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AMERICAN ACADEMY *of* ACTUARIES

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May 6, 2013

Commissioner Julie Mix McPeak and Superintendent Joseph Torti III  
Co-Chairs, NAIC Principle-based Reserving Implementation (EX) Task Force  
National Association of Insurance Commissioners

Dear Commissioner McPeak and Superintendent Torti:

The American Academy of Actuaries<sup>1</sup> Principle-based Reserves Strategy Subgroup (PBRSS) appreciates the opportunity to comment on the draft NAIC Legislative Brief on principle-based reserving. The PBRSS believes that the Legislative Brief is an excellent source of information for states considering adoption of the new Standard Valuation Law. On April 19 we submitted suggested revisions so that the document can better assist legislators in the adoption of principle-based reserves. On an April 23 conference call, you requested our assistance in expanding upon the information provided in response to the question “Is PBR more or less conservative?” to describe the impact of PBR on reserves.

When compared to current statutory reserve levels, PBR reserves will be higher for some insurance products and lower for others because PBR uses a process that more accurately reflects the risks assumed by life insurers. In an analysis performed by the consulting firm Towers Watson, term life insurance products demonstrated a decrease in reserves from 38% to 64% (our April 19 letter referred to a range of 30% to 50%; we have since decided it would be more appropriate if the exact numbers were cited). The Universal Life with Secondary Guarantee (ULSG) products that were analyzed demonstrated a decrease in reserves from 44% to an increase of 63%. The wide range of outcomes for ULSG is not unexpected given the variations in company interpretations of the reserve requirements for this product type. Reserves for most other products (e.g., whole life) remained unchanged under PBR.

The PBRSS utilized the Towers Watson results to estimate the impact of PBR on life insurance industry reserves in aggregate. The PBRSS projected a hypothetical representation of life industry reserves after PBR has been in effect for five years. The projected impact of PBR on total industry reserves was shown to be a decrease of roughly 2%. This estimate is driven largely by the fact that PBR only applies to new business issued after the effective date of the VM, and has no impact on the large block of inforce policies that are not subject to the new PBR requirements. As inforce business rolls off the books and new business is written, the PBR reserves will become a larger portion of the total company reserves. This process will take many

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<sup>1</sup> The American Academy of Actuaries is a 17,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

years and, for any given company, will depend upon the type and nature of its life insurance portfolio.

The PBRSS emphasizes that the estimated impact should be viewed with a great deal of caution since many companies will choose to delay implementation under the three year phase-in option. Further, many companies will change their product offerings over the next five years (either because of the introduction of PBR or for other reasons). There is no way of quantifying the impact of these developments on the reserve levels for an individual company or for the industry in aggregate.

The PBRSS also cautions that the change in reserve levels for an individual product, a single company or the entire life insurance industry should not be the only metric used to evaluate the merits of PBR. An estimate of the decrease or increase in reserves is only one factor and is not necessarily good or bad in and of itself; such estimates are only useful when considered in light of the effectiveness of the current statutory reserve requirements. In our view, the more important consideration is that—whether reserves increase or decrease under PBR—reserves more accurately reflect the risks assumed by life insurers.

We have attached a copy of your legislative brief with our suggested revisions from April 19 and our additional changes relating to the impact of PBR. If you choose to put this estimate of the overall effect on reserves in your Legislative Brief, we recommend that you include all of the accompanying comments, as shown in the attached, since the comments put the estimates in proper context.

In addition, the PBRSS is working on a brief of its own that will specifically address actuarial issues associated with the adoption of the Standard Valuation Law in addition to expressing our support for principle-based reserves. Our brief is intended to complement the NAIC's Legislative Brief and will be completed after the NAIC's brief has been finalized.

Please contact John Meetz, the Academy's life policy analyst ([meetz@actuary.org](mailto:meetz@actuary.org); 202/223-8196) if you have any questions.

Sincerely,

Cande Olsen, Chairperson  
Principle-based Reserves Strategy Subgroup  
American Academy of Actuaries

## Principle-Based Reserving

- *Principle-Based Reserving, or PBR, replaces the current formulaic approach to determining life insurance policy reserves with an approach that better aligns policy reserves ~~to~~with product risks and will increase uniformity among states.*
- *PBR is composed of three primary components: a revised Standard Valuation Law, which was adopted by the NAIC in 2009, a revised Standard Nonforfeiture Law, which was adopted in August, 2012 and a Valuation Manual, which was adopted by a supermajority of NAIC members in December, 2012.*
- *Once a supermajority of states, representing 75% of written premium, adopts the revisions to the SVL, PBR will become operative.*

### Background

The NAIC adopted a revised model Standard Valuation Law (SVL) in 2009 which introduced a new method for calculating life insurance policy reserves. This new method is referred to as Principle-Based Reserving, ~~or PBR,~~ and is built upon long-held principles of conservative statutory reserve requirements. PBR replaces the current static formulaic approach to determining policy reserves with ~~an~~ dynamic approach that ~~allows~~ reflects current and anticipated future economic conditions and utilizes emerging insurance product experience to allow for better alignment of policy reserves with the risks inherent in the highly complex products which they support. The improved alignment is expected to reduce redundant reserves for some products and increase inadequate reserves for products where significant product risks are not captured by the current reserve valuation methodology ~~-(often called “right-sizing” reserves)~~. It also alleviates the need for some of the company “workarounds” designed to independently achieve reserve reductions. The revised SVL authorized the creation of a Valuation Manual that contains reserving requirements. The Valuation Manual was adopted by a supermajority of NAIC membership on December 2, 2012. This paved the way for states to begin adopting revisions to the SVL in their legislative sessions. Once at least 42 states (a supermajority) representing 75% of total U.S. premium adopt the revisions to the SVL, PBR will become operative.

### Key Points

- States may consider adopting revisions to the Standard Valuation Law (SVL) beginning in the 2013 legislative sessions.
- PBR will become operative once the SVL revisions are adopted by at least 42 states representing 75% of total U.S. premium.
- Once PBR becomes operative, the Valuation Manual provides for a three-year transition period before companies will be required to implement PBR.
- The Valuation Manual will continue to be updated annually as part of an ongoing maintenance process.
- The NAIC and state insurance departments must assess their ~~need~~ needs for additional staffing, as PBR requires a greater degree of actuarial expertise. Already, the NAIC plans to hire additional actuarial staff to assist states with the PBR review process.
- In addition to the revisions to the SVL, there are companion revisions to the Standard Non-Forfeiture Law for Life Insurance for continued coordination of mortality and interest rate assumptions. The changes to both laws are intended as a package for legislative consideration.
- The Valuation Manual provides exclusion criteria which allow simpler products, with fewer guarantees and therefore less risk, to be subject to simpler reserving requirements.

## Standard Valuation Law and Standard Nonforfeiture Law Questions and Answers

### FIRST DRAFT: NOT ADOPTED

- **What are the changes to the Standard Valuation Law?**
  - The Standard Valuation Law (SVL) is unchanged for current business.
  - The SVL includes new sections to authorize an NAIC Valuation Manual, thereby implementing PBR reserving for business issued after it becomes effective, and to require insurance company reporting of data experience.
  - The SVL preserves commissioner authority to require companies to change any assumption or method, as appropriate, and to engage a qualified actuary at the expense of the company to review compliance with Valuation Manual requirements.
  
- **What are the changes to the Standard Nonforfeiture Law?**
  - The Standard Nonforfeiture Law establishes minimum benefit values if policies are surrendered or lapsed.
  - For consistency, the Standard Nonforfeiture Law would refer to the Standard Valuation Law and the Valuation Manual as the source for mortality and interested rates used in nonforfeiture calculations.
  - At present, the calculations are not changed.
  
- **What is the Valuation Manual?**
  - ~~The Valuation Manual will detail/contains~~ reserve calculation requirements as agreed by commissioners as members of the NAIC.
  - ~~The Valuation Manual is intended to be~~ also includes experience reporting, actuarial opinion, PBR reporting, and corporate governance requirements.
  - Most of the requirements are dynamic, to allow consideration of ongoing in nature so that they can adapt to changes of products offered in the insurance marketplace. It is intended or the economy without any changes to the Valuation Manual.
  - If changes to work similarly prescribed elements are needed the Valuation Manual allows consideration of such changes similar to the way changes are made to the NAIC Accounting and Procedures Manual, which sets out the details of statutory accounting.
  - ~~Use of the Valuation Manual helps to increase uniformity, which lowers insurance costs.~~
  - Future changes in the Valuation Manual require approval by a supermajority of NAIC jurisdictions.

## Principle-based Reserving (PBR) Questions and Answers

### FIRST DRAFT: NOT ADOPTED

#### ➤ What is PBR?

- Insurers set aside funds, or reserves, to pay insurance claims when due. Currently, one-size-fits-all formulas and assumptions are used to determine these reserves, as prescribed by state law and regulations.
- ~~PBR would introduce~~ Companies will hold the ~~calculation~~ HIGHER ~~higher~~ of reserves under (a) ~~variety~~ a reserve using prescribed factors and (b) a reserve which considers a wide range of future economic conditions and is computed using justified company experience factors, such as for mortality, policyholder behavior, and expenses.
- ~~Companies will book the HIGHER of the formulaic reserve using pre-set factors and the reserve under a variety of economic conditions using justified company experience factors, such as mortality, policyholder behavior, and expenses.~~
- ~~An NAIC~~ The Valuation Manual would be established by the Standard Valuation Law and would be used to detail the reserve calculation requirements.
- The new Standard Valuation Law and Valuation Manual are built to encompass requirements for all life and health insurers and the business they write. Initially, reserving methods only change for ~~life insurance~~. However, over time, PBR is expected to be developed for other product lines.

#### ➤ Why is PBR needed?

- ~~Reserve requirements need to evolve to keep pace with new product designs.~~ The formulaic approach prescribed by current state laws and regulations needs to be frequently updated as new product designs are introduced. PBR alleviates this need to a great degree.
- State laws would establish principles upon which reserves are to be based rather than specific formulas, with more detail and ~~constraint~~ constraints included in the Valuation Manual.
- Current formulas do not always accurately reflect the liabilities held on policies. For some products this leads to excessive conservatism in reserve calculations and for others it results in inadequate reserves. ~~Holding higher reserves than necessary results in higher costs to consumers. Holding too low of reserves can put companies at greater risk of future insolvency, with lower protection to consumers.~~
- The current system locks in certain assumptions, resulting in reserves that do not adjusting as circumstances change. as economic conditions change or as insurers accumulate actual experience. The new system adjusts reserves as economic conditions change and as insurers accumulate credible experience.

#### ➤ Is PBR more or less conservative?

- ~~To improve accuracy of reserves, PBR would move from using industrywide averages to using some of the companies' own experience.~~
- When compared to current statutory reserve levels, PBR Rreserves will be higher for some insurance products and lower for others, set at a level ~~levels~~ because PBR uses a process that more accurately reflects ~~reflects~~ the risk ~~risks~~ assumed by life insurers. ~~The NAIC's 2012 impact study shows lower reserves for competitive term insurance and, generally, both lower and higher reserves for universal life policies with secondary guarantees.<sup>4</sup> In an analysis performed by the~~

<sup>4</sup> In a study performed by Towers Watson, some of the competitive term life insurance products studied showed reserves that dropped by as much as 30% to 50% under PBR whereas some of the UL with secondary guarantee (ULSG) products studied showed a decrease of 14% to 44% and some ULSG products showed an increase in reserves (ULSG results were affected by varying practices to calculate CRVM reserves). Reserves for most

consulting firm Towers Watson, term life insurance products demonstrated a decrease in reserves from 38% to 64%. The Universal Life with Secondary Guarantee (ULSG) products that were analyzed demonstrated a decrease in reserves from 44% to an increase of 63%. The wide range of outcomes for ULSG is not unexpected given the variations in company interpretations of the reserve requirements for this product type. Reserves for most other products (e.g., whole life) remained unchanged under PBR.

The Principle-based Reserve Strategy Subgroup of the American Academy of Actuaries (Academy) utilized the Towers Watson results to estimate the impact of PBR on life insurance industry reserves in aggregate. The Academy projected a hypothetical representation of life industry reserves after PBR has been in effect for five years. The projected impact of PBR on total industry reserves was shown to be a decrease of roughly 2%. This estimate is driven largely by the fact that PBR only applies to new business issued after the effective date of the VM, and has no impact on the large block of inforce policies that are not subject to the new PBR requirements. As inforce business rolls off the books and new business is written, the PBR reserves will become a larger portion of the total company reserves. This process will take many years and, for any given company, will depend upon the type and nature of its life insurance portfolio.

The Academy emphasizes that the estimated impact should be viewed with a great deal of caution since many companies will choose to delay implementation under the three year phase-in option. Further, many companies will change their product offerings over the next five years. There is no way of quantifying the impact of these developments on the reserve levels for an individual company or for the industry in aggregate.

The Academy also cautions that the change in reserve levels for an individual product, a single company or the entire life insurance industry should not be the only metric used to evaluate the merits of PBR. An estimate of the decrease or increase in reserves is only one factor and is not necessarily good or bad in and of itself; such estimates are only useful when considered in light of the effectiveness of the current statutory reserve requirements. The more important consideration is that—whether reserves increase or decrease under PBR—reserves more accurately reflect the risks assumed by life insurers.

- The PBR approach is built with numerous safeguards:
  - APrescriptive and limiting elements have been introduced into the Valuation Manual that will limit the extent to which reserves will be reduced from the current levels.
  - As noted above, there is a minimum reserve floor-is included, so the companies can only lower reserves to the level established by a formula. If the new method produces higher reserves than the floor, that higher reserve must be bookedheld.
  - PBR will be phased in over 3 years after the Valuation Manual is operational.
  - PBR only applies to new policies issued after the law and Valuation Manual are in effect.
  - Regulators will be building more analytical tools and will be implementing data-collection requirements for mandatory data submission by insurers, which will improve regulators' ability to enhance regulatory oversight. evaluate reserve assumptions for individual companies. This process will also provide companies with better information to support the assumptions they use. Where a company's own experience is less

statistically credible, the company must use higher margins in developing assumptions (i.e., the less credible the experience, the higher the margin).

### **Will**

#### ➤ **What will make PBR be successful?**

- Regulators will collectively review PBR through NAIC activity and can quickly adjust the Valuation Manual, if needed.
- ~~Companies must justify assumptions that deviate from the regulatory provided assumptions.~~
- Regulatory tools will be built and resources will ~~need to~~ be enhanced. At present, the NAIC is studying the need for resources at the states and the ability for collective sharing of experience with the new requirements at the NAIC to aid the states.
- Companies will be able to appropriately reflect their own company experience (i.e., mortality, lapse, expenses, etc.) in the reserves calculation with an appropriate level of conservatism consistent with statutory reporting objectives.
- PBR will allow better alignment of regulatory requirements with company risk exposures and risk management practices.

#### ➤ **How will PBR Affect Consumers?**

- “Right-sizing” reserves is important for consumers. Holding higher reserves than necessary results in higher costs to consumers. Holding reserves that are too low can put companies at greater risk of insolvency, with lower protection to consumers.
- PBR is a step needed to ultimately allow for multi-benefit products to be introduced by insurers that can be more flexible and valuable to consumers. Some examples are life insurance policies that can automatically convert to an annuity upon retirement, products that could cover an entire family for life insurance, or that could provide life insurance protection for a woman (or man) while simultaneously providing retirement income to a parent or to pay for home or nursing home care.
- Use of the Valuation Manual will help increase uniformity across the states, which could lower insurance costs to consumers.

#### ➤ **How will PBR Affect Companies?**

- The calculation of PBR reserves will require insurers to model and assess the risks they undertake in offering their products to consumers. Insurers writing complex products are exposed to various risks and should already be utilizing sophisticated actuarial models to manage those risks. Thus, the new modeling requirements of PBR should not represent challenges to those insurers. To the extent insurers do not offer products with the complex risks, compliance with the new requirements will be less demanding. The VM includes exclusion tests that allow less complex products to be excluded from PBR calculations.
- Since PBR will be phased in over three years after the Valuation Manual is operational, it allows companies to plan (and spread out) the implementation of additional work.

#### ➤ **How will PBR Affect Insurance Regulators?**

- While PBR and the VM are new, PBR is the codification of more modern valuation methods that have been in development for more than 20 years. The NAIC and state regulators have been modernizing different aspects of the entire solvency regime over this time.
- The gradual implementation of PBR will give regulators more time to familiarize themselves with the new requirements. Regulators will need to consider how PBR fits into the risk-focused approach to financial examination; materiality of PBR reserves of a particular block of business will be a consideration. A phased-in implementation and safeguards described above will allow sufficient time to evaluate the effectiveness of the new requirements and determine if adjustments are needed.
- As regulatory expertise develops and comfort level increases, regulatory focus should shift to the

insurers whose assumptions and/or reserve levels are outliers relative to industry norms. A better understanding of the range of results and best practices will lead to appropriate changes to the VM.

- PBR may reduce the unlevel playing field created by product designs developed with the express intention to take advantage of the limitations of the formulaic approach, and PBR may allow product designs that weren't contemplated by the formulaic approach. Successful implementation of PBR will result in fewer resources needed for the update and maintenance of valuation standards to address these situations.