



SOCIETY OF ACTUARIES

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PBA Corner

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UPDATE ON STATE ADOPTION STATUS OF PRINCIPLE-BASED RESERVES

As of year-end 2014, 18 states adopted the Standard Valuation Law revised to require principle-based reserve (PBR) valuations. These states include: Ariz., Conn., Fla., Hawaii, Ind., Iowa, La., Maine, Miss., Neb., N.H., N.M., Ohio, Okla., R.I., Tenn., Va., and W.Va. Total premium contributed by these 18 states, based on 2008 annual statement data, is 28 percent. This implies a gap of 24 states and 47 percent of premium in achieving an operative date for the Valuation Manual. Nine other states (Wash., Texas, N.J., Mo., Mont., Mich., Ill, Ga., and Del.) have advanced the legislation through various stages of approval. These nine states represent approximately 25 percent of premium. Should the nine states with bills in-progress complete the adoption during 2015 sessions, the gap narrows to 15 states and 22 percent of premium.

PRELIMINARY PBR VIA ACTUARIAL GUIDELINE 48

In Dec. 2014, the NAIC Executive Committee and Plenary approved the adoption of Actuarial Guideline 48 (AG 48) as an interim measure to more uniformly regulate captive and special purpose reinsurers until more permanent revisions can be made and adopted to Model 785, Credit For Reinsurance Model Law. The Guideline establishes an expectation of the type and amount of assets to be held on a basis of funds withheld, Trust or modified coinsurance for policies considered Covered Policies. Covered Policies are defined as those required to be valued under Sections 6 or 7 of the NAIC Valuation of Life Insurance Policies Model Regulation (Model 830) and that have risk ceded to an assuming insurer. Covered Policies do not include policies issued prior to Jan. 1, 2015 and ceded as part of an arrangement, as of Dec. 31, 2014, that would not qualify for exemption. Refer to AG 48 for specific exemptions and grandfathering provisions.

Early implementation of PBR was first introduced by Section 8D of Actuarial Guideline 38, which requires

calculation of a modified version of the Deterministic Reserve in certain situations. AG 48 further advances this early implementation by defining the amount of assets to be held in support of Covered Policies. The language of AG 48 calls this amount of assets the Required Level of Primary Security, the calculation of which is based directly on VM-20 methodology. The one exception to the methodology is the omission of exclusion tests. AG 48 requires the opining actuary to issue a qualified opinion in either of the following situations:

- i. Funds consisting of Primary Security in an amount at least at great as the Required Level of Primary Security are not held by or on behalf of the ceding insurer, as security under the reinsurance contract within the meaning of Section 3 of Model 785, on a funds withheld, Trust, or modified coinsurance basis, unless the ceding insurer complies with one of the Remediation Options, or
- ii. Funds consisting of Other Security in an amount at least equal to any portion of the statutory reserves as to which Primary Security is not held, pursuant to subsection (i) above, are not held by or on behalf of the ceding insurer as security under the reinsurance arrangement within the meaning of Section 3 of Model 785, unless the ceding insurer complies with one of the Remediation Options.

The reader should consult with the Guideline for specific requirements regarding affiliated companies, specific exemption definitions, the definitions of Primary Security and Other Security, Remediation Options, and the required actuarial analysis.

Reinsurance arrangements structured to include Covered Policies issued beginning Jan. 1, 2015 and later will be expected to hold Primary Assets where the level is determined using the Actuarial Method. AG 48 defines the Actuarial Method for term insurance as the greater of the Deterministic Reserve or the applicable percentage of the Net Premium Reserve (NPR) where the percentages come from a table provided in the Guideline. The Actuarial Method for universal

life insurance with secondary guarantee provisions (ULSG) is the greater of the Deterministic Reserve, the Stochastic Reserve and the applicable percentage of the NPR. There is a different percentage table for ULSG than for Term.

Up to this point, companies using reserve financing mechanisms relied on a definition of Economic Reserves that was typically specified in the reinsurance agreement. The economic reserve assumptions were known up front—sometimes locked in at issue, sometimes variable. Companies wishing to continue using reserve financing mechanisms for policies in scope of AG 48 will encounter challenges in planning for these agreements that may be new to them. Three of these challenges are outlined below. The focus is on the Deterministic Reserve for purposes of this discussion, but similar concepts apply as well to the Stochastic Reserve if the Covered Policies are ULSG.

1. Projecting the Actuarial Method amount into future years: The Deterministic Reserve as defined by VM-20 is based on a reserve method where assumptions reflect anticipated experience assumptions plus margins for adverse deviation and estimation error, i.e., prudent estimates. At each future point of calculation, or node, the calculation of the Deterministic Reserve should be performed for the population of policies expected to reach that node, taking into account the required margins. This requires a systematic way to produce the future population of policies according to the company's best estimate assumptions, while determining the Deterministic Reserve amounts using prudent estimate assumptions. Generating and auditing these amounts requires a robust actuarial projection capability.

2. Projecting the discount rates for future amounts: VM-20 requires that the Deterministic Reserve be calculated assuming the liability cash flows are discounted using the net asset earnings rate from the segment of assets supporting the policies being valued. This is a straightforward determination at the valuation date, when current interest rates are known; the deterministic scenario is known; and the in-force asset portfolio, spreads and default charges are known. Projecting these considerations into the future involves several moving pieces that are dependent upon one another. For

example, in calculating the Actuarial Method amount five years from the reinsurance agreement effective date, what should be the discount rate used? This will depend on the state of the U.S. Treasury rates on that date, the asset spreads and prescribed default charges in VM-20 on that date, and the actual securities in force on that date. All these elements will combine, together with the liability cash flows projected from the fifth year forward, to determine the net asset earned rate which becomes the discount rate.

3. Tax implications: Though not a component of VM-20, tax implications and therefore tax reserves may be a component of reserve financing agreements. During development of PBR, it has been assumed that the Net Premium Reserve (NPR) will serve as the tax-deductible reserve. At present, this is the best assumption that can be made. The NPR is a formulaic piece of PBR and depends on a stated mortality table and valuation interest rate. Currently, VM-20 identifies the 2001 CSO complement of mortality tables as the basis for NPR calculations. A newer CSO valuation table is under development and is expected to be the table used when companies begin to perform principle-based valuations. However, prior to the actual VM-20 operative date and availability of the new mortality table, AG 48 requires NPR calculations for purposes of determining the Actuarial Method amount. AG 48 allows a modified NPR, such that the modification is a percentage (less than 100 percent) of the otherwise-calculated NPR amount using the 2001 CSO mortality rates. The percentages are different for term insurance and ULSG, and are an attempt to estimate the NPR under the new, but not yet available, Commissioners Standard Ordinary table. Outcomes will vary by product and policy year, but there may be more tax-inefficiency in reinsurance agreements in scope of AG 48 than those effective prior to AG 48.

The considerations discussed above are not unique to AG 48. Companies writing business for which a VM-20 modeled reserve component is a factor will need to tackle these issues in the context of business planning and product development purposes. ■