



SOCIETY OF ACTUARIES

Article from:

The Financial Reporter

June 2013 – Issue 93

PBA Corner

By Karen Rudolph



Karen Rudolph, FSA, MAAA, is a consulting actuary at Milliman Inc. She can be reached at Karen.rudolph@milliman.com.

The views expressed in this article are those of the author and do not necessarily reflect the views of Milliman nor are they intended as methods of regulatory compliance.

The U.S. insurance regulatory environment is undergoing significant change. A great deal of it is focused on better management and understanding of the particular risks that each insurance company takes on. Actuaries involved in financial reporting are aware, by now, of the advent of principle-based statutory reserve requirements that will apply to new life insurance business under VM-20 in the not-too-distant future and currently apply to variable annuity contracts under VM-21. Principle-based reserves (PBR) will reflect the insurer's assessment of the underlying risks of the business it writes. While the effective date for implementation of VM-20 is unknown, there is a new National Association of Insurance Commissioners (NAIC) risk assessment and monitoring requirement for which the effective date is known. The NAIC's Risk Management and Own Risk and Solvency Assessment Model Act (ORSA) carries an effective date of Jan. 1, 2015. As both VM-20 and VM-21 and the ORSA Model Act contain similar risk assessment and reporting requirements, it will be natural for insurers to want to leverage the same or similar processes when complying with these two requirements. This article provides an overview of the potential synergies between certain requirements of the NAIC Valuation Manual Section VM-20 (as found in the Dec. 2, 2012 version) and the guidance found in the NAIC ORSA Guidance Manual. While the focus of this article is on ORSA and the Valuation Manual, synergies may also exist between ORSA and the International Association of Insurance Supervisors (IAIS) Insurance Core Principle 16 and other international reporting requirements such as Solvency II.

ORSA—AN OVERVIEW

As stated in its opening paragraph, the purpose of the NAIC Risk Management and Own Risk and Solvency Assessment Model Act is to provide requirements for maintaining a risk management framework and completing the ORSA, and provide guidance and instructions for filing an ORSA Summary Report with the insurance commissioner. For states adopting the Model Act, the effective date is Jan. 1, 2015, which means a company must first conduct an ORSA during the



2015 calendar year, and no less frequently than annually thereafter, but also at any time when significant changes to the insurer's risk profile take place. The ORSA Summary Report is submitted annually to the commissioner and includes the information described in the NAIC ORSA Guidance Manual.

The requirements of the act apply to all insurers domiciled in the state unless the company meets the exemption criteria. Both of the following criteria must be met to be exempt:

1. The insurer has annual direct written premium less than \$500,000,000, and
2. The insurance group of which the insurer is a member has annual direct written premium less than \$1,000,000,000.

The ORSA Guidance Manual serves the purpose of providing guidance to the insurer for reporting on its ORSA process. The Guidance Manual suggests, at a minimum, discussion of the following three areas be included in the ORSA Summary Report:

1. Section 1—Description of the Insurer's Risk Management Framework
2. Section 2—Insurer's Assessment of Risk Exposure
3. Section 3—Group Risk Capital and Prospective Solvency Assessment.

Noting the 2015 effective date for ORSA, it seems highly likely that companies will have implemented ORSA (or calibrated its current risk management processes to the ORSA Guidance Manual) by the time the Valuation Manual becomes operative. There are aspects of the documentation required by the Valuation Manual,

specifically in VM-31, which create potential synergies with the ORSA Summary Report and can be used as support for the company’s risk management framework. Additionally, the ORSA Guidance Manual allows for the insurer to reference other explanatory documents from within the ORSA Summary Report, in an effort to avoid excessive detail and redundancies. Companies may be able to reference documentation that is produced for compliance with VM-31 when completing their ORSA Summary Report. The following sections list some of the parallels between documentation required by portions of the Valuation Manual and the ORSA Summary Report.

VM-31 PBR REPORT REQUIREMENTS

VM-31 outlines the minimum reporting requirements for policies subject to PBR valuation. These reporting requirements are fulfilled through the company’s PBR Actuarial Report. For purposes of the PBR Actuarial Report (i.e., the report required by VM-31), policies for which a PBR valuation have been performed are those policies where deterministic and/or stochastic reserves were calculated pursuant to VM-20 and annuities for which reserves were calculated pursuant to VM-21. The chart below compares required documentation of VM-31 that may be leveraged in fulfilling certain aspects of the ORSA Summary Report.

VM-31: PBR Actuarial Report	ORSA Summary Report
<p><u>Section 2. General Requirements</u></p> <p>Paragraph B. The PBR Actuarial Report must include descriptions of all material decisions made and information used by the company in complying with the minimum reserve requirements and must comply with the minimum documentation and reporting requirements set forth in Section 3.</p>	<p><u>Section 1—Description of the Insurer’s Risk Management Framework</u></p> <p>This section discusses the importance of identifying assessment tools (feedback loops) used to monitor and respond to any changes in the company’s risk profiles. These feedback loops would include information the company would use in material decisions. For example, a quarterly assessment of policyholder withdrawals may be used to establish the withdrawal assumption for policies subject to PBR and also to assess whether such activity is within a range considered normal, or whether in excess of a normal range whereby management should consider policyholder conservation measures.</p>
<p><u>Section 3.C.5 PBR Actuarial Report Requirements</u></p> <p>A description of the risks determined material by the Qualified Actuary and associated with policies and/or contracts subject to a PBR valuation.</p>	<p><u>Section 2—Insurer Assessment of Risk Exposures</u></p> <p>Section 2 of the ORSA Summary Report should document the company’s qualitative and quantitative assessment of its risk exposure for each material risk category such as credit, market, liquidity, underwriting, etc. These risk categories are specifically identified in Section 1 of the Summary Report. The risks determined material for the PBR valuation should be a subset of the universe of risks documented in the ORSA Summary Report.</p>

CONTINUED ON PAGE 16

VM-31: PBR Actuarial Report	ORSA Summary Report
<p><u>Section 3.C.7. A summary of the valuation assumptions and margins for each major product line subject to a PBR valuation including:</u></p> <ul style="list-style-type: none"> • Description of the method used to determine anticipated experience assumptions for each material risk factor, including the degree to which the assumptions are based on experience versus actuarial judgment or other factors, and the source of the experience • Description of significant changes from prior year • List of key risk and experience reporting elements the company will track in order to monitor changes in experience that will be used to update assumptions • Description of the method used to determine margins for each material risk factor • Description of any significant changes from the prior year in the method used to determine margins • Disclosure of any assumptions or margins that are inconsistent with risk analysis and management techniques • Considerations helpful in understanding rationale behind and development of assumptions and margins. 	<p><u>Section 2—Insurer Assessment of Risk Exposures</u></p> <p>Section 2 of ORSA talks about the quantitative and/or qualitative assessments of risk exposure in both normal and stressed environments for each material risk category identified in the ORSA Summary Report. The normal environment will be expressed in terms of the company’s expected values based on current anticipated experience—i.e., through experience studies—and how the company expects experience to unfold over the near term. Risk assessment includes stress testing the normal environment of each material risk factor.</p> <p>Periodic monitoring of significant risks through experience studies provides a feedback loop of critical data and information to make management decisions.</p> <p>The ORSA process can benefit from leveraging the quantitative analysis that is inherent in VM-20 assumption setting. As part of the anticipated experience assumption development in PBR, sensitivity tests (or stress tests) can be used to determine the materiality of prudent estimate assumptions on the minimum reserve.</p> <p>In summary, the overall process of assumption setting for a PBR valuation includes (i) the assessment of risk factors, (ii) determination of anticipated experience, (iii) evaluation of a risk margin for adverse deviation, and (iv) sensitivity testing to understand the impact of the assumption on the minimum reserve. These stress tests assist in “assessing risk exposure” pursuant to ORSA.</p>
<p><u>Section 3.C.8.: A summary of the approach used to model the assets supporting the policies subject to a PBR valuation.</u></p> <p><u>Section 3.C.9: A description of the approach used to model risk management strategies (e.g., hedging), and other derivative programs, and a summary and description of any clearly defined hedging strategies.</u></p>	<p><u>Section 2—Insurer Assessment of Risk Exposures</u></p> <p>The assessment process of Section 2 of ORSA includes consideration for risk categories related to assets. The documentation required of VM-31 Section 3.C.8 and 9 should include discussion of risks related to the assets supporting the PBR valuation and any hedge programs and/or derivative programs used to mitigate risk. The evaluation of the asset risks and hedging programs are a subset of the company’s larger risk evaluation processes which can serve to satisfy the requirements of ORSA Summary Report, Section 2.</p>

VM-G CORPORATE GOVERNANCE GUIDANCE FOR PBR

An appendix to the Valuation Manual, VM-G, provides corporate governance guidance for PBR valuations. This guidance elaborates on the requirements of the Standard Valuation Law Section 12.B.(2) for companies using a PBR valuation. The premise for the guidance in VM-G stems from recognition that the

determination of actuarial and financial assumptions is the responsibility of the company (rather than assumptions that are prescribed by regulation) and requires some degree of oversight from a company’s board of directors, senior management and appointed actuary. Each of these levels of company management carries specific responsibilities, parallels for which can be drawn to the ORSA process. The chart below highlights some of these parallels.

VM-G: Corporate Governance Guidance for PBR	ORSA Summary Report
<p>Section 2. Guidance for the Board</p> <ul style="list-style-type: none"> • Establish a process to receive and review reports of the effectiveness of internal controls with respect to PBR calculations • Interact with senior management to resolve questions and collect additional information as needed • Determine what additional steps are necessary to rely on the PBR valuation function established by senior management • Provide general oversight of the PBR valuation in a manner commensurate with the materiality of the valuation in relationship to the overall risks borne by the company <p>Section 3. Guidance for Senior Management</p> <p>(1) Oversight:</p> <ul style="list-style-type: none"> • Ensure adequate infrastructure is established to implement PBR • Review the PBR elements for consistency with other company risk assessment processes • Review PBR results for consistency with established risk tolerances • Review and address significant and unusual issues/findings in light of the results of the PBR valuation. 	<p>The ORSA Guidance Manual does not use a company’s management levels to categorize responsibilities as does VM-G. However, one of the key principles a company must discuss in Section 1 of its Summary Report is the company’s risk culture and governance, including an articulation of the roles, responsibilities and accountabilities of stakeholders in the risk-based decision-making process. PBR is a valuation method intended to consider risks inherent in the product being valued. The documentation of responsibilities and accountabilities that are laid out in VM-G can be leveraged for ORSA purposes and to ensure some degree of consistency and streamline the documentation.</p> <p>In Section 1 of the Summary Report, the company must discuss its formal risk appetite statement and associated risk tolerances and limits. It is specifically noted that board understanding of the risk appetite statement is important to ensure alignment with risk strategy. In this way the company’s board must be actively engaged in observing the consistencies between the company’s positions on risk as well as how those positions are carried out through the PBR valuation.</p>

CONTINUED ON PAGE 18

VM-G: Corporate Governance Guidance for PBR	ORSA Summary Report
<p>(2) Internal controls:</p> <ul style="list-style-type: none"> • Adopt controls that assure all material risks are included • Assure PBR valuations are made in accordance with the Valuation Manual • Ensure an annual evaluation is made of the internal controls and communicate the results to the board. <p>(3) Valuation execution:</p> <ul style="list-style-type: none"> • Determine whether company resources are adequate for the modeling function • Address whether models and procedures produce appropriate results relative to the PBR objectives • Confirm there is a process to validate data used in model assumptions and validate model input • Establish a process to find and limit material errors and weaknesses and provide an ongoing effort to improve model performance • Establish a procedure for review of PBR valuation including reporting on the adequacy of principle-based reserves. <p>(4) Report to the board, annually, on these matters:</p> <ul style="list-style-type: none"> • Infrastructure (risk tolerances, policies, procedures, controls, etc.) that senior management has established to support PBR valuations • Critical risk elements of the valuation and their relationship to those for other risk assessment processes • Summary results of the PBR valuation, including the level of conservatism and materiality of PBR reserves in relation to the total liabilities of the company • The level of knowledge and experience of senior management responsible for the PBR valuation • Reports related to governance of PBR, including the certification of the effectiveness of internal controls, as provided by SVL Section 12.B.(2). 	<p>In Section 1 of the Summary Report, the company must provide a high-level summary of the company's risk management and controls. The ORSA Guidance Manual notes that managing risk is an ongoing enterprise risk management activity, operating at many levels within the organization. This has support in the levels defined in VM-G. Although the PBR valuation is just one aspect of the larger enterprise risk management process, the accountabilities specified by VM-G provide a framework the company can consider in its ORSA process.</p> <p>Section 1 of the Summary Report calls for a discussion of the company's risk reporting and communication, where such communication is intended to provide key constituents with transparency into the risk management processes and facilitate active, informal decisions on risk taking and management. As part of the PBR valuation process, senior management is reporting to the board on topics related to PBR, risk elements, conservatism, materiality, controls and governance.</p>

VM-G: Corporate Governance Guidance for PBR	ORSA Summary Report
<p>Section 4. Guidance for Qualified Actuaries, Including the Appointed Actuary</p> <ul style="list-style-type: none"> • One or more qualified actuaries must oversee the PBR valuation • Review and approve assumptions, methods, models • Review and approve internal standards for actuarial valuation processes, internal controls and documentation used for PBR valuations • Confirm that assumptions prescribed in the Valuation Manual are being used as required • Provide a summary report to the board and senior management on the PBR valuation process; assist their understanding of PBR valuation results, the level of conservatism in the reserves, the materiality of PBR reserves in relation to the overall liabilities of the company and significant or unusual findings • Provide an opinion on the adequacy of company statutory reserve, both those developed using PBR and using other approaches, as part of his/her annual Statement of Actuarial Opinion • Cooperate with internal and external auditors and regulators in working to resolve significant issues regarding the PBR valuations. 	

CLOSING

Implementing PBR valuations will take resources the company may find scarce. Leveraging the steps in the process to fulfill as many of the company's risk management requirements as possible may be one way a company can become efficient over time. Knowing the synergies between the requirements of the Valuation Manual (specifically VM-31) and the ORSA process will help to make the annual reporting on these two critical risk assessment processes more streamlined and internally consistent. ■