Special Considerations Relating to December 31, 2018 Reserves and Other Solvency Issues

These considerations pertain to life insurance companies and fraternal benefit societies doing business in New York, and insurers holding a certificate from the superintendent as being accredited for the reinsurance of life insurance, annuities, or accident and health insurance, with the exception of non-New York domestic companies that meet the definition of “reinsurers” under the Federal Dodd-Frank Act.

This letter focuses on particular issues relating to actuarial opinions and memorandums and other solvency issues. These considerations are meant to (i) provide instructions on filing, (ii) describe additional tests and documentation standards that insurers should conduct, (iii) provide guidance to appointed actuaries on the analysis they should consider in rendering their reserve adequacy opinions, and (iv) provide companies with insight as to how the Department views adequacy in preparation for discussions that may occur subsequent to filing the opinion. These considerations have been applied on previous examinations and have sometimes led to the requirement of additional reserves as deemed appropriate in light of company-specific circumstances.

Please see Item 13(c) of this letter where the “NY7” is referenced.

Reserve Methodology for Certain Universal Life Insurance Products

The reserves held for universal life with secondary guarantee policies that have multiple sets of charges and/or interest credits applied to the shadow account shall be in compliance with §98.9(2)(viii) of Regulation 147 applying the lowest set of minimum premiums and following the guidance from the November 1, 2011 Life Actuarial Task Force Statement, available at the website:


Actuarial Opinion and Memorandum – Filing Instructions

The 12/31/18 actuarial opinion and memorandum should be submitted via CD or other electronic means. Email submissions should be sent to the Albany Life Bureau. Multiple electronic files are acceptable as long as an index and description of these files is included. To reduce the need for follow-up correspondence, a complete summary of applicable actuarial opinions and certifications should be received via Email by the March 1st filing deadline. See AOM and RBC Checklist. Life RBC C3 Phase I and Phase II analyses should be forwarded by June 15, 2019, along with the appointed actuary’s certification and documentation consistent with ASOP 41 relating to Actuarial Communications. The documentation of Life RBC C3 Phase I and Phase II analyses should be at least as thorough as that provided in the Actuarial Memorandum per Section 95.9 of Regulation 126. The Life RBC C3 Phase I and Phase II documentation should be submitted on a fully standalone basis, i.e., without cross references to each other.
Per Section 95.10(a)(2) of Regulation 126, prior written approval is required to aggregate the results of asset adequacy analysis across lines of business. Aggregation requests should be sent via email to the Albany Life Bureau.

Per Regulation 126, the actuarial memorandum is due by March 1st. However, extensions are available upon request and when justified. In any event, all substantive asset adequacy analysis should be completed prior to rendering the actuarial opinion submitted with the annual statement, i.e., prior to the March 1st filing deadline. If an extension is granted, the actuarial opinion still should be submitted by March 1st, accompanied by a brief summary of the results of the asset adequacy analysis, with the actuarial memorandum due by the extension date. The summary of results should contain the numerical “NY7” results for each scenario for each line of business, as well as an explanation as to how these results were considered in forming the opinion. The summary also should pay particular attention to material changes in assumptions or methodology versus the previous submission. If a material line of business was not subjected to cash flow testing, then the actual type of analysis, numerical results, and conclusions should be explained.

In addition, a Regulatory Asset Adequacy Issues Summary (RAAIS) should be submitted no later than April 1, 2019. The RAAIS should be consistent with that prescribed in Section 3.B of VM-30 of the NAIC Valuation Manual with the summary being based on the analysis done for the New York submission.

VACARVM certifications are due March 1, 2019, as applicable. Filing extensions for the related memorandum will be granted in similar fashion to the Regulation 126 memorandum.

For foreign insurers and fraternal benefit societies, the table of liabilities in the Regulation 126 actuarial opinion should be clearly reconcilable to the New York supplement.

**Actuarial Opinions per § 95.7 and § 95.8 of Regulation 126**

Except as provided by the language recommended in Sections 95.7 or 95.8 of Regulation 126, the actuarial opinion should avoid using wording such as “to the best of my knowledge” or “to the extent practicable” unless such wording is specifically intended to qualify the opinion. The actuarial opinion should not rely on actuarial opinions from other actuaries. Other actuarial opinions should not be attached to the actuarial opinion or included in the actuarial memorandum. Reliance on the “work product” of other actuaries continues to be permitted and will be considered “reliance on the analysis of other experts”, which is addressed per §95.8(f). Accordingly, if the appointed actuary relies on the analysis of other actuaries, the appropriate reliance statements should be attached to the actuarial opinion.

If an actuarial opinion or certification is qualified, it should be clearly identified as such. In such cases, the impact should be quantified in the opinion or certification.

If an actuarial memorandum or report includes “Deviation from Standard” wording regarding conformity with the applicable actuarial standard(s) of practice, that fact should be disclosed directly in the related opinion or certification.
New York State Department of Financial Services
Special Considerations Relating to December 31, 2018 Reserves and Other Solvency Issues

Actuarial Memorandum per § 95.9 – Separate Section for Special Considerations

The actuarial memorandum per §95.9 of Regulation 126 should include a separate section that specifically addresses each of the fourteen items enumerated below. References can be made to other sections of the actuarial memorandum as appropriate; however, the separate section should contain all specially requested data, test results, and related explanations.

(1) Description of Assumptions per § 95.9(b)(1)(vi)

The actuarial memorandum should include appropriate validation of key assumptions to recent actual experience and include justification whenever assumptions used in the asset adequacy analysis are materially different from recent actual experience, particularly when such differences produce more favorable testing results. In any event, the appointed actuary should ensure that the "moderately adverse conditions" testing requirement has been satisfied.

A description of all substantive assumptions should be provided regardless of the type of asset adequacy analysis, i.e., for gross premium valuation, loss ratio analysis, cash flow testing, etc.

In general, the testing period used for asset adequacy analysis should extend far enough into the future to cover the major portion of the future run out of the liability cash flows, i.e., until an immaterial amount of business remains. If a shorter testing period is used (e.g., the ten year horizon required for individual single premium deferred annuities), then sensitivity tests over longer horizons should be conducted to determine the impact of long-term guarantees (e.g., substantive minimum interest rate guarantees in the decreasing interest rate scenarios).

Notwithstanding premium payment histories, for contracts with flexible premiums (e.g., individual flexible premium deferred annuities), appropriate sensitivity tests should be performed assuming additional contributions in the decreasing interest rate scenarios, in order to assess the potential intermediation risk due to minimum interest rate guarantees.

With respect to §95.9(b)(1)(vi)(a) lapse rates, the actuarial memorandum should clearly identify any blocks of business where testing results are materially lapse supported, explain the rationale for such lapse assumptions and comment on the sensitivity of results if actual lapse rates prove lower than those assumed. Note that the term “lapse” in this memo and in Regulation 126 refers to both surrenders for value and lapses due to insufficient premiums to keep the policy in force. For products with relatively attractive interest rate guarantees, lapse rates should be appropriately adjusted downward under particularly low interest rate scenarios.

Where a lapse-related formula is used within the actuarial memorandum, a chart should accompany the formula specifying the assumed rate for specific cases. Where rates are to be specified for “each duration”, grouping of durations can be performed where rates are very similar within a range of durations. Here are examples of cases where this demonstration is expected:

- For universal life with secondary guarantee business that is reserved using the 9-step methodology stated in §98.9(c)(2)(viii) of Regulation 147, provide the assumed lapse percentage for the case of a level premium payment pattern, level interest rate scenario, for each duration.
- For deferred annuity dynamic lapses, provide the assumed lapse percentage for combinations of credited/competitor rate differences and each duration.
For variable annuity with guarantee business, provide the assumed lapse percentage for combinations of in-the-moneyness and duration. For this purpose, the definition of “in-the-moneyness” is the present value of benefits less the cash surrender value. Any programs that encourage surrender of living benefits or death benefits where the surrender value is in excess of the contractual cash value should not be counted as a lapse.

For long-term care, provide the lapse assumption for each duration.

With respect to §95.9(b)(1)(vi)(b) interest crediting rate methodology, the actuarial memorandum should describe actual versus modeling spreads. Where the assumed crediting strategy materially deviates from current company practices, (e.g., modeling spreads not currently being achieved), the impact of continuing current practices should be quantified.

For asset adequacy analysis, maintenance expenses should be validated using a top-down approach, by considering overall company expenses and backing out acquisition costs and other costs clearly not necessary to maintain the inforce business. To this end, excluded costs should be clearly justified in light of actual sales production for companies with established marketing platforms. For companies incurring material startup expenses, any excluded startup costs should be clearly justified in light of the expected volume and profitability of new business resulting from such expenditures.

(2) Asset Assumptions per § 95.9(b)(2)

Reinvestment and disinvestment assumptions should be consistent with actual company practice. If reinvestment or disinvestment assumptions differ from current or recent past company practice, the actuarial memorandum should explain and provide a justification.

An explanation should be included within the actuarial memorandum for any inconsistencies between the asset allocations in the modeling with actual company practice or the manner in which investment income is allocated by line of business for annual statement reporting purposes.

For cash flow testing models, the appointed actuary should be cognizant of which assets are pledged or encumbered and, therefore, may not actually be available for sale during the projection period (e.g., FHLB loans).

The asset adequacy analysis should assume a return on investment for general account assets having substantial volatility of returns (e.g., common stock, real estate, hybrids with significant common stock characteristics, foreign currency risks, Schedule BA assets, etc.) of an immediate 20% drop in value, followed by a 5.5% annual return (before deduction of investment expenses) starting at the beginning of the second projection year. The memorandum should clarify which assets were subjected to this drop and recovery and which were not, and provide the annual statement carrying value for each major asset category. This drop and recovery should be performed if assets with substantial volatility of returns are supporting general account liabilities. In addition, where assets having substantial volatility of returns are assumed to be purchased in the future, the asset should be assumed to follow the same 20% drop and 5.5% recovery pattern as stated above, starting at the date of purchase of the asset.

Asset adequacy analysis for variable annuities (including that for any guaranteed living benefits, guaranteed minimum death benefits, and/or recoverability testing of CARVM allowance) should assume the return described above (before deduction of M&E charges and investment expenses) on equity funds...
and other funds with substantial volatility of returns. A consistent adjustment should be made to expected returns for fixed income funds having equity or other volatile return component (e.g., balanced funds). If projected gains on variable annuities are used to offset projected losses on other business, this drop and recovery must be performed for variable annuity projections in conjunction with the “NY7” cash flow projections for such other business. This drop and recovery should likewise be performed when aggregating life products held in separate accounts with life products held in the general account.

Anticipated returns for bond and other fixed income funds should be consistent with the duration and quality of the underlying assets, with due regard for how fund assets might be expected to perform under the “NY7”. The assumption used should be discussed in the actuarial memorandum, along with justification that the scenarios used are sufficiently robust to gauge the expected impact of fund volatilities in a manner consistent with the underlying “NY7” interest scenarios.

Some companies selling variable life or variable annuity products may have made revenue sharing arrangements with an entity responsible for providing investment or other types of services that makes payments to the company (or to one of its affiliates). Such payments are typically in exchange for administrative services provided by the company (or its affiliate), such as marketing, distribution and recordkeeping. When income attributable to revenue sharing is included in the asset adequacy analysis, the revenue sharing arrangements should be fully explained and justified. In addition, exclude any revenue sharing income that is not contractually guaranteed to the insurer and any successor.

(3) Presentation of Results

The results from asset adequacy analysis should be shown separately by major product categories within a line of business (e.g., allocated vs. unallocated, etc. for group annuities, SPDA vs. FPDA vs. payout annuities, etc. for individual annuities, Term vs. UL vs. SPWL vs. Whole Life, etc. for life insurance). For this purpose, “major” product categories can be interpreted to mean categories where the asset adequacy results are material relative to results shown for the combined products. Professional judgment can be used to decide appropriate delineation, but the rationale should be explained and justified (e.g., Term combined with UL because Term is immaterial).

For each of the “NY7” interest rate scenarios, the present value of the ending “market value” surplus should be shown. Such present values should be consistent with the interest rate path for each scenario, with totals provided for each major product category and each major line of business (i.e., Life, Health, Annuity). Per Section 95.10(i), ending “market value” amounts should also be shown. For aggregation purposes, the common reference date shall be the valuation date, as required per Section 95.10(a)(2).

For business that is subject to Regulation 56, standalone asset adequacy analysis should be performed for at least each major product category, e.g., Long Term Disability (LTD) vs. Long Term Care (LTC).

For each major product category, the documentation should be clearly articulated so that the reviewer can readily understand which assets support which liabilities, how positive net cash flows are reinvested, and how any negative cash flows are handled in asset adequacy analysis and Life RBC Phase 1 analysis.

(4) Clarification of Interest Rate Scenarios per § 95.10(d)
The yield curve for the baseline “NY7” scenarios should not be normalized; however, additional scenarios may be provided at the discretion of the appointed actuary (e.g., normalized “NY7”, inverted yield curve, etc.).

Pop-up and pop-down scenarios should occur immediately, not at the end of the first year.

(5) Floor Rates on Decreasing Interest Rate Scenarios per § 95.10(d)

For purposes of determining the floor rates on the decreasing scenarios, parallel shifts or proportionate shifts may be used, but a consistent set of scenarios should be employed across all lines of business (i.e., do not use parallel shifts for one type of business and proportionate shifts for another).

For decreasing scenarios, the full amount of the prescribed change should occur each year until the floor rate is reached, regardless of whether parallel or proportionate shifts are being used.

For parallel shifts: Floor rates should equal the beginning rate less one half the 5-year Treasury rate. Floor rates should not be less than zero.

Example:
If the 5-year initial Treasury rate = 2.86%, 3-month initial Treasury rate = 1.24% and 10-year initial Treasury rate = 3.97%, then the 3-month floor rate would be 0% since 1.24% - 1.43% = <-.19%>, while the 10-year floor rate would be 2.54% = 3.97% - 1.43%.

For proportionate shifts: Floor rates for the 5-year Treasury rate should equal one half the 5-year Treasury rate. Floor rates for other points on the yield curve should be one half the initial rate for that point on the yield curve.

Example:
If the 5-year initial Treasury rate = 2.86%, 3-month initial Treasury rate = 1.24% and 10-year initial Treasury rate = 3.97%, then the 5 year floor rate would be 1.43% = .5 x 2.86%, the 3-month floor rate would be .62% = .5 x 1.24%, while the 10-year floor rate would be 1.99% = .5 x 3.97%.

(6) Calls and Prepayments per § 95.10(f)

Examples cited by regulation may no longer be appropriate as safe harbors.

Assumptions should be commensurate with the underlying economics. To the extent simplified assumptions are used in the asset adequacy analysis, this should be justified based on materiality and conservatism in the projected results.

For each major line of business, supporting assets subject to calls and prepayments should be identified, with an explanation and justification of all call and prepayment assumptions.

For all mortgage-backed securities, the explanation of the prepayment assumption should identify all variables (e.g., collateral type, aging, coupon differential, etc.) used in the prepayment model and illustrative prepayment speeds (PSA multiples) for all combinations of values for each of the variables in the prepayment model. The justification of the prepayment rates should reflect an appropriate comparison of prior actual prepayment experience to expected prepayments based on the current assumed prepayment rates.
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(7) Defaults per § 95.10(g) and Maximum Spreads to Treasuries

Examples cited by regulation may no longer be appropriate as safe harbors.

Expected defaults should be commensurate with the current market values for investments of like kind and quality. The basis and rationale for default provisions should be explained and justified in the actuarial memorandum, including how such provisions reflect future rating migration and with due regard for current market values.

Expected spreads should be no greater than that available in the current market for investments of like kind and quality and should not be assumed to increase over the projection period.

For all mortgage-backed securities, subprime exposure should be explicitly addressed, including the continued appropriateness of any default provisions carried over from the prior year’s analysis.

For assets that are not subject to the 20% drop and 5.5% recovery pattern noted in Item 2 of this letter, the net yield pick-up (before deduction of investment expenses) should be capped at 100% of the average current investment grade spread for Aa2 and A2 as of September 28, 2018. For assets supporting payout annuities not issued on a substandard or rated basis and with no optionality (i.e., no cash value and the annuity payment schedule cannot be modified), such net yield pick-up may be increased by the lesser of 35 bps and 30% of the average current investment grade Aa2 and A2 as of September 28, 2018 (“Payout Annuity Illiquidity Spread”).

The asset adequacy results for payout annuities applying the Payout Annuity Illiquidity Spread must be shown with and without such extra spread.

Current spreads for Aa2 and A2 assets are published by the NAIC in conjunction with the Valuation Manual as shown below.

<table>
<thead>
<tr>
<th>Weighted Average Life</th>
<th>Aa2</th>
<th>A2</th>
<th>Aa2/A2</th>
<th>Payout Annuity Illiquidity Spread</th>
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<tr>
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<td>34.85</td>
<td>44.83</td>
<td>39.84</td>
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<tr>
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<td>9</td>
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<td>111.36</td>
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</table>
For this purpose, net yield pick-up is defined as the yield pick-up versus comparable investments that are generally regarded as “risk free” with respect to default risk (e.g., U.S. Treasuries) minus default provision based on current market values. The weighted average life is defined as the weighted average number of years until 100% of the outstanding principal is expected to be repaid, rounded to the nearest whole number but not less than 1. For assets that mature after 30 years, the weighted average life for determining the net yield pick-up shall be 30.

Strict technical compliance for each and every asset may not be possible due to modeling limitations. Professional judgment should be used to produce results that comply with the spirit of this request and a variety of alternative approaches may be acceptable. In any event, appropriate explanation and justification should be provided for the methodology that was employed and the results that were obtained.

The net yield pick-up should be applied across all interest rate scenarios to both existing assets (as of the valuation date) and assumed reinvestments.

When applying the net yield pick-up to existing assets, it is recommended that the default provisions be increased as needed to limit the “net yield pickup” versus current Treasuries.

The following is an example of an approach that conforms to the spirit of this request; however, alternative approaches may also be acceptable. In any event, the provisions for default should reflect current market values. Particular attention should also be paid to assets that have been written down so default provisions are reflective of the amount of the write-down.

Example: Non-callable Bond with 4 Years to Maturity and Annual Coupons as of 9/30/2018

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Projected Cash Flows

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Market Yield 3.6344%
3-year Treasury 2.88%
5-year Treasury 2.94%
Interpolated 4-year Treasury 2.91%
Net Yield Pick-up Cap 0.6156%
Maximum Net Yield 3.5256%
Excess Yield Over Max Cap 0.1088% Adjustment Needed

(8) Interim Results

Regardless of the form of asset adequacy analysis, interim results should be addressed.

For cash flow testing, interim results under the Level scenario must be provided for each projection year and each major line of business (Life, Health, Annuity). “Market value” interim results are not required, but the “book value” interim results must be provided, i.e., by showing the book value of assets, liabilities, and surplus.

For other than cash flow testing, the appointed actuary should make a good faith effort with respect to the analysis and explanation of interim results.

The appointed actuary should explain and justify the extent to which these results were considered in forming the actuarial opinion.

Note:
If there are substantial interim shortfalls (i.e., negative book value surplus) in the aggregate for all lines of business tested, then meaningful additional reserves may be expected as of the current valuation date. Simply relying on future surplus to cover all projected interim shortfalls may not be acceptable, depending on the timing and severity of the projected interim shortfalls.

(9) Asset Adequacy Analysis for Particular Products

For traditional life insurance policies with a level premium for a guaranteed period of ten years or more, followed by a substantial increase in premium after the expiry of the guaranteed level premium, or for universal life with secondary guarantee policies with an expected premium pattern similar to term life, to the extent relevant and credible experience is unavailable to support an alternative assumption, lapse rates within the last one third of the level term period should not exceed 2% per year and all business should be assumed to lapse at the expiry of the guaranteed level premium. If relevant and credible experience is available to the contrary, then see the Special Sensitivity Test section of this letter.
For individual fixed deferred annuity contracts, lapse rates of 20%, 40%, 60%, and 80% should be assumed when the calculated spread (CS) equals 100 bps, 200 bps, 300 bps, and 400 bps, respectively (and interpolated in between these rates). The CS should be determined as the following:

\[
\text{CS} = C - (CR + SC/3 + (GR - 1\%)/2)
\]

where
- C = competitor rate
- CR = credited rate
- SC = surrender charge
- GR = guaranteed rate

The competitor rate assumptions used should be explicitly stated and justified. The CS should be floored at zero. This test should be performed for each of the increasing scenarios (i.e., those specific scenarios referenced in Sections 95.10(d)(1)(ii), (iii), and (iv) of Regulation 126) to the extent relevant and credible experience is unavailable to support an alternative assumption. If relevant and credible experience is available, then see the Special Sensitivity Test section of this letter.

For deferred annuities with minimum interest rate guarantees of 3% or more, the annual lapse rates assumed in asset adequacy testing should be 2% or less in low interest rate environments, unless the Company has relevant and credible experience to the contrary.

For universal life policies with secondary guarantees, the annual lapse rate after the tenth policy year should be less than or equal to 1%, unless a higher assumption is supported by credible and relevant experience or if a shock lapse is expected due to a significant premium increase. For this purpose, the term “lapse” refers to both surrenders for value and lapses due to insufficient premiums to keep the policy in force. If relevant and credible experience is available, then see the Special Sensitivity Test section of this letter.

For modeling individual payout annuities and annuitizations involving guaranteed lifetime income streams (including GMIB annuitizations and in-the-money GMWB lifetime income streams), the 2012 IAR Table should be used as the mortality table to the extent relevant and credible experience is unavailable to support an alternative assumption. If relevant and credible experience is available, then see the Special Sensitivity Test section of this letter.

With respect to equity indexed annuities, asset adequacy analysis should ensure that combinations of interest rate risk and equity risk are tested. Toward this end, each of the “NY7” interest rate scenarios should be tested in conjunction with equity scenarios that are sufficiently robust to gauge the impact of all guarantees.

(10) Variable Annuities with Guaranteed Minimum Death Benefits (GMDBs) and Living Benefits (VAGLBs)

For individual variable annuities having these types of guaranteed benefits, two summaries should be provided. The first summary should include direct and assumed business, before reinsurance ceded. The second summary should include direct and assumed business, after reinsurance ceded.

Each summary should include the following details:
number of contracts, account value, cash surrender value, guaranteed minimum death benefit, guaranteed living benefit, reserve net of CARVM allowance, additional reserve for guaranteed minimum death benefit and guaranteed living benefit (combined or separately).

These details may be provided as of 9/30/18 or as of 12/31/18.

For this summary, the “guaranteed minimum death benefit” should be the death benefit as of the valuation date, whereas the “guaranteed living benefit” should be the present value of the “guaranteed living benefit” assuming 100% election at the earliest opportunity.

Present values should be based on the Level interest rate scenario, i.e., the beginning yield curve used for asset adequacy analysis. Projected benefit values should be consistent with the methodology used for asset adequacy analysis. If the present value of the “guaranteed living benefit” is less than the current account value, the current account value should be used.

This summary is intended for risk assessment purposes only, i.e., to ascertain whether or not these guarantees may pose a material risk to the company.

The appointed actuary should comment on the materiality of these benefits and explain the key benefit variations (e.g., return of principal, rollups, ratchets, etc.).

(11) Companies with Exposure to GMDBs and VAGLBs

For companies with over $500 million of account value related to VAGLBs or where the amount of related account value is greater than 2% of the company’s total statutory reserves, the standalone asset adequacy analysis should be provided as of 9/30/18 or as of 12/31/18, even if these benefits have been fully reinsured. Results should be presented as stated in Item 3 above:

- These results should be computed for each of the “NY7” interest rate scenarios in conjunction with two equity scenarios:
  
  (i) 20% immediate drop, 5.5% annual recovery starting at beginning of second year
  (ii) 20% annual increase for 5 years, followed by 15% annual drop for 5 years, followed by 4% annual recovery (This second scenario is required only if there are ratchet or reset designs.)

  These assumed growth rates for equities are before deduction of M&E charges and investment expenses.

  The results of such testing may be aggregated with the results for other lines of business as noted in Item 13(c) of this letter.

- Regarding election and utilization rate assumptions:
  - The following assumptions should be applied in the absence of credible and relevant experience: for both scenarios, a 100% election rate should be assumed for GMABs (Guaranteed Minimum Account Balance) at the earliest opportunity where exercising the guaranteed benefit option may be advantageous to the contractholder.

- Regarding lapse rate assumptions:
  - In the absence of credible and relevant experience for in-the-money (present value of benefits less cash surrender value) lapses, lapse rates on a guaranteed living benefit that is more than 20% in the money of not greater than 1% per year should be assumed.
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- If credible and relevant experience is available, see the Special Sensitivity Test section of this letter.

- Key assumptions (mortality for GMDBs, lapses, fixed income returns, etc.) should be explained and justified, including the extent of the margins needed to satisfy “moderately adverse conditions” requirements of the asset adequacy analysis.

- The present value of the M&E charges and the deferred contingent surrender charges (i.e., surrender charges on lapsed business) should be shown separately with comments as to what portion is needed to cover related expenses, what portion is needed to amortize the CARVM allowance, etc.

- These results should be shown before reinsurance ceded and after reinsurance ceded.

In addition, for companies falling within the VAGLB account value-related scope stated above in Item 11, the total option value of VAGLBs along with an explanation of how the option value was calculated should be provided. Such option value should be calculated on a seriatim basis with arbitrage-free interest rates and equity return paths with an equity volatility consistent with that currently observed in the market. The option value should be provided before and after reinsurance and clearly show the associated reserve and account values.

(12) Companies with Accelerated Underwriting

An accelerated underwriting program is defined as any non-medical (i.e., no paramedical exam or not physically invasive) underwriting program or criteria based on external consumer data or information sources.

For business subject to accelerated underwriting, the Regulation 126 memorandum should include an overview of the accelerated underwriting program, describe how the corresponding mortality assumption was developed and include an explanation for how the appointed actuary got comfortable with the mortality assumption used in the testing. Furthermore, the mortality assumption for business subject to accelerated underwriting shall be no less than 110% of that assumed for fully underwritten business.

(13) Additional Review Criteria for Asset Adequacy Analysis per Regulation 126

In order for the Department to review whether or not the “moderately adverse conditions” testing requirement is being met for Regulation 126 asset adequacy analysis, the appointed actuary should confirm the following:

(a) All material assumptions should be clearly explained and justified, including validations to historic results and/or industry data.
(b) Each material assumption should include an explicit margin.
(c) Where cash flow testing is performed, all interest rate scenarios specified in Section 95.10(d)(1) should be tested with reserves established such that company aggregate results are positive under the interest rate scenarios specified in Section 95.10(d)(1)(i), (ii), (iii), (iv) and (vi) of Regulation 126. Aggregation across lines of business (i.e., Health, Life and Annuity) is subject to prior approval per Section 95.10(a)(2) of Regulation 126.
(d) If negative results are reduced by anticipated federal income tax offsets, such offsets should be demonstrated to be truly recoverable.
(e) Appropriate conservatism should be added to the extent credible experience is lacking.

(f) To the extent securities lending is material to projected cash flows, explain how it is taken into account.

(g) If borrowing is assumed, it should only be modeled to address very short-term liquidity needs.

(h) The ongoing availability and affordability of reinsurance-related letters of credit should be clearly addressed, where applicable.

(i) Expected future funding requirements of reserve credit trusts along projection scenarios should be clearly addressed, where applicable.

(j) All derivatives used for hedging or replication should be clearly explained and their impact appropriately reflected, where applicable.

(k) Favorable trends (e.g., future mortality improvement on life insurance and future morbidity improvement on accident & health insurance) should be assumed not to continue beyond the valuation date.

(l) Any other improvements should not be assumed beyond the valuation date (e.g., mean reversion of the yield curve, increase in spreads, decrease in expenses, etc.).

(m) Cash flows associated with those proportional reinsurance agreements that increase the present value of surplus and do not qualify for reinsurance reserve credit should be excluded from the testing.

(n) Inflation should be no less than the greater of 1.0% and half of the 5-year Treasury rate.

(o) Short-term health and life business should not assume any renewals beyond the guaranteed period.

A brief answer and any relevant comments should be provided for each of these items within the Special Considerations section of the AOM.

(14) Review Criteria for “Sound Value” Requirements per Regulation 56

In order to determine whether or not the Regulation 56 “sound value” reserving requirement is being met for LTD and LTC, the Department’s review may include, but is not limited to, the following aspects for the standalone asset adequacy analyses referenced in Item 3 above:

(a) Asset adequacy analysis should anticipate no premium rate increases unless they have been approved and the company confirms plans to implement along with the approximate date.

(b) For LTC business, does cash flow testing produce positive results under at least the interest scenario of Section 95.10(d)(1)(vi) of Regulation 126, where projected interest rates for a five year Treasury Note need not be reduced beyond the point where such five year Treasury Note yield would be the greater of seventy-five percent of its initial level and its initial value less 100 bps? (Parallel shifts or proportionate shifts may be used consistent with the guidance provided in Item 5 of this letter.) If results are not positive, aggregation with other blocks of business may be requested as noted in Item 13(c) of this letter.

(c) If credible and relevant experience is not available for LTC business, the assumed ultimate lapse rates (i.e., for policy years 15 and later) should not be greater than 1% per year.

Market Value Adjusted (MVA) Annuities

For companies with inforce MVA annuity contracts, funded in a separate account with assets valued at market, the following should be submitted:

1) the actuarial opinion and memorandum as required by §44.11(b)(1)(v) of Regulation 127, and
2) for contracts subject to §44.11(b) of Regulation 127, the Macaulay durations of the assets and of the liabilities.

For companies with inforce MVA annuity contracts, funded in a separate account or in the general account, with assets valued in accordance with §1414 of the Insurance Law and with reserves calculated in accordance with §44.11(c)(1) of Regulation 127, the following should be submitted:

1) the actuarial opinion and memorandum as required by §44.11(c)(2)(v) of Regulation 127, and
2) the Macaulay durations of the assets and of the liabilities (§44.11(c)(2)(iii) of Regulation 127).

**Regulation 128 Business**

An actuarial opinion and memorandum as described by Regulation 128 should be submitted for all such business, including synthetic GICs. Asset adequacy analysis should handle synthetic GICs consistently with non-synthetic GICs. The following information should be included with the Actuarial Memorandum:

1) The book value and market value of synthetic GIC contracts issued in New York and of synthetic GIC contracts issued in jurisdictions other than New York. The market values should be subdivided according to whether assets are managed by (i) the company or one of its affiliates or (ii) an investment manager not affiliated with the company;
2) A list of all currently approved synthetic GIC New York plans of operation, including a brief summary of identifying information and the date of approval;
3) For synthetic GIC contracts issued in jurisdictions other than New York, the number of contracts, total book value, and total market value for (i) contracts that meet all the requirements of a currently approved New York plan of operation; and (ii) contracts that do not meet all the requirements of a currently approved New York plan of operation. For contracts in the latter category, the company should summarize the main contract provisions that cause them to fall into that category.

**Life Risk-Based Capital Analysis**

Life RBC Phase 1 and Phase 2 analyses should provide at least the same level of conservatism as asset adequacy analysis with respect to assumptions other than interest rate scenarios, asset assumptions which are addressed in other RBC charges, and the dynamic lapse function for fixed deferred annuities described in Item 9 of this letter. The Phase 1 analysis should include a sensitivity test applying this dynamic lapse function.

**Special Sensitivity Tests**

These tests are generally intended for risk assessment purposes only, i.e., to ascertain whether or not these factors may pose a material risk to the company.

These tests may suggest the need for additional reserves as deemed appropriate in light of company-specific circumstances.

For traditional life insurance policies with a level premium for a guaranteed period of ten years or more, followed by a substantial increase in premium after the expiry of the guaranteed level premium, lapse rates within the last one third of the level term period should not exceed 2% per year and all business should be assumed to lapse at the expiry of the guaranteed level premium. Note that these are sensitivity
tests if relevant and credible experience to support an alternative assumption is available. If results for the sensitivity test are less favorable than baseline results, the baseline expected mortality assumption for the policyholders persisting beyond the end of the level period should be explained and justified. To the extent relevant and credible experience is unavailable, then these tests should be the baseline assumption.

For individual fixed deferred annuity contracts, a special sensitivity test should be performed using lapse rates of 20%, 40%, 60%, and 80% when the calculated spread (CS) equals 100 bps, 200 bps, 300 bps, and 400 bps, respectively (and interpolated in between these rates). The CS should be determined as the following:

\[ CS = C - (CR + SC/3 + (GR - 1\%/2) \]

where:
- \( C \) = competitor rate
- \( CR \) = credited rate
- \( SC \) = surrender charge
- \( GR \) = guaranteed rate

The competitor rate assumptions used should be explicitly stated and justified. The CS should be floored at zero. This sensitivity test should be performed for each of the increasing scenarios (i.e., those specific scenarios referenced in Sections 95.10(d)(1)(ii), (iii), and (iv) of Regulation 126). If results for the sensitivity test are less favorable than baseline results, the baseline expected lapse assumption for relevant durations should be explained and justified. To the extent relevant and credible experience is unavailable, then this test should be the baseline assumption.

For universal life policies with secondary guarantees, the annual lapse rate after the tenth policy year should be less than or equal to 1% unless a shock lapse is expected due to a significant premium increase. Note that this is a sensitivity test if relevant and credible experience to support an alternative assumption is available. If results for the sensitivity test are less favorable than baseline results, the baseline expected lapse assumption for relevant durations should be explained and justified. To the extent relevant and credible experience is unavailable, then this test should be the baseline assumption. For this purpose, the term “lapse” refers to both surrenders for value and lapses due to insufficient premiums to keep the policy in force.

For all business subjected to cash flow testing, a special sensitivity test should be performed using a 500 bps pop-up interest rate scenario. The ratio of market value of assets before and after the pop-up scenario, and the method for determining the market value of assets after the pop-up scenario, should be stated and discussed in the memorandum.

In addition, for companies falling within the VAGLB account value related scope stated above in Item 11, a special sensitivity should be performed using a 40% immediate drop, 3% annual recovery starting at beginning of second year.

Regarding VAGLB election and utilization rate assumption, a 100% election rate should be assumed for GMABs (Guaranteed Minimum Account Balance) at the earliest opportunity where exercising the guaranteed benefit option may be advantageous to the contractholder. A 20% election rate should be assumed for other VAGLBs at the earliest opportunity where exercising the guaranteed benefit option.
may be advantageous to the contractholder, with 20% utilization assumed for each successive year where exercising the guaranteed benefit option may be advantageous to the contractholder. If results for the sensitivity test are less favorable than baseline results, the baseline expected mortality assumption for the persisting policyholders should be explained and justified.

Regarding VAGLB lapse rate assumptions, assume lapse rates on a guaranteed living benefit that is more than 20% in the money of not greater than 1% per year. Note that this is a sensitivity test if relevant and credible experience to support an alternative assumption is available. If results for the sensitivity test are less favorable than baseline results, the baseline expected mortality assumption for the persisting policyholders should be explained and justified. To the extent relevant and credible experience is unavailable, then this test should be the baseline assumption.

For modeling individual payout annuities and annuitizations involving guaranteed lifetime income streams (including GMIB annuitizations and in-the-money GMWB lifetime income streams), the 2012 IAR Table should be used as the mortality table. Note that this is a sensitivity test if relevant and credible experience to support an alternative assumption is available. If results for the sensitivity test are less favorable than baseline results, the baseline expected mortality assumption should be explained and justified. To the extent relevant and credible experience is unavailable, then this test should be the baseline assumption.

A special sensitivity test should be performed (at the company-wide aggregate level) to measure the dependency of results on assumptions that all projected profits will be retained rather than released. This test can assume that some portion of the projected profits will be retained, but the rationale should be provided.

Life RBC Phase 2 stochastic testing should include a special sensitivity tests, excluding impact of hedges not actually held as of the valuation date.

**Additional Guidance**

Questions concerning this letter should be directed via e-mail to Amanda Fenwick, FSA (Assistant Chief Actuary) or by phone at (518) 474 – 7929.