1990 VALUATION ACTUARY SYMPOSIUM PROCEEDINGS

NEW YORK REGULATION 126

Clark A. Ramsey

New York Regulation 126 relates to the valuation of annuity and single premium life reserves. The regulation establishes requirements for being a qualified actuary, provides guidelines for submitting actuarial opinions and memoranda, and provides guidelines for valuing annuity contracts with and without cash settlement options and single premium life policies in accordance with statutory formulae. Procedures for determining minimum reserve requirements for contracts with and without an acceptable actuarial opinion and memorandum are given.

The regulation applies to all life insurance companies and fraternal benefit societies doing business in New York and to all accredited reinsurers. The actuarial opinion and memorandum for 1989 and later year-ends are to cover all annuity contracts and single premium life policies for all years of issue, no matter where issued or assumed, and no matter where shown in the annual statement.

Regulation 126 requires cash-flow analysis under various interest rate scenarios for all business covered, unless it is clear that there is no risk to the insurer from changing interest rates. In such case, the actuarial memorandum must explain and justify why cash-flow analysis is not required.

If an acceptable actuarial opinion and memorandum are not filed, the minimum reserve for a block of annuity contracts is the greater of 115% of the minimum reserve as otherwise determined in the regulation and the reserve calculated by using full accumulation value rather than cash surrender value and by using the life insurance formula to determine valuation interest rates. For the 1990 year-end valuation, 105% shall be used in place of the 115%. In certain circumstances, a smaller minimum reserve may apply.

The minimum reserve for single premium life policies for which an acceptable actuarial opinion and memorandum are not filed is 110% of the greater of the death benefit reserve and the greatest present value of guaranteed accumulation funds, computed on the basis of the interest rate for life insurance (other than a single premium) with guarantee duration of more than 20 years. For the 1990 year-end valuation, 102% shall be used in place of the 110%.

The regulation specifies details to be considered for the actuarial memorandum. Cash flows projected must reflect the extent to which they may vary due to changes in interest rate scenarios. Asset cash flows must reflect put and call provisions, default risks, marketability, prepayment rate variations, etc. The risk of default may be provided for by making annual expense charges equal to 75% of the appropriate mandatory securities valuation reserve (MSVR) accumulation (based on an accumulation factor of 1.00 and

exclusive of capital gain and loss considerations). Insurance cash flows should ignore new business except for a "going concern" assumption with respect to the level of maintenance expenses and should reflect current and future interest rate guarantees, any commutation, withdrawal, transfer or surrender rights, mortality risk, policy loans, etc. Lapse rates must be sensitive to differences between credited rates and market rates of interest, as impacted by any surrender charges.

The regulation requires testing under a minimum of seven specified scenarios, including level interest rates, pop-up and pop-down scenarios, uniformly decreasing over 10 years then level (and the increasing analog), and uniformly decreasing over 5 years then uniformly increasing over 5 years to the original level (and the mirror-image increasing-then-decreasing scenario). Sensitivity analyses are also to be performed for any assumptions that are critical to the results.

Based on the results of the cash-flow analysis, the actuary may require reserves in addition to the minimum reserves. The memorandum must explain the actuary's decision to hold or not to hold additional reserves.

NONGUARANTEED ELEMENTS OPINION

Stephen L. White

The Annual Statement requires:

1. A statement about the company's determination procedures.
2. Answers to eight specific interrogatories.
3. An actuarial opinion.

The statement of procedures applies only to newly introduced contracts or those not previously reported. It asks about the company's policy for determining nonguaranteed elements, with particular reference to the degree of discretion reserved, together with the general methods and procedures which are expected to be used.

The interrogatories address:

1. Changes in illustrated nonguaranteed elements.
2. Changes in actually charged or credited nonguaranteed elements.
3. Whether any changes described in 1 and 2 are consistent with previously reported methods and procedures.
4. Relationship between anticipated experience factors underlying nonguaranteed elements and current experience.
5. Investment income allocations.

6. Allocation of other experience.
7. An opinion as to whether there is substantial probability that currently authorized illustrations cannot be supported by currently anticipated experience. (If yes, explain).

The actuarial opinion must be signed by a Member of the American Academy of Actuaries. The actuary must consider his qualification to render the opinion, but he need not meet the requirements to sign the actuarial opinion on reserves.

The ACLI did a study of Nonguaranteed Elements Statements in the 1987 Annual Statements. It was in 1987 that this statement was first required. Results were discussed at the 1988 Annual Meeting (*RSA* Vol. 14, 4A, pp. 1849-71).

Some general comments:

1. There was a great deal of diversity in the level of detail provided on the company's general policies. Most companies reserved complete discretion for changing nonguaranteed elements. Many indicated that redeterminations did not distribute past gains and losses, or that redeterminations maintain profit objectives set at issue.

2. A majority of responses said anticipated experience factors are the same as, or not materially different from, current experience. For those where there were differences, more favorable expense assumptions (due to growth) or improved mortality, were most frequent. Some responses referred to the difficulty of controlling illustrations.
3. Over 60% of the respondents said "no," that there was not a substantial probability that illustrations could not be supported (i.e., most opinions were favorable, unqualified). Another 15% were qualified "no's," either specifying that current economic conditions continue or mentioning "unless ...." The remainder suggested that there was a substantial probability that adverse developments would occur. From the nature of the responses, it appears there was a significant difference among the respondents in their interpretation of the question.

NEW JERSEY EXCESS INTEREST RESERVE ADJUSTMENT (NEW JERSEY 11:4-33)

Stephen L. White

This regulation, effective in 1989, requires an additional excess interest reserve if the insurer has guaranteed to credit interest, beyond the valuation date, at a rate higher than the valuation interest rate.

The reserve is in the amount of the excess interest commitment (interest in excess of maximum valuation interest), discounted at a rate not greater than the maximum valuation rate. Note that the excess interest is measured with respect to the maximum valuation rate, not the policy's valuation rate.

If there is a policy loan, excess interest reserves are computed separately for loaned and unloaned portions of the policy value. If the loan credit rate is below the maximum valuation rate, that portion of the excess interest reserve will be 0. Upon written request by an insurer, the commissioner may determine that no excess interest reserve is required on the loaned portion even if the loan credit rate exceeds the maximum valuation rate. Presumably, the commissioner would consider the relationship between the loan rate and the loan credit rate.

The regulation applies to life, pure endowment and annuity contracts. However, in practice, no additional excess interest reserve is required on an annuity when the Commissioners Annuity Reserve Valuation Method reserve reflects the guaranteed interest.

SPECIAL WASHINGTON (STATE) VALUATION REQUIREMENTS

Stephen L. White

Special Universal Life Calculation Requirements (Washington Administrative Code 284-84-050)

In addition to comparing reserves to cash surrender values, Washington compares them up to policy values less surrender charges. To the extent that the policy value is guaranteed in current or future years, those guarantees must be prefunded in accordance with the Commissioners Reserve Valuation Method (CRVM).

Since this is prefunding future policy values (i.e., surrender values) instead of death benefits, Commissioners Annuity Reserve Valuation Method (CARVM) formulas instead of life CRVM formulas are appropriate.

Future guaranteed policy values are more likely to be found in single premium UL or fixed premium UL than in flexible premium UL.

Relationship between Valuation Interest Rate and Nonforfeiture Interest Rate

Washington has a requirement (probably not unique to Washington) that the valuation rate on a life policy cannot exceed the nonforfeiture rate. Washington has taken the position that, if the guaranteed (minimum) credited rate is 4%, then the valuation rate cannot

exceed 4%. This creates reserve strain at issue, especially on back-end loaded single premium life.

While this is a valuation issue, Washington has disapproved policy forms unless the company agreed to hold reserves on this basis. At the present time, however, most universal life forms are not being reviewed. They are considered approved by "deemer" provisions.

Fortunately, this restriction on valuation rates does not apply to annuities.

MINNESOTA SOLVENCY TASK FORCE

Edward John Bonach

The Minnesota Department of Commerce, in conjunction with the Insurance Federation of Minnesota, has formed a task force comprised of Minnesota Commerce Department and insurance representatives to undertake a comprehensive review of existing laws in the Minnesota Insurance Code relating to insurance company solvency. The task force is to identify changes or additions to those laws which will enhance the likelihood of diminishing future insolvencies.

The task force is composed of three committees -- Investment, Regulation, and Special Issues. Diverse and complex issues concerning guarantee funds, reserve requirements, capital and surplus requirements, asset/liability management, investment restrictions and basket clauses, reinsurance contracts, examination, and Commerce Commissioner authority are among the topics being addressed.