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PBR: What will Regulators be Looking for?

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Principle-based reserving (PBR) has finally arrived, at least for life products. As of June 2016, 45 states, representing 79.5 percent of premium, had adopted the revisions to the Standard Valuation Law (SVL) that are "substantially similar" to the revisions to the SVL adopted by the NAIC making Jan. 1, 2017 the operative date of the Valuation Manual. Are you and your company ready for all the new PBR reporting requirements? Do you know in which areas regulators will be concentrating? In this article, Tim Cardinal and Len Mangini discuss regulatory oversight of PBR with two former regulators, Andy Rarus and Leslie Jones, in the hopes that this may give you some insight into areas in which your company should be preparing for these new requirements.

Tim: We have heard a lot of talk about centralized review of PBR submissions. What has happened with that? Will the NAIC or states be responsible for monitoring compliance with PBR?

Andy: As it currently stands, an insurer's domestic state regulator will have primary responsibility for monitoring compliance with PBR requirements. However, the NAIC is developing a variety of resources to help states in this effort.

Tim: How will states monitor compliance with PBR?

Leslie: States monitor compliance with reserving standards, including PBR, via annual and quarterly reporting, ongoing analysis and periodic examinations.

Tim: What new reporting standards are applicable to PBR?

Andy: New reporting standards applicable to PBR include: 1) the PBR actuarial report required by Valuation Manual chapter 31 (VM-31), which documents the deterministic and stochastic exclusion tests, all company experience assumptions and margins, as well as the procedures and processes used to calculate the reserves; 2) several new reporting items in the annual statement blank, including a new supplement referred to as the VM-20 Reserve Supplement, which breaks out the principle-based reserve into its various components on a pre-reinsurance and post reinsurance basis; 3) new experience reporting requirements and formats set forth in VM-50 and VM-51; and 4) reports under VM-G related to corporate governance, including the certification of the effectiveness of internal controls with respect to the principle-based calculation.

Tim: What will states be looking for in performing analyses of PBR?

Leslie: Analysis standards are still under development by the NAIC via the PBR Review Procedures Subgroup. However, analysts will be reviewing the VM-31 actuarial report and the VM-20 Reserve Supplement to assess whether the reserves appear to be valued in accordance with the requirements of VM-20. The analyst may seek the assistance of actuarial staff at the NAIC related to any verification of exclusion test calculations as well as validation of principle-based reserves for a small random sample of policies and contracts subject to a principle-based valuation methodology.

It is reasonable to expect that regulators will be focused on the methods used to determine anticipated experience assumptions and margins for each major risk factor, including how the risk factors were determined to be material, the degree to which assumptions are based on experience versus actuarial judgment or other factors, the results of actual to expected analyses, any sensitivity testing, the individual and aggregate impact of margins on the deterministic reserve, and how the assumptions and methods compare to the company's overall risk assessment process. Regulators will also likely be focused on required information related to the cash flow models used by the company, including validation of those models. It is important to note that VM-31 contains many detailed disclosure requirements which are peppered with the words rationale, description, support, and justification. The more adequate the documentation, the less likely it is that regulators will have questions. Here is a link to the Valuation Manual that will be in effect on Jan. 1, 2017, which includes VM-31: *http://www.naic.org/documents/committees_a_latf_related_valuation_manual_noapf_160829.pdf*

Tim: Is "adequate" in the eye of the beholder? How do I know if a regulator will accept my documentation as adequate?

Leslie: I think the regulatory view of what is adequate will evolve over time. In the meantime, the actuary should be guided by the requirements in VM-31 and the pending PBR Actuarial Standard of Practice (ASOP). VM-31 states that the PBR Actuarial Report must include documentation and disclosure sufficient for another actuary qualified in the same practice area to evaluate the work. It requires the report to include descriptions of all material decisions made and information used by the company in complying with the minimum reserve requirements. Transparency beyond disclosure, is evident throughout the requirements. VM-31 emphasizes this in requiring the summary to include any considerations helpful or necessary to understanding the rationale behind the development of assumptions and margins even if such considerations are not explicitly mentioned in the Valuation Manual. The PBR ASOP adds that "the actuary should include the rationale for all significant decisions made and information used by the insurer in complying with the minimum reserve requirements and in compliance with the minimum documentation and reporting requirements set forth in the Valuation Manual with respect to the PBR actuarial report."

Tim: What will states be looking for with respect to PBR during examinations?

Andy: Examination standards are also under development by the NAIC via the PBR Review Procedures Subgroup. However, it is reasonable to expect that the standards developed will be consistent with a risk focused approach and will focus on areas where the residual risk is deemed to be material after the company's controls have been taken into account. Initially, states will likely be focused on an insurer's readiness to implement PBR. Examiners will be reviewing plans, procedures, systems, enterprise risk management and corporate governance around PBR development. The SOA published a revised version of the *PBA Implementation Guide* to assist companies in this effort. Even if a company has decided to delay implementation, it is important for a company to perform a "gap analysis" and construct a "road map" to implement PBR.[1]

Here are some areas from this PBA Implementation Guide that you may want to consider:

- Has your company made any changes to current processes to enable tracking of all assumption changes, other than mortality and lapses?
- Has your company created controls to aid with the auditability of all following processes: assumption and margin setting, exclusion tests, sensitivity testing, and disclosures?
- Do you have audit procedures and tools to identify areas of material risk and potential weak spots in your company's models and assumptions?
- Given the volatile nature of the stochastic and deterministic reserves, has your company revised the breadth and depth of output to support analysis to validate, interpret, explain, and evaluate results?

Once companies have implemented PBR, areas where residual risks will likely be deemed material include the company's end-to-end process for monitoring experience, setting assumptions and margins, and the modeling performed by the company, including data input, projection system, model validation, sensitivity testing, model documentation and change control procedures. Examiners will likely perform a detailed analysis of deterministic and stochastic reserve calculations as a part of the model validation process. Corporate governance is also generally reviewed during examinations. VM-G describes the procedures you should have in place with respect to corporate governance and oversight of PBR valuations, including assumption oversight and model risk controls.

Tim: How much detail regarding validation needs to be provided in the Report?

Andy: VM-31 requires a description of the approach used to validate model calculations within each model segment for both the deterministic and stochastic models, including how the model was evaluated for appropriateness and applicability, how the model results compare with actual historical experience, what (if any) risks are not included in the model, the extent to which correlation of different risks is reflected in the margins, and any material limitations of the model.

Len: I haven't heard you mention professional standards in this discussion. How do states take applicable Actuarial Standards of Practice into account in the regulatory oversight process?

Leslie: As a general rule, regulators expect actuaries to comply with applicable Actuarial Standards of Practice (ASOPs). In the case of PBR, the VM includes several specific references to compliance with ASOPs. For example, VM-20 requires companies to design and use a cash flow model that complies with applicable ASOPs. And, of course, the SVL requires the actuarial opinion and memorandum to be based on standards developed by the Actuarial Standards Board. So, the regulators have specific statutory authority to enforce the actuarial standards. It is my experience that regulators look to the profession to self-police. However, in the case of PBR, I would expect to see additional regulatory scrutiny with respect to compliance with applicable ASOPs. I would therefore encourage actuaries to review existing standards that may be applicable to PBR and to become familiar with the new standards that will be applicable to PBR, such as the new PBR ASOP that is expected to become effective contemporaneously with the operative date of the VM and the new modeling ASOP, which has been exposed for a third time. Here are the links to the latest drafts of the PBR ASOP, the related practice note and the modeling ASOP:

- PBR ASOP: http://www.actuarialstandardsboard.org/drafts/pending-drafts-2/
- VM-20 Practice Note: https://www.actuary.org/files/VM-20_Practice_Note_Exposure_Draft_2-24-14.pdf

- Modeling ASOP: http://www.actuarialstandardsboard.org/asops/modeling-2/

Len: The ACLI and the Academy Work Group on the Role of the Actuary presented separate Amendment Proposal Forms (APFs) to clarify the role of the qualified actuary in VM-G. Could you describe what was actually passed?

Leslie: The various APFs were debated by the NAIC's Life Actuarial Task Force (LATF), combined into one APF that passed and is now part of the Valuation Manual. A short synopsis of how VM-G defines the role of various parties in PBR governance is:

- Company: Ultimately responsible for assumptions, margins, and adequate reserves;
- Board: Establishes processes and oversight;
- Senior management: Responsible for implementation, maintaining adequate infrastructure (resources, staffing, training, budget), and quality (controls, assumptions and models, reserve adequacy);
- Qualified actuary: Responsible for overseeing the PBR reserve calculations for assigned groups of policies; verifies appropriateness of assumptions, methods, models; certifies (VM-31) that assumptions are prudent best estimates; and
- Appointed actuary (per VM-30): Opines on adequacy of reserves produced.

Len: You also mentioned new experience reporting requirements and formats set forth in VM-50 and VM-51. How do these fit into the regulatory oversight of PBR?

Andy: One of the primary differences between the current statutory reserving framework and PBR is that a company may establish assumptions (that are not prescribed) using the company's available experience to the extent it is relevant and statistically credible, or, to the extent it is not, other relevant statistically credible experience. Thus, the regulatory need to collect experience data is at least two-fold. First, the data will be used to verify and validate the assumptions used by the company, and second it will be used to construct industry experience tables to assist companies who do not have sufficient relevant statistically credible experience on which to base assumptions. The NAIC is actively working on a regulatory data collection system so that it can perform this function on behalf of the states. It is important to note that even if a company decides to delay implementation of PBR, the experience reporting requirements are not delayed. So, companies that do not meet the standards for exemption set forth in VM-50 need to be prepared to submit experience data in the format required by VM-51.

Tim: You noted that the NAIC is developing a variety of resources to help states. It appears that acting as the statistical agent is one of these. Will the NAIC also be assisting states in monitoring compliance with PBR? And, if so, how will it assist?

Leslie: The NAIC has undertaken the following tasks related to creating a reporting and regulatory review process under direction of the NAIC PBR Implementation (EX) Task Force (PBRITF):

- A "PBR Pilot Project" where participating companies calculate PBR reserves for their product(s), complete the VM-20 Reserve Supplement and complete a VM-31 Actuarial Report. State regulators and LATF will review all of the results of the pilot project and determine if any modifications or clarifications need to be made to VM-20, the VM-20 Supplement and the VM-31 Actuarial Reporting requirements. Regulator-only calls will be conducted to aid in training regulators, honing review procedures, and identifying needs to clarify communication between regulators and insurers.
- The PBR Review (EX) Working Group is coordinating the development of financial analysis, examination and actuarial review procedures and evaluating NAIC and state insurance department actuarial staff resource requirements.
- Peer and quality reviews of PBR will be conducted by the new Valuation Analysis (E) Working Group (VAWG). The VAWG will operate in a manner similar to the Financial Analysis (E) Working Group, working collaboratively with state insurance regulators, responding to issues and questions, and recommending PBR requirements and interpretations.
- To assist states in reviewing company PBR reserve calculations, the NAIC has purchased a modeling software package and is in the process of hiring two additional actuaries.

Tim: It appears that the standards related to regulatory oversight are still under development and, of course, the valuation manual is a "living document" and is expected to change over time. How can insurers keep up with the developing standards?

Andy: Here are links to the home pages of the NAIC groups actively involved with PBR implementation that may help:

- PBRITF: *http://www.naic.org/cmte_ex_pbr_implementation_tf.htm*
- PBR Review Working Group: *http://www.naic.org/cmte_ex_pbr_rev_wg.htm*

- PBR Review Procedures Subgroup: *http://www.naic.org/cmte_ex_pbr_review_procedures_sg.htm*
- LATF: http://www.naic.org/cmte_a_latf.htm

Tim: VM gives regulators authority to "push back" in a number of areas—how might that be exercised? For example, what if assumptions/margins are deemed aggressive?

Leslie: The SVL provides that the commissioner may engage a qualified actuary to perform an actuarial examination of the company and opine on the appropriateness of any reserve method or assumption used by the company. The commissioner may require a company to change any assumption or method that in the opinion of the commissioner is necessary to comply with the VM or the SVL. The commissioner may take other disciplinary action as permitted pursuant to applicable statutes. ■

ENDNOTES

1 *PBA Implementation Guide, Steps to Construct a High-Level Implementation Plan, October 2013, revised June 2016, Society of Actuaries.* https://www.soa.org/Research/Research-Projects/Life-Insurance/research-2013-pba-implementation-guide.aspx

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