**Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force**

**Amendment Proposal Form\***

1. Identify yourself, your affiliation, and a very brief description (title) of the issue.

**Identification:**

GOES (E/A) Subgroup

**Title of the Issue:**

Update the Valuation Manual economic scenario generator references for the adoption of the Conning-maintained prescribed economic scenario generator.

2. Identify the document, including the date if the document is “released for comment,” and the location in the document where the amendment is proposed:

VM-20 Section 2.J, VM-20 Section 6.A.1.a.iii, VM-20 Section 6.A.2.a.i, VM-20 Section 2.C, VM-20 Section 6.A.2.b.i.a & 6.A.2.b.i.b, VM-20 Section 6.A.2.b.v, VM-20 Section 6.A.2.c, VM-20 Section 7.G.1.c, VM-20 Section 7.G.2.a, VM-20 Section 7.G.2.c, VM-20 Appendix 1, VM-21 Section 4.C.1, VM-21 Section 8.A.1, VM-21 Section 8.B.1, VM-21 Section 8.B.2, VM-21 Section 8.B.2, VM-21, Section 8.F, VM-31 Section 3.D.6.t, VM-31 Section 3.D.10.c, VM-31 Section 3.E.3, VM-31 Section 3.F.9.b, VM-31, Section 3.F.13.d.ii.3 and VM-31, Section 3.F.13.d.iii.3, VM-31 Section 3.13.f.

3. Show what changes are needed by providing a red-line version of the original verbiage with deletions and identify the verbiage to be deleted, inserted, or changed by providing a red-line (turn on “track changes” in Word®) version of the verbiage. (You may do this through an attachment.)

See Appendix 1 for general updates to the description of the prescribed economic scenario generator.

See Appendix 2 for updates specific to VM-20’s Stochastic Exclusion Ratio Test.

See Appendix 3 for updates specific to VM-20’s Deterministic Reserve scenario.

See Appendix 4 for updates specific to selecting scenario subsets.

See Appendix 5 for updates specific to GOES Model Governance

See Appendix 6 for updates specific to the C3 Phase II Capital Metric

4. State the reason for the proposed amendment? (You may do this through an attachment.)

Changes to the Valuation Manual that are necessary to implement the updates to the prescribed economic scenario generator, including:

1. Update references to the prescribed economic scenarios or economic scenario generator to be consistent with the selected prescribed economic scenario generator. See changes in Appendix 1.
2. Update SERT threshold to be more lenient, require documentation on the reasonability of SERT results, and update the SERT to use assumptions consistent with the DR and SR, rather than adjusting to an anticipated basis, to be a more reliable indicator of whether an SR is needed. See changes in Appendix 2.
3. Update the documentation of the Deterministic Reserve Scenario to be consistent with the selected prescribed economic scenario generator. See changes in Appendix 3.
4. Remove requirement to use the scenario picker and discussions advocating for certain types of subset analysis; only require compliance with VM-20 Section 2.G and VM-21 Section 3.H. See changes in Appendix 4.
5. Add a section to VM-20 Appendix 1 documenting the oversight and governance for the economic scenario generator.
6. Update references to the C3 Phase II capital tail metric.

|  |  |  |  |
| --- | --- | --- | --- |
| **Dates:** Received 2/12/25, 4/7/25 | Reviewed by S.O. | Distributed | Considered |
|  |  |  |  |
| **Notes:** 2025-04  Updated 4/7/25 per discussion from Spring National Meeting and ACLI feedback on phase-in | | | |

# Appendix 1: Prescribed Economic Scenario Generator Reference Updates

**VM-20 Section 2.J**

J. Economic Scenario Generator Phase-InA company may elect to phase in the economic scenario requirements outlined in VM-20, Appendix 1, first applicable in the 2026 NAIC *Valuation Manual*, over a 36-month period beginning Jan. 1, 2026. This election must be consistent for the calculation of reserve requirements outlined in VM-20 Section 4, VM-20 Section 5, and VM-20 Section 6. A company may elect a longer phase-in period, up to seven years, with approval of the domiciliary commissioner. The election of whether to phase in and the period of phase-in must be made prior to the Dec. 31, 2026, valuation. At the company’s option, a phase-in may be terminated prior to the originally elected end of the phase-in period; the reserve would then be equal to the unadjusted reserve calculated according to the requirements of VM-20 applicable for valuation dates on or after Jan. 1, 2026.

The company elect to use one of the following approaches for the phase-in. The company may not switch approach after this determination has been made.

1. Amortization Approach

If there is a material decrease in the book of business by sale or reinsurance ceded, the company shall adjust the amounts of the phase-in provision. The phase-in amounts (DR1 – DR2 and SR1 – SR2, as described below) must be scaled down in proportion to the reduction in the DR and SR as a result of the transaction. The company must obtain approval for any other modification of the remaining phase-in amount. The method to be used for the phase-in calculation is as follows:

a. If the Company passes the SET as of the valuation date, prior to considering any phase-in, then the phase-in amount for the SR shall be deemed to be 0. Similarly, if the Company passes the DET as of the valuation date, prior to considering any phase-in, then the phase-in amount for the DR shall be deemed to be 0.

b. Compute DR1 and SR1 as the DR and SR as of Jan. 1, 2026, following the economic scenario requirements outlined in VM-20, Appendix 1, applicable in the 2026 NAIC *Valuation Manual* for all business in-force on the valuation date. The in-force used should include any reinsurance that is expected to be recaptured during 2026. No exclusion tests should be considered for the purposes of calculating DR1 and SR1.

c. Separately, compute DR2 and SR2 as the reserve as of Jan. 1, 2026, following the economic scenario generator requirements outlined in VM-20, Appendix 1, applicable in the 2025 NAIC *Valuation Manual* for the same in-force contracts used to compute DR1 and SR1. No exclusion tests should be considered for the purposes of calculating DR2 and SR2.

d. Compute the DR and SR on the valuation date as follows:

DR = D – (B – A) \* (DR1 – DR2) /B, and

SR = S – (B – A) \* (SR1 – SR2) /B, where

• A is the number of months that have elapsed since Dec. 31, 2025. For example, for the March 31, 2026. valuation, A = 3.

• B = 36 unless the company has obtained approval for a longer phase-in, in which case B = number of months of approved phase-in.

• D is the DR on the valuation date determined according to these requirements, prior to the phase-in adjustment.

• S is the SR on the valuation date determined according to these requirements, prior to the phase-in adjustment.

Guidance Note: If a company uses a 3-year phase in, for the 12/31/2026 valuation, the value of the DR and SR are:

DR = D – (36 – 12)\*(DR1-DR2)/36 = D – 2/3 (DR1- DR2)

SR = D – (36 – 12)\*(DR1-DR2)/36 = D – 2/3 (DR1- DR2)

2. Weighted Average Approach

a. Compute SZ = the reserve as of the current valuation date, following the economic scenario requirements outlined in VM-20, Appendix 1 of the *Valuation Manual* applicable for the valuation datefor all business in-force on the valuation date.

b. Separately, compute TZ = the reserve as of the current valuation date, following the economic scenario generator requirements outlined in VM-20, Appendix 1, of the 2025 *Valuation Manual* the same in-force policies used to compute SZ. All other requirements should be consistent with the *Valuation Manual* applicable for the valuation date*.*

c. The weighting factor used for the prior methodology may be no more than wt = *(20XX-YYYY)/(20XX-2025),*

Where YYYY *is the current valuation year,*

And 20XX *is the final year of the phase-in*

Reserve = TZ \* wt + SZ \* (1-wt)

Guidance Note: If a company uses a 3-year phase in (so full GOES reserves 12/31/2028), for the 12/31/2026 valuation, the value of the reserve is:

Reserve = TZ \* 2/3 + SZ \*1/3, where

wt = *(2028-2026)/(2028-2025) = 2/3*

**VM-20 Section 7.G.2.a**

2. Stochastic Economic Scenarios

a. For purposes of calculating the SR under Section 5, the company shall use:

i. Prescribed treasury interest rate scenarios, as described in Appendix 1; and

ii. Prescribed total investment return paths for general account equity assets and separate account fund performance scenarios, as described in Appendix 1.

## VM-20, Appendix 1: Additional Description of Economic Scenarios

The prescribed economic scenarios can be found on Conning’s website at <https://naic.conning.com/scenariofiles>.

1. Interest Rates

The interest rate model used to develop the prescribed interest rate scenarios is a 3-factor extension to the well-known Cox-Ingersoll-Ross modeling framework. In this model, the dynamics of yield curves are governed by three independent stochastic processes referred to as state variables. The values of these state variables change through time. Three factors, referred to as CIR1, CIR2, and CIR3, are chosen because interactions among the three factors allow for the modeling of the three predominant types of yield curve movement observed in real market data: parallel shifts, steepening and curvature (sometimes referred to as shift, twist and butterfly/smile). A dynamic generalized fractional floor is applied to the interest rate scenarios, to control the frequency and magnitude of negative interest rates.

Technical documentation on the interest rate model used to develop the prescribed interest rate scenarios is available on the NAIC website at <https://content.naic.org/sites/default/files/committee_related_documents/NAIC%2520Technical%2520Documentation%2520-%2520Interest%2520Rates%252C%2520DRAFT.pdf>.

The prescribed interest rate scenarios can be found on Conning’s website at <https://naic.conning.com/scenariofiles>.

1. Generating Equity Returns

The equity model used to develop the prescribed equity scenarios is based on the GEMS® Stochastic Volatility with Jumps model.

Technical documentation on the equity model is available on the NAIC website at <https://content.naic.org/sites/default/files/committee_related_documents/NAIC%2520Technical%2520Documentation%2520-%2520Equity%252C%2520DRAFT.pdf>.

The prescribed equity return scenarios can be found on Conning’s website at <https://naic.conning.com/scenariofiles>.

1. Generating Bond Fund Returns

The corporate model used to develop the prescribed bond fund return scenarios is a multi-factor model referred to as the Corporate Yield Model.

Technical documentation on the corporate model is available on the NAIC website at <https://content.naic.org/sites/default/files/committee_related_documents/NAIC%2520Technical%2520Documentation%2520-%2520Corporate%2520Bonds%2520%25281%2529.pdf>.

The prescribed bond fund return scenarios can be found on Conning’s website at <https://naic.conning.com/scenariofiles>.

1. Source of U.S. Treasury Interest Rates and Mean Reversion Benchmarks

Treasury interest rates can be found at the website: [*www.treas.gov/offices/domestic-finance/debt-*](http://www.treas.gov/offices/domestic-finance/debt-management/interest-rate/yield_historical_main.shtml)[*management/interest-rate/yield\_historical\_main.shtml*.](http://www.treas.gov/offices/domestic-finance/debt-management/interest-rate/yield_historical_main.shtml)

The initial mean reversion benchmarks ranges were developed based on a Percentiles Exponentially Weighted (PEW) approach with a 15-year half-life and a data period of 1953.05 to 2021.12. Future updates to these benchmarks would be part of the ongoing maintenance of the GOES and subject to the GOES Governance Framework. The final mean reversion benchmarks are determined through a holistic approach that considers all of the acceptance criteria. For more information on the PEW approach, see [insert link to PEW documentation]. For more information on the process for future updates to the benchmarks, see [link to governance documentation].

1. This section describes the set of 16 scenarios for the SERT in VM-20. Starting with the yield curve on the valuation date, the scenarios are created using the prescribed economic scenario generator and the interest rate shocks and equity price returns detailed below. All shocks to CIR 1 are zero for each of the 16 scenarios.

Scenario 1 – Pop up, high equity

Interest rate shocks to the CIR3 are selected to maintain the cumulative shock at the 90% level (1.282 standard errors). Similar shocks are applied to the CIR2, except that each period the CIR2 shocks are scaled down by a factor of SQRT(2)-1. Equity price returns are selected to maintain the cumulative equity total return at the 90% level.

Scenario 2 – Pop up, low equity

Interest rate shocks are selected as in Scenario 1. Equity price returns are selected to maintain the cumulative equity total return at the 10% level.

Scenario 3 – Pop down, high equity

Interest rate shocks to the CIR3 are selected to maintain the cumulative shock at the 10% level (1.282 standard errors). Similar shocks are applied to the CIR2, except that each period the CIR2 shocks are scaled down by a factor of SQRT(2)-1. Equity price returns are selected to maintain the cumulative equity total return at the 90% level.

Scenario 4 – Pop down, low equity

Interest rate shocks are selected as in Scenario 3. Equity price returns are selected to maintain the cumulative equity total return at the 10% level.

Scenario 5 – Up/down, high equity

Interest rate shocks, applied to CIR3 and CIR2 as described in Scenario 1 (“up”) and Scenario 3 (“down”), are selected that, for each five-year period, are consistently in the same direction. The cumulative shock for each five-year period is at the 90% level during “up” periods and at the 10% level during “down” periods.

Equity price returns are selected to maintain the cumulative equity total return at the 90% level.

Scenario 6 – Up/down, low equity

Interest rate shocks are selected as in Scenario 5.

Equity price returns are selected to maintain the cumulative equity total return at the 10% level.

Scenario 7 – Down/up, high equity

Interest rate shocks, applied to CIR3 and CIR2 as described in Scenario 1 (“up”) and Scenario 3 (“down”), are selected that, for each five-year period, are consistently in the same direction. The cumulative shock for each five-year period is at the 90% level during “up” periods and at the 10% level during “down” periods.

Equity price returns are selected to maintain the cumulative equity total return at the 90% level.

Scenario 8 – Down/up, low equity

Interest rate shocks are selected as in Scenario 7.

Equity price returns are selected to maintain the cumulative equity total return at the 10% level.

Scenario 9 – Baseline scenario

All shocks are zero.

Scenario 10 – Inverted yield curves

There are no shocks to long-term rates and equities.

There are shocks to the CIR 2 that are consistently in the same direction for each three-year period, with smaller, offsetting shocks to CIR 3 (1/3 of the level of CIR 2 shocks) to keep the 20-year spot rate unchanged. The shocks for the first three-year period are in the direction of reducing the spread (usually causing an inverted yield curve). Shocks for each subsequent three-year period alternate in direction.

Scenario 11 – Volatile equity returns

There are no shocks to interest rates. There are shocks to equity price returns that are consistently in the same direction for each two-year period and then switch directions.

Scenario 12 – Deterministic scenario for valuation

There are uniform downward shocks to equity price returns and interest rates, applied to CIR3 and CIR2 as described in Scenario 1 (“up”) and Scenario 3 (“down”) for interest rates, each month for 20 years, sufficient to get down to the one standard deviation point (84%) on the distribution of 20-year shocks. After 20 years, shocks are zero.

Scenario 13 – Delayed pop up, high equity

There are interest rate shocks, applied to CIR3 and CIR2 as described in Scenario 1 (“up”) that are zero for the first 10 years, followed by 10 years of shocks— each 1.414 (square root of 2) times those in the first 10 years of Scenario 1. This gives the same 20-year cumulative shock as scenario 1, but all the shock is concentrated in the second 10 years. After 20 years, the shock is the same as scenario 1.

Equity price returns are selected to maintain the cumulative equity total return at the 90% level.

Scenario 14 – Delayed pop up, low equity

There are interest rate shocks as in Scenario 14.

Equity price returns are selected to maintain the cumulative equity total return at the 10% level.

Scenario 15 – Delayed pop down, high equity

There are interest rate shocks, applied to CIR3 and CIR2 as described in Scenario 3 (“down”), that are zero for the first 10 years, followed by 10 years of shocks— each 1.414 (square root of 2) times those in the first 10 years of Scenario 3. This gives the same 20-year cumulative shock as scenario 3, but all the shock is concentrated in the second 10 years. After 20 years, the shock is the same as scenario 3.

Equity price returns are selected to maintain the cumulative equity total return at the 90% level.

Scenario 16 – Delayed pop down, low equity

There are interest rate shocks as in Scenario 15.

Equity price returns are selected to maintain the cumulative equity total return at the 10% level.

**VM-21 Section 2.C**

C. Economic Scenario Generator Phase-In

A company may elect to phase in the economic scenario requirements outlined in VM-20, Appendix 1, first applicable in the 2026 NAIC *Valuation Manual*, over a 36-month period beginning Jan. 1, 2026. A company may elect a longer phase-in period, up to seven years, with approval of the domiciliary commissioner. The election of whether to phase in and the period of phase-in must be made prior to the Dec. 31, 2026, valuation. At the company’s option, a phase-in may be terminated prior to the originally elected end of the phase-in period; the reserve would then be equal to the unadjusted reserve calculated according to the requirements of VM-21 applicable for valuation dates on or after Jan. 1, 2026.

The company elect to use one of the following approaches for the phase-in. The company may not switch approach after this determination has been made.

1. Amortization Approach

If there is a material decrease in the book of business by sale or reinsurance ceded, the company shall adjust the amount of the phase-in provision. The phase-in amount (C = R1 – R2, as described below) must be scaled down in proportion to the reduction in the excess reserve, measured on the effective transaction date as the reserve amount in excess of cash surrender value before and after the impact of the transaction. The company must obtain approval for any other modification of the remaining phase-in amount. The method to be used for the phase-in calculation is as follows:

a. Compute R1 = the reserve as of Jan. 1, 2026, following the economic scenario requirements outlined in VM-20, Appendix 1, applicable in the 2026 NAIC *Valuation Manual* for all business in-force on the valuation date. The in-force used should include any reinsurance that is expected to be recaptured during 2026.

b. Separately, compute R2 = the reserve as of Jan. 1, 2026, following the economic scenario generator requirements outlined in VM-20, Appendix 1, applicable in the 2025 NAIC *Valuation Manual* for the same in-force contracts used to compute R1.

c. Compute the reported reserve on the valuation date as follows:

Reserve = D – (B – A) \* C /B, where

• A is the number of months that have elapsed since Dec. 31, 2025. For example, for the March 31, 2026. valuation, A = 3.

• B = 36 unless the company has obtained approval for a longer phase-in, in which case B = number of months of approved phase-in.

• C = R1 – R2

• D is the reserve on the valuation date determined according to these requirements, prior to the phase-in adjustment.

Guidance Note: If a company uses a 3-year phase in, for the 12/31/2026 valuation, the value of the reserve is:

Reserve = D – (36 – 12)\*(R1-R2)/36 = D – 2/3 ( R1- R2)

2. Weighted Average Approach

a. Compute SZ = the reserve as of the current valuation date, following the economic scenario requirements outlined in VM-20, Appendix 1, of the *Valuation Manual* applicable for the valuation datefor all business in-force on the valuation date.

b. Separately, compute TZ = the reserve as of the current valuation date, following the economic scenario generator requirements outlined in VM-20, Appendix 1, of the 2025 *Valuation Manual* for the same in-force contracts used to compute SZ. All other requirements should be consistent with the *Valuation Manual* applicable for the valuation date*.*

c. The weighting factor used for the prior methodology may be no more than wt = *(20XX-YYYY)/(20XX-2025),*

Where YYYY *is the current valuation year,*

And 20XX *is the final year of the phase-in*

Reserve = TZ \* wt + SZ \* (1-wt)

Guidance Note: If a company uses a 3-year phase in (so full GOES reserves 12/31/2028), for the 12/31/2026 valuation, the value of the reserve is:

Reserve = TZ \* 2/3 + SZ \*1/3, where

wt = *(2028-2026)/(2028-2025) = 2/3*

**VM-21 Section 8.A.1**

* 1. This section outlines the requirements for the stochastic cash-flow models used to simulate interest rates, fund returns, and implied volatility to be used in the modeled projections. Specifically, it prescribes scenarios for interest rates, as well as investment returns for general account equity assets and separate account fund returns. A more complete documentation of the prescribed scenarios can be found in VM-20 Appendix 1. In addition, this section sets certain standards that must be satisfied by fund returns, implied volatility scenarios, and non-prescribed scenario generators. It also discusses general modeling considerations, such as the number of scenarios and projection frequency.

**VM-21, Section 8.B.1**

Treasury Department interest rate curves shall be determined on a stochastic basis using the prescribed interest rate scenarios, or scenarios based on a non-prescribed generator that meets the requirements described in Section 8.E.

**VM-21, Section 8.B.2**

The prescribed interest rate scenarios can be found on Conning’s website address, <https://naic.conning.com/scenariofiles>[.](http://www.soa.org/tables-calcs-tools/research-scenario/)

**VM-21, Section 8.C.2**

1. The prescribed economic scenarios for equity returns and bond funds can be found on Conning’s website address, <https://naic.conning.com/scenariofiles>.

# Appendix 2: SET Updates

**VM-20 Section 6.A.1.a.iii**

SET Certification Method – For any groups of policies within the scope of VM-20, the qualified actuary may document that a group of policies has passed the exclusion test through an approach other than the SET Certification Method within the past three years and that there have not been material changes in the interest rate risk or asset return volatility risk inherent in the liabilities and supporting assets. Alternatively, for groups of policies other than variable life or ULSG, in the first year and at least every third calendar year thereafter, the company provides a certification by a qualified actuary that the group of policies is not subject to material interest rate risk or asset return volatility risk (i.e., the risk on non-fixed-income investments having substantial volatility of returns, such as common stocks and real estate investments). The company shall provide the certification and documentation supporting the certification to the commissioner upon request.

**VM-20 Section 6.A.2.a.i**

1. In order to exclude a group of policies from the SR requirements using the method allowed under Section 6.A.1.a, a company shall demonstrate that the ratio of (b– a)/c is less than 6% where:

**VM-20 Section 6.A.2.b.i.a & 6.A.2.b.i.b**

* + - * 1. The DR defined in Section 4.A, but with the following differences:

Using the interest rates and equity return assumptions specific to each scenario.

Using NAER and discount rates defined in Section 7.H specific to each scenario to discount the cash flows.

* + - * 1. The gross premium reserve developed from the cash flows from the company’s asset adequacy analysis models, using the experience assumptions of the company’s cash-flow analysis, but with the following differences:

Using the interest rates and equity return assumptions specific to each scenario.

Using the methodology to determine NAER and discount rates defined in Section 7.H specific to each scenario to discount the cash flows, but using the company’s cash-flow testing assumptions for default costs and reinvestment earnings.

When using the cash-flow testing models, the company shall use the cash-flow testing model with explicit margins and/or sensitivities such that moderately adverse conditions are reflected for risks other than the economic scenarios.

**VM-20 Section 6.A.2.b.v (Delete entire section, no subsequent renumbering needed)**

**VM-20 Section 6.A.2.c**

1. If the ratio calculated in Section 6.A.2.a above is less than 6% pre-YRT reinsurance, but is greater than 6% post-YRT reinsurance, the group of policies will still pass the SERT if the company can demonstrate that the sensitivity of the adjusted DR to economic scenarios is comparable pre- and post-YRT reinsurance.
   * + 1. An example of an acceptable demonstration:
          1. For convenience in notation • SERT = the ratio (b–a)/c defined in

(a) above

1. The pre-YRT reinsurance results are “gross of YRT,” with a subscript “gy,” so denoted SERTgy
2. The post-YRT results are “net of YRT,” with subscript “ny,” so denoted SERTny
   * + - 1. If a block of business being tested is subject to one or more YRT reinsurance cessions as well as other forms of reinsurance, such as coinsurance, take “gross of YRT” to mean net of all non-YRT reinsurance but ignoring the YRT contract(s), and “net of YRT” to mean net of *all* reinsurance contracts. That is, treat YRT reinsurance as the last reinsurance in, and compute certain values below with and without that last component.
         2. So, if SERTgy ≤ 0.060 but SERTny > 0.060, then compute the largest percent increase in reserve (LPIR) = (b–a)/a, both “gross of YRT” and “net of YRT.”

LPIRgy = (bgy – agy)/agy LPIRny = (bny – any)/any

Note that the scenario underlying bgy could be different from the scenario underlying bny.

If SERTgy *×* LPIRny/LPIRgy < 0.060, then the block of policies passes the SERT.

**VM-31 Section 3.D.10.c**

* + 1. Stochastic Exclusion Ratio Test – For groups of policies for which the SERT is used, the following data on a post-reinsurance-ceded basis calculated in accordance with VM-20 Section 6.A.2 and on a pre-reinsurance-ceded basis calculated in accordance with VM-20 Section 8.D.2:
       1. The adjusted DR for each of the 16 scenarios.
       2. The values of a, b and c.
       3. The value of the test ratio (b – a)/c.
       4. A discussion of why the test results are or are not reasonable and expected, given the nature of the product and any product or supporting asset features that could result in material interest rate risk or asset return volatility.

# Appendix 3: Deterministic Reserve Updates

**VM-20 Section 7.G.1.c**

* + 1. The Scenario 12 interest rate yield curves and total investment returns are selected to provide a moderately adverse deterministic economic scenario. The prescribed economic scenarios are described in Appendix 1.

# Appendix 4: Scenario Subset Updates

**VM-20, Section 7.G.2.c**

c. Use of fewer scenarios rather than a higher number of scenarios is permissible as a model efficiency technique provided that the use of the technique is consistent with Section 2.G.

**VM-21 Section 4.C.1**

1. Number of Scenarios

The number of scenarios for which the scenario reserve shall be computed shall be the responsibility of the company, following Section 8.F.

**VM-21, Section 8.F**

1. Number of Scenarios

Use of fewer scenarios rather than a higher number of scenarios is permissible as a model efficiency technique provided that the use of the technique is consistent with Section 3.H.

**VM-31 Section 3.D.6.t**

t. Number of Scenarios – Number of scenarios used for the SR and, if fewer than 10,000 scenarios were used, support that the simplification meets the requirements of VM-21 Section 2.G. If the number of scenarios or the subset selection methodology has changed from the prior year-end valuation, discuss the reasons for the change.

**VM-31 Section 3.F.9.b**

b. Number of Scenarios – Number of scenarios used and, if fewer than 10,000 scenarios were used, support that the simplification meets the requirements of VM-20 Section 3.H. If the number of scenarios or the subset selection methodology has changed from the prior year-end valuation, discuss the reasons for the change.

# Appendix 5: Governance Documentation (New Section)

## VM-20, Appendix 1: Additional Description of Economic Scenarios (Add New Section G)

G. Governance

The NAIC’s Life Actuarial (A) Task Force and Life RBC (E) Working Group’s Generator of Economic Scenarios (GOES) Subgroup is charged with oversight of the GOES. The GOES Model Governance Framework and documentation related to the ongoing governance of the GOES is available on the NAIC website at <https://content.naic.org/sites/default/files/inline-files/Draft%20GOES%20Model%20Governance%20Framework%20092324_1.docx>.

# Appendix 6: C3 Phase II Capital Metric

**VM-31, Section 3.E.3**

Changes in Reserve Amounts – A description of any material changes in reserve amounts from the prior year and an explanation for the changes, including the results of any supporting analysis such as an attribution analysis or waterfall chart. A table shall be attached to the summary, listing the aggregate reserve amount, reserve component amounts, and key statistics for the business valued under VM-21, including but not limited to the SR, additional standard projection amount, alternative methodology reserve, account values, cash surrender value, and contract count. A template is provided below for reference.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Post-Reinsurance-Ceded | | Pre-Reinsurance-Ceded | |
|  | Current Year (YYYY) | Prior Year (YYYY-1) | Current Year (YYYY) | Prior Year (YYYY-1) |
| Total VM-21 Reserve |  |  |  |  |
|  |  |  |  |  |
| **Stochastic Reserve (SR)** |  |  |  |  |
| * SR Amount |  |  |  |  |
| * CTE 70 (best efforts) |  |  |  |  |
| * CTE 70 (adjusted) |  |  |  |  |
| * E Factor |  |  | N/A | N/A |
|  |  |  |  |  |
| **Standard Projections** |  |  |  |  |
| * Additional Standard Projection Amount |  |  |  |  |
| * Prescribed Projections Amount |  |  |  |  |
| * Unbuffered Additional Standard Projection Amount |  |  |  |  |
| * Unfloored CTE 70 (adjusted) |  |  |  |  |
| * Unfloored CTE 65 (adjusted) |  |  |  |  |
|  |  |  |  |  |
| **Alternative Methodology (AM)** |  |  |  |  |
| * AM Reserve |  |  |  |  |
| * AM Reserve (without floor) |  |  |  |  |
| * Cash Surrender Value Floor |  |  |  |  |
| * Reserve Floor under AG 33 Guideline No. XXXIII in VM-C |  |  |  |  |
|  |  |  |  |  |
| **Phase-In Components** |  |  |  |  |
| R1 |  |  | N/A | N/A |
| R2 |  |  | N/A | N/A |
| A |  |  | N/A | N/A |
| B |  |  | N/A | N/A |
| C |  |  | N/A | N/A |
| D |  |  |  |  |
|  |  |  |  |  |
| **Summary Statistics** |  |  |  |  |
| * Separate Account Value |  |  | N/A | N/A |
| * General Account Value |  |  | N/A | N/A |
| * Total Account Value |  |  | N/A | N/A |
| * Cash Surrender Value |  |  | N/A | N/A |
| * Contract Count |  |  | N/A | N/A |
|  |  |  |  |  |
| **RBC Amount** |  |  |  |  |
| * CTE level used for C-3 RBC in LR027 (pre-tax) |  |  | N/A | N/A |
| * CTE level used for C-3 RBC under LR027 (post-tax) |  |  | N/A | N/A |
| * Effect of Phase-In |  |  | N/A | N/A |
| * Effect of Smoothing |  |  | N/A | N/A |

**VM-31, Section 3.F.13.d.ii.3**

3. Repeat the impact analysis using the same method on the higher CTE level used in determining the C-3 RBC amount in LR027.

**VM-31, Section 3.F.13.d.iii.3**

3. Repeat the impact analysis using the same method on the higher CTE level used in determining the C-3 RBC amount in LR027.

**VM-31, Section 3.D.11.n**

n. Economic Scenario Generator Phase-In – If electing a phase-in period, as described in VM-20 Section 2.J, discussion of the phase-in calculation including:

1. Method to Determine Phase-in Reserve (Amortization Approach or Weighted Average Approach)

ii. Amortization Approach

(a). Regarding the determination of R2—i.e., the reserve as of Jan. 1, 2026, following the requirements of the economic scenario generator outlined in VM-20, Appendix 1, in the 2025 NAIC *Valuation Manual*—disclosure of all changes from the Dec. 31, 2025, reserve reported and documented in the 2025 PBR Actuarial Report (or AG 43 actuarial memorandum). Such changes should include changes in reinsurance agreements (e.g., recaptures) and other significant changes in in-force policies.

(b). Regarding the determination of R1—i.e., the reserve as of the valuation date following the requirements of the economic scenario generator outlined in VM-20, Appendix 1, on or after Jan. 1, 2026— disclosure of deviations from R2 in areas such as in-force contracts, scenario generation, or other aspects that should parallel the R2 calculation. Also include disclosure of deviations from the methods and factors used for 2026 reserve and documented in the 2026 VA Summary and VA Report for those areas that should parallel those used for the Dec. 31, 2026, reserves.

(c). Disclosure of any scaling factors applied to the phase-in amount due to material changes in the book of business, as well as any other modifications of the remaining phase-in amount.

iii. Weighted Average Approach

(a). Value of SZ (the reserve as of the current valuation date, following the economic scenario generator requirements outlined in VM-20, Appendix 1, applicable in the 2026 NAIC *Valuation Manual* for all business in-force on the valuation date)

(b). Value of TZ (the reserve as of the current valuation date, following the economic scenario generator requirements outlined in VM-20, Appendix 1, applicable in *the* 2025 NAIC *Valuation Manual* for the same in-force contracts used to compute SZ, with all other requirements consistent with the 2026 NAIC Valuation Manual.)

**VM-31, Section 3.F.13.g**

g. Economic Scenario Generator Phase-In – If electing a phase-in period, as described in VM-21 Section 2.C, discussion of the phase-in calculation including:

1. Method to Determine Phase-in Reserve (Amortization Approach or Weighted Average Approach)

ii. Amortization Approach

(a). Regarding the determination of R2—i.e., the reserve as of Jan. 1, 2026, following the requirements of the economic scenario generator outlined in VM-20, Appendix 1, in the 2025 NAIC *Valuation Manual*—disclosure of all changes from the Dec. 31, 2025, reserve reported and documented in the 2025 PBR Actuarial Report (or AG 43 actuarial memorandum). Such changes should include changes in reinsurance agreements (e.g., recaptures) and other significant changes in in-force policies.

(b). Regarding the determination of R1—i.e., the reserve as of the valuation date following the requirements of the economic scenario generator outlined in VM-20, Appendix 1, on or after Jan. 1, 2026— disclosure of deviations from R2 in areas such as in-force contracts, scenario generation, or other aspects that should parallel the R2 calculation. Also include disclosure of deviations from the methods and factors used for 2026 reserve and documented in the 2026 VA Summary and VA Report for those areas that should parallel those used for the Dec. 31, 2026, reserves.

(c). Disclosure of any scaling factors applied to the phase-in amount due to material changes in the book of business, as well as any other modifications of the remaining phase-in amount.

iii. Weighted Average Approach

(a). Value of SZ (the reserve as of the current valuation date, following the economic scenario generator requirements outlined in VM-20, Appendix 1, applicable in the 2026 NAIC *Valuation Manual* for all business in-force on the valuation date)

(b). Value of TZ (the reserve as of the current valuation date, following the economic scenario generator requirements outlined in VM-20, Appendix 1, applicable in *the* 2025 NAIC *Valuation Manual* for the same in-force contracts used to compute SZ, with all other requirements consistent with the 2026 NAIC Valuation Manual.)