  - Developing a feedback loop for future Valuation Manual changes



**Questions ?**

## Principle-Based Approach to Insurance Valuation Educational Session

*Nancy Bennett, FSA, CERA, MAAA*
*Senior Life Fellow*
*American Academy of Actuaries*



## Agenda for this Session

- Overview of the Academy's Role with PBA
- PBA Governance
- Actuarial Standards of Practice



## American Academy of Actuaries

**Mission: The Academy's mission is to serve the public on behalf of the United States actuarial profession.**

- Provides independent and objective actuarial analysis
- Identifies and addresses issues where actuarial science provides a unique understanding
- Provides high professional standards of actuarial qualification, practice, and conduct



## Academy Life Practice Council (LPC)

- Initial catalyst for PBA regulation
- Served as the primary technical architect of PBA
- Worked with various stakeholders to promote, develop, and refine PBA
- Operating Structure
  - Principle-Based Reserve Work Groups
  - Other LPC Groups supporting PBR
  - Risk-Based Capital Work Groups
  - Economic Scenario Work Groups

## Agenda for this Session

- Overview on the Academy's Role with PBA
- PBA Governance
- Actuarial Standards of Practice



## PBA Requires Governance

- **Flexibility in assumptions, methods, and models used to determine reserves means:**
  - New obligations for company boards, management and actuaries to assure they are appropriately governing the processes by which these reserves are determined
  - New obligations for regulators to get assurance that the results are appropriate and consistent with the legal requirements
- **Both the SVL and the VM address corporate governance of PBA**

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## PBA Governance within the SVL

- **The SVL primarily points to the VM for governance, but does specifically:**
  - Require that PBR assumptions, methods and models must be consistent with (but not necessarily identical to) those used in other company risk assessment processes
  - Require that the company annually provide to the commissioner and the board a certification of the effectiveness of internal controls with respect to the PBR valuations

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## PBA Governance within the Valuation Manual

- Provides guidance for governance responsibilities of the board, company management, and qualified actuaries with respect to PBR
- Oversight is the responsibility of the Board of Directors:
  - Reviews summary results and other information on PBR processes
  - Determines what additional steps, if any, are needed to rely on PBR processes of the company

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## PBA Governance within the Valuation Manual

- **Company management's responsibilities**
  - Provide information to the Board
  - Review PBR results
  - Adopt internal controls over PBR valuations
  - Ensure that resources are adequate and competent
  - Ensure that PBR processes operate as intended



## PBA Governance within the Valuation Manual

- **Qualified actuary's responsibilities for PBR**
  - Oversee determination of PBR
  - Review and approve the assumptions, methods, models, and internal standards
  - Provide a summary report (to board, management)
- **The Appointed Actuary provides an annual Statement of Actuarial Opinion on adequacy all statutory reserves (PBR as well as formulaic reserves)**



## Agenda for this Session

- Overview on the Academy's Role with PBA
- PBA Governance
- Actuarial Standards of Practice



## Why is the Actuary Qualified to do PBR?

- Education
  - Basic and Continuing
- Experience
- Professional Standards
  - Code of Professional Conduct

<u>Credentials for Life and Health Actuaries</u>

| | |
|---|---|
| ASA | = Associate, Society of Actuaries |
| FSA | = Fellow, Society of Actuaries |
| CERA | = Chartered Enterprise Risk Analyst |
| MAAA | = Member, American Academy of Actuaries |

## Code of Professional Conduct

- Actuaries are required to comply with the Code
  - Professional Integrity
  - Qualification Standards
  - Actuarial Standards of Practice (ASOPs)
- Actuaries who breach code are subject to discipline



## Independent Entities Involved in Professional Standards

- **Actuarial Standards Board (ASB)**
  - Establishes and improves Actuarial Standards of Practice (ASOPs), identifying what the actuary should consider, document, and disclose when performing an actuarial assignment
  - Reviews and evaluates current and emerging practices
  - Determines appropriate guidance
  - Obtains input from actuaries and other interested parties
  - Publishes standards based on input from actuaries and other interested parties
- **Actuarial Board for Counseling and Discipline (ABCD)**
  - Serves the five US-based actuarial organizations
  - Provides guidance to actuaries
  - Responds to possible violations of the Code of Professional Conduct



**QUESTIONS?**



## What needs to be done at the State Legislative Level ?

- Summary of Amendments to the Standard Valuation Law
  - Law defines a Principle-Based Valuation Methodology
  - Law defines a Valuation Manual (VM)
  - VM contains Valuation Standards that apply to all contracts issued on and after the Operative Date of the Valuation Manual
  - Law defines what the VM must contain
  - Law requires that changes to the VM be adopted by the NAIC
  - Law defines the Operative Date of the Valuation Manual
  - Law defines the Effective Date of Valuation Manual Changes
  - Law requires Experience Reporting of Company Data
  - Law provides for Exemption of a Company writing business in a Single State

## What needs to be done at the State Legislative Level ?

- Operative Date of the Valuation Manual
  - January 1 of the calendar year following July 1 of the calendar year in which all of the following have occurred:
    - (1) Adoption of VM by NAIC of at least 42 members or ¾ of members voting whichever is greater
    - (2) Amended SVL enacted in states representing greater than 50% of direct premiums written as reported in the annual statements
    - (3) Amended SVL enacted in at least 42 of the following 55 jurisdictions: the 50 states of the United States, the District of Columbia, American Samoa, the American Virgin Islands, Guam and Puerto Rico

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## What needs to be done at the State Legislative Level ?

- Effective Date of the Valuation Manual Changes
  - January 1 of the calendar year following adoption of the change by the NAIC of:
    - (1) ¾ of the members voting but not less than a majority of total membership and
    - (2) Members of the NAIC representing greater than 50% of direct premiums written as reported in the annual statements

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## What needs to be done at the State Legislative Level ?

Contents of Valuation Manual

- VM-0 (Table of Contents, Introduction, Overview)
- VM-1 (Definition of Terms)
- VM-2 (Types of Contracts, Riders, Supplemental Benefits, Substandard Risks)
- VM-3 (Contracts subject to PBR)
- VM-20 (Reserve Requirements for Life Products)
- VM-21 (Reserve Requirements for Variable Annuities)
- VM-22 (Reserve Requirements for Non-Variable Annuities)
- VM-25 (Reserve Requirements for Health Insurance)
- VM-26 (Reserve Requirements for Credit Life and Disability)
- VM-30 (Requirements of Actuarial Opinion and Memorandum)
- VM-31 (Requirements for Reporting and Documentation)
- VM-50 (Requirements of Experience Reporting)
- VM-51 (Experience Reporting Data Formats)

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## What is the Projected PBA Timeline ?

- NAIC adoption of amended Standard Valuation Law and Valuation Manual December 2009
- Begin Legislative adoption of amended Standard Valuation Law in next 2 years beginning in 2010 or 2011.
- Operative date of VM provided by the SVL trigger.
- International Regulatory Effort 2014 ?

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## Remaining Items Needed to Roll Out PBA

- Complete the Valuation Manual
- Complete the Statistical Agent Project
  - Select the Statistical Agent(s)
  - Decide the location of the Data Warehouse
  - Decide the Funding Mechanism
- Create the Centralized Regulatory Review Process
  - Similar to FAWG
  - Define the Feedback Loop Process
- Train and Educate Regulatory Actuaries and Examiners
- Work with State Legislators to get the SVL adopted



**Questions ?**