MEETING MATERIALS PACKET

LIFE ACTUARIAL TASK FORCE

March 26 – March 27, 2015

NAIC SPRING NATIONAL MEETING

PHOENIX, AZ
Thursday, March 26

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Adoption of Conference Call Minutes

March 12, 2015
March 5, 2015
March 3, 2015
February 26, 2015
February 19, 2015
February 18, 2015
February 5, 2015
February 4, 2015
January 29, 2015
December 11, 2014
The Life Actuarial (A) Task Force met via conference call Mar. 12, 2015. The following Task Force members participated:

David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Jason Wade (OH); Dave Jones represented by Perry Kupferman; Jim L. Ridling represented by Steve Ostlund (AL); Anne Melissa Dowling represented by Mike Colburn (CT); Kevin M. McCarty represented by Lisa Parker (FL); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Ramge represented by Rhonda Ahrens (NE); Kenneth E. Kobylowski represented by Felix Schirripa (NJ); Benjamin M. Lawskey represented by William Carmello (NY); John D. Doak represented by Frank Stone (OK); and Todd E. Kiser represented by Tomasz Serbinowski (UT).

1. **Voted to Adopt the PBR Small Company Exemption Proposal**

Mr. Boerner reviewed the guidance the Principal-Based Reserving Implementation (EX) Task Force provided on the American Council of Life Insurers (ACLI) proposal for the exemption of small companies from the VM-20 exclusion tests. The guidance includes retaining the $300 million company/$600 million group thresholds and making exempted companies subject to the current CRVM requirements. He said that it is important that the Task Force adopts the proposal on the call to help the states that are currently considering Standard Valuation Law (#820) legislation. He said that it is preferable to have the small company exemption in the Valuation Manual as opposed to states writing it into their laws. He noted that, although no comments regarding the Risk-Based capital requirement in the proposal were received, any concerns on the issue can be addressed before or during the three-year transition period allowed in the Valuation Manual.

A motion was made by Mr. Stone, and seconded by Mr. Yanacheak, to adopt the small company exemption proposal (Attachment A) exposed for public comment through Mar. 11, 2015, using the language in the first alternative, excluding the requirement to file the statement of exemption with the second quarter NAIC filing and excluding the drafting note regarding a request to the Blanks (E) Working Group for future blanks changes. John Bruins (ACLI) said the motion is consistent with the ACLI comment letter (Attachment B). Scott Harrison (Affordable Life Insurance Alliance-ALIA) said a pilot program could be initiated to help determine the time state regulators might need to review the statements of exemption filed by companies. He said the ALIA supports the motion. The motion passed, with Mr. Carmello dissenting.

2. **Voted to Adopt the Synthetic GIC Proposal**

Tina Kennedy (American Academy of Actuaries - Academy) reviewed the Academy proposal (Attachment C) to modify the Synthetic Guaranteed Investment Contracts Model Regulation (#695). She said the modifications incorporate 1) a change to the discount rate methodology that is responsive to all economic environments, 2) the strengthening of pooled fund contracts, 3) additional requirements in the Actuarial Memorandum and 4) increased transparency in the Plan of Operation.

Mr. Bruins said the ACLI comment letter (Attachment D) supports the proposed amendments. He said that the change in the discount rate more closely reflects market rates for investments currently being made by companies.

Ms. Kennedy responded to the questions (Attachment E) submitted by regulators. She said the proposal results in a higher discount rate, reflects market conditions consistent with the segregated portfolio and results in a lower expected reserve. She said that the most significant impact of the change in the discount rate methodology is observed during periods of high credit spread environments. The supplement to the proposal (Attachment F) shows the impact of changes in the discount rate on reserves under various scenarios.

A motion was made by Mr. Schirripa, and seconded by Mr. Stone, to adopt the proposal. The motion passed, with Mr. Carmello dissenting.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call March 5, 2015. The following Task Force members participated: David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Jason Wade (OH); Jim L. Ridling represented by Steve Ostlund (AL); Anne Melissa Dowling represented by Mike Colburn (CT); Kevin M. McCarty represented by Kerry Krantz (FL); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Ramege represented by Rhonda Ahrens (NE); Kenneth E. Kobylowski represented by Felix Schirripa (NJ); Benjamin M. Lawsky represented by William Carmello (NY); John D. Doak represented by Frank Stone (OK); and Todd E. Kiser represented by Tomasz Serbinowski (UT).

1. Discussed the PBR Small Company Exemption Proposal

Mr. Boerner said that on its Feb. 11 call, the Principal-Based Reserving Implementation (EX) Task Force provided guidance on the American Council of Life Insurers (ACLI) proposal for the exemption of small companies from the VM-20 exclusion tests. He said the guidance includes the retention of the $300 million company/$600 million group thresholds and makes exempted companies subject to the current Commissioners Reserve Valuation Method (CRVM) requirements. He said the edits (Attachment A) provided by the ACLI are designed to align the original proposal with the guidance provided by the Principal-Based Reserving Implementation (EX) Task Force. Those edits were exposed for public comment ending Feb. 4. Comments (Attachment B) suggesting several non-substantive edits were submitted by the Washington State Office of the Insurance Commissioner. The Life Actuarial (A) Task Force proposed two alternatives (Attachment C) to the ACLI exposure. Both alternatives use language from the VM-00, which points to current reserve requirements in Section VM-A and Section VM-C. The alternatives differ in that the first alternative puts the onus on the Commissioner to reject the company request for exemption by Sept. 1. If the Commissioner does not reject the request by that date, the request is deemed to be approved. The second alternative puts the onus on the company to push for action on the request before Sept. 1; otherwise, the company must follow the reserve requirements of VM-20.

John Bruins (ACLI) said the ACLI edits had identified the mortality and interest separately because there is no apparent mechanism in the Valuation Manual for updating new tables. Mr. Boerner said that just as current requirements have always been updated with new tables, the requirements in the Valuation Manual will also be updated. He said that as the time for adoption of the 2017 Commissioners Standard Ordinary (CSO) table draws near, the Life Actuarial (A) Task Force can begin drafting an amendment proposal that will ensure that the applicable requirements for the Valuation Manual, regarding the VM-A and VM-C requirements, will be updated with the 2017 CSO mortality, as will Section 3 of the Valuation Manual.

Mr. Carmello asked why the exemption language is in a section called “Stochastic and Deterministic Exclusion Tests,” when the exemption allows a company to be exempted entirely from VM-20. Mr. Bruins explained that the intent of the original amendment was not to exempt companies from VM-20 but to allow them to use the VM-20 formulaic reserves. Given that intent, the section on exclusion tests seemed the appropriate place to put the language. He said that when the Principal-based Reserving Implementation (EX) Task Force provided the new guidance, it was expeditious to make the language change in the same place as the language resided in the original amendment. He said that while the language could be moved to VM-00, leaving it in “Stochastic and Deterministic Exclusion Tests” accomplishes the intent of the new guidance. Mr. Boerner said that given that things can change, he suggests leaving it where it is.

Mr. Colburn recommended changing the word “which” in the first bullet under the definition of nonmaterial secondary guarantee to the phrase “and that secondary guarantee.” Mr. Krantz recommended adding the following sentence to each of the alternatives: “The statement of exemption must also be included with the NAIC filing for the second quarter of that year.” Mr. Ostlund made a motion, seconded by Mr. Serbinowski, to expose the small company exemption proposal with both alternatives and the changes recommended by the Washington state office of the Commissioner, Mr. Colburn and Mr. Krantz. The motion passed, with Mr. Carmello dissenting.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Mar. 3, 2015, in regulator-to-regulator session pursuant to open meetings policy #6: Consultations with NAIC staff members related to NAIC technical guidance, including, but not limited to, Annual and Quarterly Statement Blanks and Instructions, the Accounting Practices and Procedures Manual, and similar materials of the NAIC Policy Statement on Open Meetings. The following Task Force members participated: David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Dave Jones represented by Perry Kupferman (CA); Kevin M. McCarty represented by Eric Johnson and Kerry Krantz (FL); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Ramge represented by Rhonda Ahrens (NE); Benjamin M. Lawsky represented by William Carmello (NY); and Todd E. Kiser represented by Tomasz Serbinowski (UT).

1. Previewed Materials for the Mar. 5 Task Force Call

The Task Force discussed the proposed the small company exemption, and the procedural process for its NAIC adoption, in preparation for its meeting scheduled for Mar. 5.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Feb. 26, 2015. The following Task Force members participated: David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Jason Wade (OH); Dave Jones represented by Perry Kupferman (CA); Anne Melissa Dowling represented by Andrew J. Rarus (CT); Kevin M. McCarty represented by Kerry Krantz (FL); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Range represented by Rhonda Ahrens (NE); Benjamin M. Lawsky represented by William Carmello (NY); and Todd E. Kiser represented by Tomasz Serbinowski (UT).

1. **Reappointed the C-3 Phase II/AG 43 (E/A) Subgroup**

   Mr. Andersen made a motion, seconded by Mr. Yanacheak, to reappoint the C-3 Phase II/AG 43 (E/A) Subgroup. The motion passed unanimously.

2. **Discussed the Academy AG 33 Non-Elective Benefits Proposal**

   Mr. Boerner reviewed the American Academy of Actuaries (Academy) proposal (Attachment A) discussed on the June 26, 2014, Task Force call. John Bruins (American Council of Life Insurers—ACLI) said the edits in the second paragraph of the Definition section were intended to more definitively state that the contract owner may have the financial incentive not to exercise the benefit. The original document, to which the ACLI edits were applied, was exposed for public comment on the May 15, 2014, Task Force call. To date, the edited document from the June 26 call has not been exposed for public comment.

   Mr. Boerner said that the July 25, 2014, Academy letter (Attachment B) was in response to a Task Force request for the Academy to work with regulators to create a version of Actuarial Guideline XXXIII, *Determining CARVM Reserves for Annuity Contracts With Elective Benefits* (AG 33), to reflect the discussion from the June 26 call. He said the letter was discussed by the Task Force on its Oct. 9, 2014, call. He pointed out that the Academy letter reflects breaking non-elective benefits into two categories: 1) those that are mortality-based; and 2) those that are non-mortality-based. Alice Fontaine (Academy) said that in calculating the value of the non-mortality-based benefit, a two-stage approach is applied, with the incidence rates being utilized in the first stage. Once an individual qualifies, the greatest present value of every potential stream is calculated. That is the value that is applied, in conjunction with the incidence rates, for those benefits.

   Mr. Bruins reviewed the ACLI comment (Attachment C) on the July 25 Academy letter.

   Mr. Krantz made a motion, seconded by Mr. Rarus, to expose the Academy proposal reviewed on the June 26 Task Force call for a seven day public comment period. The motion passed, with Mr. Carmello dissenting.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Feb. 19, 2015. The following Task Force members participated: David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Dave Jones represented by Perry Kupferman (CA); Anne Melissa Dowling represented by Andrew J. Rarus (CT); Kevin M. McCarty represented by Kerry Krantz (FL); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Ramge represented by Rhonda Ahrens (NE); Kenneth E. Kobylowski represented by Felix Schirripa (NJ); Benjamin M. Lawsky represented by William Carmello (NY); and Todd E. Kiser represented by Tomasz Serbinowski (UT).

1. **Voted to Reappoint Its Subgroups**

Mr. Krantz made a motion, seconded by Mr. Yanacheak, to reappoint the Aggregate Margin (A) Subgroup, the Contingent Deferred Annuity (A) Subgroup, the Experience Reporting (A) Subgroup, the Index-Linked Variable Annuity (A) Subgroup and the VM-22(A) Subgroup (Attachment A). The motion passed unanimously. Action on the C-3 Phase II/AG 43 (E/A) Subgroup was deferred.

2. **Voted to Expose IUL Illustration AG Proposal**

Mr. Andersen reviewed the proposed actuarial guideline (AG) (Attachment B) for indexed universal life (IUL) illustrations. He said his goals for developing the guideline were to: 1) add complexity only where necessary; 2) be consistent with the Life Insurance Illustrations Model Regulation (#582); 3) have understandable illustrations that foster education of the consumer without misleading; and 4) avoid clamping down on IUL illustrations to a greater extent than has been applied to other product illustrations.

Mr. Andersen said the effective date was anticipated to be July 1, but it was moved to Sept. 1 based on feedback that more time was needed. He noted that to be within the scope of the guideline, a policy must be subject to Model #582, and the illustrated credited rate for some portion of the policy account must be tied to an external index or indices. He said that the guideline uses the term “alternate scale” to replace the term “midpoint scale” because the midpoint scale was not exactly midway between the guaranteed and the maximum rate.

John Bruins (American Council of Life Insurers—ACLI) asked if an example of how each aspect of the new guideline will work can be provided. He also asked if the guideline would be applicable to inforce illustrations. Mr. Andersen agreed to provide a working example of the guideline. He said the guideline was intended to be applicable to inforce illustrations, but he is willing to have further discussions on that point. Mr. Bruins asked if there is any room for negotiation on the Sept. 1 effective date. Other industry members commented that the efforts to revise illustrations, train their sales forces and consider new product designs are considerable. They recommended a Jan. 1, 2016, effective date. Mr. Boerner suggested that further consideration of moving the effective date be postponed until the guideline is closer to finalization.

Mr. Andersen noted that he had received a request for the removal of the word “illustrated” from bullet 2(i) in the Text section. He recommended removing the word to prevent what might be a potential loophole. He said a decision may have to be made as to whether a clearer definition of crediting rate is necessary. Mr. Bruins said that there are companies that have a base chassis product with options that can be added through riders that may or may not include an index account. He asked if the illustration guideline would be applicable only to those riders that use an index account. Mr. Andersen said that question will be given consideration.

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The Life Actuarial (A) Task Force met via conference call Feb. 18, 2015. The meeting was held in regulator-to-regulator session pursuant to paragraph 3 (specific companies, entities or individuals) of the NAIC Policy Statement on Open Meetings. The following Task Force members participated: David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Dave Jones represented by Perry Kupferman (CA); Anne Melissa Dowling represented by Andrew J. Rarus (CT); Kevin M. McCarty represented by Eric Johnson and Kerry Krantz (FL); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Ramge represented by Rhonda Ahrens (NE); Kenneth E. Kobylowski represented by Felix Schirripa (NJ); Benjamin M. Lawsky represented by William Carmello (NY); and Todd E. Kiser represented by Tomasz Serbinowski (UT).

1. **Previewed Materials for its Feb. 19 Conference Call**

   The Task Force discussed the proposed actuarial guideline (AG) for indexed universal life (IUL) illustrations developed by the informal regulator group in preparation for its meeting scheduled for Feb. 19.

   Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Feb. 5, 2015. The following Task Force members participated: David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Anne Melissa Dowling represented by Andrew J. Rarus (OK); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Ramge represented by Rhonda Ahrens (NE); Kenneth E. Kobylowski represented by Felix Schirripa (NJ); Benjamin M. Lawsky represented by William Carmello (NY); John D. Doak represented by Frank Stone (OK); and Todd E. Kiser represented by Tomasz Serbinowski.

1. Discussed IUL Illustration Actuarial Guideline Proposals

Mr. Andersen said a group of regulators and NAIC staff have worked to develop a proposal for an indexed universal life (IUL) actuarial guideline that is a compromise between the proposals submitted by three groups: 1) the Coalition Group (Attachment A); 2) the IUL Technical Group (Attachment B); and 3) the IUL Writers Group (Attachment C). He said the starting point for the compromise was the seven guiding principles (Attachment D) developed by the regulator group and endorsed by a majority of the Task Force. (His summary of the key differences between the three proposals is included as Attachment E). Recommendations from companies outside of the three industry groups include a hard cap on the illustrated returns and rules to discourage companies from seeking a competitive advantage by subsidizing higher rate caps.

Joe Kordovi (Pacific Life) highlighted that the Technical Group proposal recommended that changes to guidelines impacting leveraged loans also be equally applied to leveraged loans for other products so that IUL policies are not at a competitive disadvantage. Mr. Andersen said the group will consider whether there is sufficient time in this phase of the project to address products other than IUL.

Mr. Andersen asked for comments on the extent to which the low interest rate environment is reflected in IUL maximum illustrated rates. Anthony Ferraro (New York Life) said a methodology consistent with a standard index account will effectively capture the interest rate environment and will alleviate the need for an interest rate cap. Mr. Boerner asked Mr. Ferraro whether having a standard index account would make the regulatory guardrails in the Coalition Group proposal necessary. Mr. Ferraro said Mr. Boerner was correct. He said the Coalition Group added the guardrails only to comply with the criteria laid out by Mr. Andersen. He said the primary need for a cap on illustrated rates is to address designer indices that are not reflective of the current interest rate environment. Using a standard index account eliminates the risk inherent in the designer indices. Bob Ehren (Securian Financial Group) voiced his support for opening the *Life Insurance Illustrations Model Regulation* (#582) and reiterated that IUL products should not be placed at a competitive disadvantage. Mr. Kordovi said two components impact the cap and other nonguaranteed elements of IUL, interest rates and the cost of hedging. He said the illustration actuary must confirm that these are supportable elements.

Mr. Andersen asked if regulators should be concerned about the probabilities of the caps and expected returns being impacted by the low interest rate environment. Mr. Ehren said that issue should be addressed if and when Model #582 is opened for revision. Bobby Samuelson (MetLife) pointed out that dividend rates on whole life contracts are not the same as crediting rates on universal life contracts. He noted that a 7.1% rate on an IUL policy will illustrate more attractively than a 7.1% dividend yield on a whole life policy.

Mr. Kordovi provided a brief explanation of the treatment of loan leveraging within the basic policy illustration. He said that loan leveraging is when the policyholder borrows from the policy, but the assets backing the loan continue to be a part of the account participating in the underlying investments for the policy. There is a risk that the rate credited to the account will be different from the rate charged for the loan. He said concerns exist when companies illustrate multiple years where the credited rate is higher than the loan rate and does not reflect the volatility of the interest rate environment. He said the Technical Group recommends having a supplemental illustration page for leveraged loans and adding disclosures to show how leveraged loans work. He noted that current regulations prohibit a supplemental illustration page that shows a scenario that is better than the scenario shown on the basic ledger.

Mr. Serbinowski asked if anyone has considered how the disclosures would be worded. Mr. Kordovi said the disclosure for the basic illustration would show the standard type of loan, the loan and crediting rates for which are easily explained. The supplemental page would explain that while the policyholder has taken a loan, the assets are still invested in an index and can, therefore, earn a variety of returns that could range from zero up to the cap. It would separately illustrate values assuming positive leverage and negative leverage.
Mr. Andersen noted that the next to last sentence in Section 4C should be changed by removing “calibration point” and replacing it with “risk and return.” Mr. Leung said clarification is needed on how to translate the disciplined current scale into a credited rate. Mr. Bruins said section 5A should clarify if the reader is being asked to take a percentage of the account value or some other value. He also said that section 5A and section 5B should be changed to say: “the portion of the general account …..” Tom DeRoska (Global Atlantic) recommended deleting the phrase “and the hedging program is based on market pricing consistent with options purchased from third-parties.”

Mr. Andersen asked that comments be separated into two categories: 1) those related to the concept; and 2) those that are corrections to the guideline.

Mr. Andersen made a motion, seconded by Mr. Ostlund, to expose the guideline, including the changes accepted on the call and a pending change to section 3A, for a public comment period ending March 11. The motion passed, with New York dissenting.

Subsequent to the call, Mr. Andersen revised section 3A, as directed by the Task Force, by inserting the phrase “If the illustration includes a loan, the illustrated rate credited to the loan balance does not exceed the illustrated loan charge” as bullet (ii) and renumbering the remaining bullet.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Feb. 4, 2015, in regulator-to-regulator session pursuant to paragraph 3 (Discussion of specific companies, entities or individuals, including, but not limited to, collaborative financial and market conduct examinations and analysis) of the NAIC Policy Statement on Open Meetings. The following Task Force members participated: David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Oslund (AL); Dave Jones represented by Perry Kupferman (CA); Anne Melissa Dowling represented by Andrew J. Rarus (CT); Kevin M. McCarty represented by Eric Johnson and Kerry Krantz (FL); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Ramge represented by Rhonda Ahrens (NE); Kenneth E. Kobylowski represented by Felix Schirripa (NJ); Benjamin M. Lawsky represented by William Carmello and Michael Cebulla (NY); and John D. Doak represented by Frank Stone (OK).

1. Previewed Materials for the Feb. 5 Task Force Call

The Task Force discussed the specifics of proposals for indexed universal life (IUL) illustration guidelines provided by the coalition of companies and other company groups in preparation for its meeting scheduled for Feb. 5.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Jan. 29, 2015. The following Task Force members participated: David Mattax, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Pete Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Dave Jones represented by Perry Kupferman (CA); Anne Melissa Dowling represented by Andrew Rarus (CT); Kevin M. McCarty represented by Kerry Krantz (FL); Nick Gerhart represented by Mike Yanacheak (IA); Mike Rothman represented by Fred Andersen (MN); Bruce R. Range represented by Rhonda Ahrens (NE); Kenneth E. Koby lowski represented by Felix Schirripa (NJ); Benjamin M. Lawsky represented by William Carmello (NY); and John D. Doak represented by Frank Stone (OK).

1. **Voted to Expose the Dec. 31, 2014, VM-20 Spread Tables**

Larry Bruning (NAIC) reviewed the Dec. 31, 2014, VM-20 Spread Tables (Attachment A). He noted that the yields for current U.S. Treasury notes with durations of three years or less increased slightly as compared to their levels in the previous quarter. The yields for Treasury notes with durations of four years or greater declined by an average of 40 basis points. On average, the spread for investment-grade long-term bonds over treasuries decreased by less than one basis point from their levels in the previous quarter. For below investment-grade bonds, the long-term spread over Treasuries declined by an average of three basis points. Mr. Bruning also reviewed results for current spreads and swap spreads. He said the documentation describing the overall process is currently being reviewed and should be available prior to close of the exposure period. Mr. Ostlund made a motion, seconded by Mr. Weber, to expose the Dec. 31, 2014 VM-20 spread tables for a 14-day public comment period ending Feb. 12. The motion passed unanimously.

2. **Adopted its 2014 Fall National Meeting Minutes**

Mr. Yanacheak made a motion, seconded by Mr. Rarus, to adopt the Task Force’s 2014 Fall National Meeting minutes (See NAIC Proceedings – Fall 2014, Life Actuarial (A) Task Force Nov. 14–15, minutes). The motion passed unanimously.

3. **Discussed the SOA’s Survey for the 2016 GRET**

Leon Langlitz (Society of Actuaries—SOA Committee on Life Insurance Company Expenses—CLICE) reviewed the results of the 2015 Generally Recognized Expense Tables (GRET). He said the number of distribution channels was reduced from eight to five to address concerns that some channels were not sufficiently populated. The five channels include an “other” category. Sam Gutterman (CLICE) said the annual company distribution channel survey is expected to be distributed at the end of March. Mr. Ostlund asked if there is a legitimate reason for having the “other” category. Mr. Langlitz responded that while some companies that do not provide a response are assigned to the “other” category, there are a few companies that legitimately choose the “other” category as the appropriate description for their business distribution channel. Mr. Boerner asked Task Force members to consider submitting any questions or suggestions they might have. He said a follow-up call will be arranged to further the discussion on the 2016 GRET survey.

4. **Discussed the Unofficial Version of the Valuation Manual**

Reggie Mazyck (NAIC) discussed the unofficial version of the Valuation Manual (Attachment B) that will be on the Task Force webpage. He said that in addition to the non-substantive changes that have been incorporated into the official adopted version of the Valuation Manual, the unofficial version will include amendments that have been adopted by the Task Force but not by the Life Insurance and Annuities (A) Committee. A table listing those amendments is on page 4 of the unofficial version. Additionally, an appendix will be added that will include the amendment proposal forms as adopted by the Task Force. Mr. Ostlund asked how the health insurance-related changes adopted by the Health Actuarial (B) Task Force apart from the Valuation Manual process should be addressed. Mr. Boerner said an amendment proposal form should be submitted to initiate the necessary changes. He said that further consideration will be given to a process for adding actuarial guidelines and changes required to maintain alignment with the Accounting Practices and Procedures Manual to the Valuation Manual. John Bruins (American Council of Life Insurers—ACLI) said it is necessary that the Mortality Credibility amendment be adopted by July 1. Mr. Boerner agreed and said the issue will be discussed further on a future call.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Dec. 11, 2014. The following Task Force members participated: Julia Rathgeber, Chair, represented by Mike Boerner (TX); Mary Taylor, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Dave Jones represented by Perry Kupferman (CA); Thomas B. Leonardi represented by Andrew J. Rarus (CT); Kevin M. McCarty represented by Kerry Krantz (FL); Bruce R. Ramge represented by John Rink (NE); Benjamin M. Lawsky represented by William Carmello (NY); Raymond G. Farmer represented by Andrew Dvorine (SC); and Todd E. Kiser represented by Tomasz Serbinowski (UT).

1. **Adopted the Sept. 30, 2014, VM-20 Spread Tables**

John Bruins (American Council of Life Insurers—ACLI) shared the ACLI’s comments (Attachment A). Mr. Bruins said that, because principle-based reserving is not yet effective, the VM-20, Requirements for Principle-Based Reserves for Life Products, spread tables currently apply only to *Actuarial Guideline XXXVIII—The Application of the Valuation of Life Insurance Policies Model Regulation* (AG 38) testing. He said that to allow companies to set up their modeling in advance, AG 38 specifies that the *Valuation Manual* effective on the previous July 1 be used for year-end testing. He said the changes to the table are not significant; therefore, the ACLI is not against adoption of the new tables. He said that, if adopted, the Sept. 30, 2014, VM-20 spread tables should be considered optional for year-end 2014.

Mr. Bruins said that, moving forward, the timing of the spread adoption process should consider companies’ need for capital planning. He also noted that the documentation should be updated to provide specifics on the additional data source used to calculate the Sept. 30 spread tables. Mr. Boerner said further discussion of the timing for calculation of future spread tables is necessary. The Task Force agreed to not make the Sept. 30 spread tables optional. Larry Bruning (NAIC) said that, assuming a 10-day comment period, he expects future spread tables to be available within 17 days after the close of the quarter. Mr. Weber suggested that the Task Force could revisit the VM-00 governance process for updating the *Valuation Manual*. He said that if the process for, and documentation of, spread tables updates are well-defined, the comment period could possibly be eliminated.

Mr. Carmello said the comments (Attachment B) from the New York Department of Financial Services are related to the use of a moving average rate for current assets and reinvestments in a low spread environment, which leads to an assumption of higher future spreads. He said making such an assumption is contrary to conservative statutory accounting principles. He noted that the issue is a long-term concern. Gary Falde (Pacific Life) said that whether low spreads are considered conservative depends upon whether a company is buying or selling assets. He also noted that the approach suggested by the New York Department of Financial Services will introduce more volatility. Mr. Boerner said a call will be scheduled to specifically discuss this issue.

Mr. Weber made a motion, seconded by Mr. Krantz, to adopt the Sept. 30, 2014, VM-20 spread tables, without making them optional. The motion passed unanimously.

Having no further business, the Life Actuarial (A) Task Force adjourned.
Mortality Updates – 2014 VBT, 2017 CSO & Margins, PBR Margins

Provided Separately
Update on 2014 VBT and 2014 CSO Testing

No Materials
Valuation Manual Amendment Proposals

Cover letter and redline of VM-31

APF – Commercial Mortgage Defaults revised
March 17, 2015

Mr. Mike Boerner
Chairman – NAIC Life Actuarial Task Force

Re Review of VM-31

Dear Mike:

The ACLI¹ is pleased to submit the following comments regarding VM-31 on behalf of our member companies. We have reviewed VM-31 for clarity and consistency with other sections of the Valuation Manual. In addition, we have analyzed whether the current VM-31 provisions will facilitate both efficient production by companies and effective review by regulators.

We have developed a list of possible improvements for consideration by the Task Force. We present the attached appendix which contains a redline version of VM-31, with a comment explaining each proposed change. Some highlights are as follows:

1. **Elimination of certain calculation requirements**

   Existing VM-31 requires a “summary of the impact of aggregation on the stochastic reserve.” In practice, this requires periodic calculation of stochastic reserves on a product-by-product basis, and the impact of aggregation is the difference between the sum of the product-by-product reserves and the aggregated “whole.”

   Although this calculation is required only periodically, we are nevertheless persuaded that the burdens of this requirement outweigh the regulatory benefits. Because stochastic reserves are calculated on a CTE 70 basis, CTE measures for each product type will capture subsets of scenarios that vary by product. However, in order to ascribe meaning to the sum of the product-by-product reserves, it is necessary to believe that different economic environments simultaneously impact

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¹ The American Council of Life Insurers (ACLI) is a Washington, D.C.-based trade association with 284 member companies operating in the United States and abroad. ACLI advocates in federal, state, and international forums for public policy that supports the industry marketplace and the 75 million American families that rely on life insurers’ products for financial and retirement security. ACLI members offer life insurance, annuities, retirement plans, long-term care and disability income insurance, and reinsurance, representing more than 90 percent of industry assets and premiums. Learn more at www.acli.com.
different product types. We are therefore unable to determine what meaningful conclusion might be
drawn by the sum of the product-by-product stochastic reserves and propose that the requirement to
calculate such reserves be eliminated.

Specific comments relevant to this theme are #50 and 51.

2. **Reduction of certain data reporting requirements**

For purposes of determining reported reserves on both a gross and net basis, VM-20 requires an
aggregated comparison of net premium, deterministic, and / or stochastic reserves. Following that
comparison, any excess of the deterministic or stochastic reserve over the net premium reserve is
allocated to individual policies in proportion to the net premium reserve. VM-31, however, requires
reporting of both gross and net reserves on a product-by-product basis.

While we can support product-by-product reporting of net reserves, we propose elimination of such
product-by-product reporting of gross reserves (along with separate reporting of assumed and direct
gross reserves). Since the reported amounts are based on allocations using the net premium reserve,
any resulting chart would show values proportional to the net premium reserve. It is not clear to us
that reporting of these gross reserves on a product-by-product basis will produce significant
regulatory value.

More generally, we recommend coordination of the various tables required in VM-31 and those to be
required in public annual statements so as to minimize redundancy and confusion.

Specific comments relevant to this theme are #3, 9, 10, 11, 12, 17, 18, 22, and 23.

3. **Re-ordering of sections**

We suggest moving certain subparagraphs in VM-31 to other sections in order to improve the flow of
the document. For example, one suggestion is to expand the asset assumptions section to cover both
asset modeling and assumptions so that the reader does not have to jump between sections when
reviewing the items related to assets. We think these changes will make the documentation easier for
companies to compile and for regulators to review.

Specific comments relevant to this theme are #1, 26, 27, 38, 39, 41, 45, 54, 55, 56, 57, and 58.

4. **Improved clarity and alignment with other parts of the Valuation Manual**

A number of proposed changes are intended to improve clarity and alignment with VM-20. While we
do not believe that any of these clarifications represents a fundamental change to the intent of the
existing provisions, it may be necessary to formally consider them for adoption.

These items are #8, 13, 14, 15, 19, 20, 21, 24, 25, 28, 29, 30, 31, 32, 33, 34, 35, 41, 42, 43, 44, 46, 47,
48, 49, 52, and 53.
5. **Non-substantive corrections**

Finally, several of our proposed changes appear to be non-substantive corrections. These items are #2, 4, 5, 6, 7, 16, 36, and 37.

ACLI looks forward to discussing our comments with you and to work with you to produce meaningful documentation of the PBR reserve development.

cc Reggie Mazyck, NAIC
Appendix -- VM-31 redline

VM-31 PBR REPORT REQUIREMENTS FOR BUSINESS SUBJECT TO A PRINCIPLE-BASED RESERVE VALUATION

Table of Contents

Section 1. Purpose
Section 2. General Requirements
Section 3. PBR Actuarial Report Requirements
   A. Definition of PBR for life insurance policies or contracts
   B. Table of Contents
   C. Overview
   D. Separate Filing of Overview
   E. PBR Actuarial Report Requirements for Individual Life Insurance Policies or Contracts
      1. Summary of Results
      2. Assumptions and Margins
      3. Cash Flow Model
         • Policy Loans
         • Grouping GA Equity Investments
         • Grouping SA Funds and Subaccounts
         • Description of Modeled Asset Investment Strategy
         • Modeled Strategy not less than 50/50 Strategy
         • Number of Stochastic Scenarios
         • Documentation of Scenario Reduction Technique
      4. Mortality Assumptions
      5. Policyholder Behavior Assumptions
         • Competitor rate definition and usage
      6. Expense Assumptions
      7. Asset Assumptions
         • Policy Loans
         • Grouping GA Equity Investments
         • Grouping SA Funds and Subaccounts
         • Description of Modeled Asset Investment Strategy
         • Modeled Strategy not less than 50/50 Strategy
         • Number of Stochastic Scenarios
         • Documentation of Scenario Reduction Technique
         • Description of Method to Translate Stochastic Economic Paths into Fund Performance.
      8. Revenue Sharing Assumptions
      9. Reinsurance Assumptions
   10. Non-Guaranteed Element Assumptions
       • Description of interest crediting strategy
   11. Deterministic and Stochastic Reserve Exclusion Tests
   12. Other Disclosure Information
       • Description of Method to Translate Stochastic Economic Paths into Fund Performance.
       • Competitor rate definition and usage
       • Description of interest crediting strategy
   13. Investment Certifications
   14. Senior Management Certification

1
Appendix -- VM-31 redline

F. PBR Actuarial Report Requirements for Variable Annuity Contracts

Section 1. Purpose

These requirements establish the minimum reporting requirements for policies or contracts subject to principle-based reserve valuation under the Standard Valuation Law.

Section 2. General Requirements

A. Each year a company shall prepare, under the direction of one or more qualified actuaries, a principle-based reserve actuarial report (PBR Actuarial Report) if any policy or contract is subject to a principle-based reserve valuation under the Standard Valuation Law. The PBR Actuarial Report must include documentation and disclosure sufficient for another actuary qualified in the same practice area to evaluate the work.

B. The PBR Actuarial Report must include descriptions of all material decisions made and information used by the company in complying with the minimum reserve requirements and must comply with the minimum documentation and reporting requirements set forth in Section 3.

C. The company shall submit a PBR Actuarial Report to a commissioner upon request.

D. The company shall retain on file, for at least seven (7) years from the date of filing, sufficient documentation so that it will be possible to determine the procedures followed, the analyses performed, the bases for assumptions and the results obtained in a principle-based valuation.

Section 3. PBR Actuarial Report Requirements

A. For purposes of this section.

1. For individual life insurance policies, “principle-based reserves” means that deterministic and/or stochastic reserves were calculated for policies under VM-20.

2. For variable annuity contracts, “principle-based reserves” means that reserves were calculated for contracts under VM-21.

B. The PBR Actuarial Report shall contain a table of contents with associated page numbers.

C. The PBR Actuarial Report shall contain an overview section at the beginning of the report that includes the following:

1. An opening paragraph identifying the qualified actuary, the qualifications of the qualified actuary, and the relationship of the qualified actuary to the company.

2. A description of the policies and/or contracts subject to VM-20 or VM-21.

3. A table on a net of reinsurance basis, as shown below. If some policies within a product type are valued under a principle-based valuation and other groups of policies are not, add additional rows under the product type in the table and show policies valued under a principle-based valuation and policies not valued under a principle-based valuation separately.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>If using PBR, first year used</th>
<th>Current Year Premium</th>
<th>Face Amount</th>
</tr>
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<tbody>
<tr>
<td>Life Insurance-Issued prior to the operative date of the Valuation Manual</td>
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2
### Appendix -- VM-31 redline

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<td>Participating Whole Life</td>
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<tr>
<td>Universal Life without secondary guarantee</td>
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<td>Universal Life with Secondary Guarantee</td>
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<td>Variable Universal Life</td>
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<td>Variable Life</td>
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<td>Indexed Life</td>
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<tr>
<td>Other</td>
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<td><strong>TOTAL</strong></td>
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**Life Insurance-Issued on or after the operative date of the Valuation Manual**

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<th>Term</th>
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<tr>
<td>Non-participating Whole Life</td>
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<td>Participating Whole Life</td>
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<table>
<thead>
<tr>
<th>Product Name</th>
<th>If using PBR, first year used</th>
<th>Current Year Premium</th>
<th>Face Amount</th>
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<tr>
<td>Universal Life without secondary guarantee</td>
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<td>Universal Life with Secondary Guarantee</td>
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<td>Variable Universal Life</td>
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<td>Variable Life</td>
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<td>Indexed Life</td>
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<td>Other</td>
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<td><strong>TOTAL</strong></td>
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**Annuities**

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<td>Fixed</td>
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<tr>
<td>Variable</td>
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<tr>
<td>Other</td>
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<tr>
<td><strong>TOTAL</strong></td>
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**Accident and Health Insurance**

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<td>[list product types]</td>
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**Deposit Type Contracts**

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<td>[list product types]</td>
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4. A table, as shown below:

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<tr>
<th>Annual Statement Item</th>
<th>Direct Reserve (1)</th>
<th>Assumed Reserve (2)</th>
<th>Ceded Reserve (3)</th>
<th>Net Reserve (1)+(2)-(3)</th>
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<td><strong>Life Insurance and Annuity</strong></td>
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<tr>
<td>Life Insurance-Issued on or after the operative date of the Valuation Manual</td>
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<tr>
<td>Policies stochastically modeled per VM-20</td>
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<tr>
<td>Policies deterministically modeled (not stochastically modeled) per VM-20</td>
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Appendix -- VM-31 redline

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<tr>
<th>Policies subject to VM-20, but Policies not modeled either stochastically or deterministically (non-PBR) [A4]</th>
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<td>Net Premium Reserve per VM-20</td>
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<tr>
<td>Policies not subject to VM-20 [Other policies] [A5]</td>
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<tr>
<td>Annuities</td>
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<tr>
<td>Supplementary Contracts Involving Life Contingencies</td>
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<td>Accidental Death Benefit</td>
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<td>Disability – Active</td>
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<td>Miscellaneous</td>
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<td>Total Life Insurance and Annuity</td>
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<tr>
<td>Accident and Health Insurance</td>
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<tr>
<td>Active Life Reserve</td>
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<tr>
<td>Claim Reserve</td>
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Section 3

<table>
<thead>
<tr>
<th>Annual Statement Item</th>
<th>Direct Reserve (1)</th>
<th>Assumed Reserve (2)</th>
<th>Ceded Reserve (3)</th>
<th>Net Reserve (1)+(2)-(3)</th>
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<tbody>
<tr>
<td>Deposit Type Contracts</td>
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<tr>
<td>TOTAL PRINCIPLE-BASED RESERVES</td>
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<tr>
<td>TOTAL RESERVES (PBR + Non-PBR)</td>
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5. A description of the risks determined material by the Qualified Actuary and associated with policies and/or contracts subject to a principle-based reserve valuation.

6. A description of those areas where the Qualified Actuary relied on others for data, assumptions, projections or analysis in determining the principle-based reserves and a reliance statement from each individual on whom the Qualified Actuary relied which includes:

   a. The information provided by the individual.

   b. A statement as to the accuracy, completeness or reasonableness, as applicable, of the information provided.

7. A summary of the valuation assumptions and margins for each major product line subject to a principle-based reserve valuation including:

   a. Description of the method used to determine anticipated experience assumptions for each material risk factor, including the degree to which the assumptions are based on experience versus actuarial judgment or other factors, and the source of the experience (e.g., company experience v. industry study).

   b. Description of any significant changes from the prior year in the method used to determine anticipated experience assumptions, and the rationale for the change.
Appendix -- VM-31 redline

c. List of key risk and experience reporting elements that the company is tracking in order to monitor changes in experience that will be used to update assumptions and the frequency of the tracking.

d. Description of the method used to determine margins for each material risk factor.

e. Description of any significant changes from the prior year in the method used to determine margins, and the rationale for the change.

f. Disclosure of any valuation assumptions or margins that are inconsistent with risk analysis and management techniques used by the company, a summary of those risk analyses and management techniques with which the assumptions or margins are inconsistent and the rationale for the inconsistency.

g. Description of any considerations helpful in or necessary to understanding the rationale behind and development of assumptions and margins even if such considerations are not explicitly mentioned in the Valuation Manual.

Guidance Note: The requirements in C.7 above require an executive summary version of the assumptions and margins. Additional details on assumptions and margins are included in later sections of the PBR Actuarial Report.

8. A summary of the approach used to model the assets supporting the policies subject to a principle-based reserve valuation including:

a. Method used and rationale for allocating the total asset portfolio into multiple segments, if applicable.

b. Description of the asset portfolio, including the types of assets, duration and their associated quality ratings.

9. A description of the approach used to model risk management strategies (e.g., hedging), and other derivative programs, and a summary and description of any clearly defined hedging strategies.

10. A description of the rationale for determining whether a decision, information, assumption, risk, or other element of a principle-based reserve calculation is material. Such rationale could include such items as a percentage of surplus, a percentage of reserve, or a specific monetary value.

11. Paragraphs certifying that the PBR reserve valuation:

a. Was calculated in accordance with VM-05 and VM-20.

b. The assumptions and margins are prudent estimates.

12. A closing paragraph with the signature, title, telephone number and e-mail address of the Qualified Actuary, the Company name and address, and the date signed.

D. The overview section described in Section 3.C above shall be submitted to the company’s domiciliary commissioner no later than April 1 of the year following the year to which the PBR Actuarial Report applies and the company shall provide this overview section to any other commissioner upon request. A commissioner shall keep the overview confidential to the same extent and under the same conditions as the PBR Actuarial Report. Since this overview is a part of the PBR Actuarial Report, even when submitted as a standalone document, it is confidential information as defined in the Standard Valuation Law.
E. PBR Actuarial Report Requirements for Individual Life Insurance Policies or Contracts.

The company shall include in the PBR Actuarial Report:

1. Tables, as shown below, on a net of reinsurance basis unless otherwise indicated, with one set of tables on a net of reinsurance basis showing reported reserve equal to the net reserve; and one set of tables on a gross basis where reported reserve is shown in two columns, as applicable, one column for direct reserves and one column for assumed reserves.

   a. Groups of policies for which deterministic reserves were calculated but stochastic reserves were not calculated:

<table>
<thead>
<tr>
<th>Product</th>
<th>Net Premium Reserve (1)</th>
<th>Deterministic Reserve (2)</th>
<th>Deferred Premium Asset (3)</th>
<th>Reported Reserve (4)</th>
</tr>
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<tbody>
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Note: The Total Reported Reserve = \( \text{col (1)} + \max\{0,\text{col (2)}-\text{col (1)}+\text{col (3)}\} \). The Reported Reserve is only calculated determined in aggregate, not by product type. The allocation of the total Reported Reserve is described by the product categories is accomplished by summing the minimum reserve for each policy within each product category (the minimum reserve for each policy is defined in Section 2.CD of VM-20). A similar process may be used for the deterministic reserve.
b. Groups of policies for which stochastic reserves are calculated:

<table>
<thead>
<tr>
<th>Product</th>
<th>Net Premium Reserve (1)</th>
<th>Deterministic Reserve (2)</th>
<th>CTE 70 Scenario Reserve (3)</th>
<th>Addt’l proven for risks not captured (4)</th>
<th>Stochastic Reserve (5)</th>
<th>Deferred Premium Asset (6)</th>
<th>Reported Reserve (7)</th>
</tr>
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<tbody>
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<td>Term</td>
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<td><strong>Total Gross of Reinsurance</strong></td>
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**Note:** The Total Reported Reserve = col (1) + max{0,[col (2)-col(1)+col(3)]}, The Reported Reserve is only calculated-determined in aggregate, not by product type. The allocation of the total Reported Reserve to the product categories is described by accomplishing by summing the minimum reserve for each policy within each product category (the minimum reserve for each policy is defined in Section 2D.2.C of VM-20). A similar process may be used for the CTE 70 scenario reserve, the deterministic reserve and the stochastic reserve.
Appendix -- VM-31 redline

c. Groups of policies for which principle-based reserves are not calculated (includes policies subject to VM-20 but where both the stochastic exclusion test and the deterministic exclusion test are passed).

<table>
<thead>
<tr>
<th>Product</th>
<th>Net Premium Reserve</th>
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<tbody>
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<td>Term</td>
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<td>Non-participating Whole Life</td>
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<td>Indexed Life</td>
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<td>Other</td>
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<tr>
<td><strong>TOTAL, Total Net of Reinsurance</strong></td>
<td>[A22]</td>
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<tr>
<td><strong>Total Gross of Reinsurance</strong></td>
<td>[A23]</td>
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</tbody>
</table>

2. A summary of valuation assumptions and margins including a listing of the final prudent estimate valuation assumptions and margins for the major risk factors and a description of any changes in anticipated experience assumptions or margins since the last PBR Actuarial Report.

3. The following information regarding the cash flow model(s) used by the company in determining principle-based reserves:

   a. Description of modeling system(s) used.

   b. Description of model segments and rationale for the organization of the policies and assets into model segments, consistent with guidance from VM-20 7.A.1.b and VM-20 & D.1.b. [A24]

   c. Description of approach and rationale used to group assets and policies for the deterministic reserve calculation within each model segment.

      A clear indication shall be provided of how the company met the requirements of Section 2.G of VM-20 with respect to the grouping of policies. It shall be documented that, upon request, information may be obtained that is adequate to permit the audit of any subgroup of the deterministic reserve amount to ensure that a deterministic reserve amount calculated as the total of the seriatim (policy-by-policy, with respect to liability cash flows) reserve calculations produces a reserve not materially different than the deterministic reserve amount.

   d. Description of approach and rationale used to group assets and policies for the stochastic reserve calculation within each model segment if different than the approach used in paragraph 3.c.

   e. Description of approach used to validate model calculations within each model segment for both the deterministic and stochastic models including how the model was evaluated for appropriateness and applicability, how the model results compare with actual historical experience, what, if any, risks are not included in the model, the extent to which correlation of different risks is reflected in the margins model [A25], and any material limitations of the model.
Appendix -- VM-31 redline

f. Disclosure of the length of projection period and comments addressing the conclusion that no material amount of business remains at the end of the projection period for both the deterministic and stochastic models.

g. Description of how policy loans are modeled, including documentation that if the company substitutes assets that are a proxy for policy loans, the modeled reserve produces reserves that are no less than those produced by modeling existing loan balances explicitly.[A26]

h. Description of how reinsurance cash flows are modeled.

i. Description of approach and rationale used to group general account equity investments, including non-registered indexed products, including an analysis of the proxy construction process that establishes the relationship between the investment return on the proxy and the specific equity investment category.

j. Description of approach and rationale used to group separate account funds and subaccounts, including analysis of the proxy construction process that establishes a firm relationship between the investment return on the proxy and the specific variable funds.

k. Description of the asset investment strategy used in the model, including asset reinvestment and disinvestment assumptions, and documentation supporting the appropriateness of the model investment strategy compared to the actual investment policy of the company.

l. Documentation that the model investment strategy does not produce a modeled reserve that is less than the modeled reserve that would result by assuming an alternative investment strategy in which all fixed income reinvestment assets are public non-callable bonds with gross asset spreads, asset default costs and investment expenses by projection year that are consistent with a credit quality blend of 50% PBR credit rating of 6 (“A2/A”) and 50% PBR credit rating of 9 (“Aa2/AA”).

m. Number of scenarios used for the stochastic reserves and the rationale for that number.

n. If a scenario reduction technique is used, description of the technique and documentation of how the company determined that the technique meets the requirements of Section 2.G. of VM-20.[A27]

4. The following information regarding the mortality assumptions used by the company in determining principle-based reserves:

a. Description of each mortality segment and the rationale for selecting the policies to include in each mortality segment.

b. If the company sub-divides aggregate company experience into various sub-classes or mortality segments to determine company experience mortality rates, documentation that when the mortality segments are weighted together, the total number of expected claims is not less than the company experience data for the aggregate class.

c. Description, a summary of the rationale, and results of applying the underwriting scoring procedure to select the industry basic table/s including the rationale for and results of applying the underwriting scoring procedure and a summary of the analysis performed to evaluate the relationship between underwriting scoring and the anticipated mortality established for mortality segments where the mortality assumption is affected by the application of the underwriting scoring procedure. If underwriting-based justification not involving UCS is being applied, provide similar analysis applicable to the company's methods.
Appendix -- VM-31 redline

d. If company experience mortality rates for any mortality segment are not based on the experience directly applicable to the mortality segment (whether or not the data source is from the company), then provide a summary containing the following:

i. The source of data including a detailed explanation of the appropriateness of the data, and the underlying source of data, including how the company experience mortality rates were developed, graduated and smoothed.

ii. Similarities or differences noted between policies in the mortality segment and the policies from the data source (e.g., type of underwriting, marketing channel, average policy size, etc.).

iii. Adjustments made to the experience mortality rates to account for differences between the mortality segment and the data source.

iv. The number of deaths and death claim amounts by major grouping and including: age, gender, risk class, policy duration and other relevant information.

e. If the company makes adjustments to company experience mortality rates for changes in risk selection and underwriting practices:

i. Rationale for the adjustments.

ii. A description and summary of the published medical or clinical studies used to support the adjustments.

iii. Documentation of the mathematics used to adjust the mortality.

iv. Summary of any other relevant information concerning any adjustments to the experience mortality that affected the mortality assumption.

f. Description of the method to determine the level of credibility for the period where sufficient company data exists including:

i. Description of and Support for the |

ii. A summary of the level of credibility for each mortality segment, along with an indication of whether the level of credibility was determined at the mortality segment level or at a higher level using aggregate mortality experience.

g. If company experience is used, a summary of company experience mortality rates for each mortality segment.

h. If company experience is not used, a description of the industry basic table used for each mortality segment.

i. Description of and rationale for any adjustments to the mortality assumptions for historical mortality improvement up to the valuation date.

j. Description of and rationale for any adjustments to mortality assumptions for impaired lives or policyholder behavior.

k. If company experience is used, a summary of the approach used to determine the final set of anticipated experience mortality rates, including,
Appendix -- VM-31 redline

i. The start and ending period of time used to grade company experience to the industry basic table, including the approach used to grade company experience mortality rates to the industry table for advanced ages (attained age 95 or 15 years after policy underwriting).

ii. Description of the industry basic table used for each mortality segment.

iii. Description and results of any smoothing technique used.

iv. Description of any adjustments that were made to ensure reasonable relationships are maintained between mortality segments that reflect the underwriting class or risk class of each mortality segment.

v. Description and justification to support and demonstrate that the resulting anticipated experience assumptions are at least as great as those expected to actually emerge. The description should include the level of granularity at which the comparison is made. [A34]

l. Description and rationale of any adjustments made to increase margins above the prescribed margin.

m. At least once every 3 years, the results of an actual to expected (without margins) analysis. [A35]

5. The following information regarding each policyholder behavior assumption used by the company in determining principle-based reserves:

a. Sources and credibility of the data and an explanation of why the data are reasonable and appropriate for this purpose.

b. Explanation of how assumptions were determined for periods that were based on less than fully credible or relevant data.

c. Description of method used to develop anticipated experience assumptions.

d. At least once every 3 years, the results of an actual to expected analysis.

e. Margins used, methodology used to determine the margins, and rationale for the particular margins used, including how the results of sensitivity tests were used to determine the margins.

f. How changes in non-guaranteed elements impact the policyholder behavior assumptions.

g. Description of any scenario-dependent dynamic formula.

h. Changes in anticipated experience assumptions and/or margins since last PBR Actuarial Report.

i. For policies that give policyholders flexibility in timing and amount of premium payments, disclose results of sensitivity tests related to the following premium payment patterns: minimum premium payment, no further premium payment, pre-payment of premium assuming a single premium, and pre-payment of premiums assuming level premiums.

j. Specific to lapses, provide description of and rationale regarding adjustments to lapse and mortality assumptions to account for potential anti-selection.

k. Competitor rate definition and usage. [A38]
Appendix -- VM-31 redline

6. The following information regarding the expense assumptions used by the company in determining principle-based reserves:

   a. Methodology used to allocate expenses to the individual life insurance policies subject to a principle-based reserve valuation.

   b. Methodology used to apply the allocated expenses to model segments or sub-segments within the cash flow model.

   c. Methodology used to determine margins.

7. The following information regarding the asset assumptions used by the company in determining principle-based reserves asset assumptions:

   a. The amount of starting assets supporting the policies subject to a principle-based valuation, and the method and rationale for determining such amount.

   b. Method used and rationale for selecting the assets and apportioning the assets between the policies subject to principle-based reserve valuation and those policies not subject to principle-based reserve valuation.

   c. Method used to determine projected market value of assets (if needed for assumed asset sales).

   d. Analysis of exposure to foreign currency fluctuations.

   e. Summary of the results of the steps for determining the maximum net spread adjustment factor for each model segment, including the method used to determine option adjusted spreads for each existing asset.

   f. A summary of the path of net asset earned rates for each model segment calculated for the deterministic reserve.

   g. Investment expense assumptions.

   h. Prepayment, call and put functions.

   i. If for all model segments combined, the aggregate annual statement value of starting assets is less than 98% or greater than 102% of the final aggregate minimum reserve, documentation that supports the conclusion that the aggregate minimum reserve is not materially understated as a result of the estimate of the amount of starting assets.

   j. With respect to modeling of derivative programs if a company assumes that residual risks and frictional costs have a value of zero, a demonstration that a value of zero is an appropriate expectation.

   k. Description of how policy loans are modeled, including documentation that if the company substitutes assets that are a proxy for policy loans, the modeled reserve produces reserves that are no less than those produced by modeling existing loan balances explicitly.

   l. Description of and approach and rationale used to group general account equity investments, including non-registered indexed products, including an analysis of the proxy construction process that establishes the relationship between the investment return on the proxy and the specific equity investment category.
Appendix -- VM-31 redline

m. Description of approach and rationale used to group separate account funds and subaccounts, including analysis of the proxy construction process that establishes a firm relationship between the investment return on the proxy and the specific variable funds.

n. Description of method to translate stochastic economic paths into fund performance [A39]

ok. Description of the asset investment strategy used in the model, including asset reinvestment and disinvestment assumptions, and documentation supporting the appropriateness of the model investment strategy compared to the actual investment policy of the company.

pl. Documentation that the model investment strategy does not produce a modeled reserve that is less than the modeled reserve that would result by assuming an alternative investment strategy in which all fixed income reinvestment assets are public non-callable bonds with gross asset spreads, asset default costs and investment expenses by projection year that are consistent with a credit quality blend of 50% PBR credit rating of 6 ("A2/A") and 50% PBR credit rating of 9 ("Aa2/AA").

qm. Number of scenarios used for the stochastic reserves and the rationale for that number.

rn. If a scenario reduction technique is used, description of the technique and documentation of how the company determined that the technique meets the requirements of Section 2.G. of VM-20[A40]

8. The following information regarding the revenue sharing assumptions used by the company in determining principle-based reserves:

a. Description of revenue sharing agreements and the nature of any guarantees underlying the revenue sharing income included in the projections including the terms and limitations of the agreements; relationship between the company and the entity providing the revenue sharing income; benefits and risk to the company and the entity providing the revenue sharing income of continuing the arrangement; the likelihood that the company will collect the revenue sharing income during the term of the agreement; the ability of the company to replace the services provided by the entity providing the revenue sharing income; the ability of the entity providing the revenue sharing income to replace the service provided by the company.

b. The amount of revenue sharing income and a description of the rationale for the amount of revenue sharing income included in the projections including any reduction for expenses.

c. The level of margin in the prudent estimate revenue sharing income assumptions and description of the rationale for the margin for uncertainty.

9. The following information regarding the reinsurance assumptions used by the company in determining principle-based reserves:

a. For those reinsurance agreements included in the calculation of the minimum reserve as per VM-20 Section 8.A, a description [A41] of each reinsurance agreement including but not limited to the type of agreement, the counterparty, the risks reinsured, the portion of business reinsured, and whether the agreement complies with the requirements of the credit for reinsurance under the terms of the Accounting Practices and Procedures Manual.

b. Description of reinsurance assumptions [A42] included in the model.
Appendix -- VM-31 redline

c. To the extent that a single deterministic valuation assumption for risk factors associated with certain provisions of reinsurance agreements will not adequately capture the risk of the company, a description of the separate stochastic analysis that was used outside the cash flow model to quantify the impact on reinsurance cash flows to and from the company. The description should include which variables were modeled stochastically.

d. If a policy is covered by more than one reinsurance agreement, description of method to allocate reinsurance cash flows from each agreement.

e. Pursuant to VM-20 Section 8.C.11, if the company concludes that modeling the assets supporting reserves held by a counterparty is not necessary, documentation of the testing and logic leading to that conclusion.

10. The following information, where applicable, regarding the non-guaranteed element (NGE) assumptions used by the company in determining principle-based reserves:

a. Description of approach used to model NGE’s, including a discussion of how future NGE amounts were adjusted in scenarios to reflect changes in experience and including how lag in timing of any change in NGE relative to date of recognition of change in experience was reflected in projected NGE amounts.

b. Description of the approach to establish a margin for conservatism.

c. Description of how the company's past NGE practices and established non-guaranteed element policies were reflected in projected NGE amounts.

d. Description of the following: (i) whether and how projected levels of NGE’s in the model are consistent with experience assumptions used in each scenario; and (ii) whether and how policyholder behavior assumptions are consistent with the NGE are assumed in the model.

e. State if and how the provision in Section 7.C.5 of VM-20 allowing conditional exclusion of a portion of an NGE is used.

i. If used, is the provision used for any purpose other than recognition of subsidies for participating business.

ii. If this provision is being used, discuss how prevention of double counting of assets is ensured.

Guidance Note: Examples of considerations include (1) if the subsidy is provided by a downstream company, and the carrying value of the downstream company is reported as an asset on the company’s books, where is the offsetting liability reported; or (2) if the subsidy is provided by another block of business within the company, is the subsidy included in cash flow testing of the “other block”? 

11. The following information regarding the deterministic and stochastic exclusion tests, if calculated:

a. Identification and description of each group of policies used in the deterministic and stochastic exclusion tests including contract type and risk profile, and rationale for each grouping of policies.

b. For each group of policies for which the company elects to exclude from stochastic reserve requirements, the stochastic exclusion test used (passing the stochastic exclusion ratio test,
stochastic exclusion demonstration test, or certification that the group of policies does not contain material interest, tail or asset risk).

c. For groups of policies for which the stochastic reserve exclusion ratio test is used, results of the 16 scenarios and the test ratio.

d. For groups of policies for which the stochastic reserve demonstration method is used, the rationale for using the demonstration method and a demonstration supporting the exclusion in the initial exclusion year and at least once every three calendar years subsequent to the initial exclusion that complies with the following

i. The demonstration shall take into account whether changing conditions over the current and two subsequent calendar years would be likely to change the conclusion to exclude the group of policies from the stochastic modeling requirement. If, as of the end of any calendar year, the company determines the modified minimum deterministic reserve for the group of policies no longer adequately provides for all material risks, the exclusion shall be discontinued and the policies shall be included in the stochastic modeling calculations.

ii. The demonstration may be based on analysis from a date that proceeds the initial or subsequent exclusion period.

iii. The demonstration shall provide a reasonable assurance that the stochastic reserve calculated on a standalone basis for only those policies subject to the stochastic modeling exclusion would not be greater than the modified minimum deterministic reserve for such policies.

iv. The demonstration shall provide an effective evaluation of the residual risk exposure resulting from risk mitigation techniques such as derivative programs and reinsurance.

Guidance Note: Examples of acceptable methods to demonstrate that the exclusion requirements are met for a group of policies include, but are not limited to:

(a) Demonstrate that the greater of the deterministic reserve and the net premium reserve, less any associated deferred premium asset is greater than the stochastic reserve calculated on a standalone basis.

(b) Demonstrate that the greater of (1) the net premium reserve less any associated premium asset and (2) the deterministic reserve is greater than the scenario reserve that results from each of a sufficient number of adverse deterministic scenarios.

(c) Demonstrate that the greater of (1) the net premium reserve less any associated premium asset and (2) the deterministic reserve is greater than the stochastic reserve calculated on a standalone basis, but using a representative sample of policies in the stochastic modeling calculations.

(d) Demonstrate that any risk characteristics that would otherwise cause the stochastic reserve calculated on a standalone basis to exceed the greater of (1) the net premium reserve less any associated premium asset and (2) the deterministic reserve are not present or have been substantially eliminated through actions such as hedging, investment strategy, reinsurance, or passing the risk on to the policyholder by contract provision.

e. For groups of policies for which the certification method is used, support for the certification including supporting analysis and tests.
Appendix -- VM-31 redline

f. For groups of policies that pass the stochastic exclusion test and for which the company chooses not to calculate stochastic reserves, the results of the deterministic exclusion test for each group of policies.

12. The following additional information:

a. The impact of individual margins on the deterministic reserve for each risk factor, or group of risk factors, that has a material impact on the deterministic reserve determined for each model segment by subtracting (i) from (ii)

i. The deterministic reserve for all policies, but with the reserve calculated based on the anticipated experience assumption for the risk factor and prudent estimate assumptions for all other risk factors.

ii. The deterministic reserve as reported.

b. An estimate of the aggregate impact of all margins on the deterministic reserve for each model segment. This shall be determined for each model segment by subtracting (i) from (ii)

i. The deterministic reserve for all policies, but with the reserve calculated based on anticipated experience assumptions for all risk factors prior to the addition of any margins.

ii. The deterministic reserves for all policies as reported.

c. For purposes of the disclosures required in 12a and 12b above

i. If the company believes the method used to determine anticipated experience mortality assumptions includes an implicit margin, the company can adjust the anticipated experience assumptions to remove this implicit margin. For example, to the extent the company expects mortality improvement after the valuation date, any such mortality improvement is an implicit margin and therefore is an acceptable adjustment to the anticipated experience assumptions for this purpose. If any such adjustment is made, the company shall document the rationale and method used to determine the anticipated experience assumption.

ii. Since the company is not required to determine an anticipated experience assumption or a prudent estimate assumption for risk factors that are prescribed for the deterministic reserve (i.e., interest rates movements, equity performance, default costs, and net spreads on reinvestment assets), when determining the impact of margins, the prescribed assumption shall be deemed to be the prudent estimate assumption for the risk factor, and the company can elect to determine an anticipated experience assumption for the risk factor, based on the company's anticipated experience for the risk factor. If this is elected, the company shall document the rationale and method used to determine the anticipated experience assumption. If the mortality segments do not qualify for the simplified method to determine prudent estimate mortality assumptions, the anticipated experience assumption for mortality is the credibility adjusted experience rates.

d. An explanation of how the results of sensitivity tests and varying assumptions were used or considered in developing assumptions including a description of, results of, and action taken with respect to sensitivity tests performed. An explanation of how the results of sensitivity tests were used to understand the materiality of prudent estimate assumptions on the minimum reserve.

e. Description of material risks not fully reflected in cash flow model used to calculate the stochastic reserve including:
Appendix -- VM-31 redline

i. A description of each element of the cash flow model for which this provision has been made in the stochastic reserve (e.g., risk factors, policy benefits, asset classes, investment strategies, risk mitigation strategies, etc.).

ii. A description of the approach used by the company to provide for these risks in the stochastic reserve outside the cash flow model, and a summary of the rationale for selecting this approach, and the key assumptions justifying the underlying approach.

iii. If there is more than one model element included in this provision, clarifying whether a separate provision was determined for each element, or collectively for groups of two or more elements and explaining the methodology, supporting rationale and key assumptions for how separate provisions were combined.

f. Summary of the impact of aggregation on the stochastic reserve

i. At least once every three (3) years, and in the current year regardless of the three (3) year requirement if the company has made a material change in its risk profile, such as buying or selling a block of business, or entering into a reinsurance arrangement covering the policies subject to these requirements, a company shall disclose the stochastic reserve for each product on a standalone basis listed in the table in Section 3.C.3 and disclose the sum of the stochastic reserves for each product less the sum of the minimum reserves for the products. \[A50\]

ii. With respect to above disclosure, the company shall disclose the nature of any approximations used and the rationale for why the approximations are appropriate. \[A51\]

g. If the company uses a date that precedes the valuation date to calculate the reserves, the company shall explain why the use of such date will not produce a material change in the results if the results were based on the valuation date. Such explanation shall describe the process the actuary used to determine the adjustment, the amount of the adjustment, address the nature of any adjustments made to the data and the rationale for why the adjustments are appropriate. \[A52\]

h. Description of any approximations, simplifications, and modeling efficiency techniques used in reserve calculations, as well as a demonstration that the use of such techniques does not understate the reserve by a material amount and that the expected value of the reserve calculated using simplifications, approximations, and modeling efficiency techniques is not less than the expected value of the reserve calculated that does not use them. \[A53\]

i. Competitor rate definition and usage. \[A54\]

j. Description of method to translate stochastic economic paths into fund performance. \[A55\]

k. Description of interest crediting strategy. \[A56\]

13. Certifications \[A57\]

a. A certification from a duly authorized investment officer that the modeled asset investment strategy is consistent with the company’s current investment strategy and an actuarial certification regarding the modeling of clearly defined hedging strategies.

b. A certification from senior management certifying that the principle-based valuation complies with VM-G (Corporate Governance Guidance for Principle-Based Reserves).

c. Certification of stochastic modeling exclusion test, if applicable \[A58\]
F. PBR Actuarial Report Requirements for Variable Annuity Contracts

Drafting Note: See documentation and reporting requirements in VM-21
Amendment Proposal Form*
(NAIC Research Division)

1. Identify yourself, your affiliation and a very brief description (title) of the issue.
   John Bruins, ACLI, include Commercial Mortgages in the asset modeling

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, Appendix 1, Table K

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 following page

4. State the reason for the proposed amendment? (You may do this through an attachment.)
   The asset modeling of VM-20 is predicated on the use of a rating for the asset to drive the assumptions of
default. Since 2013, the Life RBC instructions contain a method to assign commercial mortgages to risk
classes. This amendment provides a basis for classifying these assets into one of the rating categories
defined for modeling in VM-20.

   The chart below shows the relationship of the AVR and RBC factors for the commercial mortgage
categories compared to the current 6 bond categories. Since this is a reserve calculation, the primary focus
was on the AVR factors.

   The following chart shows the NAIC bond categories and the NAIC commercial mortgage categories,
showing the AVR basic contribution, the RBC factor, and the PBR classification. The AVR and RBC
factors are based on a combination of rates of default as well as recovery for defaults. As such, these are
proxies for expected and tail losses.

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* This form is not intended for minor corrections, such as formatting, grammar, cross-references or spelling. Those types of changes do not require action by the entire group and may be submitted via letter or email to the NAIC staff support person for the NAIC group where the document originated.

**NAIC Staff Comments:**

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**Notes:**

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Table K. Conversion from NAIC ARO Ratings and NAIC Designations to PBR Numeric Rating

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LATF CDA (A) Subgroup Report

March 9, 2015 Minutes
February 10, 2015 Minutes
February 4, 2015 Minutes
January 20, 2015 Minutes
January 13, 2015 Minutes
December 15, 2014 Minutes

CDA (A) Subgroup Letter to LATF

Proposed Revisions to Model #805
Proposed Revisions to Model #695
The Contingent Deferred Annuity (A) Subgroup of the Life Actuarial (A) Task Force met via conference call March 9, 2015. The following Subgroup members participated: Tomasz Serbinowski, Chair (UT); Andy Rarus (CT); Mark Birdsall (KS); Mike Boerner and Jan Graeber (TX); Craig Chupp (VA).

1. **Agreed to Forward the Proposed Model 805 Changes to LATF**

The subgroup reviewed several changes (Attachment A) to the Standard Nonforfeiture Law for Individual Deferred Annuities (#805). The changes include adding a period. New subsection to section 2 of Model 805, which would state that sections 3 through 8 do not apply to contingent deferred annuities (CDAs), changing section 2C to retain the Commissioner's authority to require nonforfeiture benefits for CDAs and adding a drafting note which says that any specific requirements promulgated by the Commissioner for CDAs will be prospective. The subgroup agreed to forward the changes, and a cover letter (Attachment B), to the Life Actuarial (A) Task Force for its consideration.

2. **Agreed to Forward the Proposed changes to Model 695 to LATF**

The subgroup reviewed several changes (Attachment C) to section 3, Scope and Application and section 4W, Definitions, of the Synthetic Guaranteed Investment Contracts Model Regulation (#695), to clarify that CDAs are not within the scope of the Model. Mr. Serbinowski noted that in addition to changing the wording in section 3, the format of the section was also changed to enhance its readability. Mr. Chupp suggested several non-substantive changes. Mr. Boerner noted that a sentence might have been unintentionally omitted from the revised language. He suggested that the NAIC legal staff be asked to review the reformatted language to ensure that the intent and substance remain intact. The subgroup agreed to forward the changes to the Life Actuarial (A) Task Force for its consideration. A cover letter will be provided by Reggie Mazyck.

3. **Discussed the Need for Clarifying Guidance for the Applicability of AG 43 to CDAs**

The subgroup agreed that the guidance in Actuarial Guideline XLIII (AG 43), CARVM for Variable Annuities, applicable to CDAs is sufficiently clear and does not require modification to clarify its nomenclature. Mr. Serbinowski noted that the subgroup is not opining on the appropriateness of the reserve but only the clarity of the guidance.

4. **The Applicability of the Standard Scenario Prescribed Assumptions for CDAs**

Mr. Serbinowski said the AG 43 standard scenario has prescribed assumptions for lapses, mortality and utilization rates. He asked if there is documentation of the basis for those prescribed assumptions and if the assumptions are appropriate for CDAs. Fred Andersen (MN) said there are no in-depth experience studies done on these assumptions. He said the assumptions reflect the experience of a few companies prior to the financial crisis, when there was very little data on deep in the money lapses. He said that variable annuities assumptions are appropriate for CDAs. Mr. Birdsall said that, for a number of reasons, variable annuity assumptions are not appropriate for CDAs. Those reasons include the differences in distribution channels, target markets, product designs and the goals of the purchasers.

Having no further business, the Contingent Deferred Annuity (A) Subgroup adjourned.
Contingent Deferred Annuity (A) Subgroup
Conference Call
February 10, 2015

The Contingent Deferred Annuity (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Feb. 10, 2015. The following Subgroup members participated: Tomasz Serbinowski, Chair (UT); Perry Kupferman (CA); Mike Colburn and Andy Rarus (CT); Felix Schirripa (NJ); Mike Boerner (TX); and Craig Chupp and Ern Johnson (VA).

1. Continued Discussion of the Paper Submitted by the IRI/ACLI

John Bruins (American Council of Life Insurers—ACLI) briefly reviewed the Feb. 4 Subgroup discussion of the paper jointly submitted by the Insured Retirement Institute (IRI) and the ACLI. John Satlin (Prudential Financial) reviewed the paper’s graphs of reserve patterns for two hypothetical products, a contingent deferred annuity (CDA) and a variable annuity with a typical guaranteed living withdrawal benefit. He said the reserve patterns are dependent on the specific product design. He said the reserves for the hypothetical products are illustrated in two ways: 1) looking at a specific economic scenario path for each product; and 2) looking at the average reserve levels over time across two hundred stochastic pricing scenarios. Mr. Serbinowski asked if it is possible to see the reserves for both products using the standard scenario. Mr. Satlin said that request will be considered.

2. Discussed the Applicability of Model #695 to CDAs

Mr. Serbinowski reviewed the edits (Attachment 1) to section 3 and section 4W of the Synthetic Guaranteed Investment Contracts Model Regulation (#695) that reflect changes discussed on the Feb. 4 Subgroup call. He asked Subgroup members to provide feedback on whether the revised language makes it clear that CDAs are not within the scope of Model #695.

3. Discussed Revising Model #805 to Exclude CDAs from Its Scope

Mr. Serbinowski reviewed the draft of a letter (Attachment 2) to the Life Actuarial (A) Task Force explaining the rationale for the revision to the recommendation (Attachment 3) to exclude CDAs from the scope of the Standard Nonforfeiture Law for Individual Deferred Annuities (#805), while preserving the commissioner’s authority to require nonforfeiture benefits as he or she may deem appropriate. Mr. Leung noted that Missouri does not allow the commissioner to have the authority to prescribe regulations. Mr. Boerner said that can be addressed by modifying the Missouri version of the legislation prior to adoption.

4. Discussed Other Matters

Mr. Serbinowski asked the Subgroup to consider whether there is a need to evaluate differences in sensitivity to assumptions for CDAs and variable annuities and whether the differences are sufficient to warrant adjustments to Actuarial Guideline (AG) 43. Mr. Boerner said that the question is aligned to a question of his related to whether there is increased volatility from year-to-year generated by CDA fund transfers and whether that volatility is captured in the AG 43 reserve.

Having no further business, the Contingent Deferred Annuity (A) Subgroup adjourned.
The Contingent Deferred Annuity (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Feb. 4, 2015. The following Subgroup members participated: Tomasz Serbinowski, Chair (UT); Perry Kupferman (CA); Mike Colburn and Andy Rarus (CT); Felix Schirripa (NJ); Mike Boerner and Jan Graeber (TX); and Craig Chupp (VA).

1. **Discussed Revising Model #805 to Exclude CDAs from its Scope**

Mr. Serbinowski discussed the proposed revisions (Attachment 1) to the *Standard Nonforfeiture Law for Individual Deferred Annuities* (#805). This revision recognizes that the methods and the values prescribed in the model are not appropriate for contingent deferred annuities (CDAs). Drafting notes will be added to clarify that the changes are not meant to be retroactive.

2. **Discussed the Applicability of Model #695 to CDAs**

Mr. Serbinowski reviewed suggestions (Attachment 2) made by Subgroup members for clarifying that CDAs were not meant to be included in the scope of the *Synthetic Guaranteed Investment Contracts Model Regulation* (#695). Tina Kennedy (American Academy of Actuaries—Academy) said, not speaking as a representative of the deposit fund subgroup, her preference is for either approach 2 or approach 3. She suggested making approach 2 more generic by removing the crediting rate formula. She provided the following example of more generic wording:

> “A synthetic guaranteed investment contract means a group annuity contract or other agreement that establishes the insurer’s obligation by reference to a segregated portfolio of assets that is not owned by the insurer. The contract functions as an accounting record for an accumulation fund, and the fixed rate of return credited to the fund reflects the amortization of the segregated portfolio’s marketing gains and losses based on the duration.”

Mr. Serbinowski asked if there might be other synthetic guaranteed investment contracts (GICs) that are not meant to be covered by Model #695. He said that it should be made clear that the changes suggested are just for the purposes of Model #695 and would not have consequences outside of the model. Ms. Kennedy said that approach 3 could also accomplish the Subgroup’s purpose. Mr. Serbinowski said that the approach 3 indicates that the model is only applicable to some synthetic GICs and because it does not apply to CDAs, approach 3 avoids the issue of whether a CDA is a synthetic GIC. He said that approach 4 addresses CDA-type benefit features. He said he favors approach 2, approach 3 or approach 4 because approach 1 will raise too many questions about financial guarantees. Ms. Kennedy said that a corollary to approach 4 is that a CDA-type benefit would need to be defined in Model #695. Mr. Boerner said that with that type of change, he would favor approach 4. Mr. Chupp voiced concerns about that approach. The Subgroup agreed to rewrite the definition of synthetic GICs in section 4W of Model #695 to incorporate elements of approach 2 and approach 3 and rewrite section 3 of the model to make it more structured.

3. **Discussed the Paper Submitted by the IRI/ACLI**

John Bruins (American Council of Life Insurers—ACLI) discussed the paper (Attachment 3) the ACLI submitted jointly with the Insured Retirement Institute (IRI). The paper identifies and illustrates the considerations for establishing reserves and RBC within the C-3Phase II/AG 43 framework for a CDA, relative to a variable annuity with guaranteed income benefits. Mr. Bruins said that the paper was developed using a specific product design but that the thoughts of assumptions, modeling, scenario generation and calibration are generic and are applicable to any product design. He cautioned that the reserve patterns depicted in the graphs are specific to the product designs. Jon Satlin (Prudential Financial) said that the level of reserves, including the sensitivity of the assumptions such as lapse and mortality, are highly dependent on the product design. He said that AG 43 is flexible enough to accommodate a variety of product designs.

Having no further business, the Contingent Deferred Annuity (A) Subgroup adjourned.
Contingent Deferred Annuity (A) Subgroup
Conference Call
January 20, 2015

The Contingent Deferred Annuity (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Jan. 20, 2015. The following Subgroup members participated: Tomasz Serbinowski, Chair (UT); Michael Colburn and Andy Rarus (CT); Felix Schirripa (NJ); Mike Boerner (TX); and Craig Chupp (VA).

1. Discussed Revising Model #805 to Exclude CDAs From Its Scope

Mr. Serbinowski reviewed the three options (Attachment 1) for exempting contingent deferred annuities (CDAs) from the Standard Nonforfeiture Law for Individual Deferred Annuities (#805), while preserving the commissioners’ authority to require nonforfeiture. It was decided that the first option should be modified to indicate that: 1) the wording in Model #805 section 2, Applicability, should say that section 3, section 4, section 5, section 6, section 7 and section 8 of the model are not applicable to CDAs; and 2) the commissioners have the authority to require nonforfeiture for CDAs. Kelly Ireland (American Council of Life Insurers—ACLI) said that allowing the commissioners to have the authority to require nonforfeiture values works against the goal of having uniformity across all states. Mr. Serbinowski said that he is uncomfortable moving forward with any recommendation that can be construed to imply that CDAs do not require nonforfeiture values.

Mr. Serbinowski recommended that no further consideration be given to the second option because of the practical issues related to tying the sunset date to NAIC adoption of a new nonforfeiture regulation. He also said there is not a lot of support for the third option. He said he will revise option one and add a drafting note indicating that application of the revision would be prospective. He will distribute the revised option one for discussion on the next call.

2. Discussed the Applicability of Model #695 to CDAs

Mr. Serbinowski compared the definitions of CDAs and synthetic guaranteed investment contracts (GICs) (Attachment 2). He said while CDAs clearly meet the definition of a synthetic GIC, it is less clear whether synthetic GICs meet the definition of CDAs, primarily because most synthetic GICs do not create the obligation to provide periodic payments for the lifetime of the annuitant. He said that CDAs were never intended to be subject to the Synthetic Guaranteed Investment Contracts Model Regulation (#695). He said the Subgroup should consider what can be done to avoid subjecting CDAs to the model. Mr. Colburn suggested that exclusion of CDAs from Model #695 can be accomplished by noting in the scope statement of the model that products having certain characteristics specific to CDAs are outside of the model’s scope. Mr. Schirripa said the synthetic GIC definition is too broad and should be revised such that CDAs are not included.

Having no further business, the Contingent Deferred Annuity (A) Subgroup adjourned.
Contingent Deferred Annuity (A) Subgroup
Conference Call
January 13, 2015

The Contingent Deferred Annuity (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Jan. 13, 2015. The following Subgroup members participated: Tomasz Serbinowski, Chair (UT); Andy Rarus (CT); Felix Schirripa (NJ); Mike Boerner (TX); and Craig Chupp and Ern Johnson (VA).

1. Discussed the Exemption of CDAs from Model #805

Mr. Serbinowski discussed two options for allowing the Commissioner to exercise the discretion to require other forms of nonforfeiture if contingent deferred annuities (CDAs) are excluded from the Standard Nonforfeiture Law for Individual Deferred Annuities (#805). The first option recommends modifications to the wording in Model #805 to clarify that the Commissioner retains the authority to require nonforfeiture benefits. The second option utilizes the language in the Utah nonforfeiture law for life insurance. Mr. Serbinowski said that language is broad enough that specific exemption is not required. The Subgroup discussed several variations of the two options. Mr. Serbinowski agreed to revise option one based on the discussion comments.

2. Discussed the Applicability of Model #695 to CDAs

Mr. Serbinowski said section 3 in the Synthetic Guaranteed Investment Contracts Model Regulation (#695) and a drafting note in the model seems to indicate that the model did not intend to include CDAs. Concurring with Mr. Serbinowski, Mr. Rarus said that when writing laws, state legislators do not tend to include the text of drafting notes. The Subgroup recommended that Model #695 be modified to clarify that the model is not applicable to CDAs. For the next meeting, Mr. Serbinowski agreed to provide, for comparison purposes, the Life Insurance and Annuities (A) Committee’s definition of a CDA along with its definition of a synthetic guaranteed investment contract.

Having no further business, the Contingent Deferred Annuity (A) Subgroup adjourned.
The Contingent Deferred Annuity (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Dec. 15, 2014. The following Subgroup members participated: Tomasz Serbinowski, Chair (UT); Perry Kupferman (CA); Robert Chester and Andrew Rarus (CT); Felix Schirripa (NJ); Philip Reyna (TX); and Ern Johnson (VA).

1. Reviewed its Charges

The Subgroup is awaiting a response from the American Council of Life Insurers (ACLI) related to the application of *Actuarial Guideline XLIII—CARVM for Variable Annuities* (AG 43). Mr. Serbinowski said the ACLI presented a draft of an appendix to AG 43 that provides reserve guidance for policies where the assets are not held by the insurer. The draft proposed two reserve methodologies. The ACLI has agreed to provide a demonstration that the two methods are equivalent. They have also agreed to find alternative wording to replace the use of the term “separate account,” because the draft uses the term in a manner that is inconsistent with its traditional use in the context of insurance accounting.

Mr. Serbinowski said that when the Subgroup addressed the charge related to excluding contingent deferred annuities (CDAs) from the *Standard Nonforfeiture Law for Individual Deferred Annuities* (#805), it failed to allow for the commissioner to have the discretion to require other forms of nonforfeiture, if deemed necessary. The Subgroup agreed to revisit the issue to address the oversight.

Mr. Serbinowski said there is a drafting note in the *Synthetic Guaranteed Investment Contracts Model Regulation* (#695) that indicates that the model may not be appropriate for contracts other than synthetic guaranteed investment contracts. Mr. Rarus and Mr. Schirripa agreed to review Model #695 to determine whether a relationship and applicability to CDAs might exist.

The Subgroup considered how to address the charge related to the development of a template or checklist to facilitate the review of insurers’ risk management programs. No consensus of direction was reached.

The Subgroup agreed to a schedule of weekly calls beginning Jan. 12, 2015.

Having no further business, the Contingent Deferred Annuity (A) Subgroup adjourned.
March 18, 2015

To: Mike Boerner (TX)  
Chair, Life Actuarial (A) Task Force

Subject: CDA (A) Subgroup Proposals

Mike,

The Contingent Deferred Annuity (A) Subgroup is respectfully submits the accompanying proposals for the consideration of the Life Actuarial (A) Task Force. The first proposal recommends changes to the Standard Nonforfeiture Law for Individual Deferred Annuities (#805) to exempt Contingent Deferred Annuities (CDAs). The second proposal recommends changes to the Synthetic Guaranteed Investment Contracts Model Regulation (#695) to clarify that CDAs are not within the scope of the model.

**Model #805**

In December 2013, the Life Insurance and Annuities (A) Committee charged the Subgroup to “Consider revisions to the Standard Nonforfeiture Law for Individual Deferred Annuities (#805) to specifically exclude CDAs from the scope of the model.” The Subgroup provided a recommendation to the Task Force at the 2014 NAIC Summer National Meeting. The initial recommendation was subsequently revised to consider language that retained the Commissioner authority to require nonforfeiture benefits at his/her discretion.

**Model #695**

In March 2014, the Financial Condition (E) Committee charged the Subgroup to “Review and determine whether revisions to the Synthetic Guaranteed Investment Contracts Model Regulation (#695) are needed to clarify its relationship with CDAs.” The Subgroup recommends changes to the Scope and Application section (section 3) and the Definitions section (section 4W) to clarify that CDA’s are not within the scope of the model.

Both recommendations are included in the Subgroup Report to the Task Force. The Subgroup is requesting that the Task Force reviews the recommendations and considers exposing them for public comment.

Thank you,

Tomasz Serbinowski (UT)  
Chair, Contingent Deferred Annuity (A) Subgroup
STANDARD NONFORFEITURE LAW FOR
INDIVIDUAL DEFERRED ANNUITIES

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Section 1.  Title
This Act shall be known as the Standard Nonforfeiture Law for Individual Deferred Annuities.

Section 2.  Applicability

A. This Act shall not apply to any reinsurance, group annuity purchased under a retirement plan or plan of deferred compensation established or maintained by an employer (including a partnership or sole proprietorship) or by an employee organization, or by both, other than a plan providing individual retirement accounts or individual retirement annuities under Section 408 of the Internal Revenue Code, as now or hereafter amended, premium deposit fund, variable annuity, investment annuity, immediate annuity, any deferred annuity contract after annuity payments have commenced, or reversionary annuity, nor to any contract which shall be delivered outside this state through an agent or other representative of the company issuing the contract.

B. Sections 3 through 8 shall not apply to contingent deferred annuities.

C. Notwithstanding Subsection B, the commissioner shall have the authority to prescribe by regulation nonforfeiture benefits for contingent deferred annuities that are, in the opinion of the commissioner, equitable to the policyholder, appropriate given the risks insured, and to the extent possible consistent with general intent of this law.

Drafting Note: It is expected that any regulation prescribing specific nonforfeiture requirements for the CDAs and promulgated by the commissioner under Subsection C above would apply only to the CDA contracts issued subsequent to the effective date of such regulation.
SYNTHETIC GUARANTEED INVESTMENT CONTRACTS
MODEL REGULATION

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Section 1. Authority

This rule is issued pursuant to the authority vested in the commissioner of the State of [insert state] under [insert citation for authority].

Section 2. Purpose

A. The purpose of this regulation is to prescribe:

(1) The terms and conditions under which life insurance companies may issue group annuity contracts and other agreements that in whole or in part establish the insurer's obligation by reference to a segregated portfolio of assets that is not owned by the insurer;

(2) The essential operational features of the segregated portfolio of assets; and

(3) The reserve requirements for these group annuity contracts and agreements.

B. This regulation is intended to aid in the timely approval of such products by the commissioner, and recognizes that timely approval is essential given the competitive nature of the market for these products.
Section 3. Scope and Application

A. This regulation applies to that portion of a group annuity contract or other agreement described in Section 4W and issued by a life insurer:
   (1) That functions as an accounting record for an accumulation fund;
   (2) That has benefit guarantees relating to a principal amount and levels of interest at a fixed rate of return specified in advance; and
   (3) Where the fixed rates of return:
      (a) Are Constant over the applicable rate periods;
      (b) May reflect prior and current market conditions with respect to the segregated portfolio; and
      (c) May not reference future changes in market conditions.

B. This regulation is applicable to all contracts issued after its effective date. Contracts that have been negotiated prior to the effective date need not be refiled with the commissioner.

Drafting Note: This explanation of the fixed rate of return is intended to clarify the fact that the regulation excludes products such as those that guarantee the future performance of a stated index. It is recognized that versions of synthetics other than those described in the scope section may evolve over time; the intent of the regulation is not to preclude the issuance of such products, but rather to describe how a specific set of synthetics (those described in the scope) should be regulated.

Drafting Note: It is expected that individual regulators, where applicable, will retain the right to withdraw approval of previously filed contract forms for new issuance if they do not conform to the regulation. Therefore, no language explicitly withdrawing approval of previously filed forms was included.

Section 4. Definitions

As used in this regulation, the following terms shall have these meanings:

A. “Account assets” means the assets in the segregated portfolio plus any assets held in the general account or a separate account to meet the asset maintenance requirements.

B. “Actuarial opinion and memorandum” means the opinion and memorandum of the valuation actuary required to be submitted to the commissioner pursuant to Section 10B of this regulation.

C. “Affirmatively approved” means approval of an insurer’s plan of operation for a class of contracts containing the form of contract under review, after the plan of operation associated with the class of contracts has been reviewed by the insurer’s domiciliary insurance department, and the plan of operation has been found to be in compliance with the NAIC Synthetic Guaranteed Investment Contracts Model Regulation by the

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domiciliary insurance department. Affirmatively approved does not mean approval as a result of the deemer provision.

D. “Appointed actuary” means the qualified actuary appointed or retained either directly by or by the authority of the board of directors through an executive officer of the company to prepare the annual statement of actuarial opinion for the company as a whole pursuant to Section [insert reference to standard valuation law].

E. “Asset maintenance requirement” means the requirement to maintain assets to fund contract benefits in accordance with Section 10 of this regulation.

F. “Class of contracts” means the set of all contracts to which a given plan of operation pertains.

G. “Contract value record” means an accounting record, provided by the contract in relation to a segregated portfolio of assets, that is credited with a fixed rate of return over regular periods, and that is used to measure the extent of the insurer’s obligation to the contractholder. The fixed rate of return credited to the contract value record is determined by means of a crediting rate formula or declared at the inception of the contract and valid for the entire term of the contract.

H. “Crediting rate formula” means a mathematical formula used to calculate the fixed rate of return credited to the contract value record during any rate period and based in part upon the difference between the contract value record and the market value record amortized over an appropriate period. The fixed rate of return calculated by means of this formula may reflect prior and current market conditions with respect to the segregated portfolio, but may not reference future changes in market conditions.

I. “Date of filing,” with respect to a filing for approval of a contract form under this regulation, means the date as defined by the applicable statutes or regulations of the state of issue with regard to contract filings.

Drafting Note: Individual states may wish to insert a specific reference to the applicable statute or regulation.

J. “Duration” means, with respect to the segregated portfolio assets or guaranteed contract liabilities, a measure of price sensitivity to changes in interest rates, such as the Macaulay duration or option-adjusted duration.

K. “Fair market value” means a reasonable estimate of the amount that a knowledgeable buyer of an asset would be willing to pay, and a knowledgeable seller of an asset would be willing to accept, for the asset without duress in an arm’s length transaction. In the case of a publicly traded security, the fair market value is the price at which the security is traded or, if no price is available, a price that appropriately reflects the latest bid and asked prices for the security. In the case of a debt instrument that is not publicly traded, the fair market value is the discounted present value of the asset calculated at a reasonable discount rate. For all other non-publicly traded assets, fair market value will be determined in accordance with valuation practices customarily used within the financial industry.

L. “Guaranteed minimum benefits” means contract benefits on a specified date that may be either:
(1) A principal guarantee, with or without a fixed minimum interest rate guarantee, related to the segregated portfolio;

(2) An assurance as to the future investment return or performance of the segregated portfolio; or

(3) The fair market value of the segregated portfolio, to the extent that the fair market value of the assets determines the contractholder’s benefits.

M. (1) “Hedging instrument” means:

(a) An interest rate futures agreement or foreign currency futures agreement, an option to purchase or sell an interest rate futures agreement or foreign currency futures agreement, or any option to purchase or sell a security or foreign currency, used in a bona fide hedging transaction; or

(b) A financial agreement or arrangement entered into with a broker, dealer or bank, qualified under applicable federal and state securities or banking law and regulation, in connection with investment in one or more securities in order to reduce the risk of changes in market valuation or to create a synthetic investment that, when added to the portfolio, reduces the risk of changes in market valuation.

(2) An instrument shall not be considered a hedging instrument or a part of a bona fide hedging transaction if it is purchased in conjunction with another instrument where the effect of the combined transaction is an increase in the portfolio’s exposure to market risk.

N. “Investment guidelines” means a set of written guidelines, established in advance by the person with investment authority over the segregated portfolio, to be followed by the investment manager. The guidelines shall include a description of:

(1) The segregated portfolio's investment objectives and limitations;

(2) The investment manager's degree of discretion;

(3) The duration, asset class, quality, diversification, and other requirements of the segregated portfolio; and

(4) The manner in which derivative instruments may be used, if at all, in the segregated portfolio.

O. “Investment manager” means the person (including the contractholder) responsible for managing the assets in the segregated portfolio in accordance with the investment guidelines in a fiduciary capacity to the owner of the assets.

P. “Market value record” means an accounting record provided by the contract to reflect the fair market value of the segregated portfolio.

Q. “Permitted custodial institution” means a bank, trust company or other licensed fiduciary services provider.
Drafting Note: When adopting this regulation, individual regulators may wish to review their applicable state laws to ensure that this definition hasn’t inadvertently authorized an entity to act as a custodial institution that it would not wish to do so.

R. “Plan of operation” means a written plan meeting the requirements of Section 5B(1) of this regulation.

S. “Qualified actuary” means an individual who meets the qualification standards set forth in [insert reference to section of the regulations related to actuarial opinions and memoranda].

T. “Rate period” means the period of time during which the fixed rate of return credited to the contract value record is applicable between crediting rate formula adjustments.

U. “Segregated portfolio” means:

(1) A portfolio or sub-portfolio of assets to which the contract pertains that is held in a custody or trust account by the permitted custodial institution and identified on the records of the permitted custodial institution as special custody assets held for the exclusive benefit of the retirement plans or other entities on whose behalf the contractholder holds the contract; and

(2) Any related cash or currency received by the permitted custodial institution for the account of the contractholder and held in a deposit account for the exclusive benefit of the retirement plans or other entities on whose behalf the contractholder holds the contract.

V. “Spot rate” corresponding to a given time of benefit payment means the yield on a zero-coupon non-callable and non-prepayable United States government obligation maturing at that time, or the zero-coupon yield implied by the price of a representative sampling of coupon-bearing, non-callable and non-prepayable United States government obligations in accordance with a formula set forth in the plan of operation. To the extent that guaranteed contract liabilities are denominated in the currency of a foreign country rated in one of the two (2) highest rating categories by an independent nationally recognized United States rating agency acceptable to the commissioner and are supported by investments denominated in the currency of the foreign country, the spot rate may be determined by reference to substantially similar obligations of the government of the foreign country. For liabilities other than those described above, the spot rate shall be determined on a basis mutually agreed upon by the insurer and the commissioner.

W. “Synthetic guaranteed investment contract” or “contract” means a group annuity contract or other agreement that in whole or in part establishes the insurer’s obligations by reference to a segregated portfolio of assets that is not owned by the insurer. The contract functions as an accounting record for an accumulation fund and the fixed rate of return credited to the fund reflects an amortization of segregated portfolio’s market gains and losses based on the duration.

X. “Unilateral contract termination event” means an event allowing the insurer to unilaterally and immediately terminate the contract, without future liability or obligation to the contractholder.
Y. “United States government obligation” means a direct obligation issued, assumed, guaranteed or insured by the United States of America or by an agency or instrumentality of the United States government.

Z. “Valuation actuary” means the appointed actuary or, alternatively, a qualified actuary designated by the appointed actuary to render the actuarial opinion pursuant to Section 10. Written documentation of any such designation shall be on file at the company and available for review by the commissioner upon request.
C3 Phase II/AG 43 (E/A) Subgroup Report

No Materials
Indexed Universal Life (IUL) Illustrations
American Academy of Actuaries Comment Letter
American Council of Life Insurers Comment Letter
Affordable Life Insurance Alliance Comment Letter
Connecticut Insurance Department Comment Letter
EquiTrust Life Comment Letter
Pacific Life Comment Letter
Pete Weber Comment Letter
Tom Taylor Comment Letter
March 11, 2015

Mike Boerner
Chair, Life Actuarial (A) Task Force
National Association of Insurance Commissioners

Dear Mr. Boerner:

The American Academy of Actuaries\(^1\) Life Illustrations Work Group (“Work Group”) appreciates the opportunity to comment on the proposed Actuarial Guideline YY that was discussed on the Feb. 19 Life Actuarial (A) Task Force conference call.

While formulating our comments, we were mindful of the goals stated in the Life Insurance Illustration Model Regulation (“the Model”) and in the February 2007 revision of actuarial standard of practice No. 24 (“ASOP 24”):

- “…to ensure that illustrations do not mislead purchasers of life insurance and to make illustrations more understandable” (the Model)
- “…to update and reflect current, generally accepted actuarial practices with respect to illustrations prepared in compliance with the Model [due to continued product innovation]” (ASOP 24)

Our comments are organized to follow the sections of the proposed Actuarial Guideline.

**GENERAL COMMENTS**

1) The Background section states: “in the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different crediting rates.” We note that this disparity could continue to be the case after this guideline becomes effective due to the following factors:

   a. Products with the same the same index and crediting method—and the same index parameters—may have different “annual net investment earnings rates” described in 5 (A) and 5 (B), which could result in different illustrated rates.
   b. Companies and agents may illustrate a lower credited rate at their option.

\(^1\) The American Academy of Actuaries is an 18,500+ member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.
We also note that uniformity of illustrated rates is not a goal of the Model. Therefore, we recommend the Background section of this document be modified to either remove this reference or clarify the perceived problem.

2) We believe it is incorrect to prescribe a credited rate for the Currently Payable Scale for an indexed universal life (IUL) policy. The Currently Payable Scale is defined in the Model as a scale of non-guaranteed elements that are determined by the company; these non-guaranteed elements are not intended to be prescribed by regulation. We recommend a change to the language to remove this reference.

3) We recommend additional clarity as to how the proposed Actuarial Guideline applies to in-force policies. The Work Group has not had time to fully consider the potential impacts to in-force policies, but there are some concerns that common practices under ASOP 24 Section 3.7 (“Illustrations on Policies In Force One Year or More”) may be affected in an unintended manner. In addition, we believe there may be consumer confusion if an in-force illustration fell within the scope of the Actuarial Guideline but the new business illustration did not (or vice versa).

4) We continue to have concerns that the proposed Actuarial Guideline reaches beyond the responsibilities of the Illustration Actuary. For example, under the Model, the Illustration Actuary certifies that the illustration meets the requirements of a disciplined current scale (DCS); however, it is the Responsible Officer who certifies compliance for items such as the requirements in sections 6 and 7 of the proposed Actuarial Guideline.

5) We recommend that the Scope section be modified or expanded to include policies that utilize an external index to determine non-guaranteed elements other than index credits (e.g., participating whole life policy with index-linked dividends).

SECTION 3: DEFINITIONS

6) The Alternate Scale definition references a fixed account in 3 (A) (i). It is possible that a product could offer multiple fixed accounts (e.g., one fixed account may offer a higher credited rate in exchange for a longer duration). Clarification is needed as to what would be intended in that situation. We also note that there could be a significant inconsistency between illustrations of policies with a fixed account and those without.

7) The Annual Point to Point definition references an annual cap in 3 (B) (ii). We believe the intent is to use the annual cap associated with the currently payable scale for the calculations in 4 (B). In any case, we recommend additional language to make that clear.

8) The Annual Point to Point definition references account charges in 3 (B) (vi). We recommend additional language to define account charges and to clarify what should be done in the event that account charges vary between more than one account (e.g., should the Illustration Actuary use the account with the lowest percent charges?).
SECTION 4: CURRENTLY PAYABLE SCALE METHODOLOGY

9) As mentioned above in our general comments, we believe this section is intended to limit the illustrated rate, and not to specify the actual credited rate to the policy. We recommend all such references to the currently payable scale be removed.

10) We continue to note that the use of the current indexing parameters combined with historic index experience creates a mismatch of assumptions. (The same type of mismatch is true in the indexed annuity illustration regulation; however, the impact is less severe due to the shorter historical horizon used and commonly lower option budgets.)

11) We question whether it is appropriate to give certain time periods significantly more weight than others. The rolling 25-year periods apply extra weight to years in the middle of the 65-year period vs. years at the beginning and end of the period, so more recent index performance will have relatively low impact. Furthermore, the rolling 25-year periods may make the look-back rate more difficult to explain to the consumer. A simple look-back method without rolling periods may be sufficient without adding complexity for the consumer (e.g., one could use the average annual rate from a simple 50-year look back). Additionally, it may be sufficient to use fewer data points than those that are required in a daily calculation.

12) We note that the calculations in 4 (A) are open to interpretation (e.g., how to handle dates that do not fall on a trading day). We recommend more clarification of this calculation.

13) We believe the annual cap that is used in the look-back calculation in 4 (A) is intended to be the declared current cap offered in a company’s actual available Benchmark Index Account. We recommend better clarification of such throughout the document.

14) We recommend combining 4 (E) with 3 (C) to help improve clarity, and recommend deleting the last phrase of 4 (E) (“but in no event shall the credited rate for the currently payable scale exceed the rate calculated in 4 (B)”) because it is already included elsewhere in the Actuarial Guideline.

15) We believe the intent of 4 (E) is to require construction of a hypothetical, supportable S&P 500 Annual Point to Point index account, but believe it could be misinterpreted to allow any hypothetical Benchmark Index Account (e.g., Nasdaq-100 Monthly Average). We recommend adding clarifying language to this effect and providing guidance to help actuaries create a hypothetical Benchmark Index Account.

SECTION 5: DISCIPLINED CURRENT SCALE METHODOLOGY

16) We recommend changing the “credited rate” reference in this section to “earned interest rate” to align with terminology used in the Model.

17) The 45 percent limit in 5 (A) seems to be an arbitrary number, and we question if it should be a static number. We suggest that if the look-back methodology is sound, then an arbitrary limit should not be needed.

18) We interpret the limit in 5 (A) to apply when the Illustration Actuary is performing self-support and lapse-support testing for the DCS; however, the formula seems to ignore certain sources for
the amount invested in a hedging program. For example, it is widely accepted practice for cost of insurance charges (COIs) or other policy charges to both offset mortality and expense costs and also support a higher option budget. The formula in 5 (A) eliminates these potential additional components and results in inconsistencies between IUL and traditional universal life DCS testing. We recommend modifying the language to eliminate the limitation on the amount invested in the hedging program.

19) We believe there would be value in defining “net investment earnings rate.” We believe a common interpretation would be to subtract default costs and investment expenses, but note that ASOP 24 specifically states that investment expenses are sometimes treated separately.

20) The amount assumed to be invested in a hedging program described in 5 (A) is to be expressed as a percent. We recommend clarifying that the account value is the denominator in that percentage calculation.

21) We do not understand the intent of 5 (C). ASOP 24 already requires inclusion of all policy features, including crediting bonuses, to be considered as a part of DCS testing. What, if anything, is this language intending to add? Is a bonus intended to be capped by the Benchmark Index Account limit as well?

SECTION 6: POLICY LOANS

22) Policy loan leverage is a feature of many product designs, not just IUL products. The 100-basis-point limitation to loan leverage could confuse consumers when comparing different types of products subject to the Model. We recommend this provision be removed from the IUL Actuarial Guideline and addressed in a manner that affects all products with similar features.

23) The 100-basis-point limitation appears arbitrary to us.

SECTION 7: ADDITIONAL STANDARDS

24) In view of the Model’s goals of not confusing purchasers and making illustrations more understandable, we question whether percentiles are understandable to the average consumer.

25) We believe it is important to convey how the crediting rate can vary year-to-year and note that the original ACLI proposal included a chart to show possible yearly movements.

We hope these comments are helpful. Please contact Brian Widuch, the Academy’s life policy analyst (widuch@actuary.org; 202-223-8196) if you have any questions or would like any further assistance.

Sincerely,

Linda Rodway, MAAA, FSA
Chairperson
Life Illustrations Work Group
American Academy of Actuaries

Cc: Fred Andersen
March 16, 2015

Mr. Mike Boerner
Chairman – NAIC Life Actuarial Task Force

Re  Exposed Actuarial Guideline (YY) - The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest

Dear Mike;

The ACLI¹ is pleased to submit the following comments regarding the Exposed Actuarial Guideline YY – The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest on behalf of our member companies.

We support the principles laid out in the framework for IUL illustrations that LATF exposed last month and offer this letter in the spirit of compromise.

We greatly appreciate LATF’s transparency throughout the process and your willingness to incorporate industry viewpoints. No stakeholder will agree with every aspect of a true compromise, but LATF seems to have found a middle ground that can be embraced by a wide majority. We note that this letter outlines the viewpoint shared by a significant majority of member companies on the points addressed, but there are companies with other viewpoints as well as items we did not address.

While the Actuarial Guideline is specific to IUL, we note that it addresses elements of IUL that may be present in other products. To the extent such elements are analyzed, we believe it would be appropriate to consider a level playing field between products and companies.

Illustration regulations appropriately need to be in broad agreement with other regulations and illustration principles; they also need to be clear so as to be implemented consistently across companies with minimized opportunity for loopholes. In this spirit, we hope LATF will work with industry actuaries to develop more specific technical language for the framework.

¹ The American Council of Life Insurers (ACLI) is a Washington, D.C.-based trade association with 284 member companies operating in the United States and abroad. ACLI advocates in federal, state, and international forums for public policy that supports the industry marketplace and the 75 million American families that rely on life insurers’ products for financial and retirement security. ACLI members offer life insurance, annuities, retirement plans, long-term care and disability income insurance, and reinsurance, representing more than 90 percent of industry assets and premiums. Learn more at www.acli.com.
The following are commentary and specific recommended wording that we ask LATF to consider as you finalize the actuarial guideline. To the extent we have not commented specifically, we are in support of the LATF proposal.

cc Reggie Mazyck, NAIC
Sections 1 & 2: Effective Date and Scope

Commentary

- Certain aspects of the proposed actuarial guideline, such as maximum illustration rates are straightforward and can be implemented in a short time frame.
- However other items (e.g. alternate scale with equal prominence) can take a significant amount of time to implement due to the formatting and programming changes that may be necessary.
- Other considerations that can have an effect on timing are dealing with external vendors (some will have to make changes for multiple carriers at the same time) and year-end Information Technology limitations.
- We suggest using language from the NAIC Universal Life Model Reg. #585 to define IUL.

Proposed Wording

This Actuarial Guideline shall become effective in two stages:

1. Sections 4 and 5 shall be effective for all new business and in-force life insurance illustrations on policies sold on or after September 1, 2015.
2. Sections 6 & 7 shall be effective for all new business and in-force life insurance illustrations on policies sold on or after March 1, 2016.

This Actuarial Guideline shall apply to any life insurance illustrations that meets both (i) and (ii), below:

i. The policy is subject to Model regulation #582.
ii. Interest credits are linked to an external index or indices.

Section 3: Definitions

Commentary

- To avoid any loopholes when calculating the Benchmark lookback rate, LATF should stipulate that to qualify, an indexed account should not be subject to limitations on policyowner allocations.

Proposed Wording

3(B) vii. There are no unique limitations on policyowner allocations to the account.
Section 4: Currently Payable Scale Methodology

Commentary

- Almost all companies offer a Benchmark Index Account. To avoid uncertainty we suggest LATF work with industry actuaries to clarify how actuarial judgment would be used to create a hypothetical Benchmark Index for products that do not offer one.

Proposed Wording

4(C). For other Index Accounts using other equity, bond, and/or commodity indexes, and/or using other crediting methods, the illustration actuary shall use actuarial judgment to determine the credited rate for the currently payable scale. The determination shall reflect the fundamental characteristics of the Index Account and the parameters shall have the appropriate relationship to the expected risk and return of the Benchmark Index Account or the hypothetical account described in 4(E). In no event shall the credited rate for the currently payable scale exceed the rate calculated in 4(B) or (E).

4(E). If the insurer does not offer a Benchmark Index Account with the illustrated policy, the Illustration Actuary shall use actuarial judgment to determine an annual cap for a hypothetical Benchmark Index Account, based on the cap the insurer could support on such an account. This hypothetical Benchmark Index Account shall be used to calculate a credited rate using the method described above. This credited rate shall be the maximum rate allowable for the currently payable scale for each Index Account in the illustration.
Section 5: Disciplined Current Scale Methodology

Commentary

- We recommend clarifying the guardrail as a straight percentage of the annual net investment earnings rate of the general account assets supporting the policy instead of referring to the hedging program.
  - There are wide differences in hedging strategies for one-year S&P500 products, multi-index products, and five-year products; also three companies can have three different strategies for simple one-year products. Some companies use futures, some pay for options in advance and some pay in arrears. You could have three companies, all with the same product, the same portfolio rate, AND with the same hedging results all coming up with different calculations of "return on hedge program" just because of trivial differences in hedge executions.
- Using the “annual net investment earnings rate (gross portfolio earnings less provisions for investment expenses and default costs) of the general account assets (excluding hedges for index-based credits) allocated to support the policy” provides the following benefits:
  - consistent application of the rules across the industry,
  - eliminates uncertainty for the Illustration Actuary, and
  - standardizes a well-understood and quantifiable basis for calculation.

Proposed Wording

5. Disciplined Current Scale Methodology

A. If an insurer engages in a hedging program for index-based credits, the assumed earned interest rate underlying the disciplined current scale will not exceed 145% of the annual net investment earnings rate (gross portfolio earnings less provisions for investment expenses and default costs) of the general account assets (excluding hedges for index-based credits) allocated to support the policy.

B. If an insurer does not engage in a hedging program for index-based credits, the assumed earned interest rate underlying the disciplined current scale shall not exceed the annual net investment earnings rate of the general account assets allocated to support the policy.

C. These experience limitations shall be included when performing the self-support and lapse-support tests under Model reg. #582 for the policy, accounting for all its benefits including illustrated bonuses.
Section 7: Additional Standards

Commentary

• Was it LATF’s intention to remove the table of year by year historical index returns that was part of the original ACLI recommendation? This table was intended to highlight to the consumer the expected variability in annual returns. We believe that this table would be more effective than showing the 20th and 80th percentiles.

Proposed Wording

The basic illustration shall also include the following:

A. A ledger using the Alternate Scale shall be shown alongside the ledger using the illustrated scale with equal prominence.

B. A table showing the minimum and maximum of the geometric average annual credited rates calculated in 4(A).

C. A table showing actual historical index changes and corresponding hypothetical interest rates using current index parameters for the most recent 20-year calendar period.
March 16, 2015

Michael Boerner
Chairman, NAIC Life Actuarial Task Force

Re: Exposed Actuarial Guideline (YY)

Mr. Boerner:

Thank you for the opportunity to comment on exposed Actuarial Guideline (YY). ALIA companies support the principles for IUL illustrations that were exposed last month and urge their adoption. We have had the opportunity to review the ACLI’s comment letter and wish to lend our support. We appreciate the significant amount of work that Task Force members have expended on this issue, and in particular Fred Anderson’s leadership that succeeded in finding a compromise approach that has received broad support from companies across the spectrum.

Thank you again for the opportunity to submit these comments.

Regards,

Scott R. Harrison
Executive Director
March 10, 2015

Reginald Mazyck
Life Actuary
National Association of Insurance Commissioners
1100 Walnut St., Suite 1500
444 North Capitol Street NW
Suite 701
Washington, DC 20001-1509

Re: Connecticut Comments on Actuarial Guideline (YY) – The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest

Dear Reggie:

Connecticut would like to submit comments regarding the recent February 23, 2015 exposure of The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest. Our comments reflect those from both our product area (headed by Mary Ellen Breault and supported by Robert Chester) as well Connecticut’s financial regulation division.

Our comments are as follows:

- It is important that the illustrations not be deceptive. They need to demonstrate not only some average net crediting rate, but the gross rate and specific loads or expenses of the carrier. Otherwise, the illustration is of no real value, especially for comparison purposes at the point of sale.
- If it is not part of the actual illustration, we recommend an additional disclosure document that shows how the net rates are determined for the carrier, including the gross rate and all charges.
- The interest rate earned on IUL products are dependent on the performance of the overall return of an outside index which is then applied to many indexing loads, fees and spreads which are all laid out and specific within the contract. These products are marketed and designed this way with these features enumerated in great detail within the contracts.
- In contrast, Whole Life policies are illustrated based on a current dividend scale rate which is a rate actually awarded and credited by a company. Traditional UL policies are illustrated based on a current interest rate which is the rate awarded and credited by a company through their supported bond portfolio return.
Connecticut believes that establishing or regulating a net earned rate in the IUL Illustrations is wrong for the following reasons:

1. Whole Life and Traditional Universal Life Illustrations require the illustrated rate be based only on the actual current scale dividend earning rate or the current net portfolio earnings rate. These products apply no additional interest rate loads based on their designs. The IUL illustrated rate is entirely a hypothetical rate based in part on historical return averages of the S&P 500 or similar index. This hypothetical rate is more similar to the hypothetical maximum gross rate of 12% established for Variable Life Illustrations which is based off the historical average returns on equities.

2. IUL product designs establish within their contracts and market an earned interest rate based on an overall outside index return (Gross Rate of Return) and spell out a variety of contract driven indexing loads applied to this Gross Index Return Rate to deliver a product specific Net Rate of Return. Every product and contract specifies these indexing loads and each is specific by company delivering a different and unique Net Rate of Return to consumers.

3. Targeting a net earned rate will conceal to consumers the contract driven indexing loads which get applied to the gross overall rate to deliver a final net rate of return. – This is an important aspect of the illustration to the consumer for comparison between companies and product. The product with steeper index loading will have less accumulated value at the same projected gross rate. Consumers can easily ascertain and discern the impacts of these product components.

• The illustrations for these products should follow the hypothetical guide established for Variable Life Illustration and not the current scale rate requirements of both the Whole Life and Traditional Universal Life Illustrations.
• We support a table such as that described in 7.B of this proposal that illustrates the volatility of this product.

The Connecticut Insurance Department continues to offer its support in refining and shaping the Life illustration Model Regulation for this product. Please let us know if you have any questions.

Andrew J. Rarus
Life & Health Actuary

cc: Mary Ellen Breault, Director, Life and Health Division
Robert Chester, Life and Health Division
Anne Melissa Dowling, Acting Commissioner of Insurance
March 10, 2015

Reggie Mazyck
Life Actuarial Task Force (LATF)
National Association of Insurance Commissioners

To the members of LATF:

We appreciate the opportunity to comment on the exposure draft of Actuarial Guideline [YY]. We have been following the progress of this discussion from the time the ACLI was charged with recommending improvements to life illustrations for indexed products back in 2010. We supported the subsequent proposal of the task force as a reasonable solution to adding consistency to IUL illustrated rates. We understand the proposal was met with strong, coordinated opposition, which prevented the adoption of the proposal as new guidance. We understand the exposed Actuarial Guideline [YY] is a compromise between the ACLI and several other groups.

Alternate Scale:

- Regardless of the good intentions of the Alternate Scale, it is our opinion, and great concern that adding this will be misleading, and may be used to “discredit” the Currently Payable Scale. The Alternate Scale is no more likely to occur than the Currently Payable Scale, and may give the false impression that the values produced by the Alternate Scale are somehow more correct, more realistic, or more conservative. This provision does nothing to explain the “bumpiness” of actual IUL credited values.

- Because of the credited rate limitation in Section 4C, the Alternate Scale and the Currently Payable Scale will not be significantly different. Having the illustrated values so close in magnitude will not make the illustration more understandable, may add confusion as to the purpose of the extra columns, and may overwhelm the applicant by adding even more numbers to an already crowded ledger.

Benchmark Index Account:

- The wording is confusing in Section 3C. We believe the word “An” should be replaced with the word “The”. Without this correction, the wording implies that the Benchmark Index Account may be an external and/or theoretical account, rather than the actual Annual Point-to-Point account for the illustrated product.

- We are concerned this provision may lead to companies either no longer offering Annual Point-to-Point accounts, or perhaps cynically adding additional accounts for the purpose of having a higher Benchmark Index Account, ironically by utilizing Section 4E as the loophole.

- We believe the Benchmark Index Account limitation in Section 5C is unreasonable, and are concerned the unintended consequence of this limitation will inhibit the development of new and innovative account concepts.

Arbitrary Boundaries:

- We believe the 65 years requirement in Section 4A is an arbitrary assignment of a recent historical period. We believe there are compelling, credible, defensible reasons for using a shorter period, and feel it is the responsibility of the Illustration Actuary to document, explain, and defend the recent historical period chosen. Should guidance for a boundary be necessary for consistency and uniformity, we recommend a look-back period that starts no earlier than 1984 (see Appendix for discussion of recent historic experience and recommended look-back boundary).

- We are concerned the look-back method and period in Section 4A gives more prominence to some S&P buckets than to others. We recommend re-considering the ACLI look-back method, which accounted for this weighting discrepancy.

- We believe the wording in Section 5A is confusing as to the choice and intent of the 45% boundary, and request guidance and clarification of this section before the final wording is approved.
Understandability:

- Knowing that the actual credited IUL value will be zero, the capped amount, or some value in between is helpful in understanding and setting realistic expectations for an IUL illustration. The ACLI requirement of a table of hypothetical year-by-year rates was one such method.
- While we had some disagreement with the ACLI table, the proposed method was nevertheless effective in communicating IUL “bumpiness”. The requirement of Section 7 simply to show a single look-back rate at various percentiles is a step backward. Displaying a single, averaged rate neither educates nor informs about the variable nature of IUL credited values, and may add confusion as to the purpose and meaning of such value.

Implementation Date:

- The requirement of a September 1, 2015 implementation is simply too short. We were very surprised to hear the comment on a recent LATF call that this is somehow a simple programming change. The sudden and complete need for resources in such a short time will be a large strain on existing illustration capacity, both in-house and from external vendors. At the very least, the Alternate Scale alone will most likely cause a re-orientation of the entire illustration layout.
- Therefore, we respectfully request consideration be given to an implementation date no sooner than 3/1/16.

While we strongly support the effort to prevent IUL illustrations from misleading purchasers and to make them more understandable, it is our opinion, that this guideline falls short in those regards, and places new, selective limitations on the Illustration Actuary.

Steven C. Newman, ASA, MAAA
Life Product Actuary
EquiTrust Life Insurance Company
Appendix: Historic Look-Back Period Discussion

By 1984, nearly half of all large firms were either already offering a 401(k) plan or considering one. The 401(k) plan retirement system held $4.3T in assets as of March 2014. The bulk of 401(k) assets continue to be invested in stocks. On average, at year-end 2013, 66% of 401(k) participant's assets were invested in equity securities through equity funds, the equity portion of balanced funds, and company stock.

We recommend using data starting no earlier than 1984, which we believe represents the start of the new equity paradigm and recognizes that the equity markets were fundamentally changed with the introduction of 401(k) plans as an employee benefit. In fact, we expect increased growth in 401(k) equity assets, as defined contribution plans continue to replace defined benefit plans as preferred employee retirement plan.

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Comparison of Historic S&P 500 with 401(k) Plan Assets

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2Facts from EBRI, February 2005, Employee Benefit Research Institute
By starting in 1950 for 2015 (65 years) as prescribed in the Guideline, the method in 4A produces a 6.11% geometric average rate, assuming a 10% cap. By starting in 1984 (the “new paradigm” post-401(k) era) the method in 4A produces a 6.68% geometric average.

The point of the exercise is not to manipulate the value up to a higher value; one of the reasons for this guideline is the NAIC feels companies have been doing this for years. Rather, the point is the look-back period and method should reflect recent and representative historical data.
March 17, 2015

Mr. Michael W. Boerner
Chair, NAIC Life Actuarial Task Force

Re: Proposed Actuarial Guideline [YY] on IUL Illustrations

Dear Mike,

Pacific Life strongly supports the speedy adoption of proposed Actuarial Guideline [YY] on Indexed Universal Life (IUL) Illustrations with changes to reflect the specific wording suggested by the ACLI in their March 16 letter. We commend the Life Actuarial Task Force, particularly Fred Andersen and his subgroup for balancing the many diverse interests to develop this guideline. LATF’s proposal is in the true spirit of compromise – not perfect for any one company involved in this process, but sound regulatory guidance that provides consumers with appropriate tools to make the proper decisions.

Thank you for your leadership on this issue.

Best regards,

[Signature]

Gary L. Falde
Fairly minor, but when specific indices in models, guidelines, regulations, etc. are used, I think the convention is to anticipate the possibility that one day they may no longer be available. While difficult to imagine, I recommend changing the definition of Benchmark Account say:

An actual Index Account available for the illustrated policy with the Annual Point to Point method based solely on changes in the S&P 500® Index (Ticker: SPX), or comparable broad market index if the S&P 500 is no longer available.

Pete

Peter Weber, ASA, MAAA
Life Actuary, Office of Product Regulation and Actuarial Services - Life & Health
Ohio Department of Insurance
50 West Town St.
Third Floor - Suite 300
Columbus, Ohio 43215
(614) 644-3311 (Office)
Peter.Weber@insurance.ohio.gov
http://www.insurance.ohio.gov
March 9, 2014

To: Life Actuarial Task Force, c/o Reggie Mazyck

RE: Actuarial Guideline [YY]: The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest

Dear Mr. Mazyck and LATF Members:

Thank you for drafting this Actuarial Guideline and accepting comments. Actuaries and company officials desperately need this guidance on Indexed UL illustrations because “disciplined” projections must be mandated for companies to compete fairly and serve the public. Furthermore, Illustration Actuaries need direction to make critical judgments as to whether IUL illustrations are self-supporting without being lapse supported. Having a great deal of experience with both Illustration Regulation compliance and IUL products, I have followed the deliberations with great interest.

While this draft guideline will significantly improve the current state of affairs, please consider the comments and suggestions below. I will often refer to the example described in Appendix A – a hypothetical insurer whose general account earns 4.167% which funds a 4.00% beginning-of-year Index Option budget, and credits policy funds at a rate equal to the annual S&P 500 gain, floored at 0%, capped at 10%. I believe this lines up closely with many actual insurers today with respect to portfolio earnings and index credits, and yields a credited rate of 6.00% using the methodology described in Section 4.

Per Section 5(A), “If an insurer engages in a hedging program for index-based interest, the assumed investment return from that hedging program shall not exceed 45%.” The 45% cap on the assumed return from hedging seems generally reasonable, but the guidance should specify that, before assuming any hedging return in excess of the general account return, the Illustration Actuary should document the index option budget, index option costs and actual experience or historical basis for the assumed return on index options. Furthermore, the assumed Index Option budget should be limited so that earnings on the remaining General Account assets will cover the guaranteed interest credits.

It isn’t clear whether Sec 5(A) directly limits the rate projected on illustrations, or rather the total earned rate assumed in the self-support and lapse-support tests. If this is a “guardrail” which limits the rate computed in section 4, then it seems reasonable based on the computations described below and in Appendix B. On first blush, it may not seem feasible that index option buyers could average such a return over an extended period. One might think the option sellers would tire of losing money and demand higher prices for the options. However, as you can see from experimenting with rates in the Appendix B spreadsheet, these options provide the sellers with lower volatility than they would
otherwise get in an S&P 500 Index Fund, along with a higher return than would be available in the fixed-income market.

Appendix B includes projected returns for a “balanced” fund which includes both equity and fixed income investments. Such a mix, of course, combines higher long-term returns from the stock market with lower but more stable returns from fixed income investments. Since investing solely in equities while also selling options serves the same purpose, Appendix B compares the two approaches. Note this appendix is an Excel spreadsheet in which you can input parameters of your own choosing. In some reasonable Interest Rate/Index Cost scenarios (for example: 4% option budget, 8% cap, 4.17% fixed income return, 15% of balanced fund in fixed income), the fund manager realizes both a greater return and lower volatility by investing in an S&P 500 Index Fund and selling options rather than investing in a combination S&P 500 Index Fund and Fixed Income fund. In short, while there does not seem to be any publicly available historical data confirming such high returns, a 45% return is not the windfall it may appear to be at first blush.

On Illustration Regulation tests, however, this provision should not condone simply increasing the general account interest rate by 45%. As stated above, it must be incumbent upon the Illustration Actuary to document the rationale and basis for whatever he may assume for future index option returns. As the Academy’s Life Illustrations Work Group has recommended, the index option cost and return assumptions should be “based on sound actuarial practice” and “free of any arbitrary limits or arbitrary components.” This is particularly important for price and return assumptions for non-Benchmark Index Accounts. For example, the Work Group pointed out in its May 23, 2014 letter that “currently some existing UL products reference a Treasury Bill index when determining interest crediting (which acts similar to bond assets held in insurance company general accounts).” This is an extreme example for which a 45% return assumption would not be appropriate.

The Guideline should also limit the assumed Index Option budget. The projected General Account return excluding Index Option returns should cover the guaranteed policy fund credits each year. Even if this guarantee is 0%, after Index Option costs are deducted from the General Account, the non-index earnings on the remaining balance should bring the total return back to 0% for years that the options pay nothing.

Section 7(B) would require a “table showing the minimum, 20th percentile, 80th percentile, and maximum of the geometric average annual credited rates calculated in 4(A).” This requirement should be expanded to incorporate lower potential caps, or alternatively include language conveying that the crediting rate will deteriorate if lower interest earnings or higher index costs lead to less favorable index parameters.

As written, Sec 7(B) would yield the following table for the hypothetical example in Appendix A:
Average annual credited rates for the 40 25-year periods based on experience of last 65 years:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>5.35%</td>
</tr>
<tr>
<td>20th Percentile</td>
<td>5.74%</td>
</tr>
<tr>
<td>80th Percentile</td>
<td>6.27%</td>
</tr>
<tr>
<td>Maximum</td>
<td>6.96%</td>
</tr>
</tbody>
</table>

A reasonable consumer would likely view the 20th percentile rate, 5.74%, as a conservative long-term average crediting rate expectation. However, all the above rates assume future option budgets will be sufficient to purchase S&P Annual Point to Point index options with 10% caps. I am not aware of any publicly-available price data for index options, but suppose long-term option prices are such that a 4% option budget can only fund S&P options with a cap of 8%, as suggested in Appendix D of the ACLI’s Oct 28 letter. Under that scenario, the projected average return, 4.96%, is less than even the Minimum figure above. Of course, decreased general account interest will also lead to lower option budgets and likewise lower caps and returns than shown in the table.

I hope the above commentary is helpful. Thanks again for your fine work and the opportunity to submit these suggestions.

Sincerely,

Tom Taylor

Attachment: AGYY Appendices.xlsx
### APPENDIX A: Benchmark Index Account rate computation per Sec 4(B) of Actuarial Guideline YY

<table>
<thead>
<tr>
<th>Yr</th>
<th>Mo</th>
<th>Day</th>
<th>S&amp;P 500 Adj Close</th>
<th>Annual S&amp;P gain</th>
<th>Gain f/m Option</th>
<th>Cumm gain 25-yr gain</th>
<th>Geom average 25-yr ave</th>
<th>25-year returns (sorted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>12</td>
<td>29</td>
<td>20.43</td>
<td>16.35%</td>
<td>10.00%</td>
<td>1.1 Yr Rate Percentile</td>
<td>1981 5.35% 0.00%</td>
<td></td>
</tr>
<tr>
<td>1951</td>
<td>12</td>
<td>31</td>
<td>23.77</td>
<td>-6.62%</td>
<td>0.00%</td>
<td>1.21</td>
<td>1977 5.41% 2.50%</td>
<td></td>
</tr>
<tr>
<td>1952</td>
<td>12</td>
<td>31</td>
<td>26.57</td>
<td>11.78%</td>
<td>10.00%</td>
<td>1.21</td>
<td>1978 5.45% 5.00%</td>
<td></td>
</tr>
<tr>
<td>1953</td>
<td>12</td>
<td>31</td>
<td>24.81</td>
<td>45.02%</td>
<td>10.00%</td>
<td>1.31</td>
<td>1979 5.45% 7.50%</td>
<td></td>
</tr>
<tr>
<td>1954</td>
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<td>31</td>
<td>35.98</td>
<td>26.40%</td>
<td>10.00%</td>
<td>1.4641</td>
<td>1980 5.45% 10.00%</td>
<td></td>
</tr>
<tr>
<td>1955</td>
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<td>30</td>
<td>45.48</td>
<td>2.62%</td>
<td>2.62%</td>
<td>1.502409</td>
<td>1984 5.46% 12.50%</td>
<td></td>
</tr>
<tr>
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<td>31</td>
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<td>2.62%</td>
<td>2.62%</td>
<td>1.502409</td>
<td>1990 5.58% 15.00%</td>
<td></td>
</tr>
<tr>
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<td>12</td>
<td>31</td>
<td>39.99</td>
<td>-14.31%</td>
<td>0.00%</td>
<td>1.502409</td>
<td>1993 5.74% 17.50%</td>
<td></td>
</tr>
<tr>
<td>1958</td>
<td>12</td>
<td>31</td>
<td>55.21</td>
<td>38.06%</td>
<td>10.00%</td>
<td>1.65265</td>
<td>1994 5.74% 20.00%</td>
<td></td>
</tr>
<tr>
<td>1959</td>
<td>12</td>
<td>31</td>
<td>59.89</td>
<td>8.48%</td>
<td>8.48%</td>
<td>1.79274</td>
<td>1982 5.75% 22.50%</td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>12</td>
<td>30</td>
<td>58.11</td>
<td>-2.97%</td>
<td>0.00%</td>
<td>1.79274</td>
<td>1983 5.75% 25.00%</td>
<td></td>
</tr>
<tr>
<td>1961</td>
<td>12</td>
<td>29</td>
<td>71.55</td>
<td>23.13%</td>
<td>10.00%</td>
<td>1.972014</td>
<td>1984 5.76% 27.50%</td>
<td></td>
</tr>
<tr>
<td>1962</td>
<td>12</td>
<td>31</td>
<td>76.5</td>
<td>-11.81%</td>
<td>0.00%</td>
<td>1.972014</td>
<td>1992 5.77% 27.50%</td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>12</td>
<td>31</td>
<td>97.25</td>
<td>18.89%</td>
<td>10.00%</td>
<td>2.169216</td>
<td>1975 5.81% 30.00%</td>
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</tr>
<tr>
<td>1964</td>
<td>12</td>
<td>31</td>
<td>84.75</td>
<td>12.97%</td>
<td>10.00%</td>
<td>2.386137</td>
<td>1976 5.81% 32.50%</td>
<td></td>
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<tr>
<td>1965</td>
<td>12</td>
<td>31</td>
<td>92.43</td>
<td>9.06%</td>
<td>9.06%</td>
<td>2.602368</td>
<td>1985 5.87% 35.00%</td>
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<tr>
<td>1966</td>
<td>12</td>
<td>30</td>
<td>80.33</td>
<td>-13.09%</td>
<td>0.00%</td>
<td>2.602368</td>
<td>1986 5.87% 37.50%</td>
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<tr>
<td>1967</td>
<td>12</td>
<td>29</td>
<td>95.78</td>
<td>20.09%</td>
<td>10.00%</td>
<td>2.862604</td>
<td>2008 5.93% 42.50%</td>
<td></td>
</tr>
<tr>
<td>1968</td>
<td>12</td>
<td>31</td>
<td>103.86</td>
<td>7.66%</td>
<td>7.66%</td>
<td>3.081892</td>
<td>1987 5.95% 45.00%</td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>12</td>
<td>31</td>
<td>92.06</td>
<td>-11.36%</td>
<td>0.00%</td>
<td>3.081892</td>
<td>1988 5.95% 47.50%</td>
<td></td>
</tr>
<tr>
<td>1970</td>
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<td>31</td>
<td>92.15</td>
<td>0.10%</td>
<td>0.10%</td>
<td>3.084905</td>
<td>1989 5.95% 50.00%</td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>12</td>
<td>31</td>
<td>102.09</td>
<td>10.79%</td>
<td>10.00%</td>
<td>3.393395</td>
<td>1990 5.98% 52.50%</td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>12</td>
<td>29</td>
<td>118.05</td>
<td>15.63%</td>
<td>10.00%</td>
<td>3.732735</td>
<td>1991 5.99% 55.00%</td>
<td></td>
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<tr>
<td>1973</td>
<td>12</td>
<td>31</td>
<td>97.55</td>
<td>-17.37%</td>
<td>0.00%</td>
<td>3.732735</td>
<td>1992 5.99% 57.50%</td>
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</tr>
<tr>
<td>1974</td>
<td>12</td>
<td>31</td>
<td>68.56</td>
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<td>0.00%</td>
<td>3.732735</td>
<td>1993 6.14% 60.00%</td>
<td></td>
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<tr>
<td>1975</td>
<td>12</td>
<td>31</td>
<td>90.19</td>
<td>31.55%</td>
<td>10.00%</td>
<td>4.106008</td>
<td>1994 6.14% 62.50%</td>
<td></td>
</tr>
<tr>
<td>1976</td>
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<td>31</td>
<td>107.46</td>
<td>19.15%</td>
<td>10.00%</td>
<td>4.516609</td>
<td>1995 6.14% 65.00%</td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>12</td>
<td>30</td>
<td>95.1</td>
<td>-11.50%</td>
<td>0.00%</td>
<td>4.516609</td>
<td>1996 6.14% 67.50%</td>
<td></td>
</tr>
</tbody>
</table>
# APPENDIX A: Benchmark Index Account rate computation per Sec 4(B) of Actuarial Guideline YY

10.00% = cap  
4.17% = fixed crediting rate  
4.00% = index options budget  
Illustrated Rate: 6.00%

<table>
<thead>
<tr>
<th>Yr</th>
<th>Mo</th>
<th>Day</th>
<th>S&amp;P 500 Adj Close</th>
<th>Annual S&amp;P gain</th>
<th>Gain fm Option</th>
<th>Cumm gain 25-yr gain</th>
<th>Geom average 25-yr ave</th>
<th>25-year returns (sorted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>12</td>
<td>29</td>
<td>96.11</td>
<td>1.06%</td>
<td>1.06%</td>
<td>4.564577</td>
<td>3.772378</td>
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<tr>
<td>1979</td>
<td>12</td>
<td>31</td>
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<td>12.31%</td>
<td>10.00%</td>
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</tr>
<tr>
<td>1980</td>
<td>12</td>
<td>31</td>
<td>135.76</td>
<td>25.77%</td>
<td>10.00%</td>
<td>5.523138</td>
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</tr>
<tr>
<td>1981</td>
<td>12</td>
<td>31</td>
<td>122.55</td>
<td>-9.73%</td>
<td>0.00%</td>
<td>5.523138</td>
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<tr>
<td>1982</td>
<td>12</td>
<td>31</td>
<td>140.64</td>
<td>14.76%</td>
<td>10.00%</td>
<td>6.075452</td>
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<td>5.75%</td>
</tr>
<tr>
<td>1983</td>
<td>12</td>
<td>30</td>
<td>164.93</td>
<td>17.27%</td>
<td>10.00%</td>
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<tr>
<td>1984</td>
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<td>31</td>
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<td>1.40%</td>
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<td>3.780023</td>
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<tr>
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<td>12</td>
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<td>1986</td>
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<td>242.17</td>
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<td>10.00%</td>
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<td>1987</td>
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<td>31</td>
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<td>2.03%</td>
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</tr>
<tr>
<td>1988</td>
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<td>30</td>
<td>277.72</td>
<td>12.40%</td>
<td>10.00%</td>
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APPENDIX A: Benchmark Index Account rate computation per Sec 4(B) of Actuarial Guideline YY

10.00% = cap  
4.17% = fixed crediting rate  
4.00% = index options budget  
Illustrated Rate: 6.00%

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**ALTERNATE INVESTMENT STRATEGIES**

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8.86% = Average S&P 500 price gain

Average return 10.86%  8.78%  7.51%
Standard Deviation 16.69%  13.01%  8.35%

Do Goal Seek on cell R4 to make cell R73 equal to cell P73
This compares volatility of:
1. Investing in S&P Index Fund & selling options, vs
2. Investing in combination S&P Fund and Fixed Income
Interstate Insurance Product Regulation Commissioner (IIPRC) Update

IIPRC Report
Report to LATF & HATF of activities at the IIPRC:

Following is the agenda for the Joint Meeting of the Management Committee and the Interstate Insurance Product Regulation Commission, to be held Friday, March 27, 2015.

In addition to the recommendations with regards to the Group Disability Income Standards being discussed by the Product Standards Committee, the supporting Actuarial Working Group has been reviewing the Longevity Standards in order to consider allowing period certain income options. The Working Group will also discuss the appropriate requirements for Group Disability income rate filings included in the Uniform Standards.

**JOINT MEETING OF THE MANAGEMENT COMMITTEE AND THE INTERSTATE INSURANCE PRODUCT REGULATION COMMISSION**

Friday, March 27, 2015  
12:30 pm MST & PDT / 2:30 pm CDT / 3:30 pm EDT  
Sheraton Phoenix Downtown, Valley of the Sun ABC—2nd Floor  
Phoenix, AZ

1. Roll Call

2. Report of the Audit Committee and Consideration by the Commission to Adopt the Report of the Audit Committee

3. Report of the Communications Committee and Consideration by the Management Committee to Approve the Report of the Communications Committee

4. Report of the Finance Committee and Consideration by the Management Committee to Approve the Report of the Finance Committee

5. Report of the Product Standards Committee and Consideration by the Management Committee to Approve the Report of the Product Standards Committee
   a. [Phase 5 of the 5-year review](#) notice went out on January 6, 2015 – comments received
      (i) Self Certification Rule;
      (ii) Several Standards relating to Additional Benefit Features for Deferred Annuities
   b. Group Disability Income Subgroup Member Call Summary [March 3, 2015](#)
   c. Product Standards Committee Call Summary [March 10, 2015](#)

6. Report of the Rulemaking Committee and Consideration by the Management Committee to Approve the Report of the Rulemaking Committee
7. Report of the Technology Committee and Consideration by the Management Committee to Approve the Report of the Technology Committee

8. Management Committee Consideration of Approval of Meeting Minutes of the November 15th Joint Meeting of the Management Committee and Commission

9. Commission Consideration to Adopt the November 15th Joint Management Committee and Commission Meeting Minutes as Approved by the Management Committee

10. Management Committee Consideration of Approval of Meeting Minutes of the December 15th Meeting of the Management Committee

11. Election for IIPRC Chair

12. Operational Matters

13. Any Other Matters

14. Adjourn
Aggregate Margin (A) Subgroup Report
March 4, 2015 Minutes
The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Mar. 4. The following Subgroup members participated: Mark Birdsall, Chair (KS); Perry Kupferman (CA); Mike Yanacheak (IA); William Leung (MO); John Rink (NE); William Carmello (NY); Pete Weber (OH); Frank Stone (OK); and Ern Johnson (VA).

1. Discussed the Status of the Subgroup Work

Mr. Birdsall said that given its charge, the subgroup recommendation to the Life Actuarial (A) Task Force should consider the purpose and level of margins. He said that, in order to ascertain the purpose of margins and how they are used, he has reached out to the American Council of Life Insurers (ACLI), the American Academy of Actuaries (Academy), NAIC staff responsible for following international discussions on the issue, a rating agency and a reinsurer. He noted that it would be worthwhile to talk about the aggregate margin approach and the individual margin approach and the existing differences between the two approaches. The pattern of margin runoff is a significant topic for discussion. He said another issue that should receive substantial consideration is whether to use explicit margins or implicit margins.

Mr. Johnson asked if the charge to the subgroup is limited to life insurance or are annuities also included. Mr. Birdsall said that the charge is broad and does include annuities. Mr. Rink asked if the approach will entertain the possibility that the aggregate margin approach may not be a good fit for annuities. Mr. Birdsall said that is the case. He encouraged the subgroup to monitor the activities of the VM-22 (A) Subgroup.

Mr. Birdsall provided an overview of the following documents:

1) AG-43 Requirements for Assumption Setting (Attachment A)
2) Aggregate Margin Proposal to LATF 8-22-2013 (Attachment B)
3) IAA Measurement of Liabilities_2009-public (Attachment C)
4) Lapse 2015 Modeling Post Level Report (Attachment D)
5) RSM Report - Level Premium Term_draft 5 (Attachment E)
6) Setting Margins in PBR Research Analysis - Life Annuity (Attachment F)

Dave Neve (American Academy of Actuaries – Academy) provided a more in-depth review of the pros and cons of using an aggregate margin that has been detailed in the Aggregate Margin Proposal to LATF 8-22-2013. He said the Academy Life Practice Council concluded that an aggregate margin approach will better meet the objectives and the purpose for the margin. He said after considering various approaches they favored the cost of capital approach using the representative scenario method (RSM).

Steve Strommen (Academy) provided a more in-depth review of the RSM Report–Level Premium Term. He said the objective of the report was to apply the RSM to a block of term insurance to determine reserves that could be compared to the VM-20, Requirements for Principle-Based Reserves for Life Products, reserves and the current net premium reserves. He said the results show that there are implicit margins in the VM–20 reserves and the net premium reserves. Mr. Strommen said that the chart 7 demonstrates that, while the margin generated using the cost of capital method starts out higher than the margin generated using the percentile method, the cost of capital margin runs off faster. Mr. Birdsall asked if it is expected that the cost of capital method margins would vary with the remaining liability durations. Mr. Strommen said that the relationship of the cost of capital margins and the remaining liability durations is the result of the margins being calculated as the present value of an annuity where each payment is the cost of capital for the remaining years.

Having no further business, the Aggregate Margin (A) Subgroup adjourned.
The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Mar. 11. The following Subgroup members participated: Felix Schirripa, Chair (NJ); Mike Yanacheak (IA); Fred Andersen (MN); William Leung (MO); William Carmello (NY); and Tomasz Serbinowski (UT).

1. Reviewed the ACLI Comment Letter

John Bruins (American Council of Life Insurers-ACLI) reviewed the ACLI comment letter (Attachment A). He said that the issue of complexity exists with any principles-based approach. He said formulaic approaches should continue to be used where they can produce an appropriate reserve. He said an appropriate method should be applied to a given risk. He pointed out that more refinement is needed when there is optionality within the product that cannot be adequately measured by formulas.

Mr. Bruins noted that VM-20, Requirements for Principle-Based Reserves for Life Products, starts with the assumption that all products need modeling. The ACLI would like consideration given to the opposite approach of identifying areas that do not need modeling and would default to a formula unless there is a justified need.

Mr. Bruins said, as changes in reserve methods are developed, field testing will be important to the understanding of how the new methods are applied. He said that there are a number of things that can be learned from the implementation of actuarial guideline XLIII, CARVM for Variable Annuities. He said that the scope of annuity products is broad, so care should be taken to ensure that all annuity products are covered in the Valuation Manual. He said the ACLI will continue to work on more specific recommendations but believe that some annuity reserve concerns can be addressed with formulaic solutions.

Mike Streck (Principal Financial Group representing the ACLI) said the subgroup should consider a number of different issues as agenda topics, including the scope of products to be covered by VM-22, reliance on a formulaic approach, having criteria that trigger the need for more robust modeling, and the kinds of enhancements that should be considered for CARVM.

Mr. Schirripa said it would be valuable to understand the development of the current reserve basis before attempting to change it. He asked what the ACLI and industry see as the major priorities or biggest fixes. He challenged the basic assumption that optionality requires modeling.

Mr. Schirripa said he is looking for subgroup members to assist in moving the work plan forward. Mr. Yanacheak said he is willing to look through some of the old NAIC proceedings to discover specific items that might shed light on the development of the current Standard Valuation Law framework. Mr. Schirripa said he is interested in what product set was in scope at the time, whether they were individual or group products, whether they were qualified or nonqualified products and what were the sizes (e.g., small, medium, jumbo) of the contracts that were considered. He said he would like to compare that initial product set to the product set we have today. He said he would like to get support from the ACLI. Mr. Bruins said that developing a good reserve basis is important enough to the ACLI that they are willing to commit resources.

Mr. Schirripa said he would like to address the three items that were identified in the work plan as potential fixes. He said the subgroup should be able to complete work on the single premium immediate annuity, Actuarial Guideline XXXIII, Determining CARVM Reserves for Annuity Contracts with Elective Benefits, and Stable Value products prior to the Summer NAIC Meeting.

Mr. Schirripa said he would like the ACLI to present their most important items to the subgroup as early as possible. He said his preference is to see more work completed on the Representative Scenarios Method or enhancements for CARVM and, for now, defer development of a fully stochastic reserve for annuities.

Having no further business, the VM-22 (A) Subgroup adjourned.
VM-22 (A) Subgroup
Conference Call
March 4, 2015

The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Mar. 4. The following Subgroup members participated: Felix Schirripa, Chair (NJ); Mike Yanacheak (IA); Mark Birdsall (KS); Fred Andersen (MN); William Leung (MO); and Tomasz Serbinowski (UT).

1. Reviewed the Draft Letter to LATF

Mr. Schirripa reviewed the draft of the VM–22 work plan (Attachment A), focusing on the section called “Pros and Cons of the Valuation Methods under Discussion”. He said that replicating the VM-20, Requirements for Principle-Based Reserves for Life Products, methodology and adding an exclusion test specifically designed for fixed annuities seems to be an obvious direction to pursue but may be much more complex than is necessary.

Mr. Birdsall said it seems that the ideal path would be to modernize the Standard Valuation Law (#820) (SVL) formulas and incorporate the use of the representative scenarios method (RSM) where needed.

Mr. Yanacheak suggested that the industry input may be helpful. John Bruins (American Council of Life Insurers-ACLI) concurred that modernizing SVL should not be mutually exclusive of using the RSM or replicating some aspects of VM twenty. He said that regardless of the approach that is chosen, and underlying formulaic approach will be necessary to serve as a reserve and tax reserve. He also pointed out that while the VM-20 stochastic approach has more complex calculations then the RSM, that is somewhat offset by the complexity of the process of developing scenarios for the RSM is complex. He suggested that the ease of developing scenarios for the stochastic approach be listed as a pro for the VM-20 approach.

Mr. Birdsall noted that while VM-20 applies the stochastic process only to interest rates, the RSM is a multi-risk approach. Mr. Bruins said the ACLI is willing to commit resources to support the subgroup efforts. Mr. Birdsall said the auditability of RSM should be included as a pro.

Various subgroup members provided opinions on how each method should be scored. Mr. Bruins noted that on the first page does reference made to right-sizing reserves but the score card uses the term “prudent reserves.” He wondered if the change of focus was intentional. Mr. Schirripa said that he meant right-sized reserves where the words “prudent reserves” are shown.

Mr. Kerry Krantz (FL) said a principle that should be noted and cataloged is that whatever method is used should be designed to avoid regulatory arbitrage.

Mr. Schirripa reviewed his initial list of current flaws in the existing SVL.

Having no further business, the VM-22 (A) Subgroup adjourned.

W:\National Meetings\2015\Spring\TF\LA\VM-22\Mar 4\Mar 4_15 VM-22 Minutes_Pre TPR.docx

Minutes are pending NAIC third party review (TPR) for grammar and formatting. TPR will not change the substance and/or meaning of the content.

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The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Feb. 11, 2015. The following Subgroup members participated: Felix Schirripa, Chair (NJ); William Leung (MO); William Carmello (NY); and Tomasz Serbinowski (UT).

1. **Discussed Its Short-Term Work Plan**

Mr. Schirripa said he is envisioning a short-term work plan that is composed of two parts. The first part is to identify several different statutory reserve methodologies for non-variable annuities, with a list of pros and cons for each methodology. The second part of the work plan is to identify the critical questions that the Life Actuarial (A) Task Force will need to have answered before accepting any new statutory reserve methodology for non-variable annuities. The goal is to complete both tasks before the Spring National Meeting.

Mr. Schirripa listed four reserve methodologies for consideration:

1) Representative Scenarios Method  
   a. Pros  
      i. Potentially easier way to evaluate the safety or instability of a product without using full stochastic modeling.
   b. Cons  
      i. The distribution of the key risk drivers must be known.
      ii. Even if mean and standard deviation are available, they may only be based on limited historical experience.
      iii. Historical observations may not be predictive of future results.

2) VM-20 with unique exclusion tests for annuity products

3) Modernization of the current valuation system by relying on strong actuarial principles  
   a. Pros  
      i. The approach is being used today to address ad hoc problems, (e.g., stable value).
      ii. This could be an easy adjustment for Single Premium Immediate Annuities (SPIAs) (valuation interest rates concerns).
      iii. This could address problems with Actuarial Guideline (AG) 33 (optionality, constant interest rate).

4) Comparison of assets and liabilities on a market value basis at each valuation date

Mr. Schirripa said a package of work products (referred to as a “care package”) will be distributed and posted on the Subgroup’s Web page.

John Bruins (American Council of Life Insurers—ACLI) said that the answer may be a combination of reserve methodologies. He said that given the current tax structure, it is important to industry that there is a formulaic approach defined for all products in order to form a sound tax calculation. He said results coming from the American Academy of Actuaries (Academy) and from the Kansas field test seem to be leaning toward the development of an include/exclude list of which product features need a formulaic approach and which may require modeling.

Martin Snow (Prudential Financial) said a possible fifth approach may be starting with an economic reserve and building in appropriate add-ons until getting to the point of a moderately adverse reserve that would serve as the statutory reserve. Kerry Krantz (FL) suggested using the international approach where the reserve is calculated using a margin over current estimate (MOCE). Mr. Leung asked if the Subgroup has considered the Canadian method, an asset/liability matching method based on book value. Mr. Carmello said he is content with the current approach of using the Commissioners Annuity Reserve Valuation Method, in conjunction with asset adequacy analysis.

Mr. Schirripa asked for all participants to submit their pros and cons for the methods discussed, as well as their ideas on the development of a scoring matrix. He said a list of pros and cons of using an aggregate margin approach will also be gathered.

Having no further business, the VM-22 (A) Subgroup adjourned.
To: Life Actuarial (A) Task Force

From: Felix Schirripa, Chair of VM-22 Subgroup

Re: Subgroup’s Proposed Work Plan for Your Review & Guidance

Purpose

The purpose of this memorandum is to seek your suggestions on the Subgroup’s near term work plan.

The Subgroup appreciates that the final work product could require special impact studies and full blown field tests, akin to those conducted for VM-20. However, the LATF members should know that the VM-22 Subgroup is not staffed to deliver a fully developed and tested VM-22 with all impacts explained.

Our charge is to “pose a PBR methodology for non-variable (fixed) annuities for consideration by the Life Actuarial (A) Task Force”. We would expect the methodology to apply only to new business written on or after the new reserve standard’s effective date. Existing business would continue to use the current reserve rules.

We note there are several ways one could design VM-22, the new statutory reserve standard for fixed annuities. Each approach comes with pros and cons.

The Subgroup is not yet ready to recommend its preferred blueprint for VM-22. However, we would all agree the methodology that’s ultimately selected as the foundation for the new reserve standard must “right-size” statutory reserves while also seeking to minimize the potential for unintended consequences.

VM-22 Foundation: Three Feasible Paths

The Subgroup identified six conceivable ways to design VM-22. Three of the approaches (i.e., the Canadian Method, the “Status Quo” Method, and Market Value Method) have been rejected by the Subgroup’s Chair.

The three most credible options for constructing VM-22 are:

I. Replicate VM-20, but with a stochastic “exclusion test” designed specifically for fixed annuities.
   This is arguably the most obvious option. The approach would include a formulaic floor, perhaps similar to the current AG 33 calculations.
A stochastic exclusion test would be developed for non-variable annuities, beginning with the VM-20 stochastic exclusion test using a company’s cash flow testing model and making any needed refinements for this product type, such as consideration of living benefits. Provision might be made for a simplified reserve calculation approach, perhaps based on the stochastic exclusion test, whereby a company could hold a reserve higher than minimum in order to avoid the additional complexity of the stochastic reserve calculations.

For the stochastic reserve, methodologies related to setting assumptions for base mortality, mortality improvement, surrender rates (both base and dynamic) and utilization of living benefits could parallel similar assumptions in VM-20. The stochastic reserve would then be based on using the economic scenario generator consistent with VM-20 and the stochastic reserve would be calculated using CTE70 of the distribution of stochastic scenario results.

Many in industry feel the approach is overkill for non-variable annuities, adding much unnecessary complexity to the statutory reserve process. The Subgroup agrees.

II. Representative Scenario Method (RSM)

This option is intended to closely approximate the reserve results that would be obtained ideally by using stochastic modeling of all key risk factors pertaining to a block of business. This RSM method would require far fewer computations than a full stochastic reserve and should be easier to audit, holding down costs for both companies and reviewers. Being a multi-risk approach, the resulting reserve would reflect all material risks contained in today’s more complex products.

For a block of business, this methodology involves an analysis of the key risk drivers for the block, such as interest rates/market rates, lapses/surrenders, utilization of living benefits, and mortality/mortality improvement. Central (best) estimate assumptions are set for each of these key risk drivers, including establishing distributions around the central estimate.

The types and parameters of these distributions around the central estimate could be established by regulators based on industry information collected by statistical agents, adjusted for the credibility of the industry experience. Taken together, these scenarios, including the central estimates and the distributions around the central estimates, comprise the Representative Scenarios, each with its own probability level.

Each of these deterministic Representative Scenarios is then run and the results are combined into a Current Estimate Reserve using the respective probability weights of each scenario. The Modeled Reserve would then be calculated by adding a margin to the Central Estimate Reserve. This margin could be calculated using (1) individual margins on the key risk drivers derived from the Representative Scenario results; or (2)
an aggregate margin calculated using either the cost of capital method or the percentile method, as described in the report from the American Academy’s Aggregate Margin Task Force.

This methodology may offer advantages, but it still requires more testing before the Subgroup is comfortable endorsing it.

Some remaining key issues include: how do we “validate” the method, what are some of the practical implementation issues for insurers, and what types of field testing will LATF require?

III. Modernize Current Formulaic/Deterministic Method (i.e., keep what’s working, correct what’s not)
The formulas set in the SVL work reasonably well for many fixed annuities. But where there are problems, fixes could be proposed by the Subgroup and presented to LATF.

To illustrate, for annuities with optional features, such as living benefits, it may be possible to develop a deterministic methodology to set the statutory reserve for the contractual options. If so, deterministic fixes would be fleshed out by the Subgroup and then presented to LATF for further consideration, testing, and possible adoption.

A summary of the pros and cons of these options is provided in Attachment I. Of course, it’s possible that we may propose going with some combinations of the above methods, for example, Method II for some products or risk drivers, and Method III for others, or Method III could serve as the floor reserve with Method II as the modeled reserve. Frankly, at this point, some combination of II and III appear to be the most logic approach.

Scoring the Plausible Options

To assist LATF in guiding our future work efforts, we “scored” these three approaches using the following criteria:

- Produces prudently conservative reserves (i.e., economic reserve plus pre-defined margin),
- Implementation is reasonably feasible for insurers and regulators, and
- Avoids unintended accounting/tax consequences.

Our score card is shown in Attachment II. The scores shown are intended to be representative of discussions by the Subgroup on an open call held March 4.
VM-22 Subgroup Work Plans

The Subgroup proposes focusing on these four major initiatives:

1. Flesh out methods of “validating” RSM
2. Solicit public comments on the pros and cons of these methods
3. Identify flaws in current deterministic/formulaic approaches, product-by-product (see attachment III for examples)
4. Propose fixes to correct formula flaws (see attachment III for examples)

We encourage the LATF members to provide feedback on these plans, especially if changes are wanted.
## Attachment I

### Pros & Cons of Valuation Methods under Discussion

<table>
<thead>
<tr>
<th>Method</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Replicate VM-20</td>
<td>• Feasible</td>
<td>• Complex calculations</td>
</tr>
<tr>
<td></td>
<td>• Adaptable to new product features</td>
<td>• Misses some non-economic risk drivers</td>
</tr>
<tr>
<td>2. Representative Scenario Method (RSM)</td>
<td>• Simplifies stochastic computations</td>
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<td></td>
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</tr>
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<td>3. Modernized SVL Formulas</td>
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<td>• Reserves “right-sized” by correcting formulaic flaws</td>
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</tr>
<tr>
<td></td>
<td>• Pragmatic, auditable, and only involves incremental changes</td>
<td>• New product features may require special study (i.e., introduces regulatory lags)</td>
</tr>
</tbody>
</table>
## Attachment II

**Proposed Score Card & Scoring**  
*(Scale from 0 to 10=perfect)*

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Replicate VM-20</th>
<th>RSM</th>
<th>Modernize SVL Processes</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produces prudent reserves (i.e., reserves right-sized)</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>Any of the methods can achieve a prudent level of reserves. But, each method will come with its unique set of challenges.</td>
</tr>
<tr>
<td>Reasonably feasible implementation (i.e., Requires no major re-tooling)</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>RSM is readily adaptable to different product risk profiles. But the process for setting the needed probability distribution functions is still a “work in progress”.</td>
</tr>
<tr>
<td>Avoids unintended consequences (i.e., fails to “right-size” reserves)</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>RSM, done right, ought to have an advantage since it measures <strong>multiple</strong> risks. A formulaic approach introduces regulatory lag and can hinder product innovation.</td>
</tr>
<tr>
<td>All</td>
<td>20</td>
<td>22</td>
<td>22</td>
<td>Note: “Fixes” to current formulas are needed even if only to set the proper NPR and tax reserves.</td>
</tr>
</tbody>
</table>
### Attachment III

#### Examples of SVL Fixes Needed to “Right-Size” Reserves

<table>
<thead>
<tr>
<th>Product</th>
<th>Formula Flaws</th>
<th>Potential Fixes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stable Value</strong></td>
<td>Liability discount rate is capped at 1.05 times treasury yield, regardless of the portfolio’s achievable spreads</td>
<td>Adoption of Academy’s revisions to the Synthetic GIC Model # 695. (LATF adopted it 3/12/15.)</td>
</tr>
<tr>
<td><strong>Fixed annuities with optional living benefits</strong></td>
<td>AG33 overstates utilization of optional benefits (by requiring 100% utilization at most expensive point).</td>
<td>Allow for more realistic utilization rates, especially when credible utilization experience is available.</td>
</tr>
<tr>
<td></td>
<td>Incorrectly values option by setting the discount rate based on year of issue rates. This overstates the option value when rates rise, but understates it when rates fall.</td>
<td>Develop simplified option pricing method (e.g., carefully crafted deterministic scenarios), and/or use RSM.</td>
</tr>
<tr>
<td><strong>SPIAs</strong></td>
<td>SPIAs are priced using “spot” rates. Yet reserves are set using a “moving average” index rate. This approach works reasonably well, expect when interest rates are volatile and/or the SPIA has unusual liability characteristics (e.g., jumbo transaction, extremely long/short duration). The differences can create non-economic reserve impacts.</td>
<td>Refine the index rate setting process for unusual transactions and business mixes unanticipated back in the 1980s (e.g., jumbo group contracts, and fully guaranteed long dated obligations).</td>
</tr>
</tbody>
</table>
VM-22 Subgroup
PBR Methodology for Non-Variable Annuities

Update to LATF
March 27, 2015

Discussion Points

- Review Subgroup’s Work Plan
- Three Feasible Options
- Scoring the Options
- Outline of Work Plan
- Potential “Fixes” to SVL
- Illustration of Current SVL Formulaic Weaknesses
- Reaction/Comments from LATF
Three Feasible Options

Pros & Cons

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Scoring the Options

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<td>8</td>
<td>6</td>
</tr>
<tr>
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<td></td>
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<tr>
<td>All</td>
<td>20</td>
<td>22</td>
<td>22</td>
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Outline of Work Plan

- Validate RSM
- Seek more public input on the feasible options
- Identify weaknesses in current SVL
- Propose fixes to those weaknesses

Potential “Fixes” to SVL

- Stable Value
  - Adopt Academy’s revisions to Model 695

- Fixed Annuities with GLIBs
  - Allow realistic/justifiable utilization rates
  - Calculate PV at then current treasury rates less 1%
  - Simplistic approach to capturing economics of “optional” benefits

- Improve SVL Interest Rate Development Process
  - Weaknesses illustrated using SPIA product
  - But issue extends to all products
SVL Illustration of Formulaic Weakness

SVL SPIA Maximum Valuation Rate vs. Reference Rate

Reference Index Rate (Moody's 12 Month Average)

SVL Illustration of Formulaic Weakness (Cont'd)

<table>
<thead>
<tr>
<th>Month</th>
<th>I</th>
<th>Reference Rate Scenarios</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rising</td>
<td>Falling</td>
<td>Level</td>
</tr>
<tr>
<td>July</td>
<td>4.00%</td>
<td>6.75%</td>
<td>5.38%</td>
</tr>
<tr>
<td>August</td>
<td>4.25%</td>
<td>6.50%</td>
<td>5.38%</td>
</tr>
<tr>
<td>September</td>
<td>4.50%</td>
<td>6.25%</td>
<td>5.38%</td>
</tr>
<tr>
<td>October</td>
<td>4.75%</td>
<td>6.00%</td>
<td>5.38%</td>
</tr>
<tr>
<td>November</td>
<td>5.00%</td>
<td>5.75%</td>
<td>5.38%</td>
</tr>
<tr>
<td>December</td>
<td>5.25%</td>
<td>5.50%</td>
<td>5.38%</td>
</tr>
<tr>
<td>January</td>
<td>5.50%</td>
<td>5.25%</td>
<td>5.38%</td>
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<tr>
<td>February</td>
<td>5.75%</td>
<td>5.00%</td>
<td>5.38%</td>
</tr>
<tr>
<td>March</td>
<td>6.00%</td>
<td>4.75%</td>
<td>5.38%</td>
</tr>
<tr>
<td>April</td>
<td>6.25%</td>
<td>4.50%</td>
<td>5.38%</td>
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<tr>
<td>May</td>
<td>6.50%</td>
<td>4.25%</td>
<td>5.38%</td>
</tr>
<tr>
<td>June</td>
<td>6.75%</td>
<td>4.00%</td>
<td>5.38%</td>
</tr>
</tbody>
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R = 5.38%
SPIA IV I = 5.00%
Spot R at Point of Sale = 7.50%
Potential IV Shortfall = -18%
Improve SVL Interest Rate Development Process

- Refine Reference Index Methodology
  - Capture ALM practices in use today
  - Avoid artificial caps (i.e., 9%) and floors (e.g., 3%)
  - Expand list of “plan types” to account for GLIBs, GLWBs, etc.
  - Capture business mix (e.g., going concern, timing of new business, and dollar amounts involved)
  - Consider gain/loss carry-forward mechanism to correct “timing” issues

- Require actuary to justify valuation rate

Reaction/Comments from LATF
Index-Linked Variable Annuity (A) Subgroup Report

No Materials
Experience Reporting (A) Subgroup Report

No Materials
Update on Nonforfeiture Modernization

Nonforfeiture Modernization Report
Update on Activities of the American Academy of Actuaries
Nonforfeiture Modernization Work Group

Phoenix - March 2015

The American Academy of Actuaries is an 18,000+ member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

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Background and Scope of Report

Pursuant to its charge, the NAIC’s Life Actuarial Task Force (LATF) has requested that the Academy’s Nonforfeiture Modernization Work Group (WG) prepare a report of the consumer related and other public policy issues associated with life insurance and annuity nonforfeiture reform, in particular with respect to requirements for cash surrender values when nonforfeiture benefits are present.

The WG’s view is that nonforfeiture benefits should be required whenever there is prefunding. Regarding cash surrender values, although cash surrender values and nonforfeiture benefits have historically been equated for most insurance products, the WG’s view is that the appropriate focus for nonforfeiture requirements is in-kind benefits, and that the question of whether a cash surrender value should be required is a public policy matter. This issue was covered in the WG’s August 2011 report.

The following is a list of some potential public policy considerations associated with requiring cash surrender values in life insurance or annuities and with certain other aspects of nonforfeiture reform. Many of the items in the list have a potential impact on the design, availability, and cost of insurance products. It is important that all stakeholders (regulators, industry, consumer representatives, and others) are informed about these and other public policy considerations and participate in the dialogue as nonforfeiture reform progresses.

Issues to be Discussed

These are the issues for discussion presented below:

• Issues Related to Cash Surrender Values
• Limitations of Current Laws
• Treatment of Existing Products
• Consumer Access to Information

Issues Related to Cash Surrender Values

Effect on consumers
Cash surrender values, if required, may make some existing products more expensive. This may be due to the cash surrender values not being actuarially equivalent to nonforfeiture benefits, or due to the anti-selection opportunities from having additional options. Also, the presence of cash surrender values increases costs by creating additional liquidity needs and disintermediation risk, which are reflected in additional reserving and capital requirements.

Cash surrender values provide value to consumers who no longer need their insurance and are not interested in in-kind benefits. For contracts with non-guaranteed elements (NGE), consumer recourse is limited if the amount credited is unsatisfactory due to a change in company practice or market conditions, and there is no cash surrender value. On the other hand, to the extent nonforfeiture benefits and cash surrender values are not actuarially equivalent, required cash surrender values affect policy costs.
Liquidity and other financial risk
The presence of cash surrender values affects financial results by creating additional liquidity needs and disintermediation risk, whether or not these risks are reflected in additional reserving and capital requirements.

Competitiveness
Cash surrender values, if required, may make certain existing insurance products less attractive.

Tax implications
Federal income tax law requires that life insurance policies with cash surrender values must meet the requirements of Section 7702 (Definition of Life Insurance Rules) and Section 7702A (Modified Endowment Contract (MEC) Rules) to avoid becoming a MEC. If loans and/or liens are provided without cash surrender values or in excess of cash surrender values, they are treated the same as cash surrender values. Before moving forward with reform, potential tax implications of any proposed approach should be examined.

Loan availability
Policy loan availability may depend upon availability of cash surrender values.

Regulations that are responsive to environment change
Invariably, in response to any regulatory change, new products will emerge. Mandatory cash surrender values, if viewed as undesirable by markets and consumers, may prompt development of new products geared toward minimizing them. This could result in a new generation of complex and potentially confusing product designs.

To the extent regulations do not adequately address environmental changes, required cash surrender values could lead to increased disintermediation risk if there is a delayed regulatory response.

Questions as to appropriate determination
If cash surrender values are required to be provided, should there be a mandated actuarial relationship to nonforfeiture benefits? If not, how should considerations of equitable policyholder treatment be addressed?

Unless cash surrender values are required to be equivalent to nonforfeiture benefits, there may be a need for additional actuarial guidance.

Should cash surrender values be allowed to reflect market factors, that is, on an individual basis vs. a class basis?

Do cash surrender values need to be available only at certain times and/or under certain conditions, or must they be available at all times if available at any time?

Consistency
There may be public policy reasons to require cash surrender values for some products and not others. However, because all products may not neatly fit within stated criteria, it may be difficult
to write a set of rules identifying the products that are subject to cash surrender value requirements.

Limitations of Current Laws

Nonforfeiture law has not kept up with product innovation. Many products sold currently do not fit the structure of the existing life or annuity nonforfeiture laws, as the coverages they provide were not contemplated when the laws were devised. This may result in a lack of fair value to consumers commensurate with the risks assumed, and/or a lack of uniformity, where prefunding exists.

- The prescriptive nature of current life nonforfeiture law uses required assumptions vs. risk-based assumptions consistent with the product guarantees, such that nonforfeiture values may not represent the value of prefunding.
- To accommodate product innovation, regulators have made differing interpretations with respect to nonforfeiture requirements, resulting in a lack of uniformity.
- Current nonforfeiture requirements are inconsistent between life insurance and annuities. For example, life insurance requirements are defined in prospective terms whereas annuities are retrospective. Cash surrender value requirements are also inconsistent in that annuity nonforfeiture law allows cash surrender values to be optional. Annuity requirements are based on gross premiums whereas life requirements are based on net premiums that do not necessarily depend on the gross premium.
- In order to provide certain benefits with nonforfeiture values that comply with existing law, the mechanics of certain products may be more complex than would otherwise be necessary, making them harder for consumers to understand (e.g., products with “secondary guarantees”), and/or may be filed as one product and effectively used as another (e.g., level premium term products filed as whole life policies with non-level guaranteed premiums).
- Reform may aid provision of combined coverage for multiple risks, while ensuring consistent consumer value (e.g., “lifecycle” products).

Treatment of Existing Products

Some current products may require changes to comply with any revised nonforfeiture requirements, or they may not be able to comply if they do not fit with the retrospective method. For example, under the Gross Premium Nonforfeiture Method (GPNM) being considered, which is a retrospective approach to determining nonforfeiture benefits, the following issues arise:

- Indeterminate premium whole life products with tabular values may require changes.
- Fixed level premium whole life policies may need to comply by continuing to use the existing nonforfeiture requirements, mostly for administrative reasons.
- Some forms of multiple (no-lapse or secondary) guarantee products use a premium test to determine their status rather than a retrospective accumulation based on assumptions and experience factors and would need to be redesigned to comply with the GPNM approach.
- Some products that do not have required nonforfeiture benefits under current requirements would require they be provided under the GPNM approach (e.g., “level premium term”).
Consumer Access to Information

Mandated reform should include enhanced consumer reporting and access to information requirements, whether as part of overall nonforfeiture reform or through other regulations.

Conclusion

The NFMWG appreciates the opportunity to provide this update to LATF and anticipates providing continuing additional reports regarding nonforfeiture reform.
Actuarial Guideline XXXIII (AG33) Edits
February 26 Exposure - Proposed Edits to AG 33
ACLI AG 33 comment letter
Transamerica AG 33 comment letter
October 9 Minutes, Exposure and Comments
June 26 Exposure - Proposed Edits to AG 33
Excerpt from Summer 2014 LATF Minutes
December 2013 - AAA AG 33 report to LATF
Background Information

1. Introduction

The Standard Valuation Law (SVL) defines the methods and assumptions which are to be used in determining minimum statutory formula reserves. This law establishes the standards for annuity contracts (which therefore includes any annuity riders or endorsements, and any or all components of which, such as premiums, benefits, contract charges, primary or secondary accumulation values or other components, either relating to annuity benefits provided by the contract or providing separate annuity benefits) and includes the criteria for the interest and mortality assumptions to be used in determining minimum formula contract reserves. The 1980 revisions to the SVL provide for the maximum statutory formula reserve interest rate to be determined through a dynamic formula in order to incorporate changes in economic conditions, liquidity needs and the risks inherent in certain types of contracts.

The SVL defined methodology for annuity contracts, the commissioners annuity reserve valuation method (CARVM), requires that reserves be the greatest of the respective excesses of the present values, at the date of valuation, of the future guaranteed benefits, including guaranteed nonforfeiture benefits, provided for by such contracts at the end of each respective contract year, over the present value, at the date of valuation, of any future valuation considerations derived from future gross considerations, required by the terms of such contracts, that become payable prior to the end of such respective contract year. Such reserves are established to adequately fund all guaranteed contract obligations, including those obligations which are optional to the contract owner and which may not have yet been elected.

Industry practices and methods of reserving under CARVM for annuity contracts with multiple benefit streams have not been found to be consistent. These range from a low reserve equal to the cash surrender value to a reserve representing the greatest actuarial present value of the future benefit streams under all potential annuity or other nonforfeiture benefit election options using a conservative rate of interest.

The major purpose of this Actuarial Guideline is to provide clarification and consistency in applying CARVM to annuities with multiple benefit streams. Some of the areas requiring clarification include: the valuation of annuitization benefits; the application of incidence rates in CARVM; the application of the integrated benefit stream approach in CARVM; how to determine valuation interest rates and mortality tables for multiple benefit streams; and certain practical considerations regarding multiple benefit streams.

2. Annuitization Benefits

Varying forms of contracts provide that the cash value available to the contract owner is less than the amount available to purchase an annuitization option under the terms of the contract.

For purposes of this Actuarial Guideline, “accumulation fund” is defined as the policy value which is used to purchase an annuity option under the terms of the contract.

Frequently there are significant discontinuities in the reserves, both upward and downward, at the time a settlement option is elected, between the reserve held immediately prior to the settlement as compared to the reserve required for the greatest actuarial present value of the annuitization option elected.

One of the most significant reasons for discontinuities in the reserve patterns at the time of election is the difference in the SPIA valuation rate available at the time of election as compared to the valuation rate used based on the date of issue of the original SPDA contract. Another significant reason is the difference between the guaranteed purchase rate contained in the contract and used for reserve development as compared to the rate actually used to purchase the annuity option at the time of election.

3. Application of Incidence Rates in CARVM
Since CARVM was adopted, there has been an increase in the types of benefits offered under certain annuity contracts, including enhanced death benefits, nursing home benefits, and various partial withdrawal provisions, including some depending on values other than the values used to determine cash values and which may allow for benefits to continue past the point where the cash value is zero. For some of these benefit types, the SVL is not explicit as to whether incidence tables prescribed under the SVL may be used to determine such benefits, versus requiring consideration of all contract owner options available under the contract, and choosing the set of incidence rates which produce the greatest present value.

4. Integrated Benefit Stream Approach

CARVM requires that reserves be based on the greatest present value of all potential future guaranteed benefits. For annuity contracts offering more than one type of potential benefit stream, the SVL is not explicit regarding whether or how blends of more than one type of benefit must be considered under CARVM.

Under the integrated benefit stream approach, any potential benefit stream must be considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. Additionally, adjustments must be made to all such potential benefit streams to reflect those benefit types for which prescribed incidence tables are required (e.g., death benefits).

For example, consider an annuity contract offering surrender, annuitization and death benefits. Potential benefit streams that would be considered include surrender streams, annuitization streams, and streams reflecting blends of surrender and annuitization benefits. All such streams would also be adjusted to reflect death benefits and to discount all benefits for survivorship (based on the mortality table prescribed in the SVL).

5. Valuation Interest Rates

For annuities offering more than one type of benefit, the SVL is not explicit as to how valuation interest rates should be determined. The SVL is also not explicit as to how valuation interest rates should be determined for certain types of benefits offered under annuity contracts, such as death and nursing home benefits.

Purpose

The purpose of this Actuarial Guideline is to codify the basic interpretation of CARVM and does not constitute a change of method or basis from any previously used method, by clarifying the assumptions and methodologies which will comply with the intent of the SVL. This Actuarial Guideline shall apply to all annuity contracts subject to CARVM, where any elective benefits (as defined below) are available to the contract owner under the terms of the contract. However, life or health insurance riders attached to an annuity contract, where all components of the rider (e.g., premiums, benefits, contract charges, accumulation values and other components) are separate and distinct from the components of the annuity contract, should be treated as a separate life or health insurance contract not subject to this Actuarial Guideline. While this Actuarial Guideline applies to all annuity contracts subject to CARVM, in the event an actuarial guideline or regulation dealing with reserves is developed for a specific annuity product design, the product specific actuarial guideline or regulation will take precedence over the Actuarial Guideline.

Definitions

1. Elective and Non-Elective Benefits in CARVM

For purposes of determining reserves under CARVM, each benefit available under the annuity contract must be placed into one of the two categories defined as follows:

Non-Elective Benefits: Benefits that are payable to contract owners or beneficiaries only after the occurrence of a contingent or scheduled event independent of a contract owner’s election of an option specified in the contract, including (but not limited to) death benefits, accidental death benefits, disability benefits, nursing home benefits, and benefits payable under either a deferred or immediate annuity contract (with or without life contingencies), where no benefit options are available under the terms of the contract.

Elective Benefits: Benefits that do not fall under the non-elective benefits category (i.e., benefit options that may be freely elected under the terms of the contract). Elective benefits include (but are not limited to) full surrenders, partial withdrawals, and full and partial annuitizations.
In some cases it may not be clear whether some benefits are elective or non-elective. The presence of certain types of non-elective benefits may affect other non-elective benefits and/or elective benefits. For example, some annuity contracts offer benefits which vary depending upon the age of retirement. In such cases, the Valuation Actuary should use judgment in making these determinations, by considering factors such as the degree to which contract owner actions would be influenced by the availability of each benefit in the contract.

2. Elective and Non-Elective Incidence Rates in CARVM

For non-elective benefits, incidence rates from tables prescribed by the SVL should be applied to determine the payment of non-elective benefits and to discount, for survivorship, all benefit payments included in an Integrated Benefit Stream, as defined below. If no incidence tables are prescribed by the SVL, then company or industry experience (with margins for conservatism) may be used, as appropriate. For non-elective waiver-of-surrender-charge benefits other than mortality-based benefits, incidence rates greater than zero are not to be applied after the earlier of the end of the surrender charge period applicable immediately after the first premium is paid or when the cash value has been depleted. For non-elective benefits other than mortality-based benefits, incidence rates greater than zero for non-elective benefits where the contract owner may have financial incentive based on the benefits available in the contract not to it is unlikely that a contract owner would report a claim or make an election (such as collecting one benefit while other more valuable benefits exist in the contract) and which could thereby place a smaller reserve value on the contract’s other benefits should not be considered to the exclusion of other incidence rates that would result in a larger reserve. Annuity mortality tables prescribed by the SVL should be used to determine all mortality based benefits under the contract (including, but not limited to, annuitizations and death benefits) and to discount other types of benefit payments for survivorship.

For elective benefits, incidence rates should not be based on tables reflecting past company experience, industry experience or other expectations. Instead, every potential guaranteed elective benefit stream required to be reserved by CARVM must be considered in the determination of integrated benefit streams as defined below. This is accomplished by considering trial sets of guaranteed elective benefit incidence rates, either through numerical testing or analytical means, to determine which trial set produces the “greatest present value” as described in Text paragraph 1 below. Theoretically, this means that all possible elective benefit incidence rates between 0% and 100% should be considered. However, in practice, such a greatest present value will typically occur by assuming an incidence rate of either 0% or 100%.

3. Integrated Benefit Stream

An integrated benefit stream is one potential blend of guaranteed elective and non-elective benefits available under the contract, determined as the combination of A and B, where:

A equals one potential stream of one or more types of guaranteed elective benefits available under the terms of the contract, based upon a chosen set of elective benefit incidence rates; and

B equals the stream of all guaranteed non-elective benefits provided under the terms of the contract, recognizing the guaranteed elective benefit stream under consideration in A above, and the non-elective incidence rates defined in 2. above.

Both A and B above should be discounted for survivorship, based on the non-elective incidence rates defined in 2. above.

Text

1. Greatest Present Value

All guaranteed benefits potentially available under the terms of the contract must be considered in the valuation process and analysis and the ultimate policy reserve held must be sufficient to fund the greatest present value of all potential integrated benefit streams, reflecting all guaranteed elective and non-elective benefits available to the contract owner. Each integrated benefit stream available under the contract must be individually valued and the ultimate reserve established must be the greatest of the present values of these values, based on valuation interest rate(s) as defined in Section 3 below.

2. Examples of Integrated Benefit Streams That Must Be Considered
A. Cash Value Streams

One mandatory set of integrated benefit streams for a deferred annuity with cash settlement values which must always be considered is any possible blend of future guaranteed partial withdrawals and full surrenders available under the contract, as specified in the SVL, accumulated at the guaranteed credited interest rate(s) and discounted at the valuation rate(s) of interest defined in section 3 below, with appropriate recognition of all guaranteed non-elective benefits available under the contract.

B. Annuitization Streams

A second mandatory set of integrated benefit streams that must be considered is any possible blend of future guaranteed full or partial annuitization elections, as specified in the SVL, available to the contract owner at each election date required by CARVM, with appropriate recognition of all guaranteed non-elective benefits available under the terms of the contract. In determining the integrated benefit streams to value the annuitization option, the guaranteed purchase rates contained in the contract, as well as any other contract provisions, excluding any current purchase rates which may be applicable, are applied to the accumulation fund.

C. Other Elective Benefit Streams

In addition to the cash value and annuitization streams described above, all other possible guaranteed elective benefits available under the contract, including blends of more than one type of guaranteed elective benefit, must be considered in a manner consistent with the mandatory cash value and annuitization streams, with appropriate recognition of all guaranteed non-elective benefits available under the contract.

3. Determination of Valuation Interest Rates

Section 4b of the SVL determines valuation rates for an annuity contract based on the following Parameters:

A. The basis of valuation (issue year or change in fund);
B. Whether or not the annuity provides for cash settlement options;
C. Whether interest is guaranteed on premiums received more than 12 months following issue (or the valuation date for change in fund basis);
D. The guarantee duration; and
E. The Plan Type.

Parameters A, B and C above should be determined at a contract level. Additional requirements regarding the change in fund basis of valuation are set forth in Section 5 below. Parameters D and E should be determined at a benefit level, as set forth in Section 4 below.

Under a contract level determination, parameters are set based on the characteristics of the contract as a whole. Under a benefit level determination, parameters are set based on the characteristics of each benefit, resulting in potentially different valuation rates for each benefit type comprising the integrated benefit stream.

4. Determination of Guarantee Duration and Plan Type

Guarantee duration and Plan Type are based upon the specific characteristics of each individual benefit type that comprise the integrated benefit stream, as follows:

A. For portions of the integrated benefit stream attributable to full surrender and partial withdrawal benefits, the Plan Type should be based upon the withdrawal characteristics of the benefit, as stated in the contract. This may result in a Plan Type A, B or C under the 1980 amendments of the SVL. The guarantee duration is the number of years for which interest rates are guaranteed in excess of the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty (20) years.

B. For portions of the integrated benefit stream attributable to full and partial annuitization benefits, the determination of the valuation interest rate involves the use of the appropriate Plan Type and weighting factor as determined by the SVL, with the guarantee duration as the number of years from the original date of issue or date of purchase, to the date the annuitization is assumed to commence. If the underlying assumption is that the contract owner may withdraw funds only as an immediate life annuity or as installments over 5 years or more, this will generally result
in a Plan Type A, under the 1980 amendments of the SVL, with the valuation interest rate changing as different assumed annuitization dates determine guarantee durations which will fall into different guarantee duration bands under the SVL. An assumed annuitization option which has a non-life contingent payout period of less than five (5) years shall be considered a Plan Type C, with the valuation interest rate changing as different assumed annuitization dates determine guarantee durations which will fall into different guarantee duration bands under the SVL.

C. For portions of the integrated benefit stream attributable to non-elective benefits, since the underlying assumption is that no withdrawal is permitted, Plan Type A should generally be used, with a guarantee duration determined as the number of years from issue or purchase to the date non-elective benefits may first be paid. In most cases, the guarantee duration should be less than five years, since non-elective benefit coverage usually begins immediately after issue, with benefits payable commencing in the first contract year.

For benefit types incorporating multiple payments, paragraphs 4(A), 4(B), and 4(C) above should be applied to each separate payment according to the withdrawal, annuitization, or non-elective benefit characteristics of the contract and payment provisions at the time each payment is to be made. If a portion of the integrated benefit stream is part of an immediate life annuity or a series of installments over five (5) years or more, but can be changed directly or indirectly by exercise of contract owner withdrawal options, then it would be inappropriate to apply paragraph 4(B) to that portion of the integrated benefit stream, since the contractholder may withdraw funds other than as a life annuity or in installments of five (5) years or more.

For example, a Guaranteed Lifetime Income Benefit (GLIB) is a guarantee to the owner of a fixed deferred annuity contract, whether traditional or indexed to an external referent such as an equity index, that the owner can have a defined income for life in an amount determined by formula, while the owner retains traditional rights (such as withdrawal) to the other values provided by the underlying deferred annuity and while such values continue to exist. Income benefits are typically deducted from one or more of the annuity’s defined values to the extent such values remain positive. Once the GLIB is elected, the contract owner may have rights to stop and restart the income benefit and may also request full or partial surrender of any remaining annuity value, though doing so may negatively impact or eliminate subsequent guaranteed income benefits. Thus, applying 4(A) and 4(B) above, the GLIB benefit stream is seen to be composed of two portions to determine the Plan Type and guarantee duration, as follows:

The first portion consists of the series of defined payments to the extent that the payments, or any fraction thereof, are withdrawals that reduce or deplete the annuity’s defined values. Applying paragraph 4(A) to this portion would result in Plan Type A, Plan Type B, or Plan Type C, by following the definitions of such contained within the Standard Valuation Law and reflecting the specific contract provisions, especially with regard to withdrawal. Paragraph 4(A) would also apply to any residual withdrawals that can be made following election of the GLIB benefit.

The second portion is a life annuity without option to take or receive additional amounts under the contract, and consists of the payments not included in the above portion. Applying paragraph 4(B), Plan Type A would generally apply to this segment with the guarantee duration determined using the period from contract issue to commencement of payments in this second portion.

5. Change in Fund Basis

As indicated by section 4b.C.(1)(c)(vi) of the SVL, a company may elect to value annuity contracts with cash settlement options on either an issue year basis or on a change in fund basis. Annuity contracts with no cash settlement options must be valued on an issue year basis. The issue year basis or change in fund basis should be determined for the contract as a whole, and thus must be consistently applied to all portions of all integrated benefit streams available under the annuity contract. The election of issue year or change in fund basis must be made at the issuance of the contract and must not change during the term of the contract without the prior written approval of the commissioner.

6. Purchase Rates

Contracts may provide, as contractual guarantees, the use of preferential purchase rates to those listed in the contract. As an example, a contract may provide that the company will offer, at the time of annuitization, the rates offered to new purchasers of immediate annuities if such rates will provide a higher annuity benefit than would result from the contractually guaranteed rates provided in the contract. This creates a contract guarantee which must be valued under CARVM. Ignoring this benefit in determining reserves will produce reserves less than the statutory formula reserves required under CARVM. Valuation of this benefit, however, is complicated by the fact that the company does not
currently know what the exact rate will be at the time of the settlement election. In order to determine conservative statutory formula reserves, if use of future unknown rates are guaranteed, the company shall establish reserves not less than the contract’s accumulation fund value, on the valuation date, reduced by an “expense allowance” not to exceed 7% of such fund. This section does not require the calculation of a reserve for the annuitization of business based upon current purchase rates pursuant to the “annuitization streams” described in Paragraph 2.B. above.

Likewise for contracts which provide for additional amounts during the payout period over those guaranteed at the commencement of the annuity payments, the reserve during the deferred period shall not be less than the contract’s accumulation fund reduced by an expense allowance not to exceed 7% of such fund.

7. Practical Considerations

The major purpose of this Actuarial Guideline is to provide clarification and consistency in applying CARVM to annuities with multiple benefit streams. However, in practice there may be other acceptable methods of applying CARVM which are substantially consistent with the methods described in this Actuarial Guideline. Such methods may also be used, with prior regulatory approval.

Additionally, in applying this Actuarial Guideline there may theoretically be an infinite number of contract owner options that are possible under the contract. However, it may not be practical, possible or even appropriate to test every conceivable combination of potential integrated benefit streams theoretically available under the contract. This Actuarial Guideline requires that the actuary consider, not necessarily test, all potential integrated benefit streams to determine to what extent each contract owner option has a material impact on the reserve. In practice, the actuary may be able to eliminate some potential integrated benefit streams by analytical methods. The actuary may also be able to demonstrate the reserve adequacy of certain approximations. For example, in certain situations it may be shown that a CARVM reserve ignoring non-elective benefits, plus an “add-on” reserve for non-elective benefits, is a reasonable approximation for the theoretically correct CARVM reserve.

Effective Date

This guideline shall be effective on December 31, 1998 affecting all contracts issued on or after January 1, 1981. A company may request a grade-in period for contracts issued prior to December 31, 1998 from the domiciliary commissioner upon satisfactory demonstration that the method and level of current reserves held for such contracts are adequate in the aggregate. This phase-in will require establishment of no less than 33 1/3% of the additional reserves resulting from the application of this guideline on December 31, 1998, no less than 66 2/3% on December 31, 1999, and 100% by December 31, 2000.
March 17, 2015

Mr. Mike Boerner
Chairman – NAIC Life Actuarial Task Force

Re Revisions to the Actuarial Guideline 33 for Non-Elective Benefits

Dear Mr. Boerner;

The ACLI1 is pleased to submit the following comments regarding proposed changes to Actuarial Guideline 33 as it applies to Non-Elective Benefits on behalf of our member companies. We generally agree that the changes originally proposed by the Academy and exposed in the spring of 2014 would be appropriate, but reiterate our comments from May 14, 2014.

The edits that we had recommended last May, in our view, add some clarity to the guideline. These were recently exposed, and we support them as an important clarification. In this version of the edits to AG-33, the spirit of CARVM is captured by evaluating the various benefit streams available within the contract, recognizing the incidence of election of certain benefits when those benefits have financial benefit to the customer. We believe that this is the appropriate interpretation of AG-33 for these types of benefits.

We will be happy to discuss these comments and answer any questions.

Cc Reggie Mazyck, NAIC

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1 The American Council of Life Insurers (ACLI) is a Washington, D.C.-based trade association with more than 300 legal reserve life insurer and fraternal benefit society member companies operating in the United States. ACLI advocates in federal, state and international forums. Its members represent more than 90 percent of the assets and premiums of the U.S. life insurance and annuity industry. In addition to life insurance, annuities and other workplace and individual retirement plans, ACLI members offer long-term care and disability income insurance, and reinsurance. Its public website can be accessed at www.acli.com.
March 12, 2015

Mr. Michael W. Boerner, ASA, MAAA
Chair, Life Actuarial Task Force
National Association of Insurance Commissioners

Re: Proposed Revisions to Actuarial Guideline 33 for Non-Elective Benefits

Dear Mr. Boerner:

Transamerica thanks you and the Life Actuarial Task Force (LATF) for the opportunity to comment on the proposed changes to Actuarial Guideline XXXIII (AG33) pertaining to non-elective benefits as contained in the exposure “Actuarial Guideline 33 Exposure with ACLI Edits.” We support the current exposure of proposed changes to AG33, based on the original “Approach C” outlined in the Academy’s report, and do not support the previously exposed changes, based on “Approach A.” The current exposure:

1. **Addresses the concern that led LATF to look into possible changes to AG33.** This is the concern that reserves could be inappropriately reduced if the assumption of irrational behavior on the part of contract holders is allowed.

2. **Requires that the value of all benefits be considered when calculating reserves.** For example, the value of a living benefit rider to the contract owner must be considered before applying non-elective non-mortality incidence rates.

3. **Produces results consistent with CARVM principles.** The resulting reserves would be a greatest present value without being unduly conservative. “Approach A” produces excessive conservatism because it does not allow for consideration of increased mortality for impaired lives, e.g., those confined to a nursing home.

4. **Would be relatively easy for companies to implement.** This is in contrast to “Approach A” which would significantly increase the already complex CARVM reserve calculations.

In short, we support the current exposure as it addresses the original concern, provides for appropriate reserves, and allows for ease of implementation.

Thank you for the opportunity to comment. If you have any questions regarding these comments, we will be glad to respond.

Sincerely,

Chris Conrad, FSA, MAAA
Senior Actuary
Transamerica Life Insurance Company
Ph: 319.355.8025
chris.conrad@transamerica.com
5. Discussed the Academy AG 33 Nonelective Benefit Proposal

Alice Fontaine (American Academy of Actuaries—Academy) said the AG 33 Nonelective Benefits Incidence Reserve proposal (Attachment Four-E) was modified to create a separate category for the elective components that occur within a benefit that is nonelective. Mr. Bruins said the ACLI comment letter (Attachment Four-F) states that material programming work is required to implement the proposed modification. The ACLI recommends that the target implementation date be year-end 2015. Tom Campbell (Actuarial Resources Corporation—ARC) said the ARC comment letter (Attachment Four-G) recommends that the Task Force should adopt the originally proposed changes to AG 33. The ARC comment also states that if the Task Force chooses to adopt the current proposal, it should only apply to policies issued after the effective date. Mr. Campbell said policies issued prior to the effective date should use the originally proposed changes to AG 33. Mr. Campbell suggested that regardless of which proposal is adopted, selection of an appropriate effective date should be done in consultation with industry companies. He noted that, to begin discussions, the ARC suggests an effective date no earlier than July 1, 2015.

Mark Alberts (Alberts Actuarial Consulting, LLC) said his comment letter (Attachment Four-H) focuses on the issues that result in the anomaly of a policy with a guaranteed lifetime income benefit (GLIB) and a nursing home rider to have a smaller reserve than a policy with only a GLIB. He said his conclusion is that some of the mechanics of AG 33 do not work well when there is an income benefit based on a notional amount that is largely unrelated to the account value. He said the current proposal, without allowance for terminations, would lead to a larger reserve.

Mr. Boerner said the comment letter from National Life Group (Attachment Four-I) does not support the current proposal. He said the comment letter recommends that the Task Force issue a pronouncement or letter that addresses any interpretation of AG 33 that allows for application of incidence rates for situations that are nonsensical. Mr. Boerner said the comment letter also says that the original AG 33 proposal is an acceptable option.

The Task Force will continue working on edits to the proposals that could be implemented by year-end 2015.
July 25, 2014

Mike Boerner, Chair
Life Actuarial Task Force
National Association of Insurance Commissioners

Dear Mike,

The attached revisions to AG33 are the result of a request from the NAIC’s Life Actuarial Task Force (LATF) on June 26, 2014 to the American Academy of Actuaries’ AG33 Non-Elective Task Force. The LATF request was to create a variation of the AG33 revision to reflect the regulator discussion on the June 26 LATF call, with additional input from interested regulators.

The concept in the attached variation shares similarities yet is different compared to the original reserve proposal as submitted by the AG33 Non-Elective Task Force and later revised with ACLI input. The original reserve proposal is an Approach C implementation. The attached variation is an Approach A implementation. Refer to the AG33 Non-Elective Incidence Reserve Proposal published for the December 13, 2013 LATF meeting to find descriptions of approaches A, B, C, D, and E.

Please contact Bill Rapp (rapp@actuary.org), assistant director of Public Policy at the Academy, if you have any questions.

Sincerely,

John Blocher, F.S.A., M.A.A.A.
Chairperson
AG33 Non-Elective Incidence Task Force
American Academy of Actuaries

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1 The American Academy of Actuaries is an 18,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.
ACTUARIAL GUIDELINE XXXIII
DETERMINING CARVM RESERVES
FOR ANNUITY CONTRACTS WITH ELECTIVE BENEFITS

Background Information

1. Introduction

The Standard Valuation Law (SVL) defines the methods and assumptions which are to be used in determining minimum statutory formula reserves. This law establishes the standards for annuity contracts (which therefore includes any annuity riders or endorsements, and any or all components of which, such as premiums, benefits, contract charges, primary or secondary accumulation values or other components, either relating to annuity benefits provided by the contract or providing separate annuity benefits) and includes the criteria for the interest and mortality assumptions to be used in determining minimum formula contract reserves. The 1980 revisions to the SVL provide for the maximum statutory formula reserve interest rate to be determined through a dynamic formula in order to incorporate changes in economic conditions, liquidity needs and the risks inherent in certain types of contracts.

The SVL defined methodology for annuity contracts, the commissioners annuity reserve valuation method (CARVM), requires that reserves be the greatest of the respective excesses of the present values, at the date of valuation, of the future guaranteed benefits, including guaranteed nonforfeiture benefits, provided for by such contracts at the end of each respective contract year, over the present value, at the date of valuation, of any future valuation considerations derived from future gross considerations, required by the terms of such contracts, that become payable prior to the end of such respective contract year. Such reserves are established to adequately fund all guaranteed contract obligations, including those obligations which are optional to the contract owner and which may not have yet been elected.

Industry practices and methods of reserving under CARVM for annuity contracts with multiple benefit streams have not been found to be consistent. These range from a low reserve equal to the cash surrender value to a reserve representing the greatest actuarial present value of the future benefit streams under all potential annuity or other nonforfeiture benefit election options using a conservative rate of interest.

The major purpose of this Actuarial Guideline is to provide clarification and consistency in applying CARVM to annuities with multiple benefit streams. Some of the areas requiring clarification include: the valuation of annuitization benefits; the application of incidence rates in CARVM; the application of the integrated benefit stream approach in CARVM; how to determine valuation interest rates and mortality tables for multiple benefit streams; and certain practical considerations regarding multiple benefit streams.

2. Annuitization Benefits

Varying forms of contracts provide that the cash value available to the contract owner is less than the amount available to purchase an annuitization option under the terms of the contract.

For purposes of this Actuarial Guideline, “accumulation fund” is defined as the policy value which is used to purchase an annuity option under the terms of the contract.

Frequently there are significant discontinuities in the reserves, both upward and downward, at the time a settlement option is elected, between the reserve held immediately prior to the settlement as compared to the reserve required for the greatest actuarial present value of the annuitization option elected.

One of the most significant reasons for discontinuities in the reserve patterns at the time of election is the difference in the SPIA valuation rate available at the time of election as compared to the valuation rate used based on the date of issue of the original SPDA contract. Another significant reason is the difference between the guaranteed purchase rate contained in the contract and used for reserve development as compared to the rate actually used to purchase the annuity option at the time of election.
3. Application of Incidence Rates in CARVM

Since CARVM was adopted, there has been an increase in the types of benefits offered under certain annuity contracts, including enhanced death benefits, nursing home benefits, and various partial withdrawal provisions, including some depending on values other than the values used to determine cash values and which may allow for benefits to continue past the point where the cash value is zero. For some of these benefit types, the SVL is not explicit as to whether incidence tables prescribed under the SVL may be used to determine such benefits, versus requiring consideration of all contract owner options available under the contract, and choosing the set of incidence rates which produce the greatest present value.

4. Integrated Benefit Stream Approach

CARVM requires that reserves be based on the greatest present value of all potential future guaranteed benefits. For annuity contracts offering more than one type of potential benefit stream, the SVL is not explicit regarding whether or how blends of more than one type of benefit must be considered under CARVM.

Under the integrated benefit stream approach, any potential benefit stream must be considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. Additionally, adjustments must be made to all such potential benefit streams to reflect those benefit types for which prescribed incidence tables are required (e.g., death benefits).

For example, consider an annuity contract offering surrender, annuitization and death benefits. Potential benefit streams that would be considered include surrender streams, annuitization streams, and streams reflecting blends of surrender and annuitization benefits. All such streams would also be adjusted to reflect death benefits and to discount all benefits for survivorship (based on the mortality table prescribed in the SVL).

5. Valuation Interest Rates

For annuities offering more than one type of benefit, the SVL is not explicit as to how valuation interest rates should be determined. The SVL is also not explicit as to how valuation interest rates should be determined for certain types of benefits offered under annuity contracts, such as death and nursing home benefits.

Purpose

The purpose of this Actuarial Guideline is to codify the basic interpretation of CARVM and does not constitute a change of method or basis from any previously used method, by clarifying the assumptions and methodologies which will comply with the intent of the SVL. This Actuarial Guideline shall apply to all annuity contracts subject to CARVM, where any elective benefits (as defined below) are available to the contract owner under the terms of the contract. However, life or health insurance riders attached to an annuity contract, where all components of the rider (e.g., premiums, benefits, contract charges, accumulation values and other components) are separate and distinct from the components of the annuity contract, should be treated as a separate life or health insurance contract not subject to this Actuarial Guideline. While this Actuarial Guideline applies to all annuity contracts subject to CARVM, in the event an actuarial guideline or regulation dealing with reserves is developed for a specific annuity product design, the product specific actuarial guideline or regulation will take precedence over the Actuarial Guideline.

Definitions

1. Elective and Non-Elective Benefits in CARVM

For purposes of determining reserves under CARVM, each benefit available under the annuity contract must be placed into one of the three categories defined as follows:

Non-Elective Benefits that are Mortality-Based Benefits: Benefits that are payable to contract owners or beneficiaries solely on the basis of death or survival.
Non-Elective Benefits other than Mortality-Based Benefits: Benefits that are payable to contract owners or beneficiaries only after the occurrence of a contingent or scheduled event other than death or survival, independent of a contract owner’s election of an option specified in the contract, including (but not limited to) death benefits, accidental death benefits, disability benefits, and nursing home benefits, and benefits payable under either a deferred or immediate annuity contract (with or without life contingencies), where no benefit options are available under the terms of the contract.

Elective Benefits: Benefits that do not fall under either of the non-elective benefits categories (i.e., benefit options that may be freely elected under the terms of the contract). Elective benefits include (but are not limited to) full surrenders, partial withdrawals, and full and partial annuitizations.

In some cases it may not be clear whether some benefits are elective or non-elective. For example, some annuity contracts offer benefits which vary depending upon the age of retirement. In such cases, the Valuation Actuary should use judgment in making this determination, by considering factors such as the degree to which contract owner actions would be influenced by the availability of the benefit.

2. Elective and Non-Elective Incidence Rates in CARVM

For all non-elective benefits, incidence rates from tables prescribed by the SVL should be applied to determine the payment of non-elective benefits and to discount, for survivorship, all benefit payments included in an Integrated Benefit Stream, as defined below. If no incidence tables are prescribed by the SVL, then company or industry experience (with margins for conservatism) may be used, as appropriate. Annuity mortality tables prescribed by the SVL should be used to determine all mortality based benefits under the contract (including, but not limited to, annuitizations and death benefits) and to discount other types of benefit payments for survivorship.

For non-elective benefits other than mortality-based benefits the incidence rates should assume that the contract owners or beneficiaries elect the benefits that are payable after the incidence. For these benefits, incidence rates should also assume the contract owners or beneficiaries elect the benefits with the greatest present value after comparing the present value of benefits that are payable immediately after the incidence to the present value of other benefits available in the contract. This election forms a second incidence rate -- an election incidence rate -- corresponding to the probability that the contract owners or beneficiaries elect non-elective benefits that are payable after the incidence. The election incidence rates should not reflect past company experience, industry experience or other expectations. Instead, the election incidence rates must be considered as elective benefit incidence rates to determine which election incidence rates produce the “greatest present value” as described in the Text paragraph 1 below. Theoretically, this means that all possible election incidence rates between 0% and 100% should be considered. However, in practice, such a greatest present value will typically occur by assuming an election incidence rate of either 0% or 100%.

For elective benefits, incidence rates should not be based on tables reflecting past company experience, industry experience or other expectations. Instead, every potential guaranteed elective benefit stream required to be reserved by CARVM must be considered in the determination of integrated benefit streams as defined below. This is accomplished by considering trial sets of guaranteed elective benefit incidence rates, either through numerical testing or analytical means, to determine which trial set produces the “greatest present value” as described in Text paragraph 1 below. Theoretically, this means that all possible elective benefit incidence rates between 0% and 100% should be considered. However, in practice, such a greatest present value will typically occur by assuming an incidence rate of either 0% or 100%.

3. Integrated Benefit Stream

An integrated benefit stream is one potential blend of guaranteed elective and non-elective benefits available under the contract, determined as the combination of A and B, where:

A equals one potential stream of one or more types of guaranteed elective benefits available under the terms of the contract, based upon a chosen set of elective benefit incidence rates; and

B equals the stream of all guaranteed non-elective benefits provided under the terms of the contract, recognizing the guaranteed elective benefit stream under consideration in A above, and the incidence rates used for non-elective benefits defined in 2. above.
Both A and B above should be discounted for survivorship, based on the incidence rates used for non-elective benefits defined in 2. above.

Text

1. Greatest Present Value

All guaranteed benefits potentially available under the terms of the contract must be considered in the valuation process and analysis and the ultimate policy reserve held must be sufficient to fund the greatest present value of all potential integrated benefit streams, reflecting all guaranteed elective and non-elective benefits available to the contract owner. Each integrated benefit stream available under the contract must be individually valued and the ultimate reserve established must be the greatest of the present values of these values, based on valuation interest rate(s) as defined in Section 3 below.

2. Examples of Integrated Benefit Streams That Must Be Considered

A. Cash Value Streams

One mandatory set of integrated benefit streams for a deferred annuity with cash settlement values which must always be considered is any possible blend of future guaranteed partial withdrawals and full surrenders available under the contract, as specified in the SVL, accumulated at the guaranteed credited interest rate(s) and discounted at the valuation rate(s) of interest defined in section 3 below, with appropriate recognition of all guaranteed non-elective benefits available under the contract.

B. Annuitization Streams

A second mandatory set of integrated benefit streams that must be considered is any possible blend of future guaranteed full or partial annuitization elections, as specified in the SVL, available to the contract owner at each election date required by CARVM, with appropriate recognition of all guaranteed non-elective benefits available under the terms of the contract. In determining the integrated benefit streams to value the annuitization option, the guaranteed purchase rates contained in the contract, as well as any other contract provisions, excluding any current purchase rates which may be applicable, are applied to the accumulation fund.

C. Other Elective Benefit Streams

In addition to the cash value and annuitization streams described above, all other possible guaranteed elective benefits available under the contract, including blends of more than one type of guaranteed elective benefit, must be considered in a manner consistent with the mandatory cash value and annuitization streams, with appropriate recognition of all guaranteed non-elective benefits available under the contract.

3. Determination of Valuation Interest Rates

Section 4b of the SVL determines valuation rates for an annuity contract based on the following Parameters:

A. The basis of valuation (issue year or change in fund);
B. Whether or not the annuity provides for cash settlement options;
C. Whether interest is guaranteed on premiums received more than 12 months following issue (or the valuation date for change in fund basis);
D. The guarantee duration; and
E. The Plan Type.

Parameters A, B and C above should be determined at a contract level. Additional requirements regarding the change in fund basis of valuation are set forth in Section 5 below. Parameters D and E should be determined at a benefit level, as set forth in Section 4 below.

Under a contract level determination, parameters are set based on the characteristics of the contract as a whole. Under a benefit level determination, parameters are set based on the characteristics of each benefit, resulting in potentially different valuation rates for each benefit type comprising the integrated benefit stream.

4
4. Determination of Guarantee Duration and Plan Type

Guarantee duration and Plan Type are based upon the specific characteristics of each individual benefit type that comprise the integrated benefit stream, as follows:

A. For portions of the integrated benefit stream attributable to full surrender and partial withdrawal benefits, the Plan Type should be based upon the withdrawal characteristics of the benefit, as stated in the contract. This may result in a Plan Type A, B or C under the 1980 amendments of the SVL. The guarantee duration is the number of years for which interest rates are guaranteed in excess of the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty (20) years.

B. For portions of the integrated benefit stream attributable to full and partial annuitization benefits, the determination of the valuation interest rate involves the use of the appropriate Plan Type and weighting factor as determined by the SVL, with the guarantee duration as the number of years from the original date of issue or date of purchase, to the date the annuitization is assumed to commence. If the underlying assumption is that the contract owner may withdraw funds only as an immediate life annuity or as installments over 5 years or more, this will generally result in a Plan Type A, under the 1980 amendments of the SVL, with the valuation interest rate changing as different assumed annuitization dates determine guarantee durations which will fall into different guarantee duration bands under the SVL. An assumed annuitization option which has a non-life contingent payout period of less than five (5) years shall be considered a Plan Type C, with the valuation interest rate changing as different assumed annuitization dates determine guarantee durations which will fall into different guarantee duration bands under the SVL.

C. For portions of the integrated benefit stream attributable to non-elective benefits, since the underlying assumption is that no withdrawal is permitted, Plan Type A should generally be used, with a guarantee duration determined as the number of years from issue or purchase to the date non-elective benefits may first be paid. In most cases, the guarantee duration should be less than five years, since non-elective benefit coverage usually begins immediately after issue, with benefits payable commencing in the first contract year.

For benefit types incorporating multiple payments, paragraphs 4(A), 4(B), and 4(C) above should be applied to each separate payment according to the withdrawal, annuitization, or non-elective benefit characteristics of the contract and payment provisions at the time each payment is to be made. If a portion of the integrated benefit stream is part of an immediate life annuity or a series of installments over five (5) years or more, but can be changed directly or indirectly by exercise of contract owner withdrawal options, then it would be inappropriate to apply paragraph 4(B) to that portion of the integrated benefit stream, since the contractholder may withdraw funds other than as a life annuity or in installments of five (5) years or more.

For example, a Guaranteed Lifetime Income Benefit (GLIB) is a guarantee to the owner of a fixed deferred annuity contract, whether traditional or indexed to an external referent such as an equity index, that the owner can have a defined income for life in an amount determined by formula, while the owner retains traditional rights (such as withdrawal) to the other values provided by the underlying deferred annuity and while such values continue to exist. Income benefits are typically deducted from one or more of the annuity’s defined values to the extent such values remain positive. Once the GLIB is elected, the contract owner may have rights to stop and restart the income benefit and may also request full or partial surrender of any remaining annuity value, though doing so may negatively impact or eliminate subsequent guaranteed income benefits. Thus, applying 4(A) and 4(B) above, the GLIB benefit stream is seen to be composed of two portions to determine the Plan Type and guarantee duration, as follows:

The first portion consists of the series of defined payments to the extent that the payments, or any fraction thereof, are withdrawals that reduce or deplete the annuity’s defined values. Applying paragraph 4(A) to this portion would resulting Plan Type A, Plan Type B, or Plan Type C, by following the definitions of such contained within the Standard Valuation Law and reflecting the specific contract provisions, especially with regard to withdrawal. Paragraph 4(A) would also apply to any residual withdrawals that can be made following election of the GLIB benefit.

The second portion is a life annuity without option to take or receive additional amounts under the contract, and consists of the payments not included in the above portion. Applying paragraph 4(B), Plan Type A would generally
apply to this segment with the guarantee duration determined using the period from contract issue to commencement of payments in this second portion.

5. Change in Fund Basis

As indicated by section 4b.C.(1)(c)(vi) of the SVL, a company may elect to value annuity contracts with cash settlement options on either an issue year basis or on a change in fund basis. Annuity contracts with no cash settlement options must be valued on an issue year basis. The issue year basis or change in fund basis should be determined for the contract as a whole, and thus must be consistently applied to all portions of all integrated benefit streams available under the annuity contract. The election of issue year or change in fund basis must be made at the issuance of the contract and must not change during the term of the contract without the prior written approval of the commissioner.

6. Purchase Rates

Contracts may provide, as contractual guarantees, the use of preferential purchase rates to those listed in the contract. As an example, a contract may provide that the company will offer, at the time of annuitization, the rates offered to new purchasers of immediate annuities if such rates will provide a higher annuity benefit than would result from the contractually guaranteed rates provided in the contract. This creates a contract guarantee which must be valued under CARVM. Ignoring this benefit in determining reserves will produce reserves less than the statutory formula reserves required under CARVM. Valuation of this benefit, however, is complicated by the fact that the company does not currently know what the exact rate will be at the time of the settlement election. In order to determine conservative statutory formula reserves, if use of future unknown rates is guaranteed, the company shall establish reserves not less than the contract’s accumulation fund value, on the valuation date, reduced by an “expense allowance” not to exceed 7% of such fund. This section does not require the calculation of a reserve for the annuitization of business based upon current purchase rates pursuant to the “annuitization streams” described in Paragraph 2.B. above.

Likewise for contracts which provide for additional amounts during the payout period over those guaranteed at the commencement of the annuity payments, the reserve during the deferred period shall not be less than the contract’s accumulation fund reduced by an expense allowance not to exceed 7% of such fund.

7. Practical Considerations

The major purpose of this Actuarial Guideline is to provide clarification and consistency in applying CARVM to annuities with multiple benefit streams. However, in practice there may be other acceptable methods of applying CARVM which are substantially consistent with the methods described in this Actuarial Guideline. Such methods may also be used, with prior regulatory approval.

Additionally, in applying this Actuarial Guideline there may theoretically be an infinite number of contract owner options that are possible under the contract. However, it may not be practical, possible or even appropriate to test every conceivable combination of potential integrated benefit streams theoretically available under the contract. This Actuarial Guideline requires that the actuary consider, not necessarily test, all potential integrated benefit streams to determine to what extent each contract owner option has a material impact on the reserve. In practice, the actuary may be able to eliminate some potential integrated benefit streams by analytical methods. The actuary may also be able to demonstrate the reserve adequacy of certain approximations. For example, in certain situations it may be shown that a CARVM reserve ignoring non-elective benefits, plus an “add-on” reserve for non-elective benefits, is a reasonable approximation for the theoretically correct CARVM reserve.

Effective Date

This guideline shall be effective on December 31, 1998 affecting all contracts issued on or after January 1, 1981. A company may request a grade-in period for contracts issued prior to December 31, 1998 from the domiciliary commissioner upon satisfactory demonstration that the method and level of current reserves held for such contracts are adequate in the aggregate. This phase-in will require establishment of no less than 33 1/3% of the additional reserves resulting from the application of this guideline on December 31, 1998, no less than 66 2/3% on December 31, 1999, and 100% by December 31, 2000.
AG 33 Exposure Comments

Discussed on the October 9 LATF Call

1. ACLI Comments
2. Actuarial Resources Inc. Comments
3. Alberts Consulting Comments
4. National Life Group Comments
September 16, 2014

Mr. Mike Boerner
Chairman – NAIC Life Actuarial Task Force

Re Revisions to the Actuarial Guideline 33 for Non-Elective Benefits

Dear Mr. Boerner;

The ACLI1 is pleased to submit the following comments regarding exposed changes to Actuarial Guideline 33 as it applies to Non-Elective Benefits on behalf of our member companies.

While we generally agree that clarifying the use of incidence rates would be appropriate, we raise two concerns.

First, we are concerned about implementation with this clarification being adopted so late in the year. We ask that consideration be given to not requiring compliance until 2015.

We are disappointed that as principle-based approaches are being developed and considered for annuities, for this purpose LATF did not consider application of something other than a strict worst-case scenario. This results in situations where the method ascribes value in certain situations that is obviously higher than the actual value to the consumer, and creates unnecessarily conservative reserves.

We will be happy to discuss these comments and answer any questions.

Cc Reggie Mazyck, NAIC

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1 The American Council of Life Insurers (ACLI) is a Washington, D.C.-based trade association with more than 300 legal reserve life insurer and fraternal benefit society member companies operating in the United States. ACLI advocates in federal, state and international forums. Its members represent more than 90 percent of the assets and premiums of the U.S. life insurance and annuity industry. In addition to life insurance, annuities and other workplace and individual retirement plans, ACLI members offer long-term care and disability income insurance, and reinsurance. Its public website can be accessed at www.acli.com.
September 16, 2014

Mr. Michael W. Boerner, ASA, MAAA  
Chair, Life Actuarial Task Force (LATF)  
National Association of Insurance Commissioners

Re: Proposed Revisions to AG33 attached to Mr. John Blocher’s letter to Mr. Mike Boerner of July 25, 2014

Dear Mike:

Actuarial Resources Corporation (ARC) thanks you for the opportunity to comment on the exposed changes to Actuarial Guideline XXXIII (AG33) pertaining to non-elective benefits. Our comments are based on decades of expertise with AG33 and in implementing its requirements in ARC’s actuarial software (ARCVAL).

Background

My understanding of the circumstances that led to LATF’s work on this issue was a concern about the interaction of certain benefits under an AG33 reserve calculation; for example, the interaction of a contingent waiver of surrender charges benefit (Waiver of SC) and a guaranteed lifetime income benefit (GLIB). The concern raised was that under certain circumstances (e.g., when the projected account value is zero), an assumption may be made within the reserve calculation that the contractholder takes the waiver of SC benefit when there are remaining guaranteed income payments available. Such a situation would result in an assumption that the contractholder would trade future guaranteed payments for a current benefit of zero. Clearly this is not a rational exercise of contractholder benefits and such an assumption should not be made in a CARVM reserve calculation.

Earlier this year, LATF exposed a change to AG33, which would require that the projected incidence rates within the reserve calculation for non-mortality, non-elective benefits, such as waiver of SC benefits, be set to zero at the earlier of the end of the surrender charge period applicable to the initial premium paid into the contract and the duration when the projected cash surrender value becomes zero (herein referred to as the Original Proposed Changes to AG33). This proposal was replaced by the current exposure, where non-mortality, non-elective benefit incidence rates are essentially set to zero when there are other projected benefits available with a greater projected present value (herein referred to as the Current Exposure of AG33).

ARC’s Position on the Original Proposed Changes and the Current Exposure of AG33

ARC believes the Original Proposed Changes to AG33 does a good job of addressing the concerns raised that led to LATF’s work on this issue. We believe any interpretation that results in the contractholder...
trading future guaranteed payments for a current benefit of zero is an incorrect interpretation of AG33. Therefore, the Original Proposed Change appears to be appropriate.

However, ARC believes the Current Exposure of AG33 is a significant change in the direction of CARVM reserve calculations under AG33 from that taken by the NAIC in its modification of AG33 in 1997. We also believe this proposed change goes well beyond addressing the concerns which were originally raised. In addition, it will significantly increase the complexity of AG33 reserve calculations which are already exceedingly complex in actual practice and moves the actuarial community even deeper into a computational morass instead of relying on the professionalism of the actuary as is embodied in the Principle Based Reserve initiative. It should be noted that practical application of AG33 is much more difficult and time-consuming for actuaries than the time and effort needed to understand AG33’s requirements. Our valuation system, ARCVAL, produces Excel auditing workbooks to facilitate checking the existing calculations. These workbooks already contain 10-15 individual spreadsheets, each with many rows and columns. This is necessary to check the calculations for a single policy. The Current Exposure of AG33 would increase this even further.

AG33 was drafted to require the comparison of various Integrated Benefit Streams ("IBSs"), where:

1. Each IBS includes a combination of elective and non-elective benefits;
2. The value of non-elective benefits is determined using incidence rates – either those prescribed by the Standard Valuation Law or company/industry experience with margins for conservatism; and
3. The resulting reserve is based on the IBS that produces the greatest present value.

ARC believes the Current Exposure of AG33 is a new interpretation of this guideline. It was never the intent of AG33 to require the period-by-period comparison of projected benefits within an Integrated Benefit Stream (IBS). ARC believes it would be very difficult to do such a comparison on an appropriate basis. Take for example, an IBS with a Waiver of SC benefit based on nursing home confinement and a GLIB. The Current Exposure of AG33 would require, at every projected duration, the comparison of the projected account value (i.e., the Waiver of SC benefit) to the projected present value of the GLIB withdrawal stream using (presumably “standard”) valuation mortality and interest. The use of such mortality, at a time when the contractholder’s expected mortality is impaired by virtue of their nursing home confinement, is likely to result in a comparison that is just as irrational as the trading of future guaranteed payments for a current benefit of zero.

Impact on Business in Force

LATF can certainly propose changes to AG33. However, because the Current Exposure of AG33 is a new and different interpretation of AG33, ARC believes that it should only be applied to new contracts issued after the effective date of the change. Otherwise, this could result in increases in reserves for contracts issued over the past 15+ years that are greater than what would have resulted from any misinterpretation of the current AG33.
Effective Date of Proposed Change

ARC notes that the Current Exposure of AG33 would require significant revisions to valuation software. While this is not a reason to not proceed with any given change, it should be a consideration in how any change is made, particularly regarding the effective date of any changes.

Recommendations

ARC recommends the following:

1. LATF adopt the Original Proposed Changes to AG33. These changes can be applied to all inforce and newly issued annuity contracts currently falling under the scope of AG33.

2. If LATF wishes to pursue the Current Exposure of AG33, which is a new interpretation for AG33, the new AG33 should include (i) the approach outlined in the Current Exposure of AG33 applied only to new contracts issued after its effective date and (ii) the approach outlined in the Original Proposed Changes to AG33 applied to contracts issued prior to the effective date (which would include all inforce contracts). The effective date of this new AG33 should be deferred to allow companies the time to modify their valuation systems (see item 3 below).

3. Any changes to AG33 should have an effective date no earlier than 7/1/2015; however we suggest LATF seek additional input from companies on whether a later date is necessary.

Either my colleague Tom Campbell or I will be available during future LATF conference calls and meetings to discuss these comments in more detail.

Sincerely,

James W. Lamson, FSA, MAAA
President, Actuarial Resources Corporation

cc: Tom Campbell
Reggie Mazyck
September 16, 2014

Mike Boerner, Chair
Life Actuarial Task Force
National Association of Insurance Commissioners

Subject: Actuarial Guideline 33 Exposure Draft

Dear Mr. Boerner and LATF Members:

I am a consulting actuary whose clients include annuity writers who would be affected by the proposed changes to Actuarial Guideline 33. The views expressed in these comments are my own and do not necessarily reflect the views of any of my clients.

I have one comment that relates directly to the proposed language with respect to non-elective benefits, and a comment that relates to existing language with respect to elective benefits.

1. Within its very limited scope, I think the proposed language with respect to non-elective benefits makes sense. I come to this conclusion by asking a simple question: Within the context of CARVM, should a policy with both a guaranteed lifetime income benefit (GLIB) rider and a surrender charge waiver for long-term care have a lower reserve than a policy with only a GLIB? My answer to this question is no; both the GLIB and nursing home benefits have value, and a reserve for a policy with both benefits should be no less than the reserve for a policy with only one of them. In this, the proposed language corrects an anomaly.

However, considered more broadly, the proposed changes exacerbate a reserving imbalance between GLIB and non-GLIB products by failing to address the underlying reason why this anomaly arises to begin with – i.e. the fact that AG33 fails to appropriately value benefits that are based on a notional amount other than account value. One reason AG33 “works” (i.e. generates an appropriate liability) for traditional fixed annuity products is because all benefits are based on the account value, and credited rates impact all benefits in a similar way. The maximum present value requirement of AG33, which may be considered overly conservative when viewed in isolation, provides a reasonable offset to the fact that account value projections, based on guaranteed interest rates, may be lower than best estimate. In my opinion, this trade-off is important in keeping AG33 reserves reasonable. However, a benefit like a GLIB is not based on account value, but on a benefit base whose growth is independent of the account value. So contrary to other policy benefits, the GLIB “net amount at risk” is maximized in a CARVM projection, causing this trade-off to collapse.

In a CARVM projection, a policy with a GLIB generally projects as lapse-supported because of the use of guaranteed rates, regardless of whether it is lapse-supported under best-estimate crediting. As an industry, we have learned some things about lapse-supported products: 1) lapse-supported products tend to have low, but non-zero, lapse rates; 2) policy values tend to be very sensitive to lapse rate assumptions, and values may be overstated by use of a 0% lapse rate or understated by a lapse rate that is too high; and 3) left to their own devices, actuaries will tend to overestimate lapse rates. Regardless of whether a deferred annuity has a specific
nursing home benefit or other non-elective benefit provision, there will always be conditions, such as nursing home confinement, which will cause some policyholders to withdraw funds or surrender their policies, regardless of whether that decision appears to be economically rational. Given the facts I have noted above in relation to GLIB net amount at risk in a CARVM context, I feel it is appropriate to acknowledge this truth explicitly in AG33 by allowing for a specified, modest lapse provision (e.g. 1%) in valuing GLIB benefit streams. Failing to do so will increase the push toward AG43 or other principles-based approaches in which much more aggressive assumptions will ultimately be used. Such a provision could be made either explicitly as a lapse rate, or implicitly in the discount rate used to value the GLIB stream.

Notwithstanding the fact that the proposed changes address the anomaly noted above, I ask the Task Force to consider whether the current AG33 produces reserves that understate the liabilities for business with a GLIB. Based on my experience, I think the answer is no, and to make a change that retroactively increases these reserves without providing some relief with respect to voluntary lapses will only increase the clamor for principles-based exceptions, with the attendant moral hazard.

2. I also have a second comment, not related to the proposed language regarding non-elective benefits, but regarding the recent changes made with respect to plan type for elective benefits. I believe this plan type language continues to be unclear for GLIB and other similar benefits. As I read the current language, Interpretation 3 from the June 2009 Report of the American Academy of Actuaries Annuity Reserve Work Group (“Plan Type A would apply to all GLIB benefit payments, even if the Integrated Benefit Stream terminates with a full (or partial) cash withdrawal, with Plan Type C applying to the cash withdrawal portion only.”) is allowed, although I suspect the intent was to preclude Interpretation 3. I conclude that Interpretation 3 is allowed by considering GLIB payments, partial surrenders and full surrenders as separate types of withdrawal benefits, and with plan type evaluated separately for each of the three benefits according to the contractual provisions that apply to the specific benefit. This interpretation is supported by the language that calls for each payment in an integrated stream to be considered individually given the contractual nature of the payment. Under this reading, all elective benefits are not created equal, but are governed by their specific contractual provisions – i.e. a GLIB payment prior to exhaustion of the account value is treated as plan type A if a series of GLIB payments would not exhaust the account value in 5 years, rather than automatically being assigned the same plan type as a full surrender payment.

I believe that this interpretation is allowed under AG33’s current language, and I also believe it is an appropriate application of CARVM. I come to this conclusion using a different thought process than the ARWG seems to have used in 2009. The plan type adjustment to the valuation interest rate is effectively an illiquidity premium, with a greater illiquidity premium afforded to benefits with greater liquidity protection. This is why a stronger market value adjustment results in a higher illiquidity premium and a higher valuation interest rate applied to the full surrender stream. So it is useful to ask what level of liquidity protection is exists in relation to a given type of withdrawal benefit. The existence of a free partial withdrawal provision provides liquidity protection for the policy as a whole because it incents smaller withdrawals as opposed to full surrender. A GLIB provides liquidity protection for the policy as a whole because it incents policy persistency in order to preserve the value of the GLIB. The liquidity protection provided by the GLIB is of greater value than that of a market value adjustment during the surrender charge period, because the protective benefit of the MVA wears off relatively quickly, while the
protective benefit of the GLIB tends to increase over time. I do not suggest that the liquidity protection provided by the GLIB or by a free partial withdrawal should affect the plan type applied to a full surrender payment, but it should be reflected in the plan type applied to GLIB or free partial withdrawal payments in a benefit stream.

I note that the concept of valuation rates that vary by benefit type is an odd fiction, because a company does not hold separate assets by benefit stream. But within the context of this fiction, it is appropriate to recognize the liquidity protection, or lack thereof, offered by each specific type of elective benefit available in the contract.

I believe Interpretation 3 is both appropriate and is allowed under AG33, and if I were interpreting intent solely based on the current language, I would say it is exactly what is intended. However, I hesitate to advise my clients accordingly, because the 2009 ARWG report suggests that this was not the intent at all. I suggest that this language should be modified to clarify whether Plan Type for different types of elective benefits should be assigned individually based on the contract provisions of the specific withdrawal benefits, or whether the same plan type should be assigned to all types of elective benefits. While I believe the former is the appropriate answer, my primary concern is clarity.

Thank you for the opportunity to comment. Please feel free to contact me by phone at 317-205-9343 or by email at mark@albertsactuary.com if you have any follow-up questions.

Sincerely,
Mark E. Alberts, FSA, MAAA
September 15, 2014

Mr. Michael W. Boerner, MAAA, ASA
Chair
Life Actuarial Task Force
National Association of Insurance Commissioners

Dear Mr. Boerner:

INTRODUCTION. The actuaries of Life Insurance Company of the Southwest and its parent, National Life Insurance Company, thank you and the Life Actuarial Task Force (LATF) for this opportunity to present comments on the proposed revisions to Actuarial Guideline XXXIII (AG33) resulting from the exposed "AAA AG33 Letter and Non-Elective Benefits Proposal," dated July 25, 2014 (the 2014 Report).

THE ISSUE. According to the Executive Summary of the August, 2013 Report to Life Actuarial Task Force (the 2013 Report) from the AG33 Non-Elective Task Force of the American Academy of Actuaries (the Task Force),

Actuarial Guideline XXXIII ("AG33") applied to annuities may result in a reduced statutory reserve when a contract contains both non-elective non-mortality benefits and benefits that can be more valuable than the accumulation value. ... These benefits may continue after the account value has been depleted.

AG33 can be interpreted as allowing, within the projection of integrated benefit streams, the incidence rates for non-elective non-mortality benefits to be in effect for the life of the contract. In such integrated benefit streams after a non-elective non-mortality incidence, the contract would pay only the account value for those incidences, releasing portions of the liability early for benefits that in reality are likely to be incurred.

THE PROPOSED SOLUTION. The approach taken in the 2014 Report is what had been categorized as “Approach A” in the 2013 Report, described thus:

Approach A ... involves breaking the waiver benefit into two pieces. The first piece is the non-elective incidence rate. Incidence has to be projected to occur to trigger the second piece of the benefit. The second piece is a decision by the contract owner (or representative) to make a claim. It involves comparison of the present value of the non-elective non-mortality waiver claim to the maximum present value of elective benefits. Because the second piece of the benefit is elective, it is assumed a fully informed contract owner (or representative) makes the optimal decision between reporting a non-elective non-mortality waiver claim and continuing the contract with the available elective benefits.
SHORTCOMINGS OF THE PROPOSED SOLUTION. Approach A represents a break from traditional interpretations of AG33. It is our understanding from discussions with principal authors of AG33 that, until now, integrated benefit streams were not required to exercise period-by-period comparisons of values of then-future possible benefits under different scenarios. This certainly appears to be the intent of this (and any Approach A treatment) proposal. The new proposal appears to require that the actuary (or, more accurately, the valuation software) make a comparison between the current account value (with recognition of the waiver of surrender charge benefit) to the projected value of future benefits, including guaranteed lifetime income benefits.

Some actuaries might note that such a comparison itself is not appropriate in that an owner, in real life, faced with making such a comparison, might have to reflect increased expectation of mortality of an annuitant who qualifies for the waiver of surrender charge.

Further, the proposed approach appears to have some characteristics in common with a “stochastic-on-stochastic” projection that faces anyone performing pricing or valuation within such a scheme.

Not only is the proposed approach difficult to comprehend, modification of today’s already sophisticated and challenging software would require much time, just in the design, coding, testing, and implementation. Changes of this complexity and under these time constraints are likely to increase the probability of error dramatically.

From a less technical aspect, the proposed wording is less than what might be desired. For instance, one sentence uses the word “values” three times within a span of nine words. The same sentence uses the word “point” to refer, apparently, to a time or duration. If some portions of the 2014 Report are considered positively for adoption, I suggest they be reviewed and perfected grammatically for the sake of clarity in application.

Finally, at a time when both the NAIC and the Academy are working to implement principle-based approaches to valuation—and specifically for non-variable annuities—the currently-exposed proposal appears to be an attempt to extend the worst-case approach of AG33 to a new level that we do not view to be supportable.

OPTIONS TO THE PROPOSED SOLUTION.

One option open to LATF would be for it to issue a pronouncement that any interpretation of existing AG33 that allows for application of incidence rates in situations that are nonsensical (such as when the value of the benefit is zero) is simply an incorrect interpretation and is not allowed. Individual states could issue bulletins to the same effect.

That such an approach is possible is recognized in the 2013 Report in the material quoted in the Issue section of this letter. Refer to the second paragraph. It starts by saying that “AG33 can be interpreted as allowing.” If the Actuarial Guideline could be interpreted in such a manner, it certainly can be interpreted in another manner. If one of the interpretations represents modeling of nonsensical behavior, such an interpretation is simply wrong.
What are the implications of pronouncing such nonsensical interpretations of AG33 to be wrong? Companies who have not followed the problematic interpretation have to do nothing. Vendors of valuation software are not required to invest many hours planning, implementing, testing, and distributing new version of software. On the other hand, companies that have adopted the illogical interpretation might be required to re-state valuations that reflected those assumptions and would need to revise their approach to future valuations. Only those who have possibly applied such invalid interpretations, whether intentionally or not, would be required to shoulder any burden. Actuarial Guideline XXXIII would remain intact and not be subject to another patch.

Alternatively, any modification more consistent with traditional AG33 would be preferred by most practitioners, consultants or auditors, and those charged with modifying valuation systems. The original 2013 Report provided such a method (Approach C). This approach, to “turn off non-elective non-mortality waiver benefit incidence rates when the initial surrender charge period ends,” was a much simpler approach and is effective in addressing the problem. While not considered ideal by the authors of this letter, such an approach is acceptable.

In any event, if adopted, the changes to the AG33 should be given a realistic effective date.

**CREDENTIALS FOR COMMENTING.** Life Insurance Company of the Southwest and National Life have issued business that is covered by AG33 for some years, including annuities with combined guaranteed lifetime income benefits and nursing home benefits. The companies have not adopted interpretations of AG33 that would allow for nonsensical pairing of these benefits that would reduce reserves.

The companies employ many actuaries with extended expertise in interpreting valuation laws, regulations, and guidelines. The primary author is a past vice-chair of the American Academy of Actuaries’ Annuity Reserve Work Group.

**CLOSING COMMENTS.** The authors again thank the Life Actuarial Task Force for the opportunity to offer these comments. If any questions arise because of comments presented in this letter, the authors would be glad to respond.

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13. Voted to Expose the AAA Proposal to Revise AG 33 for Non-Elective Benefits

Alice Fontaine (IIPRC, representing the AAA) presented the most recent version of proposed revisions to Actuarial Guideline XXXIII, Determining CARVM Reserves for Annuities Contracts with Elective Benefits (AG 33) (Attachment Thirty-Four). The key changes are the refinement in the definition of non-elective benefits, which are proposed to be categorized into nonelective benefits that are mortality-based and non-elective benefits that are other than mortality-based. For non-elective benefits that are other than mortality-based, the incident rates should assume the election of the benefits payable after the incident.

Mr. Bruins said the ACLI is concerned that the proposal assumes that when an insured enters a nursing home and clearly has impaired mortality, that the deferred lifetime income still has some value, when in fact it does not. Mr. Birdsall said the AAA’s concern is the inappropriate application of decrement factors. He said the problem the revision is trying to address is the assumption that consumers might elect benefits even though the benefit has no value.

Mr. Carmello made a motion, seconded by Ms. Jones, the Task Force unanimously voted to expose the proposed revision to AG 33 for a comment period ending Sept. 16.
1. Discussed Proposed Edits to AG 33 for Non-Elective Benefits

John Blocher (American Academy of Actuaries—AAA) and John Bruins (American Council of Life Insurers—ACLI) reviewed Mr. Blocher’s initial proposal and the subsequent edits from the ACLI (Attachment A) for Actuarial Guideline XXXIII—Determining CARVM Reserves for Annuity Contracts with Elective Benefits (AG 33), which the Task Force voted to expose on its May 15 call.

Mr. Carmello shared the comments (Attachment B) submitted by the New York Department of Financial Services. He said the surrender charge period should not be a factor. He said whichever benefit is greater should be assumed to be elected. Mr. Serbinowski observed that the non-elective benefits seem to have an elective component. He asked if it would be consistent with AG 33 to require the testing of all possible scenarios of the election rates. The election that is assumed to be chosen would be one that maximizes the greatest present value.

Mr. Boerner asked Mr. Blocher to collaborate with Mr. Serbinowski to revise the language of the third sentence in the first paragraph of Item 2 on Page 3 of the AG 33 exposure to incorporate Mr. Serbinowski’s suggestion.
ACTUARIAL GUIDELINE XXXIII

DETERMINING CARVM RESERVES
FOR ANNUITY CONTRACTS WITH ELECTIVE BENEFITS

Background Information

1. Introduction

The Standard Valuation Law (SVL) defines the methods and assumptions which are to be used in determining minimum statutory formula reserves. This law establishes the standards for annuity contracts (which therefore includes any annuity riders or endorsements, and any or all components of which, such as premiums, benefits, contract charges, primary or secondary accumulation values or other components, either relating to annuity benefits provided by the contract or providing separate annuity benefits) and includes the criteria for the interest and mortality assumptions to be used in determining minimum formula contract reserves. The 1980 revisions to the SVL provide for the maximum statutory formula reserve interest rate to be determined through a dynamic formula in order to incorporate changes in economic conditions, liquidity needs and the risks inherent in certain types of contracts.

The SVL defined methodology for annuity contracts, the commissioners annuity reserve valuation method (CARVM), requires that reserves be the greatest of the respective excesses of the present values, at the date of valuation, of the future guaranteed benefits, including guaranteed nonforfeiture benefits, provided for by such contracts at the end of each respective contract year, over the present value, at the date of valuation, of any future valuation considerations derived from future gross considerations, required by the terms of such contracts, that become payable prior to the end of such respective contract year. Such reserves are established to adequately fund all guaranteed contract obligations, including those obligations which are optional to the contract owner and which may not have yet been elected.

Industry practices and methods of reserving under CARVM for annuity contracts with multiple benefit streams have not been found to be consistent. These range from a low reserve equal to the cash surrender value to a reserve representing the greatest actuarial present value of the future benefit streams under all potential annuity or other nonforfeiture benefit election options using a conservative rate of interest.

The major purpose of this Actuarial Guideline is to provide clarification and consistency in applying CARVM to annuities with multiple benefit streams. Some of the areas requiring clarification include: the valuation of annuitization benefits; the application of incidence rates in CARVM; the application of the integrated benefit stream approach in CARVM; how to determine valuation interest rates and mortality tables for multiple benefit streams; and certain practical considerations regarding multiple benefit streams.

2. Annuitization Benefits

Varying forms of contracts provide that the cash value available to the contract owner is less than the amount available to purchase an annuitization option under the terms of the contract.

For purposes of this Actuarial Guideline, “accumulation fund” is defined as the policy value which is used to purchase an annuity option under the terms of the contract.

Frequently there are significant discontinuities in the reserves, both upward and downward, at the time a settlement option is elected, between the reserve held immediately prior to the settlement as compared to the reserve required for the greatest actuarial present value of the annuitization option elected.

One of the most significant reasons for discontinuities in the reserve patterns at the time of election is the difference in the SPIA valuation rate available at the time of election as compared to the valuation rate used based on the date of issue of the original SPDA contract. Another significant reason is the difference between the guaranteed purchase rate contained in the contract and used for reserve development as compared to the rate actually used to purchase the annuity option at the time of election.

3. Application of Incidence Rates in CARVM
Since CARVM was adopted, there has been an increase in the types of benefits offered under certain annuity contracts, including enhanced death benefits, nursing home benefits, and various partial withdrawal provisions, including some depending on values other than the values used to determine cash values and which may allow for benefits to continue past the point where the cash value is zero. For some of these benefit types, the SVL is not explicit as to whether incidence tables prescribed under the SVL may be used to determine such benefits, versus requiring consideration of all contract owner options available under the contract, and choosing the set of incidence rates which produce the greatest present value.

4. Integrated Benefit Stream Approach

CARVM requires that reserves be based on the greatest present value of all potential future guaranteed benefits. For annuity contracts offering more than one type of potential benefit stream, the SVL is not explicit regarding whether or how blends of more than one type of benefit must be considered under CARVM.

Under the integrated benefit stream approach, any potential benefit stream must be considered, including blends reflecting the interaction of more than one type of benefit. Such potential benefit streams include all types of benefits for which the greatest present value concept is required. Additionally, adjustments must be made to all such potential benefit streams to reflect those benefit types for which prescribed incidence tables are required (e.g., death benefits).

For example, consider an annuity contract offering surrender, annuitization and death benefits. Potential benefit streams that would be considered include surrender streams, annuitization streams, and streams reflecting blends of surrender and annuitization benefits. All such streams would also be adjusted to reflect death benefits and to discount all benefits for survivorship (based on the mortality table prescribed in the SVL).

5. Valuation Interest Rates

For annuities offering more than one type of benefit, the SVL is not explicit as to how valuation interest rates should be determined. The SVL is also not explicit as to how valuation interest rates should be determined for certain types of benefits offered under annuity contracts, such as death and nursing home benefits.

Purpose

The purpose of this Actuarial Guideline is to codify the basic interpretation of CARVM and does not constitute a change of method or basis from any previously used method, by clarifying the assumptions and methodologies which will comply with the intent of the SVL. This Actuarial Guideline shall apply to all annuity contracts subject to CARVM, where any elective benefits (as defined below) are available to the contract owner under the terms of the contract. However, life or health insurance riders attached to an annuity contract, where all components of the rider (e.g., premiums, benefits, contract charges, accumulation values and other components) are separate and distinct from the components of the annuity contract, should be treated as a separate life or health insurance contract not subject to this Actuarial Guideline. While this Actuarial Guideline applies to all annuity contracts subject to CARVM, in the event an actuarial guideline or regulation dealing with reserves is developed for a specific annuity product design, the product specific actuarial guideline or regulation will take precedence over the Actuarial Guideline.

Definitions

1. Elective and Non-Elective Benefits in CARVM

For purposes of determining reserves under CARVM, each benefit available under the annuity contract must be placed into one of the two categories defined as follows:

Non-Elective Benefits: Benefits that are payable to contract owners or beneficiaries only after the occurrence of a contingent or scheduled event independent of a contract owner’s election of an option specified in the contract, including (but not limited to) death benefits, accidental death benefits, disability benefits, nursing home benefits, and benefits payable under either a deferred or immediate annuity contract (with or without life contingencies), where no benefit options are available under the terms of the contract.

Elective Benefits: Benefits that do not fall under the non-elective benefits category (i.e., benefit options that may be freely elected under the terms of the contract). Elective benefits include (but are not limited to) full surrenders, partial withdrawals, and full and partial annuitizations.
In some cases it may not be clear whether some benefits are elective or non-elective. The presence of certain types of non-elective benefits may affect other non-elective benefits and/or elective benefits. For example, some annuity contracts offer benefits which vary depending upon the age of retirement. In such cases, The Valuation Actuary should use judgment in making these determinations, by considering factors such as the degree to which contract owner actions would be influenced by the availability of each benefit in the contract.

2. Elective and Non-Elective Incidence Rates in CARVM

For non-elective benefits, incidence rates from tables prescribed by the SVL should be applied to determine the payment of non-elective benefits and to discount, for survivorship, all benefit payments included in an Integrated Benefit Stream, as defined below. If no incidence tables are prescribed by the SVL, then company or industry experience (with margins for conservatism) may be used, as appropriate. For non-elective waiver-of-surrender-charge benefits other than mortality-based benefits, incidence rates greater than zero are not to be applied after the earlier of the end of the surrender charge period applicable immediately after the first premium is paid or when the cash value has been depleted. For non-elective benefits other than mortality-based benefits, incidence rates greater than zero for non-elective benefits where the contract owner may have financial incentive based on the benefits available in the contract not to it is unlikely that a contract owner would report a claim or make an election (such as collecting one benefit while other more valuable benefits exist in the contract) and which could thereby place a smaller reserve value on the contract’s other benefits should not be considered to the exclusion of other incidence rates that would result in a larger reserve. Annuity mortality tables prescribed by the SVL should be used to determine all mortality based benefits under the contract (including, but not limited to, annuitizations and death benefits) and to discount other types of benefit payments for survivorship.

For elective benefits, incidence rates should not be based on tables reflecting past company experience, industry experience or other expectations. Instead, every potential guaranteed elective benefit stream required to be reserved by CARVM must be considered in the determination of integrated benefit streams as defined below. This is accomplished by considering trial sets of guaranteed elective benefit incidence rates, either through numerical testing or analytical means, to determine which trial set produces the “greatest present value” as described in Text paragraph 1 below. Theoretically, this means that all possible elective benefit incidence rates between 0% and 100% should be considered. However, in practice, such a greatest present value will typically occur by assuming an incidence rate of either 0% or 100%.

3. Integrated Benefit Stream

An integrated benefit stream is one potential blend of guaranteed elective and non-elective benefits available under the contract, determined as the combination of A and B, where:

A equals one potential stream of one or more types of guaranteed elective benefits available under the terms of the contract, based upon a chosen set of elective benefit incidence rates; and

B equals the stream of all guaranteed non-elective benefits provided under the terms of the contract, recognizing the guaranteed elective benefit stream under consideration in A above, and the non-elective incidence rates defined in 2. above.

Both A and B above should be discounted for survivorship, based on the non-elective incidence rates defined in 2. above.

Text

1. Greatest Present Value

All guaranteed benefits potentially available under the terms of the contract must be considered in the valuation process and analysis and the ultimate policy reserve held must be sufficient to fund the greatest present value of all potential integrated benefit streams, reflecting all guaranteed elective and non-elective benefits available to the contract owner. Each integrated benefit stream available under the contract must be individually valued and the ultimate reserve established must be the greatest of the present values of these values, based on valuation interest rate(s) as defined in Section 3 below.

2. Examples of Integrated Benefit Streams That Must Be Considered
A. Cash Value Streams

One mandatory set of integrated benefit streams for a deferred annuity with cash settlement values which must always be considered is any possible blend of future guaranteed partial withdrawals and full surrenders available under the contract, as specified in the SVL, accumulated at the guaranteed credited interest rate(s) and discounted at the valuation rate(s) of interest defined in section 3 below, with appropriate recognition of all guaranteed non-elective benefits available under the contract.

B. Annuitization Streams

A second mandatory set of integrated benefit streams that must be considered is any possible blend of future guaranteed full or partial annuitization elections, as specified in the SVL, available to the contract owner at each election date required by CARVM, with appropriate recognition of all guaranteed non-elective benefits available under the terms of the contract. In determining the integrated benefit streams to value the annuitization option, the guaranteed purchase rates contained in the contract, as well as any other contract provisions, excluding any current purchase rates which may be applicable, are applied to the accumulation fund.

C. Other Elective Benefit Streams

In addition to the cash value and annuitization streams described above, all other possible guaranteed elective benefits available under the contract, including blends of more than one type of guaranteed elective benefit, must be considered in a manner consistent with the mandatory cash value and annuitization streams, with appropriate recognition of all guaranteed non-elective benefits available under the contract.

3. Determination of Valuation Interest Rates

Section 4b of the SVL determines valuation rates for an annuity contract based on the following Parameters:

A. The basis of valuation (issue year or change in fund);
B. Whether or not the annuity provides for cash settlement options;
C. Whether interest is guaranteed on premiums received more than 12 months following issue (or the valuation date for change in fund basis);
D. The guarantee duration; and
E. The Plan Type.

Parameters A, B and C above should be determined at a contract level. Additional requirements regarding the change in fund basis of valuation are set forth in Section 5 below. Parameters D and E should be determined at a benefit level, as set forth in Section 4 below.

Under a contract level determination, parameters are set based on the characteristics of the contract as a whole. Under a benefit level determination, parameters are set based on the characteristics of each benefit, resulting in potentially different valuation rates for each benefit type comprising the integrated benefit stream.

4. Determination of Guarantee Duration and Plan Type

Guarantee duration and Plan Type are based upon the specific characteristics of each individual benefit type that comprise the integrated benefit stream, as follows:

A. For portions of the integrated benefit stream attributable to full surrender and partial withdrawal benefits, the Plan Type should be based upon the withdrawal characteristics of the benefit, as stated in the contract. This may result in a Plan Type A, B or C under the 1980 amendments of the SVL. The guarantee duration is the number of years for which interest rates are guaranteed in excess of the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty (20) years.

B. For portions of the integrated benefit stream attributable to full and partial annuitization benefits, the determination of the valuation interest rate involves the use of the appropriate Plan Type and weighting factor as determined by the SVL, with the guarantee duration as the number of years from the original date of issue or date of purchase, to the date the annuitization is assumed to commence. If the underlying assumption is that the contract owner may withdraw funds only as an immediate life annuity or as installments over 5 years or more, this will generally result
in a Plan Type A, under the 1980 amendments of the SVL, with the valuation interest rate changing as different assumed annuitization dates determine guarantee durations which will fall into different guarantee duration bands under the SVL. An assumed annuitization option which has a non-life contingent payout period of less than five (5) years shall be considered a Plan Type C, with the valuation interest rate changing as different assumed annuitization dates determine guarantee durations which will fall into different guarantee duration bands under the SVL.

C. For portions of the integrated benefit stream attributable to non-elective benefits, since the underlying assumption is that no withdrawal is permitted, Plan Type A should generally be used, with a guarantee duration determined as the number of years from issue or purchase to the date non-elective benefits may first be paid. In most cases, the guarantee duration should be less than five years, since non-elective benefit coverage usually begins immediately after issue, with benefits payable commencing in the first contract year.

For benefit types incorporating multiple payments, paragraphs 4(A), 4(B), and 4(C) above should be applied to each separate payment according to the withdrawal, annuitization, or non-elective benefit characteristics of the contract and payment provisions at the time each payment is to be made. If a portion of the integrated benefit stream is part of an immediate life annuity or a series of installments over five (5) years or more, but can be changed directly or indirectly by exercise of contract owner withdrawal options, then it would be inappropriate to apply paragraph 4(B) to that portion of the integrated benefit stream, since the contractholder may withdraw funds other than as a life annuity or in installments of five (5) years or more.

For example, a Guaranteed Lifetime Income Benefit (GLIB) is a guarantee to the owner of a fixed deferred annuity contract, whether traditional or indexed to an external referent such as an equity index, that the owner can have a defined income for life in an amount determined by formula, while the owner retains traditional rights (such as withdrawal) to the other values provided by the underlying deferred annuity and while such values continue to exist. Income benefits are typically deducted from one or more of the annuity’s defined values to the extent such values remain positive. Once the GLIB is elected, the contract owner may have rights to stop and restart the income benefit and may also request full or partial surrender of any remaining annuity value, though doing so may negatively impact or eliminate subsequent guaranteed income benefits. Thus, applying 4(A) and 4(B) above, the GLIB benefit stream is seen to be composed of two portions to determine the Plan Type and guarantee duration, as follows:

The first portion consists of the series of defined payments to the extent that the payments, or any fraction thereof, are withdrawals that reduce or deplete the annuity’s defined values. Applying paragraph 4(A) to this portion would result in Plan Type A, Plan Type B, or Plan Type C, by following the definitions of such contained within the Standard Valuation Law and reflecting the specific contract provisions, especially with regard to withdrawal. Paragraph 4(A) would also apply to any residual withdrawals that can be made following election of the GLIB benefit.

The second portion is a life annuity without option to take or receive additional amounts under the contract, and consists of the payments not included in the above portion. Applying paragraph 4(B), Plan Type A would generally apply to this segment with the guarantee duration determined using the period from contract issue to commencement of payments in this second portion.

5. Change in Fund Basis

As indicated by section 4b.C.(1)(c)(vi) of the SVL, a company may elect to value annuity contracts with cash settlement options on either an issue year basis or on a change in fund basis. Annuity contracts with no cash settlement options must be valued on an issue year basis. The issue year basis or change in fund basis should be determined for the contract as a whole, and thus must be consistently applied to all portions of all integrated benefit streams available under the annuity contract. The election of issue year or change in fund basis must be made at the issuance of the contract and must not change during the term of the contract without the prior written approval of the commissioner.

6. Purchase Rates

Contracts may provide, as contractual guarantees, the use of preferential purchase rates to those listed in the contract. As an example, a contract may provide that the company will offer, at the time of annuitization, the rates offered to new purchasers of immediate annuities if such rates will provide a higher annuity benefit than would result from the contractually guaranteed rates provided in the contract. This creates a contract guarantee which must be valued under CARVM. Ignoring this benefit in determining reserves will produce reserves less than the statutory formula reserves required under CARVM. Valuation of this benefit, however, is complicated by the fact that the company does not
Currently know what the exact rate will be at the time of the settlement election. In order to determine conservative statutory formula reserves, if use of future unknown rates are guaranteed, the company shall establish reserves not less than the contract’s accumulation fund value, on the valuation date, reduced by an “expense allowance” not to exceed 7% of such fund. This section does not require the calculation of a reserve for the annuitization of business based upon current purchase rates pursuant to the “annuitization streams” described in Paragraph 2.B. above.

Likewise for contracts which provide for additional amounts during the payout period over those guaranteed at the commencement of the annuity payments, the reserve during the deferred period shall not be less than the contract’s accumulation fund reduced by an expense allowance not to exceed 7% of such fund.

7. Practical Considerations

The major purpose of this Actuarial Guideline is to provide clarification and consistency in applying CARVM to annuities with multiple benefit streams. However, in practice there may be other acceptable methods of applying CARVM which are substantially consistent with the methods described in this Actuarial Guideline. Such methods may also be used, with prior regulatory approval.

Additionally, in applying this Actuarial Guideline there may theoretically be an infinite number of contract owner options that are possible under the contract. However, it may not be practical, possible or even appropriate to test every conceivable combination of potential integrated benefit streams theoretically available under the contract. This Actuarial Guideline requires that the actuary consider, not necessarily test, all potential integrated benefit streams to determine to what extent each contract owner option has a material impact on the reserve. In practice, the actuary may be able to eliminate some potential integrated benefit streams by analytical methods. The actuary may also be able to demonstrate the reserve adequacy of certain approximations. For example, in certain situations it may be shown that a CARVM reserve ignoring non-elective benefits, plus an “add-on” reserve for non-elective benefits, is a reasonable approximation for the theoretically correct CARVM reserve.

**Effective Date**

This guideline shall be effective on December 31, 1998 affecting all contracts issued on or after January 1, 1981. A company may request a grade-in period for contracts issued prior to December 31, 1998 from the domiciliary commissioner upon satisfactory demonstration that the method and level of current reserves held for such contracts are adequate in the aggregate. This phase-in will require establishment of no less than 33 1/3% of the additional reserves resulting from the application of this guideline on December 31, 1998, no less than 66 2/3% on December 31, 1999, and 100% by December 31, 2000.
Non-Elective Incidence Reserve Proposal

AG33 Non-Elective Task Force

Presented to the National Association of Insurance Commissioners’
Life Actuarial Task Force

Washington DC – December 2013

The American Academy of Actuaries is a 17,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professional standards for actuaries in the United States.

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David Tovson, F.S.A., M.A.A.A.
Executive Summary

Actuarial Guideline XXXIII (AG33) applied to annuities may result in a reduced statutory reserve when a contract contains both non-elective\(^1\) non-mortality benefits and benefits that can be more valuable than the accumulation value. Benefits that can be more valuable than the account value include guaranteed living benefits and death benefits. These benefits may continue after the account value has been depleted.

The non-elective non-mortality benefits that we focus on in this report are primarily waiver of surrender charges for specified contingent events such as confinement to a nursing home, disability, or diagnosis of a terminal illness, anything other than death. The benefit is payment of the contract account value rather than the cash value, if the contract owner chooses to report the claim and collect the benefit (in this sense, these benefits are non-elective only in the context of the definition in AG33). Payment of such benefit terminates the contract.

AG33 can be interpreted as allowing, within the projection of integrated benefit streams, the incidence rates for non-elective non-mortality benefits to be in effect for the life of the contract. In such integrated benefit streams after a non-elective non-mortality incidence, the contract would pay only the account value for those incidences, releasing portions of the liability early for benefits that in reality are likely to be incurred.

This report explains the issue, demonstrates the magnitude conceptually and with a numerical example, proposes AG33 revision language, and discusses various approaches considered.

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\(^1\) AG33 defines non-elective and elective benefits as part of that codification:

“Non-Elective Benefits: Benefits that are payable to contract owners or beneficiaries only after the occurrence of a contingent or scheduled event independent of a contract owner’s election of an option specified in the contract, including (but not limited to) death benefits, accidental death benefits, disability benefits, nursing home benefits, and benefits payable under either a deferred or immediate annuity contract (with or without life contingencies), where no benefit options are available under the terms of the contract.

Elective Benefits: Benefits that do not fall under the non-elective benefits category (i.e., benefit options that may be freely elected under the terms of the contract). Elective benefits include (but are not limited to) full surrenders, partial withdrawals, and full and partial annuitizations.

In some cases it may not be clear whether some benefits are elective or non-elective. For example, some annuity contracts offer benefits which vary depending upon the age of retirement. In such cases, the Valuation Actuary should use judgment in making this determination, by considering factors such as the degree to which contract owner actions would be influenced by the availability of the benefit.”
**Background**
In February 2013, the American Academy of Actuaries’ Annuity Reserves Work Group (ARWG) received a paper, “ARWG AG33 Discussion: Adverse Benefit Combination” from John Blocher, which prompted the Academy’s Life Valuation Subcommittee to create the AG33 Non-Elective Incidence Task Force to investigate the potential reserve issues raised in the paper and recommend modifications to AG33 for consideration by the Life Actuarial Task Force (LATF) of the National Association of Insurance Commissioners (NAIC).

The purpose of this document is to provide LATF with a recommendation to modify the existing annuity statutory valuation requirements in AG33.

**Scope**
This proposal, if adopted, affects reserve calculations under AG33. Applicability of the proposal language or concepts to other actuarial guidelines and valuation manual items is outside the scope of this report. LATF may want to consider whether a similar concept might be useful for Actuarial Guideline XLIII’s (AG43) Basic Reserve (BR) & Basic Adjusted Reserve (BAR), correspondingly VM-21’s BR and BAR, and VM-22’s reserve method currently under development.

**Issue Statement**
Using AG33 may not always result in a level of reserves that is consistent with AG33’s general valuation approach when one or more non-elective benefits other than death are incorporated into contracts having elective benefits more valuable than the contract account value. Generally speaking, an annuity contract may contain two groups of benefits:

<table>
<thead>
<tr>
<th>Benefit Groupings</th>
<th>General Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group A</strong></td>
<td>These are non-elective benefits that are tied to a contingent event other than death (denoted as “non-mortality”). Examples of non-elective non-mortality benefits are waiver of surrender charges due to a specified contingency such as: confinement to a nursing home; disability; diagnosis of a terminal illness or specified critical illness; inability to perform activities of daily living; early retirement; education; or other possible contingencies in the product design. The value of these benefits is frequently tied to the account value. Non-elective benefits that are not currently common could be developed for annuities simply for the purpose of reducing reserves.</td>
</tr>
<tr>
<td><strong>Group B</strong></td>
<td>These are benefits with value greater than the account value that can be forfeited if the contract terminates under a Group A benefit. Examples include guaranteed living benefits applying proceeds in excess of account values or guaranteed minimum death benefits in excess of account values (GMDBs).</td>
</tr>
</tbody>
</table>

The combination of these benefits, together with unrestricted use of non-elective incidence rates for Group A benefits, may result in a reduced statutory reserve if precautions, not currently included in the current text of AG33, are not taken in the reserving process.

Group A benefits are available in many fixed and variable annuity contracts.
Group B benefits are relatively recent additions to fixed (including fixed indexed) annuity contracts though GMDBs paying a designated percentage of the gain in the contract (in addition to account value) upon death have been available for many years. Variable annuity contracts have included similar benefits for many years. When added to a fixed annuity contract, a guaranteed living benefit applying proceeds in excess of account values is known as a Guaranteed Lifetime Income Benefit (GLIB) if the benefits are guaranteed for life. GLIBs generally provide for an additional value, not to be confused with the account value, to which premiums are added, any charges for the benefit may be deducted, and the balance accumulated at rates generally in excess of those applied to the account value. This balance cannot be accessed as value but is primarily or solely for the purpose of determining GLIB payments amounts when the GLIB is exercised. Partial withdrawals are deducted from both this additional value and the account value. As long as withdrawals each year do not exceed a maximum amount determined at the start of the withdrawal stream, continuation of the withdrawal stream is guaranteed to continue for life, even if both the account value and the additional value are completely exhausted.

It is important to understand that, just because the account value is zero, a policy having a GLIB benefit can still have a guaranteed value to the contract owner (e.g., lifetime withdrawals, lifetime income), and contract owners would not knowingly forfeit this value for nothing in return.

For purposes of the remainder of this report, the term GLIB will be used to represent all the benefits of the GLIB, GLWB, and GMWB type.

The potential reserve issue occurs because AG33 can be interpreted as allowing the incidence rates for non-elective non-mortality benefits to be in effect for the life of the contract. For contracts without a GLIB or a GMDB, the life of the contract is generally terminated when the account value is depleted, usually by contract owner action such as surrender or some form of annuitization. However, for contracts with a GLIB or a GMDB, the life of the contract may not be terminated when the account value reaches zero. In fact, these contracts may contain benefits for many years after the account value is depleted.

Would a contract owner be likely to report a non-elective non-mortality claim in order to (i) collect no additional benefit but also (ii) diminish any remaining Elective Benefits? A reported claim and collected benefit is what would be assumed within an integrated benefit stream by applying non-elective incidence rates to Group A benefits after surrender charges have already declined to zero, or when the account value is zero.

Following is a graphical representation of the issue. The conceptual drawing shows, for an individual sample contract with a GLIB, the cash value (CV), account value (AV) and Maximum PV Elective Benefits. It is important to note that the Maximum PV Elective Benefits line assumes that incidence rates for non-elective non-mortality benefits have been set to zero. It is assumed that the contract owner has just elected to start collecting GLIB payments and five years of surrender charges remain at the time of GLIB election. The contract reaches an AV of zero 20 years after GLIB exercise. The pattern is more important than the specifics or exact product design of the sample contract.
The most important item to notice is that the slope of the AV line in this example is considerably steeper than the Maximum PV Elective Benefits line. Frequently, incidence rates for non-elective non-mortality benefits, such as nursing home waiver, increase with attained age. Application of those incidence rates could result in final reserves below the Maximum PV Elective Benefits line by effectively assuming that a percentage of contract owners will receive the account value instead of the higher Elective Benefits. (Note that none of the lines represents final reserves under current AG33, which would be somewhere between the dashed lines and the solid line.)

The simple fact that the final reserves are less than the Maximum PV Elective Benefits line is not always an inappropriate result. It depends on the magnitude and the likelihood of the non-elective, non-mortality claim being reported. This is in contrast to mortality claims where it is perfectly understandable that the beneficiaries of contract owners that die might only collect the AV and any existing GMDB instead of the Maximum PV Elective Benefits.

In the sample contract shown, we would surmise that no non-elective non-mortality claim is likely to be reported any later than several years after GLIB election. Claim reporting is unlikely after the end of the surrender charge period because there is no extra amount to collect by making a claim and very unlikely after the AV is depleted because there is nothing to collect.

Mathematically, if the non-elective non-mortality incidence rates were set to zero after a period of time, the final reserves would equal the Maximum PV Elective Benefit line after that period of time. Reserves for contract years prior to that point would essentially grade to that same Maximum PV Elective Benefit line at the point in time when the non-elective non-mortality incidence rates are set to zero.

**Numerical Example**
To demonstrate the potential magnitude of the issue, several variations of an AG33 calculation are shown below for a different sample contract than used for the conceptual drawing.

The following table shows reserves; cash values for various lengths of time incidence rates are used. The sample contract is issue age 55, female, $100,000 single premium, 10-year surrender
charge schedule with a Nursing Home Waiver, and a GLIB with a rollup rate of 6%. Account values have assumed that interest was credited prior to the valuation date at 2% per year. Other specifics of the product design are in Appendix 3.

Table 1: Reserve by Contract Year Prior to Comparison to CV

<table>
<thead>
<tr>
<th>Incidence Rate Period for Nursing Home Waiver</th>
<th>Issue</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>GLIB Exercise and Annual Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1   No Incidence</td>
<td>108,569</td>
<td>131,024</td>
<td>158,740</td>
<td>193,873</td>
<td>158,515</td>
<td>Yr 16: 15,242</td>
</tr>
<tr>
<td>2   Incidence to SC=0</td>
<td>107,821</td>
<td>130,322</td>
<td>158,740</td>
<td>193,873</td>
<td>158,515</td>
<td>Yr 16: 15,242</td>
</tr>
<tr>
<td>3   Incidence to AV=0</td>
<td>100,415</td>
<td>121,309</td>
<td>147,557</td>
<td>123,712</td>
<td>87,683</td>
<td>Yr 14: 13,113</td>
</tr>
<tr>
<td>4   Incidence for Life of Contract</td>
<td>88,659</td>
<td>103,031</td>
<td>124,573</td>
<td>105,039</td>
<td>74,977</td>
<td>Yr 12: 11,268</td>
</tr>
<tr>
<td>5   No GLIB</td>
<td>89,497</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The GLIB was assumed to be exercised at the optimal year. The optimal year is shown in the “GLIB Exercise and Annual Payment” column and varies by the length of the incidence rate period. The Nursing Home incidence rate increases as the contract owner ages, thus the claims over time applicable to this non-elective benefit have an increasing effect on the value of remaining elective benefits.

Table 2: Cash Value by Contract Year

<table>
<thead>
<tr>
<th>Incidence Rate Period for Nursing Home Waiver</th>
<th>Issue</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>1   No Incidence</td>
<td>90,000</td>
<td>99,163</td>
<td>107,286</td>
<td>109,528</td>
<td>29,709</td>
</tr>
<tr>
<td>2   Incidence to SC=0</td>
<td>90,000</td>
<td>99,163</td>
<td>107,286</td>
<td>109,528</td>
<td>29,709</td>
</tr>
<tr>
<td>3   Incidence to AV=0</td>
<td>90,000</td>
<td>99,163</td>
<td>107,286</td>
<td>83,161</td>
<td>12,986</td>
</tr>
<tr>
<td>4   Incidence for Life of Contract</td>
<td>90,000</td>
<td>99,163</td>
<td>107,286</td>
<td>63,772</td>
<td>2,344</td>
</tr>
<tr>
<td>5   No GLIB</td>
<td>90,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note that both the Incidence for Life of Contract and the No GLIB variations would be floored at the Cash Value of 90,000 at issue (bold values in table). All other values exceed cash values. Cash values vary according to the timing of the GLIB exercise and the GLIB payment applicable for that start year.

Table 3: Ratio Comparison to Incidence until SC=0

<table>
<thead>
<tr>
<th>Incidence Rate Period for Nursing Home Waiver</th>
<th>Issue</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>1   No Incidence</td>
<td>100.7%</td>
<td>100.5%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>2   Incidence to SC=0</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>3   Incidence to AV=0</td>
<td>93.1%</td>
<td>93.1%</td>
<td>93.0%</td>
<td>63.8%</td>
<td>55.3%</td>
</tr>
<tr>
<td>4   Incidence for Life of Contract</td>
<td>82.2%</td>
<td>79.1%</td>
<td>78.5%</td>
<td>54.2%</td>
<td>47.3%</td>
</tr>
</tbody>
</table>
Table 3 ratios are a comparison of Table 1 Reserve by Contract Year (ignoring cash value floor) to the “Incidence to SC=0” Reserve. In these examples, a company using incidence for the Nursing Home Waiver on contracts with a GLIB, either until AV=0 or for the life of the contract, starts out with lower reserves at issue and the differences increase over time.

Conclusions
As annuity product designs continue to evolve and incorporate complex benefits, it becomes increasingly important to understand the reserve implications throughout the contract life cycle of each individual benefit and various combinations of benefits within the same contract. As contracts prospectively age in the reserve calculation, the differences in reserves due to the interaction of benefits can increase over time due to the incidence rate period and increasing incidence rate level.

Further Implications
A related concern is that many policy forms are written to allow “stop and start” GLIB payments after GLIB exercise; therefore it may be possible to assume in the reserve calculation an annual GLIB payment less than 100% of the maximum GLIB payment. Although a few contract owners may not actually collect the full GLIB payment in a given year, it may be inappropriate to assume any contract owners collect less than 100% of the maximum GLIB payment each year after GLIB exercise.

Attachments:
Appendix 1: Proposed AG33 Language
Appendix 2: Discussion of Possible Approaches
Appendix 3: Specifics of Sample Contract Product Design
Appendix 1
Proposed AG33 Language

We have identified five approaches to modifying AG33, denoted A, B, C, D, and E. Understanding these approaches, described and discussed in Appendix 2, is important for full comprehension of recommended revisions.

The following recommended revisions are suggested in three locations to the text of AG33 reproduced below (Additions to existing text are underlined, deletions are struck through):

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**Background Information**

3. Application of Incidence Rates in CARVM

Since CARVM was adopted, there has been an increase in the types of benefits offered under certain annuity contracts, including enhanced death benefits, nursing home benefits, and various partial withdrawal provisions, including some depending on values other than the values used to determine cash values and that may allow for benefits to continue past the point where the cash value is zero. For some of these benefit types, the SVL is not explicit as to whether incidence tables prescribed under the SVL may be used to determine such benefits, versus requiring consideration of all contract owner options available under the contract, and choosing the set of incidence rates which produce the greatest present value.

**Definitions**

1. Elective and Non-Elective Benefits in CARVM

In some cases it may not be clear whether some benefits are elective or non-elective. The presence of certain types of non-elective benefits may affect other non-elective benefits and/or elective benefits. For example, some annuity contracts offer benefits which vary depending upon the age of retirement. In such cases, the Valuation Actuary should use judgment in making these determinations, by considering factors such as the degree to which contract owner actions would be influenced by the availability of each benefit in the contract.

2. Elective and Non-Elective Incidence Rates in CARVM

For non-elective benefits, incidence rates from tables prescribed by the SVL should be applied to determine the payment of non-elective benefits and to discount, for survivorship, all benefit payments included in an Integrated Benefit Stream, as defined below. If no incidence tables are prescribed by the SVL, then company or industry experience (with margins for conservatism) may be used, as appropriate. For non-elective waiver-of-surrender-charge benefits other than mortality-based benefits, incidence rates greater than zero are not to be applied after the earlier of the end of the surrender charge period applicable immediately
after the first premium is paid or when the cash value has been depleted. For non-elective benefits other than mortality-based benefits, incidence rates greater than zero for non-elective benefits where it is unlikely that a contract owner would report a claim or make an election (such as collecting one benefit while other more valuable benefits exist in the contract) and that would thereby place a smaller reserve value on the contract’s other benefits should not be considered to the exclusion of other incidence rates that would result in a larger reserve. Annuity mortality tables prescribed by the SVL should be used to determine all mortality based benefits under the contract (including, but not limited to, annuitizations and death benefits) and to discount other types of benefit payments for survivorship.
Appendix 2
Discussion of Possible Approaches

Various approaches to amending AG 33 that might be considered are summarized and subsequently discussed in further detail.

Although surrender charge waiver benefits are mentioned throughout what follows, benefits that are not strictly waiver-of-surrender-charge benefits might have similar reserve effects. The waiver-of-surrender-charge benefit generally makes available a portion or all of the account value to the contract owner upon the occurrence of a qualifying event. Because a portion or all of the surrender charges remaining on the contract are “waived,” the benefit is referred to as a waiver benefit even though no premium payments are waived. The contract typically terminates when the contract is surrendered and the full account value is withdrawn through the benefit despite the existence of other benefits, such as GLIBs or GMDBs.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Action Taken Within Each Integrated Benefit Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Compare the non-elective non-mortality waiver benefit PV to the elective benefit with the highest PV and use the higher PV of the two choices.</td>
</tr>
<tr>
<td>B</td>
<td>Ignore non-elective non-mortality waiver benefit incidence rates entirely.</td>
</tr>
<tr>
<td>C</td>
<td>Turn off non-elective non-mortality waiver benefit incidence rates when the initial surrender charge period ends.</td>
</tr>
<tr>
<td>D</td>
<td>Use another reasonable approach to turn off non-elective non-mortality waiver benefit incidence rates at a duration when the contract still has significant account value remaining.</td>
</tr>
<tr>
<td>E</td>
<td>Turn off non-elective non-mortality waiver benefit incidence rates when the account value is zero.</td>
</tr>
</tbody>
</table>

Approach A, which is one of the end points in the spectrum of possible approaches presented, involves breaking the waiver benefit into two pieces. The first piece is the non-elective incidence rate. Incidence has to be projected to occur to trigger the second piece of the benefit. The second piece is a decision by the contract owner (or representative) to make a claim. It involves comparison of the present value of the non-elective non-mortality waiver claim to the maximum present value of elective benefits. Because the second piece of the benefit is elective, it is assumed a fully informed contract owner (or representative) makes the optimal decision between reporting a non-elective non-mortality waiver claim and continuing the contract with the available elective benefits. Only reporting of a death claim is obligatory; reporting of a non-mortality claim is always optional.

While this approach initially sounds theoretically pure, substantial calculation difficulties exist within the current structure of AG33. The non-elective incidences occur first due to their non-
elective nature (e.g., the elective benefit assumed in the integrated benefit stream is discounted for non-elective incidence rates). The theoretical problem is whether the maximum present value of elective benefits does or does not include usage of non-elective non-mortality incidence rates prior to the comparison.

The most reasonable calculation is not very practical because the actuary would have to calculate a reserve one time with incidence rates greater than zero and a second time with incidence rates set to zero and then use the higher of the two reserve values. Worse, there may be multiple benefits where this double calculation might be required, dramatically increasing the amount of calculation time and chance for error.

The double calculation does not completely satisfy approach A because, theoretically, the calculation would have to check at assumed incidence whether the non-elective benefit present value at that moment is at least as great as the maximum present value of elective benefits, leading to a potential circularity. The potential circularity occurs because the maximum present value of elective benefits may change based on the non-elective incidence rates used. This was demonstrated in Table 1 where the optimal GLIB exercise year changed solely on the non-elective incidence rates used. There could be product designs where an incidence ignored at one point in time is used later when the non-elective benefit is the maximum value.

This approach would require system modifications and simplifying assumptions or internal approximations. Finally, it would always be difficult to know whether an input incidence rate was ever used or had any effect on the reserve.

For these reasons, we do not recommend Approach A as the standard non-elective non-mortality waiver approach.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Action Taken Within Each Integrated Benefit Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Ignore non-elective non-mortality waiver benefit incidence rates entirely.</td>
</tr>
</tbody>
</table>

Approach B reflects a realization that including the non-elective non-mortality waiver incidence rates (when the benefits are combined with other benefits) reduces the reserve in aggregate. It thus ignores the non-elective non-mortality waiver benefit entirely for reserve calculation purposes.

The limitation of this approach is that when contracts with GLIBs or GMDBs are mixed with contracts without GLIBs and GMDBs, such as when one extract contains all the contracts, the reserve may appear to be reasonable in aggregate; however, it may not be reasonable on a contract-by-contract basis. The reserve for contracts without GLIBs and GMDBs could be lower than the theoretically correct reserve by ignoring these incidence rates. The reserve for contract with GLIBs and GMDBs could be higher than they would be if incidence rates were used. It then depends on mix of business as to whether the reserve is reasonable in aggregate.

Some specialized uses where adoption of Approach B might be appropriate could include “incidental” or “slight timing” benefits that have small present values relative to other values in
the contract. Examples might include waiver of an annual or other fee or a slight acceleration of benefits when death may be expected to closely follow upon the occurrence of a contingent event (e.g., a terminal illness waiver).

Due to the limitation, we do not recommend Approach B as the standard non-elective non-mortality waiver approach. However, it may have specialized uses for specific benefits if the aggregate reserve reasonableness can be demonstrated.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Action Taken Within Each Integrated Benefit Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Turn off non-elective non-mortality waiver benefit incidence rates when the initial surrender charge period ends.</td>
</tr>
</tbody>
</table>

Approach C can be described as the “cutoff” method. It is closest to the traditional view of non-elective non-mortality waiver incidence rates. Published sample calculations, available on the Society of Actuaries website by searching on article titles, have used the cutoff method, though not describing it precisely in that fashion: (1) Record of the Society of Actuaries Volume 23, No. 3, Annual Meeting 1997, Session 15TS “Deferred Annuity Reserving – Guideline 33”, pages 18-19); (2) The Financial Reporter, March 1998, “Visual CARVM: Multiple-Benefit Streams in Pictures.” In those published examples, the waiver benefit only had an effect on reserves until the end of the surrender charge period.

It could be argued that no extra benefit exists after the end of the surrender charge period whether or not a qualifying incidence occurs. If the same amount can be withdrawn either after a qualifying incidence or by merely making an elective request, it is likely inappropriate to continue using those incidence rates.

Limitations exist with a pure application of this approach. Product designs may include contracts renewing for another surrender charge schedule period after the initial one. Product designs may include flexible premiums with surrender charges based on premium duration rather than contract duration. Perhaps a product could be designed with a surrender charge schedule containing many durations. In all of these product designs, the account value may be decreasing relative to other benefits due to annual GLIB payments after the GLIB exercise, making it less and less likely through time that a non-elective non-mortality waiver benefit would actually be made even with a qualifying incidence.

The limitations may be mitigated by setting incidence rates to zero at the earlier of the end of the initial surrender charge period or when the account value is zero. Subsequent premiums or surrender charge renewals do not extend the usage of incidence rates past the surrender charge period that exists immediately after the initial premium is paid.

With these limitations mitigated, we recommend Approach C as the standard non-elective non-mortality waiver approach.
Approach D is a general admonition to apply non-elective non-mortality incidence rates only when the benefit value is known to compare well to other benefits available in the contract. This approach may require a demonstration of relative value.

If the non-elective benefit present value had to be greater than the maximum present value of elective benefits, this approach would be the same as approach A with all of its calculation difficulty. For this approach the standard is whether a sufficiently high proportion, say 80%, of contract owners would chose the non-elective non-mortality benefit after an incidence instead of other values available in the contract. This high proportion would obviously only occur well prior to when the account value is zero if the benefit is account-value based.

The account value may be decreasing even prior to reduction by GLIB payments due to rider charges exceeding interest credits.

It is relatively easy to create non-elective non-mortality benefits that economically behave similar to waiver-of-surrender-charge benefits without referencing surrender charges in any way.

The difficulty is finding a way to demonstrate value acceptable to all the stakeholders. Any applicable industry or company experience may be helpful in creating this demonstration. It is likely difficult to create a standard approach D rule that fits all situations and meets the requirements of all the stakeholders.

For these reasons, we do not recommend Approach D as the standard non-elective non-mortality waiver approach. However, it may have specialized uses for specific benefits if an acceptable demonstration of relative value can be created.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Action Taken Within Each Integrated Benefit Stream</th>
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<tbody>
<tr>
<td>D</td>
<td>Use another reasonable approach to turn off non-elective non-mortality waiver benefit incidence rates at a duration when the contract still has significant account value remaining.</td>
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</table>

Approach E is the other end point. It is necessary to turn off incidence rates when the account value is depleted; however, at that point it is too late in the contract life cycle to assume no incidence.

Generally, if surrender is not considered reasonable, a non-elective non-mortality benefit payment is not reasonable either. There are no choices after death, but for any other non-mortality incidence there is some amount of consideration of the various values in the contract and a choice whether to report a qualifying incidence.
Some proportion of contract owners will make choices that are not economically optimal as long as there is positive account value remaining in the contract to withdraw. However, a contract owner cannot be expected to withdraw zero account value and terminate the contract when other benefits of any value are available in the contract by continuing it in force.

We do not consider this approach sufficient because there may be a significant number of contract durations prior to account value depletion where other available value relative to remaining account value may influence contract owner behavior.

We do not recommend Approach E.
Drivers of the reserve differences are non-elective non-mortality incidence rates & their usage and the “richness” of the GLIB and/or GMDB. Lower incidence or shorter incidence time period will decrease reserve differences. Less rich GLIB and/or GMDB will decrease reserve differences. A minimal GLIB and/or GMDB might not show much reserve differences.

Sample Contract Specifics:
1. Single Life, Female, Issue Age 55, $100,000 initial premium at issue, no premium bonus. 10-yr surrender charge schedule based on contract duration (AV %):
   10 – 9 – 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1 – 0.
2. Nursing Home Waiver uses 1985 NHHS 90-day elimination period.
3. No other non-elective non-mortality benefit is present. Non-elective mortality applies throughout the life of the contract.
4. GLIB has a 6.0% rollup rate for 10 years with one renewal for 20 years total. Renewal is always assumed to occur.
5. Rider charge is 90bps of benefit base, including after GLIB exercise.
6. GLIB payment percentage varies by attained age at GLIB exercise from 4.0% at age 50 to 8.0% at age 90 linearly. GLIB payment percentages by attained age: 55, 4.5%; 60, 5.0%; 65, 5.5%; 70, 6.0%, 75, 6.5%, 80, 7.0%, 85, 7.5%.
7. Annual GLIB payment is set when the GLIB is exercised and is calculated as the GLIB payment percentage applicable to the attained age at exercise multiplied by the Benefit Base. The benefit base cannot be is not withdrawn.
8. GLIB payment is always collected in full each year after GLIB exercise.
9. GLIB is exercised at the exact point of its maximum PV, which varies by usage of Nursing Home Waiver incidence rates.
10. No GMDB is present in the contract. The only death benefit is to pay the account value upon death (also known as a waiver of surrender charges upon death).
11. Assume at each aging point the contract owner has lived and has not taken any free partial withdrawals (GLIB payments are not considered free partial withdrawals). Elective free partial withdrawals and elective surrenders were checked as reserve candidates, however, never contributed to the reserve as they were never optimal.
12. The guaranteed minimum interest rate is 1.0%. The interest credited rate resets annually. It is assumed that the contract is credited with 2.0% annual interest for any period prior to the valuation date.
Update from the Academy Council on Professionalism

No Materials
Other Matters

No Materials