LIFE ACTUARIAL (A) TASK FORCE

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The Life Actuarial (A) Task Force met via conference call Aug. 3, Aug. 4 and Aug. 6, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain and Vincent Tsang (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Clara Lindley-Myers represented by William Leung (MO); Bruce R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA). Also participating was: Rachel Hemphill (TX).

1. **Adopted its June 25, June 18, June 11, June 4, May 28, May 21, May 14 and May 7 Minutes**

The Task Force met June 25, June 18, June 11, June 4, May 28, May 21, May 14 and May 7 and took the following action: 1) adopted its Feb. 27, Feb. 20, Feb. 13, Feb. 6, Jan. 30 and Jan. 23 minutes; 2) adopted changes to the Standard Nonforfeiture Law for Individual Deferred Annuities (#805); 3) adopted amendment proposal 2020-05, which modifies the net premium reserve (NPR) to reflect continuous deaths and immediate payment of claims; 4) adopted Actuarial Guideline XLIX-A—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest to Policies Sold After November 25, 2020 (AG 49-A); 5) adopted amendment proposal 2020-06, which establishes a process for replacing the London Interbank Offered Rate (LIBOR); 6) adopted amendment proposal 2020-07, which modifies VM-02, Minimum Nonforfeiture Mortality and Interest, of the Valuation Manual by replacing the fixed 4% floor for the nonforfeiture interest rate used to determine the minimum funding for the cash value accumulation test in Internal Revenue Code Section 7702.

Mr. Ostlund made a motion, seconded by Mr. Kupferman, to adopt the Task Force’s June 25 (Attachment One), June 18 (Attachment Two), June 11 (Attachment Three), June 4 (Attachment Four), May 28 (Attachment Five), May 21 (Attachment Six), May 14 (Attachment Seven) and May 7 (Attachment Eight) minutes. The motion passed unanimously.

2. **Heard an Update on the YRT Field Test**

Jason Kehrberg (American Academy of Actuaries—Academy) said the Academy initially commented in November 2017 on the potential occurrence of issues when projecting rates for yearly renewable term (YRT) reinsurance premiums under VM-20, Requirements for Principle-Based Reserves for Life Products, of the Valuation Manual. He said the letter noted the possibility of companies having differing interpretations of how to perform the modeling. He said the Task Force subsequently asked the Academy to conduct a field test on the different ways that companies might be modeling YRT reinsurance premiums. In response, the Academy put together a project oversight group (POG), comprising industry members and state insurance regulators. The POG established a design subgroup to develop instructions for testing different potential long-term solutions to the issue of projecting YRT premiums. Mr. Kehrberg said soon after the start of the design subgroup process, Oliver Wyman was engaged to put together a model office to provide oversight for the field testing of the potential YRT solutions.

Chris Whitney (Oliver Wyman) provided an overview of the YRT field test and interpretation survey presentation (Attachment Nine). He said a representative principle-based reserving (PBR) model was developed with the goal of providing early insights into the drivers for the variabilities and the impact that reinsurance has on PBR. He said initial insights from the model were shared last year while the industry field test and interpretation survey were being designed. He said the field test has since been conducted by the Academy. He said Oliver Wyman then partnered with the Academy and the NAIC to: 1) expand the granularity of the analysis dimensions and the model based on observations from field test participants; 2) use the PBR model to confirm and explain the results of the field test and perform some additional analysis based on responses to the interpretation survey; and 3) develop the report, including establishing some broad key takeaways and insights for the analysis. He said the report, in conjunction with the Academy report that summarizes the field test responses, provides additional clarity on the impact that the proposed solutions and interpretations of those solutions might have on company results. He noted that the PBR model is available for any additional analysis the Task Force may need to decide on a potential solution.
Jennifer Frasier (NAIC) provided a review of the proposed solutions in amendment proposal 2019-40, amendment proposal 2019-41, and amendment proposal 2019-42. She said the three proposals can respectively be associated with principles, best estimates and prescribed margins. Dylan Strother (Oliver Wyman) discussed the field test results and analysis. He said the field test instructions requested that participating companies submit point in time and projected reserve results for term or universal life with secondary guarantee (ULSG) products. Companies were required to submit results using a baseline scenario applying the interim solution (1/2 cx) and each of the three scenarios proposed in the amendment proposals. While numerous companies were invited to participate in the field test, the sophistication of the modeling, the extensive analysis, and some resource constraints limited the number of participants to 11 entities. Mr. Strother said the number was sufficient to do the required analysis and comparison to the representative PBR model. He noted that the distribution of companies in the field test was a good representation of company sizes, credibility assumptions and mortality assumptions across the industry. The field test submissions were used to refine the granularity in the places that were identified as the most significant drivers. Those drivers were the mortality, reserves and the properties of reinsurance. Mr. Strother said the biggest driver of the variation in results was the relationship between current scale of rates and anticipated mortality. He said two credibility scenarios for the representative model were also selected. He reviewed the results from each of the three amendment proposals under the baseline assumptions and the proposed action scenarios. Ms. van Ryn said a key observation is that differing modeling approaches between the ceding companies were the basis for the analysis. She reiterated that the intent of the presentation is not to recommend a solution but to provide the dimensions on which the decision can hinge. Mr. Boerner said a follow up call will be scheduled to allow Oliver Wyman to respond to further questions.

Mr. O’Neal said the range of interpretation survey, conducted by the Academy with support from Oliver Wyman, was designed to gather information on how companies would interpret the different proposed solutions for modeling non-guaranteed YRT reinsurance under PBR. The survey was intended to increase the level of participation above that observed in the field study and to use the additional responses to generalize across the industry. Mr. O’Neal said the survey was designed to capture most of the potential company responses and interpretations using predefined choices. For responses that were outside of the predefined choices, written descriptions could be provided in the “other” category. Companies were asked to complete a survey for each YRT treaty that had a separate modeling approach. Mr. O’Neal said 36 separate groups of direct writers and reinsurers submitted 51 separate survey responses. He discussed the slides, providing data on reinsurers’ actions taken in response to the various proposed options. He noted that if a company chose the “other” option and the survey reviewer felt the description of the company action was close to a predefined option category, the company would be asked to consider mapping the response to the predefined category. He discussed the results based on the three amendment proposals. He said all the models assume mid-year issue dates, a single neutral YRT scale developed from the field study, and a single high credibility mortality scenario. He noted that ULSG used a neutral rate scale with zero first year premium, followed by renewal premiums determined using a 95% factor applied to company best estimate mortality without any allowance for future mortality improvement. Mr. Boerner asked why the graph of the pre-reinsurance deterministic reserve for term insurance model of amendment proposal 2019-40 results shows a dip. Mr. Strother said it is possibly due with the discount rate and some of the asset mechanics related to revaluing. Mr. Whitney said they will check to confirm that that is the case. After reviewing the survey results for the three proposed amendment proposals, Mr. O’Neal directed participants to page 38 of the presentation for the list of key takeaways.

Katie van Ryn (Oliver Wyman) discussed the evaluation of the impact on the deterministic reserve under these different amendment proposals. She said no reinsurers participated in the field test. She said the range of interpretation survey was used to provide insight into how reinsurers would handle the various proposals and to investigate the total reserve impact between the ceding and assuming companies. The results from the five reinsurers that participated in the range of interpretation survey were the basis for the analysis. Ms. van Ryn said a key observation is that differing modeling approaches between the ceding and assuming companies can result in differences between the reserve credit and the assumed reserve. Mr. Strother said slide 45 provides the dimensions on which the field test results can be compared. He reiterated that the intent of the presentation is not to recommend a solution but to provide the dimensions on which the decision can hinge. Mr. Boerner said a follow up call will be scheduled to allow Oliver Wyman to respond to further questions.
Draft Pending Adoption

2. Exposed Revisions to Model #805

On its June 11 call, the Task Force adopted a revision to Model #805 (Attachment Ten) that sets the floor for the interest rate used to determine minimum nonforfeiture to 0%. The revision was held by the Task Force in anticipation of the approval of a Request for NAIC Model Law Development for changes to Model #805. The Life Insurance and Annuities (A) Committee adopted the Request for NAIC Model Law Development July 10. The Executive (EX) Committee will consider adoption of the Request for NAIC Model Law Development Aug. 13. Mr. Boerner said on July 10, the Life Insurance and Annuities (A) Committee asked the Task Force to consider a minimum nonforfeiture rate between 0% and 1%. He said the Request for NAIC Model Law Development is written to allow consideration of the request. He said suggestions for removing the 3% cap applicable to the minimum nonforfeiture rate or revising the redetermination provision would be outside the scope of the Request for NAIC Model Law Development. Brian Bayerle (American Council of Life Insurers—ACLI) discussed the ACLI comment letter (Attachment Eleven) supporting the 0% floor for the minimum nonforfeiture interest rate. He said the rate on five-year U.S. Department of the Treasury (Treasury Department) notes and 10-year Treasury Department notes were respectively 21 basis points (bps) and 55 bps on July 31. He said the rates are historically low, making it difficult for companies to support a 1% guarantee. He said maintaining an unsupported rate is a risk to the continued availability of deferred annuity products for consumers. Liz Pujolas (Insured Retirement Institute—IRI) said the IRI comment letter (Attachment Twelve) concurs with the need for the 0% floor. She said IRI is willing to work to get the Model #805 changes adopted at the state level. Mr. Leung asked for information on the reasoning behind adoption of the 1% floor. Mr. Bayerle said he would do research and provide a response for the next Task Force discussion on the issue. Mr. Carmello said he recalls that at the time, a 1% floor was not a significant issue. He suggested that in the current economic situation, companies may not want to increase surrender charges to maintain profitability. Mr. Bayerle said companies have a limited number of options available in lieu of having a lower rate. Mr. Carmello said the New York Department of Financial Services favors a rate higher than 0%. He said the thought that a company could have a 0% crediting rate is not palatable. Mr. Bayerle said the minimum nonforfeiture rate floor affects only the guaranteed rate, not the crediting rate. He said competitive market pressures will keep the crediting rate above 0%, and it will drive rates up as the interest environment improves. Mr. Leung suggested that because the company credits interest on only 87.5% of the annuity premium, the minimum nonforfeiture rate floor might not need to be as low as 0%. Mr. Bayerle said the ACLI will consider that suggestion. Mr. Ostlund asked for examples of the minimum nonforfeiture values under various interest scenarios. Mr. Bayerle agreed to consider the request. Mr. Robinson asked what the implication might be for indexed annuities. Sheldon Summers (Claire Thinking Inc.) said the rates for indexed annuities still fall between the 1–3% range. He said there would be no immediate effect on indexed annuities. Jeanne Daharsh (Interstate Insurance Product Regulation Commission—Compact) said state adoption of a revised Model #805 is not required for filings under the Compact. She said the Compact Uniform Standard requires only NAIC adoption. Mr. Boerner asked what if a compacting state has a higher standard in their law. Ms. Daharsh said a state could opt out of the Uniform Standards, but that has never happened for annuities.

After the close of the session, the chair released an exposure of Model #805 that provided four options for the minimum nonforfeiture interest rate, 0.15%, 0.25%, 0.35% and 0.5% for a 21-day public comment period ending Aug. 25.

3. Adopted the Minutes of the VM-22 (A) Subgroup

Mr. Hendrick made a motion, seconded by Mr. Weber, to adopt the VM-22 (A) Subgroup’s July 15 (Attachment Thirteen), July 1 (Attachment Fourteen), June 11 (Attachment Fifteen) and May 20 (Attachment Sixteen) minutes. The motion passed unanimously.

4. Heard an Update from the Academy ARWG

Ben Slutsker (Academy Annuity Reserves Work Group—ARWG) introduced the ARWG presentation (Attachment Seventeen) on elements of the framework for fixed annuity PBR. He said the objective is to propose a new statutory reserve methodology for fixed annuities that uses an actuarial framework to determine reserves based on the level and type of risk inherent in the contract. The four main pillars of the ARWG objective are: 1) appropriate reflection of risk; 2) comprehensive accounting for all material risks; 3) consistent application across similar products; and 4) practicality and appropriateness of the methodology. Mr. Slutsker said the recent revisions to VM-21, Requirements for Principle-Based Reserves for Variable Annuities, will be the starting point for development of the new fixed annuity framework. The target effective date for the new framework is January 2023. Chris Conrad (ARWG) said the ARWG recommends that the framework scope cover both payout and deferred annuity contracts, for individual and group business. The scope for deferred annuities will include most of the account value-based annuities, such as single and flexible premium deferred annuities, multi-year guarantee annuities, fixed indexed annuities, two-tiered annuities, and riders on fixed annuity contracts. The scope for payout annuities will include single premium immediate annuities, deferred income annuities, pension risk transfer, and structured settlement contracts. Mr. Conrad said
guaranteed investment contracts, synthetic stable value contracts, and funding agreements are not be included in the scope of products covered by the new framework.

John Miller (ARWG) said exclusion tests will be developed to allow products with less risk to continue using the current requirements. He said the exclusion test calibration has not been set. He said field tests being conducted by Willis Towers Watson will help determine the appropriate ratio for the exclusion test. He said that use of the exclusion test will be voluntary.

Mr. Conrad said the ARWG recommendation is to have reinvestment assumptions consistent with the current VM-22, Statutory Maximum Valuation Interest Rates for Income Annuities, investment quality percentage allocation, which is reflective of industry experience. He said other asset assumptions should be consistent with VM-20 and VM-21, as appropriate. Mr. Miller said the ARWG recommends allowing aggregation across contracts consistent with the risks inherent in the products and how the risks are managed. He said consistent aggregation principles should be applied for stochastic processes and exclusion tests. Mr. Slutsker said the ARWG has discussed the question of application of the new framework to in force business. He said the ARWG believes that there is merit to applying the framework to all in force business regardless of issue date.

5. Adopted the VM-22 Subgroup Report

Mr. Sartain said half of the Subgroup calls were used to discuss the issues presented by the ARWG. He said the remaining time was spent talking about the standard projection amount. He said the thought is to use the VM-21 standard projection amount, appropriately modified for fixed annuities. He said discussion of whether the standard projection amount will be used as a floor will occur later. He said the Subgroup recommendations to the Task Force are to accept the scope proposed by the ARWG and to instruct the ARWG to continue working on an exclusion test. He said the Subgroup does not have a current recommendation on aggregation. Task Force members voiced no objection to the two recommendations. Mr. Carmello did state a preference for retaining the current requirements as a floor. Ms. Hemphill noted that as the exclusion test is developed, thought must be given to the relationship of the thresholds to company materiality standards. Mr. Sartain said the discussion of the application of the new framework to in force business was a low priority for the Subgroup. He said the Subgroup tabled its discussion of aggregation until the ARWG work is complete. He said the Subgroup has no recommendation on the reinvestment guardrails or the standard projection amount/floor issue.

Mr. Sartain made a motion, seconded by Ms. Ahrens, to adopt the report of the VM-22 (A) Subgroup. The motion passed unanimously.

6. Heard an Update from the Compact

Ms. Daharsh provided an update on the activities of the Compact. She said the officers of the Compact Commission and the Compact Management Committee will meet Aug. 14 to receive comments on and consider adoption of proposed guidelines on committee composition and application criteria for the Consumer Advisory Committee. She said the Compact Commission will hear the reports of the Governance Committee on two projects, governance review, and the business structure.

Ms. Daharsh said the Product Standards Committee began reviewing comments from the ACLI regarding amendments to the additional standards for waiver of premium and waiver of monthly deduction standards. The key purpose of the amendment is to expand the trigger for waiver benefits beyond total disability. The Committee is also working on an additional standard for a waiver of surrender charge for life insurance.

Ms. Daharsh said the Compact has received 690 filings through October, of which 656 have been approved. Those numbers are down 20% compared to last year. She said the average wait time for review of a filing is 20 days, compared to 33 days last year. The median number of states on a Compact filing is 43. The number of mix-and-match filings has continued to decrease and now comprises 26% of filings. She said 54% of the filings are for life products, 33% of the filings are for annuity products, and most of the remaining filings are for long-term care (LTC) and disability income. She said the newest uniform standard to become effective is the group annuity standards. Three group annuity filings have been received.

Ms. Daharsh said the Compact actuaries are monitoring Task Force activities related to Model #805. She noted that the Compact uniform standards for deferred annuities refer to any model and changes to the model as effective immediately and available for Compact filing once adopted by the NAIC. She said state adoption of the model is not required for Compact filings. Mr. Robinson asked for further information on why state adoption for Model #805 is not required. Mr. Weber said states joining the Compact agree to allow the Compact standards to supersede state requirements.
7. **Adopted the Report of the Longevity Risk (E/A) Subgroup**

Ms. Ahrens said the Subgroup has not met since the 2019 Fall National Meeting. She said the Life Risk-Based Capital (E) Working Group was finalizing plans to implement longevity risk factors for risk-based capital (RBC) C-2 risk. The plans have been delayed until an impact study can be completed. The impact study for the factors is planned for early next year. She said work is being done on longevity risk transactions that are unlike payout annuities. These transactions call for future premium collection, with the reinsurer absorbing the longevity risk. The ceding company holds zero reserves and the assuming company holds near zero reserves at inception, therefore, producing near zero longevity risk. She said only a few companies are engaging in these transactions. A regulator-only call will be planned to discuss those transactions.

Ms. Ahrens made a motion, seconded by Mr. Kupferman, to adopt the report of the Longevity Risk (E/A) Subgroup. The motion passed unanimously.

8. **Adopted the Report of the GI Life Valuation (A) Subgroup**

Ms. Ahrens said the Subgroup did not meet during the spring or summer. She said previous discussions favored developing a PBR approach for guaranteed issue (GI) mortality. She suggested that *Actuarial Guideline XLIV—Group Term Life Waiver of Premium Disabled Life Reserves* (AG 44) could provide guidance. She asked if the target date for completion of the Subgroup charge could be extended. Mr. Boerner said Ms. Ahrens should make a recommendation for a revised target date to the Task Force prior to the deadline for submitting 2021 charges.

Ms. Ahrens made a motion, seconded by Mr. Ostlund, to adopt the report of the GI Life Valuation (A) Subgroup. The motion passed unanimously.

9. **Adopted the Report of the Experience Reporting (A) Subgroup**

Mr. Andersen said an exposure of additional elements related to accelerated underwriting for VM-51, Experience Reporting Formats, will be considered after the initial transition of the NAIC becoming the statistical agent. He said the Subgroup plans to have calls during the next quarter regarding actuarial aspects of accelerated underwriting, specifically an update on how well accelerated underwriting is predicting mortality in comparison to traditional underwriting. He said the Subgroup will also look to study experience for variable annuities with guarantees.

Mr. Andersen made a motion, seconded by Ms. Ahrens, to adopt the report of the Experience Reporting (A) Subgroup. The motion passed unanimously.

10. **Adopted the Report of the IUL Illustration (A) Subgroup**

Mr. Weber made a motion, seconded by Mr. Chou, to adopt the IUL Illustration (A) Subgroup’s June 2 (Attachment Eighteen) and May 26 (Attachment Nineteen) minutes. The motion passed unanimously.

Mr. Andersen said the Life Insurance and Annuities (A) Committee adopted AG 49-A. The Executive (EX) Committee and Plenary will consider the guideline for adoption on Aug. 14. Mr. Andersen briefly summarized that in late 2018, the Life Insurance and Annuities (A) Committee became aware of index product innovations that were leading to illustrations with higher credited rates than contemplated when the original guideline was developed. He said one of the major innovations was the multiplier. The Task Force was charged with addressing the concerns regarding product features. The charge was assigned to the Subgroup. To address the concerns, the Task Force instructed the Subgroup to add conservatism to the constraints of illustrated credited rates instead of focusing solely on disclosures. The Subgroup was also told to allow products with multipliers to illustrate no more favorably than products without multipliers and to reduce by half the illustrated benefit of borrowing at a certain rate and illustrating at a higher rate. These decisions were reflected in the guideline that was adopted.

Mr. Andersen said a general concept behind these issues is selecting a point on the spectrum of allowing innovation and preventing loopholes. He said AG 49-A ended up somewhere in the middle. He said while it is significantly more conservative than the existing guideline, it still provides guidance aligned with the *Life Insurance Illustrations Model Regulation* (#582). He said if after observing the results and practices following adoption of AG 49-A, there remain substantial concerns about unrealistic illustrations, the Committee will need to consider changes to Model #582.

Mr. Andersen made a motion, seconded by Mr. Yanacheak, to adopt the report of the IUL Illustration (A) Subgroup’s. The motion passed unanimously.
11. **Exposed Amendment Proposal 2019-33**

Mr. Boerner said amendment proposal 2019-33 was previously exposed for public comment. He said the Academy Life Reserves Work Group (LRWG) has revised the proposal to respond to comments from the ACLI (Attachment Twenty), Mr. Chupp (Attachment Twenty-One) and Mr. Robinson (Attachment Twenty-Two). Mary Bahna-Nolan (LRWG) said the amendment proposes to bring into scope a group insurance product that has attributes of individualized products that should be subject to VM-20. She said because the product is usually filed under a group chassis, it is generally being excluded from VM-20 requirements. She said in response to the comment letters, the following changes were made: 1) the amendment was modified to more clearly define the policies it covers so that true group insurance business would not be swept in; 2) VM-51 was modified to accommodate a certificate number and add an individual/group indicator; and 3) a clarifying edit was made to the language format. She recommended that the Task Force proceed with the proposal. Mr. Weber asked if the premiums for these products are easily identified in the annual statement blank. Ms. Bahna-Nolan said the premiums are not separated, and a request to the Blanks (E) Working Group may be necessary. Mr. Robinson said a group contract number data element should also be added to VM-51. Ms. Bahna-Nolan agreed that the field should be added.

Mr. Leung made a motion, seconded by Mr. Robinson, to expose amendment proposal 2019-33 (Attachment Twenty-Three), including the suggested edits, for a 60-day public comment period ending Oct. 5. The motion passed unanimously.

12. **Exposed Amendment Proposal 2020-03**

Ms. Hemphill said amendment proposal 2020-03 clarifies that the NPR can be calculated using the mean or mid-terminal method, or it can also be calculated using a more direct method. She said since its previous exposure, the language in the proposal has been aligned with the language in the *Accounting Practices and Procedures Manual* (AP&P Manual).

Mr. Chou made a motion, seconded by Mr. Weber, to expose amendment proposal 2020-03 (Attachment Twenty-Four) for a 21-day public comment period ending Aug. 25. The motion passed unanimously.

13. **Exposed Amendment Proposal 2019-34**

Mr. Robinson said the amendment proposal seeks to clarify the asset adequacy requirements for modified coinsurance (mod-co) business. He said because the mod-co agreement is structured such that the ceding company holds the reserves while the assuming company is responsible for the liability, there are challenges in holding either company responsible for cash-flow testing. He said the amendment clarifies that cash-flow testing is the responsibility of the ceding company, regardless of whether the liability has been ceded to a reinsurer. Mr. Carmello suggested that the amendment should be expanded to include other forms of reinsurance, such as funds withheld.

Mr. Robinson made a motion, seconded by Ms. Ahrens, to expose amendment proposal 2019-34 (Attachment Twenty-Five) for a 45-day public comment period ending Sept. 18. The motion passed unanimously.

14. **Exposed the 2021 GRET**

Dale Hall (Society of Actuaries—SOA) discussed the 2021 Generally Recognized Expense Tables (GRET) presentation (Attachment Twenty-Six). He noted that the SOA has also supplied a letter (Attachment Twenty-Seven), which provides a deeper overview of the methodology. He said there are no material changes in the process as compared to past years. He said the methodology attempts to minimize large jumps from one year to the next. He noted that the number of companies in the study decreased from 326 to 292. He attributed the decrease to companies no longer meeting the criteria for inclusion.

Mr. Leung made a motion, seconded by Mr. Weber, to expose the 2021 GRET for a 21-day public comment period ending Aug. 25. The motion passed unanimously.

15. **Heard an Update on SOA Research and Education**

Mr. Hall provided a presentation (Attachment Twenty-Eight) identifying recent and upcoming topics of possible interest to state insurance regulators of life insurance. He said most of the SOA research team’s recent work is related to COVID-19 topics crossing all areas of practice. He said the pandemic has had an impact on claims, assets, interest rates, operational risk and underwriting. He listed a few COVID-19 related references available on the SOA website. He said studies are under way that will provide information on the COVID-19 impact on insured life claims. He specifically noted a group life claim study that will allow comparisons of 2020 group life death claims to group life death claims for 2018 and 2019. He said the study is not
limited to COVID-19 claims, and it will also include death trends, such as suicide and accidental deaths. He pointed out a few other life insurance studies focusing on how companies are looking at mortality, modeling, new business practices, and asset/liability management, considering the low interest environment.

16. **Exposed the 2020 Life Mortality Improvement Scale Recommendation**

Marianne Purushotham (Joint Academy/SOA Life Mortality Improvement Subgroup) discussed a presentation (Attachment Twenty-Nine) on the 2020 mortality improvement scale recommendation. She said the objective of the mortality improvement updates is to address the incorporation of mortality improvement allowed in VM–20 Section 9.C.3.g. She said the mortality improvement scale is based on an average of historical data and data based on forecasted expectations, which is then smoothed to yield the mortality improvement scale. She said for 2020, there has been much discussion of how shocks, like the COVID-19 pandemic, affect the historical mortality improvement scale. She said the Subgroup decided to treat shocks as capital planning events, as opposed to treating them as impacts to reserves. Among the considerations leading to the decision for 2020 are: 1) the lack of sufficient data to understand the COVID-19 shock; 2) that reflecting a shock is inconsistent with the goals of the mortality improvement goal updates; and 3) avoiding the setting of a precedent for other excess mortality events. She said while the 2020 mortality improvement will not include an impact for the pandemic, pandemic deaths will be included in historical average used in the 2022 mortality improvement scale; but its effect will be smoothed. She said COVID-19 issues to be considered in the future are whether its impact on the insured population will be similar to its impact on the general population and what, if any, will be its long-term impact on mortality improvement rates.

The Task Force agreed to expose the 2020 Life Mortality Improvement Scale Recommendation for a 21-day public comment period ending Aug. 25 without objection.

17. **Heard an Update from the Academy PBR Governance Work Group**

Donna Claire (Academy PBR Governance Work Group) gave a presentation (Attachment Thirty) on PBR resources available from the Academy. She said the Academy is surveying appointed actuaries to get information on the impact of COVID-19 on 2020 year-end asset adequacy testing, including assumptions for mortality, lapses, interest rates, and long-term care (LTC). The white paper generated from the survey is expected to be available in September. Ms. Claire said the Academy Variable Annuity Reserves and Capital Work Group released a VM-21 checklist on Aug. 3. The checklist details the items to consider when determining variable annuity reserves and capital. Ms. Claire said the Academy PBR practice page on the Academy website provides the PBR toolkit, Academy comments on PBR, links to NAIC PBR resources, and Academy publications on PBR. She noted that the *Life Principle-Based Reserves Under VM-20* practice note has been updated to reflect the 2020 *Valuation Manual*. She also highlighted the PBR Qualification Standard on the webpage. She said the Boot Camp will be virtual. Information is available on the Academy website. Another publication referenced by Ms. Claire is the PBR analysis template.

18. **Heard an Update from the Academy Council on Professionalism**

Shawna Ackerman (Academy) said the Academy has COVID-19 resources available on its website, including links to federal rules and regulations, congressional resources, Academy resources, and the NAIC Coronavirus Resource Center. Kathy Riley (Academy) said the Actuarial Standards Board (ASB) met in June to review the second exposure draft of *Actuarial Standard of Practice (ASOP) No. 2—Nonguaranteed Elements for Life Insurance and Annuity Products*. The comment period closes on Nov. 13. Ms. Riley said the comment period for the second exposure draft for *ASOP No. 22—Statements of Opinion Based on Asset Adequacy Analysis by Actuaries for Life or Health Insurers* ends on Nov. 30. She said the comment period for the first exposure draft of *ASOP No. 11—Financial Statement Treatment of Reinsurance Transactions Involving Life Insurance or Health Insurance* ended June 30. Comments on ASOP No. 11 will be reviewed by the ASB in December. She said *ASOP No. 56—Modeling* has been released, and it is effective for work done on or after Oct. 1. Godfrey Perrott (Academy) said the Actuarial Board for Counseling and Discipline (ABCD) received 72 requests for guidance (RFG). He said one general RFG asked whether Precept 1, covering integrity and honesty, applies only to actuarial work or applies to all activities. He said the answer is that it applies to all activities. He said Precept 13 requires Academy members to report material violation of the code if they cannot correct it.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call June 25, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridding represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman and Ben Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); and Scott A. White represented by Craig Chupp (VA).

1. Adopted Revisions to AG 49

Mr. Andersen said AG 49-A, the proposed revision to Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest (AG 49), will reflect the Task Force charge that products with multipliers, cap buy ups and other index-linked enhancements should not illustrate more favorably than products without those features. AG 49-A also provides additional limits on the illustration of policy loan leverage. He said that given the constraints of the Life Insurance Illustrations Model Regulation (§582), AG 49-A strikes a balance between allowing product innovation and reducing potential loopholes without eliminating all index features. He recommended that if AG 49-A is adopted, the Task Force should observe market activities for first six to 12 months following the effective date to determine if Model #582, its associated illustrated scale and focus on historic returns make sense for the indexed universal life (IUL) product.

Mr. Andersen made a motion, seconded by Mr. Weber, to adopt AG 49-A, the revision to AG 49 effective for all policies issued after the AG 49-A effective date (Attachment One-A). The motion passed unanimously.

Mr. Boerner said, once AG 49-A is adopted by the Executive (EX) Committee and Plenary, and its effective date is set, the Task Force will consider exposure of a proposal to discontinue AG 49 for all policies issued after the effective date of AG 49-A.

2. Adopted Amendment Proposal 2020-07

Tom Kalmbach (Globe Life) discussed the Globe Life comment letter (Attachment One-B) on amendment 2020-07, which proposes to change the life nonforfeiture interest rate floor in VM-02, Minimum Nonforfeiture Mortality and Interest. He said the change will result in increases in cash values and higher premiums for consumers. He said higher premiums will make the products in the small face amount market less affordable. He said the only economic reason for the change is related to paid-up additions and in-kind benefits. He proposed allowing a lower interest rate to determine the amount of paid-up and in-kind benefits while retaining the current rate for calculation of the base cash value. Mr. Serbinowski said that lowering the interest rate for paid-up values and in-kind benefits results in lower values for both. He said the proposal should not receive regulatory consideration. Mr. Boerner said a change such as the one Mr. Kalmbach is proposing should not be pursued in the Valuation Manual. He said that type of modification should be addressed through a model law change.

Brian Bayerle (American Council of Life Insurers—ACLI) said the ACLI comment letter (Attachment One-C) responds to companies’ concerns about whether adoption of the proposal should be deferred to allow more time to prepare for the change. Mr. Bayerle said deferring the change to the 2022 Valuation Manual would provide companies less time to address the matter. He pointed out that if the change is adopted for the 2021 Valuation Manual, companies will have 18 months to comply with the change. He said it is important that the nonforfeiture rate link to Section 7702 of the Internal Revenue Code (IRC) be maintained.

Elizabeth Brill (New York Life) said the comment letter (Attachment One-D), jointly submitted with three other companies, supports amendment 2020-07. She said it is important that policyowners who surrender their policies receive equitable value in
line with the intent of the standard nonforfeiture law. She said that in this low interest rate environment, retaining a 4% nonforfeiture interest rate floor potentially hurts consumers.

Mr. Weber made a motion, seconded by Mr. Yanacheak, to adopt amendment proposal 2020-07 (Attachment One-E). The motion passed, with Ms. Ahrens dissenting.

3. Adopted Amendment Proposal 2020-06

Mr. Boerner said Task Force members will consider whether the option for companies to produce their own swap spread curves should remain in amendment proposal 2020-06. He said if the Task Force chooses to remove the company option from the amendment proposal, it will result in the removal of the word “calculated,” the restoration of the word “prescribed” and the removal of the language requiring the VM-31, PBR Actuarial Report Requirements for Business Subject to a Principle-Based Valuation, disclosures. Mr. Bayerle said the ACLI comment letter encourages the Task Force to adopt the amendment proposal in its entirety. He said the proposal was initiated because of the noted differences between the rates produced by the NAIC and the rates observed in the marketplace. He said allowing companies to use their market observable rates helps align their rates used in valuation with the rates used in their other internal processes. He said that with the disclosure provisions in the proposal providing a safety net, the risks are minimal. He said the disclosure would easily allow the NAIC to discover issues and quickly resolve them through discussion with the company.

Mr. Ostlund asked if a Valuation Manual change will be required to implement the replacement of the London Interbank Offered Rate (LIBOR). Pat Allison (NAIC) said adoption of the amendment proposal gives the Task Force the authority to adopt and implement a LIBOR replacement without further changes to the Valuation Manual. She said once the LIBOR replacement has been implemented, a Valuation Manual amendment could be submitted to capture the identity of the new data source for the sake of clarity.

Mr. Carmello made a motion, seconded by Mr. Robinson, to adopt amendment proposal 2020-06, with the “company may elect …” paragraph deleted, the word “calculated” removed, the word “prescribed” restored and the proposed revisions to VM-31 Section 3.D.6.v and Section 3.F.4.h deleted (Attachment One-F). The motion passed unanimously.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an external index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

In 2019, the NAIC decided that illustrations of products with multipliers, cap buy-ups, and other enhancements should not illustrate better than products without such features. This new requirement is intended to apply to illustrations on policies sold on or after the effective date of this guideline while the existing requirements continue to apply for in-force illustrations on policies sold before the effective date of this guideline.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.

2. Limits the policy loan leverage shown in an illustration.

3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective as follows: for all new business and in force illustrations on policies sold on or after [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption*].

i. 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.

ii. Effective March 1, 2017, Section 4 and Section 5 shall be effective for all in-force life insurance illustrations on policies within the scope of this actuarial guideline, regardless of the date the policy was sold.

iii. Sections 6 and 7 shall be effective for all new business and in force life insurance illustrations on policies sold on or after March 1, 2016.

2. Scope

This Actuarial Guideline shall apply to any life insurance illustration that meets both (i) and (ii), below:
ii. Interest credits are linked to an external index or indices.

i. The policy offers Indexed Credits.

3. Definitions

A. Alternate Scale: A scale of non-guaranteed elements currently being illustrated such that:

   i. The credited rate Annual Rate of Indexed Credits for each Index Account does not exceed the lesser of the maximum credited rate Annual Rate of Indexed Credits for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the credited rate Annual Rate of Indexed Credits for each Index Account shall not exceed the average of the maximum credited rate Annual Rate of Indexed Credits for the illustrated scale and the guaranteed credited rate Annual Rate of Indexed Credits for that account. However, the credited rate Annual Rate of Indexed Credits for each Index Account shall never be less than the guaranteed credited rate Annual Rate of Indexed Credits for that account.

   ii. If the illustration includes a loan, the illustrated rate credited to the loan balance does not exceed the illustrated loan charge. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 4%.

   iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. Annual Net Investment Earnings Rate: Gross portfolio annual earnings rate of the general account assets (excluding hedge assets for Indexed Credits), less provisions for investment expenses and default cost, allocated to support the policy. Charges of any kind cannot be used to increase the Annual Net Investment Earnings Rate.

B.C. Annual Rate of Indexed Credits: The total annualized Indexed Credits expressed as a percentage of the account value used to determine the Indexed Credits.

C.D. Benchmark Index Account: An Index Account with the following features:

   i. The interest calculation is based on the percent change in S&P 500® Index value only, over a one-year period using only the beginning and ending index values. (S&P 500® Index ticker: SPX)

   ii. An annual cap is used in the interest calculation.

   iii. The annual floor used in the interest calculation shall be 0%.

   iv. The participation rate used in the interest calculation shall be 100%.

   v. Interest is credited once per year.

   vi. Account charges do not exceed the account charges for any corresponding Index Accounts within the policy in any policy year. If Index Accounts with different levels of account charges are offered with the illustrated policy, more than one Benchmark Index Account may be used in determining the maximum illustrated crediting rates for the policy’s Index Accounts, subject to the requirements of 5.D.

   However, for each Index Account within the policy, only one Benchmark Index Account shall apply. Any rate calculated in 4 (B) shall not apply for an Index Account if the account charges for the applicable Benchmark Index Account exceed the account charges for that Index Account in any policy year. Account charges include all charges applicable to an Index Account, whether deducted from policy values or from premiums or other amounts transferred into such Index Account.
Additional amounts credited are not less than the additional amounts credited for any corresponding Index Accounts within the policy in any policy year. Any rate calculated in 4 (B) shall not apply for an Index Account if the additional amounts credited for the applicable Benchmark Index Account are less than the additional amounts credited for that Index Account in any policy year. Additional amounts include all credits that increase policy values, including but not limited to experience refunds, multipliers, or bonuses.

The Hedge Budget used to determine the cap in 3 (D) (ii) does not exceed the Annual Net Investment Earnings Rate. Charges of any kind cannot be used to increase the annual cap.

There are no enhancements or similar features that provide additional Indexed Credits in excess of the interest provided by 3 (D) (i) through 3 (D) (v), including but not limited to experience refunds, multipliers, or bonuses.

There are no limitations on the portion of account value allocated to the account.

A single Benchmark Index Account will be determined for each policy. This can be either an Index Account offered with the illustrated policy or determined according to Section 4 (A) (ii) for purposes of complying with this guideline. A policy shall have no more than one Benchmark Index Account.

Fixed Account: An account where the credited rate is not tied to an external index or indices, there are no Indexed Credits.

Hedge Budget: For each Index Account, the total annualized amount assumed to be used to generate the Indexed Credits of the account, expressed as a percent of the account value in the Index Account. This total annualized amount should be consistent with the hedging program of the company.

Index Account: An account where some or all of the amounts credited are Indexed Credits.

Indexed Credits: Any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy values that is linked to an index or indices. Amounts credited to the policy resulting from a floor greater than zero on an Index Account are included.

Loan Balance: Any outstanding policy loan and loan interest, as defined in the policy.

Policy Loan Interest Rate: The current annual interest rate as defined in the policy that is charged on any Loan Balance. This does not include any other policy charges.

Policy Loan Interest Credited Rate: The annualized interest rate is tied to an external index or indices credited that applies to the portion of the account value backing the Loan Balance:

i. For the portion of the account value in the Fixed Account that is backing the Loan Balance, the Policy Loan Interest Credited Rate is the applicable annual interest crediting rate.

ii. For the portion of the account value in an Index Account that is backing the Loan Balance, the Policy Loan Interest Credited Rate is the Annual Rate of Indexed Credits, net of any applicable Supplemental Hedge Budget, for that account.

Supplemental Hedge Budget: For each Index Account, the Hedge Budget minus the minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that is used in the determination of the Benchmark Index Account. The Supplemental Hedge Budget will never be less than zero. This amount should be consistent with the hedging program of the company.

Illustrated Scale

The total Annual Rate of Indexed Credits for the illustrated scale for each Index Account shall be limited as follows:

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A. Calculate the geometric average annual credited rate for each applicable Benchmarch Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

i. If the insurer offers an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the applicable Benchmark Index Account in 4 (A).

ii. If the insurer does not offer an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of the Benchmark Index Account, and shall use that cap in 4 (A).

B. For each applicable Benchmark Index Account, the Annual Rate of Indexed Credits shall not exceed the minimum of (i) and (ii):

iii. the arithmetic mean of the geometric average annual credited rates calculated in 4 (A) shall be the maximum credited rate(s) for the illustrated scale.

iv. 145% of the Annual Net Investment Earnings Rate.

C. For any 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 maximum credited rate for the illustrated scale. The determination shall reflect an Account that is not the Benchmark Index Account in 3 (C), the Annual Rate of Indexed Credits illustrated as a percentage of the account value in the Index Account prior to the deduction of any charges used to fund a Supplemental Hedge Budget shall not exceed the minimum of (i) and (ii):

i. The Annual Rate of Indexed Credits for the Benchmark Index Account calculated in 4 (B) plus the Supplemental Hedge Budget for the Index Account.

ii. The Annual Rate of Indexed Credits reflecting the fundamental characteristics of the Index Account and the parameters shall have the appropriate relationship to the expected risk and return of the applicable Benchmark Index Account. In no event shall the credited rate for the illustrated scale exceed the applicable rate calculated using actuarial judgment to determine this value using lookback methodology consistent with 4 (A) and 4 (B) where appropriate.

D. For the Purposes of compliance with Section 6 (C) of Model #582, the Supplemental Hedge Budget is subtracted from the illustrated rate before comparing to the earned interest rate underlying the Disciplined Current Scale.

At the beginning of each calendar year, the insurer shall be allowed up to three (3) months to update the credited rate for each Index Account in accordance with 4 (B) and 4 (C).

5. Disciplined Current Scale

The earned interest rate for the disciplined current scale shall be limited as follows:

A. If an insurer engages in a hedging program for index-based interest Indexed Credits in an account, the assumed earned interest rate underlying the disciplined current scale shall not exceed 145% of the annual net investment earnings rate (gross portfolio earnings less provisions for investment expenses and default costs) of the for that account, inclusive of all general account assets (excluding hedges for index-based credits) allocated to both hedge and non-hedge assets, that support the policy, net of default costs and investment expenses (including the amount spent to generate the Indexed Credits of the policy) shall not exceed:

i. the Annual Net Investment Earnings Rate, plus

ii. 45% of the lesser of (1) and (2):
1. Hedge Budget minus any annual floor, to the extent that the floor is supported by the Hedge Budget.

2. The minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that is used in the determination of the Benchmark Index Account.

These rates should be adjusted for timing differences in the hedge cash flows to ensure that fixed interest is not earned on the Hedge Budget minus any annual floor, to the extent that the floor is supported by the Hedge Budget.

The assumed earned rate used in testing the Disciplined Current Scale may not exceed the Annual Rate of Indexed Credits plus the excess of the Annual Net Investment Earnings Rate over the Hedge Budget.

Guidance Note: The above approach does not stipulate any required methodology as long as it produces a consistent limit on the assumed earned interest rate underlying the disciplined current scale.

For a policy with multiple Index Accounts, a maximum rate in 5.A. should be calculated for each account. All accounts, fixed and indexed, within a policy can be tested in aggregate.

B. If an insurer does not engage in a hedging program for indexed-based interest indexed 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 Annual Net Investment Earnings Rate.

C. These experience limitations shall be included when testing for self-support and lapse-support under Model #582, accounting for all illustrated benefits including any illustrated benefits and bonuses that impact the policy’s account value.

D. If more than one Benchmark Index Account is used for an illustrated policy, each set of Index Accounts that correspond to each Benchmark Index Account must independently pass the self-support and lapse-support tests under Model #582, subject to the limitations in 5 (A), (B), and (C). All experience assumptions that do not directly relate to the Index Accounts as to expenses, mortality, investment earnings rate of the general account assets, lapses, and election of any Fixed Account shall equal the assumptions used in the testing for the entire policy.

6. Policy Loans

If the illustration includes a loan, the illustrated rate credited to the loan balance Policy Loan Interest Credited Rate shall not exceed the illustrated loan charge Policy Loan Interest Rate by more than 100 basis points. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 4.50%.

7. Additional Standards

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. For each Index Account illustrated, a table showing actual historical index changes and corresponding hypothetical interest rates Indexed Credits using current index parameters for the most recent 20-year period.
Removing the 4% floor on minimum non-forfeiture rates has the potential to increase cash values on traditional whole life coverage, thus limiting the affordability and/or the amount of insurance protection for many Americans at a time when getting life insurance is more important than ever!

Overview of Whole Life Coverage – Two Approaches Used to Determine Policy Premiums

1. For traditional whole life coverage, many companies determine policy premiums based on anticipated costs which include:
   - The cost of providing Death Benefits
   - The cost of providing Cash Values or Surrender Benefits including In-Kind Benefits
   - The cost of underwriting and other acquisition expenses
   - The cost of administration
   - The cost of holding statutory reserves in excess of economic reserves
   - The cost of capital given the risks taken.

2. For mutual companies, it is common to determine premiums based on the Statutory Reserve Valuation Net Premium which is generally conservative and may provide the opportunity to pay policyholder dividends after reflecting the company’s costs in #1 above. So the policy premium may be independent of the cash values provided.

Companies have the option to provide cash values that are greater than the minimum required. So a 4% floor on discount rates used to determine minimum cash values does not preclude companies from this option and offering higher cash values.
Upon Surrender, life insurance policies provide one or more in-kind benefits (Paid Up coverage or Extended Term Insurance) in lieu of cash surrender. The Cash Surrender value is used to determine the amount of these in-kind benefits; ideally, they should be economically equivalent. A lower interest rate used to determine Paid Up (or other in-kind) benefit amounts that is more aligned with the current market rate environment has the potential to reduce overall policy costs and supports lower policy premiums.

We urge LATF to consider an amendment to APF 2020-07, which would keep costs low for basic protection life insurance thus helping the affordability and accessibility of life insurance protection for many Americans at a time when getting life insurance protection is more important than ever.

### Proposed Amendment:

The nonforfeiture interest rate for any life insurance policy issued in a particular calendar year beginning on and after the operative date of the Valuation Manual shall be equal to 75% of the calendar year statutory valuation interest rate defined for the NPR in the Valuation Manual for a life insurance policy with nonforfeiture values, whether or not such sections apply to such policy for valuation purposes, rounded to the nearer one-quarter of 1%, provided, however, that the nonforfeiture interest rate shall not be less than 4%, but the nonforfeiture interest rate to determine paid-up benefits and other in-kind nonforfeiture benefits shall not be less than the applicable interest rate used to meet the definition of life insurance in the Cash Value Accumulation Test under Section 7702 (Life Insurance Contract Defined) of the U.S. Internal Revenue Code.

### Amendment Benefits:

- Maintains the current 4% floor established in the valuation manual for the discount rate used to determine minimum cash values.
- Mitigates the impact of lower interest rates on the cost of providing minimum cash values and therefore on premiums or dividends.
- Allows for a lower interest rate to determine the amount of paid up and in-kind benefits aligned with the rates permissible under 7702 and proposed amendments aligning better with current interest rates.
Brian Bayerle  
Senior Actuary  
June 17, 2020  
Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force (LATF)  

Re: ACLI Comments on APF 2020-07 (Nonforfeiture Floor)  

Dear Mr. Boerner:  

The American Council of Life Insurers (ACLI) appreciates the opportunity to provide comments regarding the APF 2020-07, which changes the cash value floor for the nonforfeiture rate in VM-02. ACLI continues to support this change, and we provide the following comments to address concerns raised by regulators.  

**Standard Nonforfeiture Law Addresses Timing Concerns**  

Several regulators expressed concern about the timing required for companies to reprice and refile depending on when adoption of federal legislation revising the Internal Revenue Code (IRC) §7702 would occur. The Standard Nonforfeiture Law provides companies 18 months to comply with a new lower rate; NAIC Model #808 Section 5c (H) (1) states the following:  

(1) At the option of the company, calculations for all policies issued in a particular calendar year may be made on the basis of a rate of interest not exceeding the nonforfeiture interest rate, as defined in this section, for policies issued in the immediately preceding calendar year.  

If this APF is passed, there is no additional pressure for companies to reprice this year versus a deferral on adoption. If the APF is adopted this year it provides companies more flexibility on timing for the newly priced products, assuming Federal action. Delaying action may actually create a worse situation for companies: companies cannot file until the NAIC adopts the Valuation Manual, and the Interstate Insurance Product Regulation Commission would need to update their standards quickly.  

**Greater Benefit to Consumers**  

A lower maximum nonforfeiture interest rate provides higher minimum benefits to consumers upon surrender. Higher nonforfeiture benefits encourages policyholders to continue paying premiums to build up greater value. Proponents of the floor would argue maintaining the floor may result in lower premiums, but this would be contingent on companies passing the savings of lower nonforfeiture.
benefits to consumers. If the 4% floor is removed, then such benefits are required to be passed to policyholders upon surrender.

**The Floor Will Alter Relationship between Valuation and Nonforfeiture Values**

Assuming the valuation rate updates to 3.0%, the calculated nonforfeiture rate will decrease to 3.75%. If the floor is kept at 4.0%, this is a 25bp higher discount rate companies can use, and breaks the 125% relationship between the nonforfeiture rate over the valuation interest rate. This difference would become more magnified if the valuation interest rate decreased even further; if the valuation interest rate decreased to 2.5% while retaining the 4.0% floor the margin increases to 60%. Increasing the margin on nonforfeiture would likely lead to more lapse-supported permanent policies. For such products, companies begin to profit from policyholders who lapse their policy, because it costs the company less to pay the surrender benefit than it does to keep the policy in-force.

**No Issues if Tax Code Is Not Changed**

Adopting this APF does not create any potential issues in the event the Federal Government does not act on legislation. The APF just links the nonforfeiture interest rate floor to the tax code, which is why the interest rate floor in VM-02 exists in the first place. If the APF is adopted and the tax code is not updated, then the nonforfeiture floor stays at 4%, consistent with current requirements.

We look forward to a discussion on this important issue.

Sincerely,

[Signature]

cc: Reggie Mazyck, NAIC
BY E-MAIL

June 17, 2020

Mike Boerner
Chair, NAIC Life Actuarial (A) Task Force

Attention: Reggie Mazyck (rmazyck@naic.org)

Re: APF 2020-07 on Life Nonforfeiture

Dear Chair Boerner,

Our companies appreciate the opportunity to comment on APF 2020-07. We strongly support the proposal to replace the 4.0% interest rate floor in life nonforfeiture requirements with a reference to the tax code as it best protects policyholders in a low interest rate environment. Moreover, this proposal is consistent with the fundamental purpose and intent of the nonforfeiture requirements – to provide fair value to policyholders who surrender their policies after years of paying premiums. In a low interest rate environment, a minimum nonforfeiture standard that includes an artificial 4% interest rate floor permits the development and sale of products that deprive policyholders from receiving equitable value upon surrender after years of policy contributions, at a time when they no longer need or are able to afford coverage.

**Nonforfeiture Objective is to Provide Equitable Value to Consumers**

The intent of the nonforfeiture law is to provide equitable policyholder value between those who surrender versus those who persist. This is done by passing a value linked to the reserve to consumers through cash surrender value and other nonforfeiture options. If the 4.0% interest rate floor remains, products can be designed where consumers will not receive equitable value upon surrender in the current low interest rate environment. If the nonforfeiture interest rate is floored at an artificially high level, minimum guaranteed cash values will be smaller relative to the size of the reserve, making whole life a lapse-supported product.

When a policyholder surrenders a whole life contract, the company releases reserves that are larger than surrender benefits, receiving a surrender gain. The nonforfeiture interest rate is 125% of the valuation interest rate, allowing 25% of the investment income to be retained by the company.

In the likely scenario that the valuation rate drops to 3.0% for policies issued in 2021, but the 4.0% floor remains, the discount rate cushion would increase from 25% to 33% (4.0%/3.0%-1), allowing increased surrender gains to be retained by the company. If the current low rate environment persists and the valuation rate drops to 2.5%, and if the 4.0% floor remains, the discount rate cushion would increase to 60% (4.0%/2.5%-1), allowing for even more surrender gains to be retained by the company. In such a scenario, consumers who pay into policies for years and surrender the policy in a time of need would not receive value commensurate with their policy. In contrast, the company would realize a gain that may or may not be passed back to
the consumer via reduced premiums.\(^1\) If the 4.0% floor is kept, then the lower the interest rate environment, the greater the amount that can be withheld from the policyholder upon surrender.

The following chart shows examples of an insurance company’s “surrender gains”, which are the excess of the minimum reserves over the minimum nonforfeiture values (cash values). This is shown for a sample policy under two different reserve valuation rate scenarios (3.0% and 2.5%), with and without the current 4.0% nonforfeiture interest rate floor.

<table>
<thead>
<tr>
<th>“Surrender Gains” – Difference between Reserves and Minimum Cash Values</th>
<th>Valuation Rate = 3.0%</th>
<th>Valuation Rate = 2.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000 Coverage for an Issue Age 45, Male, Non-Smoker</td>
<td>Additional Value Withheld</td>
<td>Additional Value Withheld</td>
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<tr>
<td><strong>Nonforfeiture Rate</strong></td>
<td><strong>4.0% (NF Floor)</strong></td>
<td><strong>3.75% (No NF Floor)</strong></td>
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<td>Duration 10</td>
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<td>Duration 20</td>
<td>$4,506</td>
<td>$3,672</td>
</tr>
<tr>
<td>Duration 30</td>
<td>$4,386</td>
<td>$3,483</td>
</tr>
</tbody>
</table>

As shown in the chart above, maintaining the current 4.0% interest rate floor in a low interest rate allows the insurer to realize a higher surrender gain in all durations. As illustrated, the more years the policyholder pays into the policy, the more the company is able to withhold additional value from the consumer upon surrender if the 4.0% floor remains.

**Leaving in the 4.0% Floor Harms Consumers**

Claims that removing the 4.0% floor would harm consumers by increasing premiums is a misdirected argument. In fact, if the floor remains, companies would be permitted to withhold value from consumers, resulting in greater gains for the company. These gains could either be passed through as lower premiums (creating a lapse-supported product) or pocketed by the company in a low interest rate environment. There is no requirement to lower premiums. To frame lower minimum benefits to the consumer as helping the consumer is fundamentally misguided.

The nonforfeiture requirements are designed to protect policyholders who do not stay inforce, either because they no longer want or need coverage or are unable to afford coverage. Requiring a higher exit value maintains parity with persisting policyholders and protects all customers, not just those who persist.

\(^1\) If the company passes the surrender gain back to policyholders in the form of lower premiums it is potentially (1) creating inequities between persisting and surrendering policyholders and (2) creating a lapse-supported policy, where the company is financially incented to have a greater percentage of policyholders surrender.
Holding Archaic Remnants of the Tax Code Hostage
The change to the nonforfeiture law in 2014 to include the 4.0% interest rate floor was not made to lower nonforfeiture benefits, but instead solely to avoid conflict between the minimum nonforfeiture values and the maximum funding values permitted under Section 7702 of the Internal Revenue Code (“Section 7702”). However, if Section 7702 is amended so that it no longer includes a hard-coded 4% minimum rate, the 4% floor in the nonforfeiture interest rate would no longer be appropriate. APF 2020-07 proposes to eliminate this floor in the interest of providing greater equity to policyholders who surrender. We support returning to the level of fairness that was always intended by the Standard Nonforfeiture Law.

Conclusion
We strongly urge LATF to adopt APF 2020-07 to maintain equity between persisting and surrendering policyholders consistent with the purpose of the Standard Nonforfeiture Law. Leaving the current 4.0% floor in VM-02 is not only arbitrary, but deprives surrendering policyholders of value in a low interest rate environment. Consumers are not helped by lower premiums that may or may not come to fruition. In contrast, they are helped by ensuring that minimum nonforfeiture values are fair and equitable relative to the value they have already paid into their policy.

Sincerely,

Elizabeth K. Brill
Senior Vice President & Chief Actuary
New York Life Insurance Company

Jason T. Klawonn
Senior Vice President & Chief Actuary
The Northwestern Mutual Life Insurance Company

Arthur W. Wallace
Chief Actuary
Massachusetts Mutual Life Insurance Company

Michael Slipowitz
Senior Vice President, Corporate Chief Actuary & Chief Risk Officer
The Guardian Life Insurance Company of America
RE-EXPOSURE OF APF 2020-07

Comments should be submitted to Reggie Mazyck (RMazyck@NAIC.ORG) by COB June 17, 2020

Please comment on the change of wording from “used” to “prescribed”

Additionally, provide an opinion of the pro and cons of adopting or not adopting the wording of the proposal. Particularly, concerns about the potential impacts of the proposed change on companies are welcomed.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

**Identification:**
Brian Bayerle, ACLI

**Title of the Issue:**
Remove 4% Floor from Life Standard Nonforfeiture Rate.

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:

January 1, 2020 NAIC Valuation Manual – VM-02 Section 3.A

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 attached.

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

Upon any possible tax code (IRC, S. 7702) modifications to remove the hardcoded interest rate floor starting in 1/1/2021, the life standard nonforfeiture rate is being updated to ensure the minimum funding under state requirements does not exceed the maximum funding under federal requirements for life insurance contracts issued starting in 1/1/2021.

* 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:**

<table>
<thead>
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<th>Dates</th>
<th>Reviewed by Staff</th>
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<th>Considered</th>
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<tbody>
<tr>
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</table>

**Notes:** VM APF 2020-07

W:/National Meetings/2010.../TF/LHA
Section 3: Interest

A. The nonforfeiture interest rate for any life insurance policy issued in a particular calendar year beginning on and after the operative date of the Valuation Manual shall be equal to 125% of the calendar year statutory valuation interest rate defined for the NPR in the Valuation Manual for a life insurance policy with nonforfeiture values, whether or not such sections apply to such policy for valuation purposes, rounded to the nearer one-quarter of 1%, provided, however, that the nonforfeiture interest rate shall not be less than the applicable interest rate prescribed to meet the definition of life insurance in the Cash Value Accumulation Test under Section 7702 (Life Insurance Contract Defined) of the U.S. Internal Revenue Code.

**Guidance Note:** For flexible premium universal life insurance policies as defined in Section 3.D of the Universal Life Insurance Model Regulation (#585), this is not intended to prevent an interest rate guarantee less than the nonforfeiture interest rate.
Re-Exposure of APF 2020-06
Updated 6/11/20 v.2

This version of APF is the same as the initial version exposed after the June 11 LATF call with the exception that the following sentences have been replaced by the sentence below.

“When LIBOR is terminated or its use becomes de minimis, the LIBOR rates will be replaced with the most appropriate replacement rates for the specified purpose. The NAIC will monitor these market observable values and, in the event the then current values are discontinued or replaced, will recommend an appropriate replacement to the Life Actuarial (A) Task Force.”

have been replaced by the sentence below

“When the NAIC determines LIBOR is no longer effective, the NAIC shall recommend a replacement to LATF which shall be effective upon adoption by Life Actuarial (A) Task Force.”

Reggie Mazyck
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Brian Bayerle, ACLI – Interest Rate Swap Spread Determination

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:


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 attached.

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

Interest Rate Swap Spreads are currently being calculated by the NAIC under methodology outlined in the Valuation Manual. This APF changes the methodology for calculation of the 3-month and 6-month swap spreads to use market observable values for Treasury rates and LIBOR, rather than the average of these values from JP Morgan and Bank of America.

With the forthcoming termination of LIBOR, the requirements of the Valuation Manual will need to change. This APF provides broad guidance allowing for one or more currently unnamed rate to replace LIBOR in these calculations.

Additionally, this APF allows the company to calculate its own current swap spreads based on market observable values. The spread requirements are currently included in VM-20, with VM-21 referencing the applicable sections. With the potential of VM-22 likely having similar references, LATF may want to consider moving these and other asset requirements to their own section.

* 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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<tbody>
<tr>
<td>05/4/20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: VM APF 2020-06

© 2010 National Association of Insurance Commissioners
Options for LATF consideration: Per the 6/11 LATF discussion, in addition to adopting the full text of the APF, regulators wanted to consider not allowing for companies to produce their own current swap spreads. This option would be to retain “prescribed” instead of “calculated”, would strike the paragraph beginning “The company may elect to produce their own current swap curves…”, and would remove the VM-31 Section 3.D.6.v and VM-31 Section 3.F.4.h language.

**VM-20 Section 9.F.8.d**

Interest rate swap spreads over Treasuries shall be prescribed/calculated by the NAIC for use throughout the cash-flow model wherever appropriate for transactions and operations including, but not limited to, purchase, sale, settlement, cash flows of derivative positions and reset of floating rate investments. A current and long-term swap spread curve shall be prescribed/calculated for year one and years four and after, respectively, with yearly grading in between. The three-month and six-month points on the swap spread curves represent the corresponding London Interbank Offered Rate (LIBOR) spreads over Treasuries, shall be the market-observable values for these tenors. Currently, this shall be the corresponding London Interbank Offered Rate (LIBOR) spreads over Treasuries. When LIBOR is terminated or its use becomes de minimis, the LIBOR rates will be replaced with the most appropriate replacement rates for the specified purpose. The NAIC will monitor these market-observable values and, in the event the then-current values are discontinued or replaced, will recommend an appropriate replacement to the Life Actuarial (A) Task Force. When the NAIC determines LIBOR is no longer effective, the NAIC shall recommend a replacement to LATF which shall be effective upon adoption by LATF.

The company may elect to produce their own current swap spread curves based on current observable rates. The company will document the data source(s) of the observable rates and the methodology of interpolation of non-published rates in the VM-31 report.

**VM-20 Appendix 2.F.1**

F. Current Benchmark Swap Spreads

1. For tenors of one-year to thirty-years, extract swap spread data determined as of the last business day of the month by maturity. For Bank of America data, convert the swap rate for each maturity to a swap spread by subtracting the corresponding maturity Treasury yield from the swap rate. For JP Morgan, the swap spread is provided for each maturity.

**Commented [MR1]:** The word “calculated” was proposed as a replacement for the word “prescribed” if the paragraph starting “The company may select…” was adopted. The paragraph was rejected so this language goes back to “prescribed.”

**Commented [MR2]:** The word “calculated” was proposed as a replacement for the word “prescribed” if the paragraph starting “The company may select…” was adopted. The paragraph was rejected so this language goes back to “prescribed.”

**Commented [MR3]:** This paragraph was not accepted, which results in the proposal reverting to the word “prescribed” and the deletion of the two proposed revisions to VM-31 below.
iv. Current Swap Spreads Data Source: If the company used something other than the NAIC produced current swap spreads as permitted by VM-20 Section 9.F.8.d., documentation of the data source(s) used in the determination of the swap spreads, and the methodology used to determine the non-published tenors.

Commented [MR4]: See the note above.
The Life Actuarial (A) Task Force met via conference call June 18, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman and Ben Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. Exposed the ACLI Revisions to AG 49-A

Mr. Andersen discussed the proposed loan leverage options. He said option 1 limits some of the good features available in policies and limits the ability to illustrate the loan leveraging aspects of those features. He said the illustrations allowed by option 1 permit relatively high values related to those features, which is contrary to the preferences of some state insurance regulators. He said option 2 eliminates some of the undesirable features that would inflate illustration values, but option 2 also limits some desirable features. Mr. Andersen said option 3 is like option 1, but the value of the option features would be mitigated by limiting the loan leverage.

Alex Silva (John Hancock) discussed the IUL Coalition examples (Attachment Two-A) of the workings of each of the three loan leveraging options. He noted the IUL Coalition’s concern about an example (Attachment Two-B) submitted by Securian Financial. He characterized the example as misleading. Graham Summerlee (Lincoln Financial), also a member of the IUL Coalition, provided examples (Attachment Two-C) refuting the assertions of the Securian Financial examples. He said the Securian example shows fixed bonuses but fails to show the related costs. He reiterated the IUL Coalition’s support for option 1.

Seth Detert (Securian Financial) said he is concerned that there is no requirement for charges related to the bonuses. He said it is a mistake to assume that every company would choose to cover bonuses with specific costs tied to the value of the fixed bonuses. He said the examples Securian provided are representative of common industry scenarios. He said the fixed bonuses on loans creates a loophole. He said the Securian Financial comment letter (Attachment Two-D) supports option 2 to close the loophole.

Mr. Yanacheak said it seems that option 2 goes too far and complicates consumer understanding of the illustration. He said the option 2 limit on wellness bonus credits is excessive. He said he supports option 1. When polled by Mr. Boerner, 14 Task Force members said they preferred an option more conservative than option 1.

Mr. Andersen said he supports option 2. Mr. Yanacheak said he does not fully agree with option 2 and thinks that option 3 relitigates the loan leverage discussion. He said he has previously stated his dislike for loan leveraging but does not consider wellness bonuses as loan leverage and would support option 3. Mr. Andersen was asked to consider allowing companies to use either option 2 or option 3 depending on the policy circumstances. Mr. Yanacheak said writing the language for allowing company choice would be difficult. Mr. Boerner asked whether Task Force members preferred option 2 or option 3. Eleven members preferred option 3. Five members voted for option 2. Three members abstained.

Brian Bayerle (American Council of Life Insurers—ACLI) discussed the technical edits (Attachment Two-E) made to AG 49-A, the proposed revision of Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest (AG 49). Mr. Chupp suggested several non-substantive edits.

Mr. Andersen made a motion, seconded by Mr. Schallhorn, to expose the ACLI revisions to AG 49-A, including the language for option 3 and the edits suggested by Mr. Chupp, for a seven-day public comment period ending June 24. The motion passed unanimously.
Having no further business, the Life Actuarial (A) Task Force adjourned.

W:\National Meetings\2020\Summer\TF\LATF Calls\06-18\June 18 Minutes.docx
June 12, 2020

Fred Andersen
Deputy Commissioner of Insurance
Minnesota Department of Commerce
Chair, NAIC IUL Illustration (A) Subgroup

Re: Proposed Changes to Actuarial Guideline 49 Loan Illustration Provisions

Fred:

On behalf of the companies listed below (the “IUL Coalition”), we are submitting this letter in support of Option 1 in the draft of Actuarial Guideline 49 (“AG 49-A”) that was submitted by the ACLI to the Life Actuarial Task Force (“LATF”).

Lincoln Financial Group
Pacific Life Insurance Company
National Life Group
John Hancock
Sammons Financial Group

Background

Indexed loans allow policyholders to take loans from their policies and continue to earn indexed interest on the loaned policy cash values designated by the insurer as loan collateral. The mechanics that support indexed interest on loaned values are very similar to the mechanics that support indexed interest on unloaned values:

- Account value (AV) → Company earns yield (e.g., 4%) → Yield used to buy hedges → Hedge payoffs support index credits (e.g., 7.00%)
- Unloaned AV → Company earns yield (e.g., 4%) → Yield and loan charges used to buy hedges → Hedge payoffs support index credits (e.g., 7.00%)
- Loaned AV → Company collects loan charges (e.g., 4%)
The same risk premium that supports index credits in excess of the company’s portfolio yield also supports index credits in excess of the collected loan charge.

Although the mechanics that support indexed interest on loaned and unloaned values are very similar, the presence of a loan balance can make IUL policies more sensitive to indexed returns. Thus, when LATF first adopted AG 49, regulators chose to limit the illustrated “loan leverage” (the difference between the illustrated credits on cash values held as loan collateral or “indexed loan credit” and the loan charge) to 100 basis points.

Today, LATF has exposed three options for consideration. Each of those options would limit indexed loan leverage inclusive of all index multipliers, index bonuses, and other index credits. The options differ in the following ways:

- Option 1 would limit indexed loan leverage to 100 basis points;
- Option 2 would limit all indexed and non-indexed loan credits in excess of the loan charge to 100 basis points; and
- Option 3 would limit indexed loan leverage to 50 basis points.

**The IUL Coalition Supports Option 1**

Option 1 achieves the stated goal of imposing an appropriate level of new, additional conservatism on illustrations of indexed loan leverage. Option 1 is consistent with the underlying principles underlying the original loan leverage rule in AG 49. Options 2 and 3, on the other hand, go beyond regulators’ stated concerns about IUL illustrations and would create new limits on illustrations applicable to all IUL products.

The purpose of the original loan leverage rule in AG 49 was to limit the difference between the indexed loan credit and the loan charge. That limit was considered desirable because “leverage” causes increased policy sensitivity. That rationale does not, however, apply to non-indexed credits. Non-indexed credits (e.g., a fixed, guaranteed persistency bonus or wellness credits) are not supported by hedge returns that can vary and do not contribute to increased policy sensitivity. Instead, non-indexed credits are supported by mechanisms that are not dependent on indexed returns, such as policy charges and/or margins on COIs. Furthermore, there are already limits to the amount of non-indexed credits that can be illustrated, as the illustrated level of non-indexed credits are subject to self-support/lapse-support tests. We therefore urge LATF to adopt Option 1 in AG 49-A because it addresses regulator concerns and accomplishes the purpose of the loan leverage rule in AG 49 without unnecessarily limiting non-indexed credits.

In addition to concerns that have been expressed about the use of the term “charge reductions” in Option 2, we do not support Option 2 for additional reasons. Specifically, Option 2 goes beyond indexed loan leverage by limiting all credits, regardless of whether they are tied to an index. Option 2 would apply to illustrations for all products— including products without multipliers or other enhancements. Option 2 would also discourage innovation. For example, a company desiring to offer non-indexed bonuses would need to illustrate the charges related to the bonus, yet would also be prohibited from illustrating the benefit on loaned account values with indexed loans. Option 2 would also introduce inconsistencies that would cause customer confusion (e.g., inconsistent treatment of features between unloaned AV vs loaned AV, standard loans vs indexed loans, max illustrated rate vs lower illustrated rates, and UL vs IUL).
Likewise, we do not support Option 3 because it would also add conservatism for illustrations of all IUL products (including products without multipliers or other enhancements). The 100 basis point loan leverage limit already includes conservatism for index loans.

The following example demonstrates the impact of the different options:

<table>
<thead>
<tr>
<th></th>
<th>Pre AG49</th>
<th>AG49</th>
<th>AG49-A Option 1</th>
<th>AG49-A Option 2</th>
<th>AG49-A Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Assumed illustrated rate</td>
<td>7.00%</td>
<td>7.00%</td>
<td>7.00%</td>
<td>7.00%</td>
<td>7.00%</td>
</tr>
<tr>
<td>B. Asset based charge</td>
<td>2.00%</td>
<td>2.00%</td>
<td>2.00%</td>
<td>2.00%</td>
<td>2.00%</td>
</tr>
<tr>
<td>C. Index multiplier</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>D. Index loan charge rate</td>
<td>4.00%</td>
<td>4.00%</td>
<td>4.00%</td>
<td>4.00%</td>
<td>4.00%</td>
</tr>
<tr>
<td>E. Section 6 Limit¹</td>
<td>n/a</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.00%</td>
<td>4.50%</td>
</tr>
<tr>
<td>F. Index loan credit rate²</td>
<td>8.50%</td>
<td>5.50%</td>
<td>5.00%</td>
<td>5.00%</td>
<td>4.50%</td>
</tr>
</tbody>
</table>

Loan Leverage (Total Index Credits - Charge Rate = F – D)

<table>
<thead>
<tr>
<th></th>
<th>Pre AG49</th>
<th>AG49</th>
<th>AG49-A Option 1</th>
<th>AG49-A Option 2</th>
<th>AG49-A Option 3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pre AG49</th>
<th>AG49</th>
<th>AG49-A Option 1</th>
<th>AG49-A Option 2</th>
<th>AG49-A Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Leverage (Total Index Credits - Charge Rate = F – D)</td>
<td>4.50%</td>
<td>1.50%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>0.50%</td>
</tr>
</tbody>
</table>

G. Non-indexed bonus (e.g. persistency bonus) applicable to indexed loaned amount

<table>
<thead>
<tr>
<th></th>
<th>Pre AG49</th>
<th>AG49</th>
<th>AG49-A Option 1</th>
<th>AG49-A Option 2</th>
<th>AG49-A Option 3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>G. Non-indexed bonus (e.g. persistency bonus) applicable to indexed loaned amount</th>
<th>Pre AG49</th>
<th>AG49</th>
<th>AG49-A Option 1</th>
<th>AG49-A Option 2</th>
<th>AG49-A Option 3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Allowed to illustrate on indexed loaned amount?</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
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<tr>
<td>Wellness credits</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed, guaranteed persistency bonus</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Other non-indexed credits &amp; bonuses</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

¹100 bps for AG 49 (excluding index multiplier and charge), 100 bps for Option 1 (including index multiplier and charge), 100 bps for Option 2 (including ALL bonuses and credits), 50 bps for Option 3

²Equals min(A,E) x (1 + C) - B for Pre AG 49 and AG 49, Equals min(A,E) for AG 49-A Options 1, 2, and 3

Observations

- Option 1 substantially limits the indexed credit to the loan amount, and adds conservatism for illustrations of products with multipliers or other enhancements beyond the current rule in AG 49 to address the stated concerns
- Option 2 would add even more conservatism for illustrations of all products because it would not allow the illustration of non-indexed credits & bonuses such as wellness credits or fixed, guaranteed persistency bonuses
- Option 3 would also add more conservatism for illustrations of all IUL products
March 25 IUL Coalition Comment Letter

In our comment letter dated March 25, 2020, we provided additional support for Option 1. For ease of reference we are providing a summary of key points from that letter:

1. **Non-indexed credits do not contribute to loan “leverage.”** As described in the ACLI comment letter, loan “leverage” is when the index credit is higher than the loan charge. Non-indexed credits do not impact the index return or the loan charged rate, so **Option 1 and Option 2 provide the same limit to loan leverage.**

2. **Option 2 creates inconsistencies.**
   a. **Loaned vs. Unloaned Values within IUL product.** Option 2 would allow the illustration of non-indexed credits on unloaned values but not on loaned values. The leads to difficulties for a consumer to compare and understand the costs associated with a loan and the impact on benefits under the policy.
   b. **Standard Loans vs. Indexed Loans within IUL product.** Option 2 would allow the illustration of non-indexed credits on Standard Loans but not on Indexed Loans. This creates confusion to the consumer when determining which type of loan would be best suited for them.
   c. **Maximum illustrated rate vs. lower illustrated rates.** Option 2 would allow the illustration of non-indexed credits at lower illustrated rates. This is misleading because it gives the consumer the impression that the bonus amount truly varies by index performance.
   d. **UL vs. IUL.** Option 2 would create a discrepancy between UL and IUL illustrations because UL policies can illustrate non-indexed credits on loaned values. This difference will make it more difficult for the applicant to understand which product better suits his or her needs and will also make it more difficult to compare the mechanics of each product.

3. **Innovative products will be disadvantaged.** Many innovative products are designed to add non-indexed credits that could increase a customer’s policy value. The best way for a customer to understand the benefits derived from these features is in the illustration. Option 2 would create a disadvantage for innovative product designs, such as policies that offer wellness credits to customers who engage in activities that help them live longer and healthier lives.

4. **Option 1 does not provide any undue “optimism” compared to Option 2.** The illustration of non-indexed credits does not any additional optimism because the credits will be paid regardless of future index performance. Therefore the level of “optimism” in projecting uncertain events like indexed returns is identical between the two options.

In conclusion, AG 49 was created to limit the illustration of indexed performance. Option 2 goes beyond the scope of AG 49 by restricting the illustration of non-indexed credits and would add conservatism for all IUL products (including products without multipliers or other enhancements). Option 3 would also add conservatism for all IUL products (including products without multipliers or other enhancements). Thus, the IUL Coalition urges LATF to adopt Option 1 in AG 49-A because Option 1 limits the illustration of indexed loan credits while allowing for the illustration of innovative non-indexed product features.
We appreciate the opportunity to provide input to the IUL Subgroup and look forward to further discussions.

Respectfully Submitted,

Scott R. Harrison
High Point Strategies, LLC
scott@highpointstrategies.llc

c: Reggie Mazyck, NAIC
**Illustration of Loan Options**

Issue age 55

$35,000 annual premium for 15 years

20 years of annual loans starting in policy year 16

6% Index Interest Credit - Option 1 & 2 (Option 3 only 5.5%) ; 5% Loan Charge

---

**Example shows impact of non-indexed bonuses under different AG49 loan options – differences from Option 2 (Recommendation) in red.**

<table>
<thead>
<tr>
<th>Bonus not linked to index performance - illustrative examples, future designs may be higher</th>
<th>Option 1 (Bonus applied to non-loaned AV and loaned AV in excess of 100 bp loan leverage)</th>
<th>Recommendation: Option 2 (Bonus applied to non-loaned AV only, limited to 100 bp loan leverage)</th>
<th>Option 3 (Bonus applied to non-loaned AV and loaned AV in excess of 50 bp loan leverage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>57,564</td>
<td>57,564</td>
<td>54,498</td>
</tr>
<tr>
<td>0.50%</td>
<td>66,110</td>
<td>62,482</td>
<td>62,482*</td>
</tr>
<tr>
<td>1.00%</td>
<td>75,861</td>
<td>67,738</td>
<td>71,570</td>
</tr>
<tr>
<td>1.50%</td>
<td>86,982</td>
<td>73,354</td>
<td>81,910</td>
</tr>
<tr>
<td>2.00%</td>
<td>99,664</td>
<td>79,352</td>
<td>93,669</td>
</tr>
</tbody>
</table>

*Same results as "Option 2" because here "Option 3" effectively shows 1% loan leverage.
June 17, 2020

Fred Andersen
Deputy Commissioner of Insurance
Minnesota Department of Commerce
Chair, NAIC IUL Illustration (A) Subgroup

Re: Proposed Changes to Actuarial Guideline 49 Loan Illustration Provisions – Added Example

Fred:

On behalf of the companies listed below (the “IUL Coalition”), we are submitting examples in addition to our June 12 letter in support of Option 1 in the draft of Actuarial Guideline 49 (“AG 49-A”) that was submitted by the ACLI to the Life Actuarial Task Force (“LATF”). Our objective through these examples is to increase understanding about each of the three loan options that LATF is considering, and their potential impact.

Lincoln Financial Group
Pacific Life Insurance Company
National Life Group
John Hancock
Sammons Financial Group

These examples demonstrate each of the following key takeaways:

- The impact of fixed persistency bonuses is vastly overstated if the corresponding charge is not included.
- Our examples show Option 2 results in policies with fixed persistency bonuses illustrating worse than policies without fixed persistency bonuses when indexed loans are also illustrated.
- Option 1 does not create the risk of runaway illustration values.
- Option 2 creates inconsistent treatment of non-index credits between indexed loans and standard loans.

Discussion

Concerns about Option 1 claim that it creates the risk of “runaway illustrations,” (i.e., that non-indexed features could significantly enhance illustrated values). These concerns fail to acknowledge the critical fact that the illustrated values would also need to reflect the corresponding cost of the benefit. Our examples show that while the benefits of non-indexed features can be material, once the associated cost is also included the resulting net impact on illustrated values is less material.

The hypothetical examples below assume the illustration of an IUL policy where the insured’s issue age is 55 years old, premiums are paid on the policy for 15 years and an indexed loan is taken for 20 years. The
illustrated loan interest crediting rate is 6% and the loan interest charged rate is 5%, so the illustration values are at the maximum 1% difference between the index loan credited rate and charged rate.

Based on the above assumptions, the following hypothetical examples compare how Options 1, 2 and 3 impact illustrated values under three different scenarios:

(A) No fixed bonus
(B) 0.50% fixed bonus paid each year on both loaned and non-loaned values
(C) 1.00% fixed bonus – paid each year on both loaned and non-loaned values

Options 1 and 3 allow the full amount of the bonus to be included in illustrated values for both loaned and non-loaned values. Option 2 limits the illustration of the bonus to non-loaned values only. Option 3 has lower illustrated values than Option 1 because the 1% loan leverage limit is reduced to 0.50%. Standard loans are also included as a comparison point.

<table>
<thead>
<tr>
<th>Bonus not linked to index performance</th>
<th>Maximum annual loan</th>
<th>Std Loan Option 1, 2, &amp; 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Option 1</td>
<td>58,202</td>
</tr>
<tr>
<td>0.50%</td>
<td>Option 2</td>
<td>66,995</td>
</tr>
<tr>
<td>1.00%</td>
<td>Option 3</td>
<td>76,906</td>
</tr>
</tbody>
</table>

As expected, if only the bonus amount is included without reflecting the associated cost, the illustrated values could be significantly higher when adding a fixed bonus. This is not how the illustrated values are determined, however. In actual practice, the carrier needs to offset the cost of the bonus to maintain profitability levels, and to pass illustration testing. This offset results in a material change in the illustrated values and mitigates the risk of runaway illustrations.

The examples were then updated to include the following costs:

- No fixed bonus, no additional cost
- 0.50% fixed bonus, with an associated cost of 5.59% of premium
- 1.00% fixed bonus, with an associated cost of 10.92% of premium
### Maximum annual loan

<table>
<thead>
<tr>
<th>Bonus not linked to index performance</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Std Loan Option 1, 2, &amp; 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>58,202</td>
<td>58,202</td>
<td>55,160</td>
<td>52,421</td>
</tr>
<tr>
<td>0.50%</td>
<td>61,503</td>
<td>58,190</td>
<td>58,190</td>
<td>55,217</td>
</tr>
<tr>
<td>1.00%</td>
<td>64,816</td>
<td>57,997</td>
<td>61,217</td>
<td>57,997</td>
</tr>
</tbody>
</table>

### Change in maximum annual loan

<table>
<thead>
<tr>
<th>Change from no bonus</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Std Loan Option 1, 2, &amp; 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50%</td>
<td>3,301</td>
<td>(11)</td>
<td>3,030</td>
<td>2,796</td>
</tr>
<tr>
<td>1.00%</td>
<td>6,614</td>
<td>(204)</td>
<td>6,057</td>
<td>5,577</td>
</tr>
</tbody>
</table>

When reflecting the cost of the bonus in Options 1 and 3, the illustrated values are increased by adding a fixed bonus. Option 2 shows reduced illustrated values. This reduction results because, while the full amount of the bonus needs to be accounted for in setting the cost of providing the bonus, Option 2 does not allow the bonus to be illustrated on loaned values. This example demonstrates, however, that the additional illustrated value from an indexed loan is relatively modest when compared to the impact on standard loan illustrated values. The treatment of the fixed persistency bonus is consistent between Indexed Loans and Standard Loans for Option 1 (similar size increase in maximum annual loan) while the treatment is inconsistent between Indexed Loans and Standard Loans for Option 2 (maximum annual loan decreases for Indexed Loans but increases for Standard Loans).

Furthermore, the policyholder would also see a reduction in early cash value on the illustration due to the added charge to cover the associated cost of the bonus. This would be an important consideration for a policyholder evaluating the costs and benefits of the bonus.

In conclusion, these examples demonstrate that the impact on illustrated values from adding a fixed bonus on indexed loan illustration values is not significantly greater than illustrated values for a standard loan. They also address stated concerns about a significant risk that illustrated values will substantially increase under Option 1. For the reasons outlined in our June 12 letter, we urge LATF to adopt Option 1.

We appreciate the opportunity to provide input to the IUL Subgroup and look forward to further discussions.

Respectfully Submitted,

Scott R. Harrison
High Point Strategies, LLC
scott@highpointstrategies.llc

cc: Reggie Mazyck, NAIC
June 12, 2020

Fred Andersen
Acting Deputy Commissioner of Insurance
Minnesota Department of Commerce
85 7th Place East, Suite 280
St. Paul, MN 55101

Dear Fred,

The undersigned companies present these comments in response to the NAIC IUL Illustrations (A) Subcommittee request for comments on the exposed draft of the ACLI recommended changes to AG49.

Respectfully,

Seth Detert, Securian Financial
Pete Rothermel, Nationwide
Jacqueline Fallon, Penn Mutual Life Insurance Co
Seth Harlow, Mutual of Omaha

We want to take this opportunity to reiterate that it is our belief that the exposed ACLI revisions to AG49 meet the stated requirements of LATF:

- That products with charged-for multipliers and/or buy-up accounts illustrate substantially similar to those products without the additional charges.
- That, within an illustration, there is consistent treatment of policy features such as multipliers, index bonuses, participating loan crediting, and non-benchmark indices across the industry.

We appreciate the time and energy spent by the Subcommittee, the ACLI, and the ACLI member companies driving us towards a vote on the revisions to AG49. On the most recent call there was a lively discussion around the two options for loan leverage presented in the ACLI recommendation. This spawned a third option to be introduced and added to the subsequent ACLI recommendation.

We continue to recommend the Subcommittee adopt **Option #2** of the ACLI comment letter in regard to the applicability of loan leverage. The impact of participating loans is unique to the IUL product and that in and of itself gives IUL products certain advantages over other product types in the industry. Thus, it is important that illustrations be inclusive of all types of credits in the loan leverage limit to not overemphasize the impact participating loans can have on the illustrated values of IUL products and avoid giving consumers unrealistic expectations.

During the call a comment was made that having examples showing the impact of the three different loan arbitrage options would help regulators understand the impacts of each option. Below we have provided a summary table of the work we have done quantifying the impact of each loan option on a hypothetical illustrated scenario for supplemental retirement income.
**Illustration of Loan Options**

Issue age 55

$35,000 annual premium for 15 years

20 years of annual loans starting in policy year 16

6% Index Interest Credit - Option 1 & 2 (Option 3 only 5.5%) ; 5% Loan Charge

<table>
<thead>
<tr>
<th>Bonus not linked to index performance - illustrative examples, future designs may be higher</th>
<th>Option 1 (Bonus applied to non-loaned AV and loaned AV in excess of 100 bp loan leverage)</th>
<th>Recommendation: Option 2 (Bonus applied to non-loaned AV only; limited to 100 bp loan leverage)</th>
<th>Option 3 (Bonus applied to non-loaned AV and loaned AV in excess of 50 bp loan leverage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>57,564</td>
<td>57,564</td>
<td>54,498</td>
</tr>
<tr>
<td>0.50%</td>
<td>66,110</td>
<td>62,482</td>
<td>62,482*</td>
</tr>
<tr>
<td>1.00%</td>
<td>75,861</td>
<td>67,738</td>
<td>71,570</td>
</tr>
<tr>
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<td>79,352</td>
<td>93,669</td>
</tr>
</tbody>
</table>

*Same results as "Option 2" because here "Option 3" effectively shows 1% loan leverage.
THE APPLICATION OF THE LIFE ILLUSTRATIONS MODEL REGULATION TO POLICIES WITH INDEX-BASED INTEREST SOLD AFTER [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption*]

Background

The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

In 2019, the NAIC decided that illustrations of products with multipliers, cap buy-ups, and other enhancements should not illustrate better than products without such features. This new requirement is intended to apply to illustrations on policies sold on or after the effective date of this guideline while the existing requirements continue to apply for inforce illustrations on policies sold before the effective date of this guideline.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.
2. Limits the policy loan leverage shown in an illustration.
3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective for all new business and in force illustrations on policies sold on or after [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption].

2. Scope

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

i. The policy is subject to Model #582.
ii. The policy offers Indexed Credits.

3. Definitions

A. Alternate Scale: A scale of non-guaranteed elements currently being illustrated such that:

   i. The total annual percentage rate (Annual Rate) of Indexed Credits for each Index Account does not exceed the lesser of the maximum total percentage rate (Annual Rate) of Indexed Credits for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the total annual percentage rate (Annual Rate) of Indexed Credits for each Index Account shall not exceed the average of the maximum total percentage rate (Annual Rate) of Indexed Credits for the illustrated scale and the guaranteed total percentage rate (Annual Rate) of Indexed Credits.

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Credits for that account. However, the total annual percentage rate of Indexed Credits for each Index Account shall never be less than the guaranteed total annual percentage rate of Indexed Credits for that account.

ii. If the illustration includes a loan, the illustrated Policy Loan Interest Credited Rate shall not exceed the illustrated Policy Loan Interest Rate. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 4%.

iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. Annual Net Investment Earnings Rate: Gross portfolio annual earnings rate of the general account assets (excluding hedge assets for Indexed Credits), less provisions for investment expenses and default cost, allocated to support the policy. Charges of any kind are not included in the Annual Net Investment Earnings Rate.

C. Annual Rate of Indexed Credits: The total annualized Indexed Credits expressed as a percentage of the account value used to determine the Indexed Credits.

D. Benchmark Index Account: An Index Account with the following features:
   i. The interest calculation is based on the percent change in S&P 500® Index value only, over a one-year period using only the beginning and ending index values. (S&P 500® Index ticker: SPX)
   ii. An annual cap is used in the interest calculation.
   iii. The annual floor used in the interest calculation shall be 0%.
   iv. The participation rate used in the interest calculation shall be 100%.
   v. Interest is credited once per year.
   vi. The hedge budget used to determine the cap in 3 (D) (ii) does not exceed the Annual Net Investment Earnings Rate. Charges of any kind are not included when determining the applicable annual cap rate.
   vii. There are no enhancements or similar features that provide additional amounts credited that are linked to an index or indices in excess of the interest provided by 3 (D) (i) through 3 (D) (v), including but not limited to experience refunds, multipliers, and bonuses.
   viii. There are no limitations on the portion of account value allocated to the account.
   ix. A single Benchmark Index Account will be determined for each policy. This can be either an Index Account offered with the illustrated policy or determined according to Section 4 (A) (ii) for purposes of complying with this guideline. A policy shall have no more than one Benchmark Index Account.

E. Fixed Account: An account where the amounts credited are not tied to an index or indices.

F. Index Account: An account where some or all of the amounts credited are Indexed Credits.

G. Indexed Credits: Any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy value that is linked to an index or indices. Credits to the policy resulting from a floor are included.

H. Hedge Budget: For each Index Account, the total annualized amount assumed to be used to generate the Indexed Credits of the account, expressed as a percent of the account value in the Index Account. This total annualized amount should be consistent with the hedging program of the company.
H. Indexed Credits: Any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy values that is linked to an index or indices. Amounts credited to the policy resulting from a floor greater than zero on an Index Account are included.

I. Loan Balance: Any outstanding policy loan and loan interest, as defined in the policy.

J. Policy Loan Interest Rate: The current annual interest rate as defined in the policy that is charged on any Loan Balance. This does not include any other policy charges.

K. Policy Loan Interest Credited Rate: The annualized interest rate credited that applies to the portion of the account value backing the Loan Balance, as defined in the policy.

i. For the portion of the account value in the Fixed Account that is backing the Loan Balance that is in a Fixed Account, the Policy Loan Interest Credited Rate is the applicable annual interest crediting rate, as defined in the policy.

[OPTION FOR CONSIDERATION: Please see commentary on these approaches in the ACLI April 14, 2020 Comment Letter. There is an Option 3 that would use the language from Option 1 and Option 2 may need below but reduce the limit in Section 6 from 100bp to be tightened up 50bp.]

Option 1: ii. For any portion of the account value in an Index Account that is backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage Annual Rate of Indexed Credits, net of any applicable Supplemental Hedge Budget, for that account, as defined in the policy.

Option 2: ii. For any portion of the account value in an Index Account that is backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage rate of the Annual Rate of Indexed Credits and all illustrated bonuses, charge reductions or other enhancements intended to impact the portion of the account value backing the Loan Balance, net of any applicable Supplemental Hedge Budget for that account, as defined in the policy.

L. Supplemental Hedge Budget: For each Index Account, the Hedge Budget minus the minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that determines used in the determination of the Benchmark Index Account. The Supplemental Hedge Budget will never be less than zero. This amount should be consistent with the hedging program of the company.

4. Illustrated Scale

The total annual percentage rate Annual Rate of Indexed Credits for the illustrated scale for each Index Account shall be limited as follows:

A. Calculate the geometric average annual credited rate for the Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

i. If the insurer offers a Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the Benchmark Index Account in 4 (A).

ii. If the insurer does not offer a Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of the Benchmark Index Account, and shall use that cap in 4 (A).

B. For the Benchmark Index Account the total Annual Rate of Indexed Credits illustrated as a percentage of the account value in the Index Account shall not exceed the minimum of (i) and (ii):
i. the arithmetic mean of the geometric average annual credited rates calculated in 4 (A).

ii. 145% of the Annual Net Investment Earnings Rate.

C. For any other Index Account that is not the Benchmark Index Account in 3 (C), the total Annual Rate of Indexed Credits illustrated as a percentage of the account value in the Index Account prior to the deduction of any charges used to fund a Supplemental Hedge Budget shall not exceed the minimum of (i) and (ii):

i. The maximum Annual Rate of Indexed Credits for the Benchmark Index Account calculated in 4 (B) plus the Supplemental Hedge Budget for the Index Account.

ii. The total Annual Rate of Indexed Credits that reflect reflecting the fundamental characteristics of the Index Account and the appropriate relationship to the expected risk and return of the Benchmark Index Account. The illustration actuary shall use actuarial judgment to determine this value using lookback methodology consistent with 4 (A) and 4 (B) (i) where appropriate.

D. For purposes of compliance with Section 6 (C) of Model #582, the Supplemental Hedge Budget may consist subtracted from the illustrated rate before comparing to exceed the earned interest rate underlying the Disciplined Current Scale.

At the beginning of each calendar year, the insurer shall be allowed up to three (3) months to update the credited rate for each Index Account in accordance with 4 (B) and 4 (C).

5. Disciplined Current Scale
The earned interest rate for the disciplined current scale shall be limited as follows:

A. If an insurer engages in a hedging program for Indexed Credits in an account, the assumed earned interest rate underlying the disciplined current scale for the policy that account, inclusive of all general account assets, both hedge and non-hedge assets, that support the policy, net of default costs and investment expenses (including the amount spent to generate the Indexed Credits of the policy) shall not exceed:

i. the Annual Net Investment Earnings Rate, plus

ii. 45% of the lesser of (1) and (2):

1. Hedge Budget minus any floor, annual floor, to the extent that the floor is supported by the Hedge Budget.

2. The minimum of the Annual Net Investment Earnings Rate and the hedge budget that determines used in the determination of the Benchmark Index Account.

These amounts should be adjusted for timing differences in the hedge cash flows to ensure that fixed interest is not earned on the hedge cost. The Hedge Budget minus any annual floor, to the extent that the floor is supported by the Hedge Budget.

Guidance Note: The above approach does not stipulate any required methodology as long as it produces a consistent limit on the assumed earned interest rate underlying the disciplined current scale.

For a product with multiple Index Accounts with different Hedge Budgets that are less than or equal to the NIER, a maximum rate in 5.A. should be calculated for each set account. All accounts with different Hedge Budgets fixed and indexed, within a policy can be tested in aggregate.

B. If an insurer does not engage in a hedging program for Indexed Credits, the assumed earned interest rate underlying the disciplined current scale shall not exceed the Annual Net Investment Earnings Rate.
6. Policy Loans

[OPTION FOR CONSIDERATION: In addition to the 2 options outlined in 3.K, a third option was suggested to use the Option 1 language but reduce below from 100 to 50 bps.]

If the illustration includes a loan, the illustrated Policy Loan Interest Credited Rate shall not exceed the illustrated Policy Loan Interest Rate by more than [Options 1 and 2: 100; Option 3: 50] basis points. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 5%.

7. Additional Standards

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. For each Index Account illustrated, a table showing actual historical index changes and corresponding hypothetical Indexed Credits using current index parameters for the most recent 20-year period.
The Life Actuarial (A) Task Force met via conference call June 11, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman and Ben Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Manny Hidalgo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. **Adopted Revisions to Model 805**

   Jason Berkowitz (Insured Retirement Institute-IRI) said the IRI comment letter (Attachment Three-A) supports the revision of the *Standard Nonforfeiture Law for Individual Deferred Annuities (#805)* that lowers the nonforfeiture interest rate floor 1% to 0%.

   Brian Bayerle (American Council of Life Insurers—ACLI) said there is an urgent need for adoption of the revisions. He said the ACLI is open to revisiting the issue later if other considerations arise.

   Mr. Chou made a motion, seconded by Mr. Carmello, to adopt the revisions to #805 (Attachment Three-B). The motion passed unanimously.

2. **Re-exposed APF 2020-06**

   Pat Allison (NAIC) said the NAIC calculates swap spreads using methodology outlined in the *Valuation Manual*. She said the first section of the proposal addresses how the NAIC use of JP Morgan and Bank of America values has become an issue, particularly for variable annuity (VA) writers. Amendment proposal 2020-06 changes the methodology for calculation of the 3-month and 6-month swap spreads to use market observable values for U.S. Treasury rates and the London Interbank Offered Rate (LIBOR), rather than the average of the values from JPMorgan and Bank of America. She said another section of the proposal provides language that facilitates the replacement of LIBOR, when NAIC staff determine that using LIBOR values is no longer feasible. The third section of the proposal allows companies to calculate their own swap spreads using market observable values. Ms. Allison noted that market observable values are available only at certain tenors of the swap rate curve. She said companies will have to decide how to determine the rates at points between tenors and will be required to disclose their methodologies. Mr. Bayerle said that, in addition to disclosing their methodologies, the proposal requires companies to disclose their data sources. He said the ACLI is comfortable with the NAIC determining when to discontinue use of LIBOR.

   Mr. Ostlund suggested the word “calculated” be replaced with the word “prescribed.” Mr. Boerner said that the option of making that change could be included as part of the exposure. Mr. Ostlund also suggested that the language describing the replacement of LIBOR be revised. Ms. Allison worked Mr. Bayerle, Mr. Ostlund and Mr. Carmello to revise the wording for the exposure.

   Mr. Ostlund made a motion, seconded by Mr. Carmello, to re-expose amendment proposal 2020-06 (Attachment Three-C), with the edits suggested by Mr. Ostlund and provided by Ms. Allison, for a 7-day public comment period ending June 17. The motion passed unanimously.

3. **Re-exposed APF 2020-07**

   Jim Hodges (National Alliance of Life Companies—NALC) said the NALC comment letter (Attachment Three-D) opposes adoption of amendment proposal 2020-07. He suggested the Task Force pursue a comprehensive solution that modernizes the *Standard Nonforfeiture Law (#808)*. He said the Task Force should wait until after the U.S. Congress takes official action on changes to Section 7702 of the Internal Revenue Code (IRC) before considering the amendment proposal. He said any change
should consider the effect on low to middle income consumers. Tom Kalmbach (Globe Life) said the Globe Life comment letter (Attachment Three-E) also opposes the amendment proposal and asks for consideration of the impact on consumers of lowering the nonforfeiture rate floor. He suggested lowering the interest rate on in kind benefits as an alternative. He said that in an era of higher interest rates, setting the nonforfeiture rate at 125% of the valuation interest rate provided a sufficient margin between the rates. He said as interest rates declined the margin also declined. He suggested that a revision to the law may be warranted. Mr. Bayerle said the low interest environment presents several challenges. The ACLI comment letter (Attachment Three-F) explains that the proposed change is in response to congressional legislative action and maintains the important relationship between the valuation rate and the nonforfeiture rate. Mr. Bayerle said as the valuation rate drops, there is an element of fairness in commensurately increasing the cash value. He said there have been discussions of revising #808, but that is a longer process that would not allow for a timely resolution of the issue. Mr. Kalmbach said companies can provide higher cash values even if the nonforfeiture floor remains at the current level. Ms. Ahrens said if companies are required to use a rate lower than the nonforfeiture rate floor to comply with the requirements of Section 7702 they would do so regardless of whether the amendment proposal is adopted.

Mr. Robinson suggested that the word “used” be replaced with “prescribed.” Mr. Bayerle agreed to the change.

Mr. Leung made a motion, seconded by Mr. Sartain, to re-expose amendment proposal 2020-07 (Attachment Three-G) with the edits suggested by Mr. Robinson, for a 7-day public comment period ending June 17. The motion passed unanimously.

4. **Adopted APF 2020-05**

Amendment proposal 2020-05 clarifies that the net premium reserve (NPR) is intended to reflect continuous payment of premiums and immediate payment of death claims. Mr. Hidalgo said his comment letter (Attachment Three-H) suggested adding wording to clarify that death claims on riders and supplemental benefits are intended to be reflected in the NPR. Jason Kehrberg (PolySystems, Inc.) agreed that the wording of the amendment proposal was intended to cover death claims on riders and supplemental benefits. The amendment proposal was edited to provide the clarification suggested by Mr. Hidalgo.

Mr. Ostlund made a motion, seconded by Mr. Robinson, to adopt amendment proposal 2020-05 (Attachment Three-I) with the recommended edits. The motion passed unanimously.

5. **Discussed 2020-02**

Bill Wilton (unaffiliated) said his comment letter (Attachment Three-J) makes the case that the amendment proposal is unnecessary because the requirements it attempts to clarify need no further clarification. He said he also has concerns about the use of the pre-tax interest maintenance reserve (IMR). Ms. Allison said the amendment proposal seeks to clarify that there are steps outlined in VM-20, Requirements for Principle-Based Reserves for Life Products, that cannot be skipped. She said reviews of PBR Actuarial Reports have revealed that some companies are skipping steps. Mr. Bock gave an example of companies holding zero reserves on small blocks of business, because they consider the block immaterial. He said that violates Section 2.G of VM-20, which says an approximation should not be biased in a downward direction. Mr. Carmello suggested the language in the proposed guidance note should be moved to the text. Philip Wunderlich (Nationwide) said the Nationwide comment letter (Attachment Three-K) suggests that the requirements should be balanced with practicality. He also said that requirements demonstrated in one year should not require demonstration in future years if there has not been a material change. Mr. Bayerle said the ACLI comment letter (Attachment Three-L) suggests that adding a new requirement when some companies are doing principle-based reserving (PBR) for the first time creates an additional burden. He said rather than adding prescription, state insurance regulators should approach specific companies with their issues. Mr. Robinson suggested that the companies should be able to consider the materiality of the pre-tax IMR. Ms. Ahrens advocated tabling the amendment proposal and expanding the use of VM-31, PBR Actuarial Report Requirements for Business Subject to a Principle-Based Valuation, instead of adding prescription. Mr. Boerner said the Task Force will resume the discussion on a future call.

Having no further business, the Life Actuarial (A) Task Force adjourned.
May 29, 2020

Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force (LATF)  

Mr. Reggie Mazyck  
Life Actuary, NAIC  

Re: Model 805 Exposure, Standard Nonforfeiture Law for Individual Deferred Annuities  

Dear Mr. Boerner and Mr. Mazyck:

On behalf of our members, the Insured Retirement Institute (“IRI”) appreciates the opportunity to comment on the proposed change to Model 805 Exposure. For the reasons set forth below, we support the proposal and respectfully urge the NAIC to move expeditiously to adopt the proposal.

The current financial environment is challenging institutional and individual investors and product offerings. The proposed change from 1% to 0% will give companies more flexibility to provide the value and benefits wanted and needed by consumers. If companies are required to offer 1% crediting rates, and interest rates remain low or decrease further, certain products will no longer be feasible to offer. The products most at risk are often those in greatest demand by consumers. For example, products with short surrender charge periods may not be able to find investments that have a high enough yield to support a 1% rate. At the same time, many consumers will be understandably hesitant to purchase long term products in a low yield environment. Additional guarantees in contracts such as a return of premium benefit may become unaffordable if the asset yield available is exhausted by the 1% guarantee.

IRI is committed to responding to the country’s economic condition with policy recommendations that support individual investment. Companies must have a diverse product portfolio to respond to the

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1 IRI is the leading association for the entire supply chain of insured retirement strategies, including life insurers, asset managers, and distributors such as broker-dealers, banks and marketing organizations. IRI members account for more than 95 percent of annuity assets in the U.S., include the top 10 distributors of annuities ranked by assets under management, and are represented by financial professionals serving millions of Americans. IRI champions retirement security for all through leadership in advocacy, awareness, research, and the advancement of digital solutions within a collaborative industry community.
changing economic and individual situation. IRI supports the responsive approach of Model 805 and encourages the Life Actuarial Task Force to adopt as proposed.

Thank you again for the opportunity to share our views on this important subject. Please contact the undersigned if you have questions about anything in this letter, or if we can be of any further assistance in connection with this important regulatory effort.

Sincerely,

Jason Berkowitz
Chief Legal & Regulatory Affairs Officer
Insured Retirement Institute

Liz Pujolas
Director, State Affairs
Insured Retirement Institute
STANDARD NONFORFEITURE LAW FOR INDIVIDUAL DEFERRED ANNUITIES
ACLI DRAFT EDIT APRIL 30, 2020

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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.

Section 3. Nonforfeiture Requirements
A. In the case of contracts issued on or after the operative date of this Act as defined in Section 13, no contract of annuity, except as stated in Section 2, shall be delivered or issued for delivery in this state unless it contains in substance the following provisions, or corresponding provisions which in the opinion of the commissioner are at least as favorable to the contract holder, upon cessation of payment of considerations under the contract:

(1) That upon cessation of payment of considerations under a contract, or upon the written request of the contract owner, the company shall grant a paid-up annuity benefit on a plan stipulated in the contract of such value as is specified in Sections 5, 6, 7, 8 and 10;

(2) If a contract provides for a lump sum settlement at maturity, or at any other time, that upon surrender of the contract at or prior to the commencement of any annuity payments, the company shall pay in lieu of a paid-up annuity benefit a cash surrender benefit of such amount as is
specified in Sections 5, 6, 8 and 10. The company may reserve the right to defer the payment of the cash surrender benefit for a period not to exceed six (6) months after demand therefor with surrender of the contract after making written request and receiving written approval of the commissioner. The request shall address the necessity and equitability to all policyholders of the deferral;

(3) A statement of the mortality table, if any, and interest rates used in calculating any minimum paid-up annuity, cash surrender or death benefits that are guaranteed under the contract, together with sufficient information to determine the amounts of the benefits; and

(4) A statement that any paid-up annuity, cash surrender or death benefits that may be available under the contract are not less than the minimum benefits required by any statute of the state in which the contract is delivered and an explanation of the manner in which the benefits are altered by the existence of any additional amounts credited by the company to the contract, any indebtedness to the company on the contract or any prior withdrawals from or partial surrenders of the contract.

B. Notwithstanding the requirements of this section, a deferred annuity contract may provide that if no considerations have been received under a contract for a period of two (2) full years and the portion of the paid-up annuity benefit at maturity on the plan stipulated in the contract arising from prior considerations paid would be less than $20 monthly, the company may at its option terminate the contract by payment in cash of the then present value of the portion of the paid-up annuity benefit, calculated on the basis on the mortality table, if any, and interest rate specified in the contract for determining the paid-up annuity benefit, and by this payment shall be relieved of any further obligation under the contract.

Section 4. Minimum Values

The minimum values as specified in Sections 5, 6, 7, 8 and 10 of any paid-up annuity, cash surrender or death benefits available under an annuity contract shall be based upon minimum nonforfeiture amounts as defined in this section.

A. (1) The minimum nonforfeiture amount at any time at or prior to the commencement of any annuity payments shall be equal to an accumulation up to such time at rates of interest as indicated in Subsection B of the net considerations (as hereinafter defined) paid prior to such time, decreased by the sum of Paragraphs (a) through (d) below:

(a) Any prior withdrawals from or partial surrenders of the contract accumulated at rates of interest as indicated in Subsection B;

(b) An annual contract charge of $50, accumulated at rates of interest as indicated in Subsection B;

(c) Any premium tax paid by the company for the contract, accumulated at rates of interest as indicated in Subsection B; and

(d) The amount of any indebtedness to the company on the contract, including interest due and accrued.

(2) The net considerations for a given contract year used to define the minimum nonforfeiture amount shall be an amount equal to eighty-seven and one-half percent (87.5%) of the gross considerations credited to the contract during that contract year.

B. The interest rate used in determining minimum nonforfeiture amounts shall be an annual rate of interest determined as the lesser of three percent (3%) per annum and the following, which shall be specified in the contract if the interest rate will be reset:
(1) The five-year Constant Maturity Treasury Rate reported by the Federal Reserve as of a date, or average over a period, rounded to the nearest 1/20th of one percent, specified in the contract no longer than fifteen (15) months prior to the contract issue date or redetermination date under Section 4B(4);

(2) Reduced by 125 basis points;

(3) Where the resulting interest rate is not less than one zero percent (10%); and

(4) The interest rate shall apply for an initial period and may be redetermined for additional periods. The redetermination date, basis and period, if any, shall be stated in the contract. The basis is the date or average over a specified period that produces the value of the five-year Constant Maturity Treasury Rate to be used at each redetermination date.

C. During the period or term that a contract provides substantive participation in an equity indexed benefit, it may increase the reduction described in Subsection B(2) above by up to an additional 100 basis points to reflect the value of the equity index benefit. The present value at the contract issue date, and at each redetermination date thereafter, of the additional reduction shall not exceed the market value of the benefit. The commissioner may require a demonstration that the present value of the additional reduction does not exceed the market value of the benefit. Lacking such a demonstration that is acceptable to the commissioner, the commissioner may disallow or limit the additional reduction.

D. The commissioner may adopt rules to implement the provisions of Section 4C and to provide for further adjustments to the calculation of minimum nonforfeiture amounts for contracts that provide substantive participation in an equity index benefit and for other contracts that the commissioner determines adjustments are justified.

Section 5. Computation of Present Value

Any paid-up annuity benefit available under a contract shall be such that its present value on the date annuity payments are to commence is at least equal to the minimum nonforfeiture amount on that date. Present value shall be computed using the mortality table, if any, and the interest rates specified in the contract for determining the minimum paid-up annuity benefits guaranteed in the contract.

Section 6. Calculation of Cash Surrender Value

For contracts that provide cash surrender benefits, the cash surrender benefits available prior to maturity shall not be less than the present value as of the date of surrender of that portion of the maturity value of the paid-up annuity benefit that would be provided under the contract at maturity arising from considerations paid prior to the time of cash surrender reduced by the amount appropriate to reflect any prior withdrawals from or partial surrenders of the contract, such present value being calculated on the basis of an interest rate not more than one percent (1%) higher than the interest rate specified in the contract for accumulating the net considerations to determine maturity value, decreased by the amount of any indebtedness to the company on the contract, including interest due and accrued, and increased by any existing additional amounts credited by the company to the contract. In no event shall any cash surrender benefit be less than the minimum nonforfeiture amount at that time. The death benefit under such contracts shall be at least equal to the cash surrender benefit.

Section 7. Calculation of Paid-up Annuity Benefits

For contracts that do not provide cash surrender benefits, the present value of any paid-up annuity benefit available as a nonforfeiture option at any time prior to maturity shall not be less than the present value of that portion of the maturity value of the paid-up annuity benefit provided under the contract arising from considerations paid prior to the time the contract is surrendered in exchange for, or changed to, a deferred paid-up annuity, such present value being calculated for the period prior to the maturity date on the basis of the interest rate specified in the contract for accumulating the net considerations to determine maturity value, and increased by any additional amounts credited by the company to the contract. For contracts that do not provide any death benefits prior to the commencement of any annuity payments, present values shall be calculated on the basis of such interest rate and the mortality table specified in the contract for determining the maturity value of the paid-up annuity benefit. However, in no event shall the present value of a paid-up annuity benefit be less than the minimum nonforfeiture amount at that time.
Section 8. Maturity Date

For the purpose of determining the benefits calculated under Sections 6 and 7, in the case of annuity contracts under which an election may be made to have annuity payments commence at optional maturity dates, the maturity date shall be deemed to be the latest date for which election shall be permitted by the contract, but shall not be deemed to be later than the anniversary of the contract next following the annuitant's seventieth birthday or the tenth anniversary of the contract, whichever is later.

Section 9. Disclosure of Limited Death Benefits

A contract that does not provide cash surrender benefits or does not provide death benefits at least equal to the minimum nonforfeiture amount prior to the commencement of any annuity payments shall include a statement in a prominent place in the contract that such benefits are not provided.

Section 10. Inclusion of Lapse of Time Considerations

Any paid-up annuity, cash surrender or death benefits available at any time, other than on the contract anniversary under any contract with fixed scheduled considerations, shall be calculated with allowance for the lapse of time and the payment of any scheduled considerations beyond the beginning of the contract year in which cessation of payment of considerations under the contract occurs.

Section 11. Proration of Values; Additional Benefits

For a contract which provides, within the same contract by rider or supplemental contract provision, both annuity benefits and life insurance benefits that are in excess of the greater of cash surrender benefits or a return of the gross considerations with interest, the minimum nonforfeiture benefits shall be equal to the sum of the minimum nonforfeiture benefits for the annuity portion and the minimum nonforfeiture benefits, if any, for the life insurance portion computed as if each portion were a separate contract. Notwithstanding the provisions of Sections 5, 6, 7, 8 and 10, additional benefits payable in the event of total and permanent disability, as reversionary annuity or deferred reversionary annuity benefits, or as other policy benefits additional to life insurance, endowment and annuity benefits, and considerations for all such additional benefits, shall be disregarded in ascertaining the minimum nonforfeiture amounts, paid-up annuity, cash surrender and death benefits that may be required by this Act. The inclusion of such benefits shall not be required in any paid-up benefits, unless the additional benefits separately would require minimum nonforfeiture amounts, paid-up annuity, cash surrender and death benefits.

Section 12. Rules

The commissioner may adopt rules to implement the provisions of this Act.

Section 13. Effective Date

After the effective date of this Act, a company may elect to apply its provisions to annuity contracts on a contract form-by-contract form basis before the second anniversary of the effective date of this Act. In all other instances, this Act shall become operative with respect to annuity contracts issued by the company after the second anniversary of this Act.

Chronological Summary of Actions (all references are to the Proceedings of the NAIC).

2017 3rd Quarter (amended).
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Brian Bayerle, ACLI – Interest Rate Swap Spread Determination

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:


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 attached.

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

Interest Rate Swap Spreads are currently being calculated by the NAIC under methodology outlined in the Valuation Manual. This APF changes the methodology for calculation of the 3-month and 6-month swap spreads to use market observable values for Treasury rates and LIBOR, rather than the average of these values from JP Morgan and Bank of America.

With the forthcoming termination of LIBOR, the requirements of the Valuation Manual will need to change. This APF provides broad guidance allowing for one or more currently unnamed rate to replace LIBOR in these calculations.

Additionally, this APF allows the company to calculate its own current swap spreads based on market observable values. The spread requirements are currently included in VM-20, with VM-21 referencing the applicable sections. With the potential of VM-22 likely having similar references, LATF may want to consider moving these and other asset requirements to their own section.

* 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.

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Notes: VM APF 2020-06

© 2010 National Association of Insurance Commissioners
VM-20 Section 9.F.8.d

Interest rate swap spreads over Treasuries shall be *prescribed calculated* by the NAIC for use throughout the cash-flow model wherever appropriate for transactions and operations including, but not limited to, purchase, sale, settlement, cash flows of derivative positions and reset of floating rate investments. A current and long-term swap spread curve shall be *prescribed calculated* for year one and years four and after, respectively, with yearly grading in between. The three-month and six-month points on the swap spread curves represent the corresponding London Interbank Offered Rate (LIBOR) spreads over Treasuries. There is an expectation that LIBOR will be discontinued, and prior to that time, the use of LIBOR will decline substantially. At such point, the LIBOR rates should be replaced with the most appropriate rates that replace LIBOR for the specified purpose. The NAIC will monitor these market-observable values and, in the event the then-current values are discontinued or replaced, will recommend an appropriate replacement to the Life Actuarial (A) Task Force.

The company may elect to produce their own current swap spread curves based on current observable rates. The company will document the data source(s) of the observable rates and the methodology of interpolation of non-published rates in the VM-31 report.

VM-20 Appendix 2.F.1

F. Current Benchmark Swap Spreads

1. For tenors of one-year to thirty-years, extract swap spread data determined as of the last business day of the month by maturity. For Bank of America data, convert the swap rate for each maturity to a swap spread by subtracting the corresponding maturity Treasury yield from the swap rate. For JP Morgan, the swap spread is provided for each maturity.

VM-31 Section 3.D.6.v (additional bullet):

v. Current Swap Spreads Data Source: If the company used something other than the NAIC produced current swap spreads as permitted by VM-20 Section 9.F.8.d, documentation of the data source(s) used in the determination of the swap spreads, and the methodology used to determine the non-published tenors.

VM-31 Section 3.F.4.h (additional bullet):

v. Current Swap Spreads Data Source: If the company used something other than the NAIC produced current swap spreads as permitted by VM-20 Section 9.F.8.d, documentation of the data source(s) used in the determination of the swap spreads, and the methodology used to determine the non-published tenors.
June 8, 2020

Mr. Mike Boerner
Chair, Life Actuarial Task Force
NAIC

Re: ACLI Proposal Regarding Non-Forfeiture Rates

Dear Mike:

I am writing on behalf of the members of the National Alliance of Life Companies (the NALC), a trade group composed of small and mid-sized life and health insurers across the United States. Our members focus on addressing the life insurance needs of middle income and working class Americans, and are pleased to offer comments on behalf of the policyholders we serve to the proposal by the American Council of Life Insurance (the ACLI) to eliminate the 4% floor for non-forfeiture interest rates set out in the Valuation Manual.

After carefully considering the proposal, we must share our opposition to its adoption until more a more thorough study is completed. Many of the customers of our member companies are working class Americans who buy basic whole life policies. We have concerns that pricing may increase for these customers as a result of these changes, and would encourage the Committee to thoroughly and carefully evaluate the potential impact of this proposal on this group of customers.

Basic whole life customers are price sensitive and budget conscious, and these changes may possibly mean less coverage or higher premiums. The problems associated with millions of underinsured Americans in this demographic are well documented and have been a concern of state insurance regulators for years.

There is a more comprehensive solution to this dilemma- modernizing the Model Non-Forfeiture Law to better address changes in the economy as well as the way life insurers now do business.
Everyone would benefit from this approach. In the interim, we could support a temporary step that carves out basic whole life from this proposal.

On a final note, we understand the hurried nature of this proposal is because of efforts by proponents to align discussions with current efforts to enact tax law changes in the U.S. Congress. To use a well-worn phrase, we seem to be “putting the cart before the horse.” The NAIC should be waiting for Congress to act, rather than making changes in the Valuation Manual that are dependent on congressional activity that may never take place.

Thank you for allowing the NALC to comment.

Sincerely,

Jim Hodges
Executive Director
NALC
June 8, 2020

Mike Boerner
Chair, Life Actuarial (A) Task Force (LATF)
National Association of Insurance Commissioners (NAIC)
via RMazyck@NAIC.org

Re: APF 2020-07

Dear Mike:

We appreciate the opportunity to provide comments on APF 2020-07. At Globe Life, our purpose is to help working class families, with a focus on basic protection life and supplemental health products for low to middle income families. In the past few years, we issued more than a million life insurance policies through our operating companies; this may be more than any other insurance group in the US. Keeping costs low is an important element in making life insurance accessible to low and middle income families.

We do not support changes to the Valuation Manual as proposed in APF 2020-07 regarding non-forfeiture rates that simply remove the 4% interest rate floor. Although simple, this proposal is a source of concern particularly as it has the potential to increase the cash value on whole life insurance, which we believe will lead to higher costs for these products, thus limiting the affordability and amount of life insurance protection for many Americans at a time when getting life insurance is more important than ever. The 4% rate limit in the Valuation Manual sets a floor for the minimum cash values. A company would have the option to offer higher cash values than this floor if rates needed to meet the Internal Revenue Code definition of life insurance (Section 7702 rates) fall below 4%; thus there is no need to eliminate the current 4% limit.

Instead, we support an option that causes the non-forfeiture interest rates used to determine in-kind benefits like paid-up additions and extended term insurance to be more aligned with the current interest rate environment and rates needed to meet the definition of life insurance. This change could lead to reductions in insurance company costs and thus support lower premiums or higher dividends. We support this option as a stop gap measure until a comprehensive solution can be considered:

**VM-02**

**Section 3: Interest**

A. The nonforfeiture interest rate for any life insurance policy issued in a particular calendar year beginning on and after the operative date of the *Valuation Manual* shall be equal to 125% of the calendar year statutory valuation interest rate defined for the NPR in the *Valuation Manual* for a life insurance policy with nonforfeiture values, whether or not such sections apply to such policy for valuation purposes,
rounded to the nearer one-quarter of 1%, provided, however, that the nonforfeiture interest rate shall not be less than 4%, but the nonforfeiture interest rate to determine paid-up benefits and other in-kind nonforfeiture benefits shall not be less than the applicable interest rate used to meet the definition of life insurance in the Cash Value Accumulation Test under Section 7702 (Life Insurance Contract Defined) of the U.S. Internal Revenue Code.

Finally, we favor a more deliberative process that would consider the comprehensive modernization of non-forfeiture laws that are reflective of the current economic environment and costs associated with selling and maintaining permanent life insurance contracts today. In the past, there has been reluctance in doing so given the Internal Revenue Code definition of life insurance and tax reserve requirements. With the current proposal to change the definition of life insurance interest rates and recent tax reserve changes, there are fewer constraints to moving forward with modernization of non-forfeiture requirements. Today’s non-forfeiture requirement dates back to the 1940’s – it is hardly modern -- and has not kept pace with changes to product designs (no-lapse guarantee products), industry mortality tables, interest rates, inflation and associated costs of acquiring business. A comprehensive rewrite is needed to effectively consider all these items rather than addressing them piecemeal, with the goal of making insurance more accessible to many more Americans.

Thank you, we look forward to working with LATF on this proposal.

Tom Kalmbach

Thomas P. Kalmbach
Executive Vice President and Chief Actuary
Brian Bayerle  
Senior Actuary

June 10, 2020

Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force

Re: ACLI Comments on APF 2020-07

Dear Mr. Boerner:

The American Council of Life Insurers (ACLI)\(^1\) appreciates the opportunity to provide comments regarding the APF 2020-07, which eliminates the cash value floor for the nonforfeiture rate in VM-02. ACLI is supportive of this change.

**Likely Change to Federal Code Makes Floor Unnecessary**

The floor of 4% was added to the NAIC Valuation Manual in 2014 to provide consistency with the codified limitations in the Internal Revenue Code (IRC) §7702. Given low interest rates, US Congress has proposed changing the fixed limits in IRC §7702 to a variable indexed rate. This change has passed in the US House of Representatives, and will hopefully become signed legislation this year. APF 2020-07 was structured to address this potential uncertainty by referencing the Cash Value Accumulation Test (CVAT) rate within IRC §7702, which is currently 4% (consistent with the floor). Were the legislation to become law, the reference would automatically be updated, thus lowering the floor. If nothing passes, the reference will remain consistent with the current requirements. We note the reference to CVAT rate is only needed to Congressional uncertainty. If Congress changes the law, we can simply remove the floor for the following year’s NAIC Valuation Manual.

**Consumer Costs Will Likely Increase Regardless of the Change**

The low interest rate environment will continue to challenge the investment return on insurance products, which will likely lead to higher insurance premiums. Notably, there is likely to be a reduction in the valuation interest rate in 2021, which will lead to higher reserves that will be financed by higher premiums. Eliminating the interest rate floor in the nonforfeiture calculation will maintain the existing relationship between the rates (since nonforfeiture interest rate is 125% of the valuation rate), and will lead to more equitable nonforfeiture benefits for consumers.

We look forward to discussing our comments on a future call.

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\(^1\) The American Council of Life Insurers (ACLI) is the leading trade association driving public policy and advocacy on behalf of the life insurance industry. 90 million American families rely on the life insurance industry for financial protection and retirement security. ACLI’s member companies are dedicated to protecting consumers’ financial wellbeing through life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, and dental, vision and other supplemental benefits. ACLI’s 280 member companies represent 94 percent of industry assets in the United States.
Sincerely,

[Signature]

cc  Reggie Mazyck, NAIC
RE-EXPOSURE OF APF 2020-07

Comments should be submitted to Reggie Mazyck (RMazyck@NAIC.ORG) by COB June 17, 2020

Please comment on the change of wording from “used” to “prescribed”

Additionally, provide an opinion of the pro and cons of adopting or not adopting the wording of the proposal. Particularly, concerns about the potential impacts of the proposed change on companies are welcomed.
1. Identify yourself, your affiliation and a very brief description (title) of the issue.

**Identification:**
Brian Bayerle, ACLI

**Title of the Issue:**
Remove 4% Floor from Life Standard Nonforfeiture Rate.

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:

January 1, 2020 NAIC Valuation Manual – VM-02 Section 3.A

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 attached.

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

Upon any possible tax code (IRC, S. 7702) modifications to remove the hardcoded interest rate floor starting in 1/1/2021, the life standard nonforfeiture rate is being updated to ensure the minimum funding under state requirements does not exceed the maximum funding under federal requirements for life insurance contracts issued starting in 1/1/2021.

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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.

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**Notes:** VM APF 2020-07
VM-02

Version 1: Remove floor

Section 3: Interest

A. The nonforfeiture interest rate for any life insurance policy issued in a particular calendar year beginning on and after the operative date of the Valuation Manual shall be equal to 125% of the calendar year statutory valuation interest rate defined for the NPR in the Valuation Manual for a life insurance policy with nonforfeiture values, whether or not such sections apply to such policy for valuation purposes, rounded to the nearer one-quarter of 1%, provided, however, that the nonforfeiture interest rate shall not be less than the applicable interest rate used-prescribed to meet the definition of life insurance in the Cash Value Accumulation Test under Section 7702 (Life Insurance Contract Defined) of the U.S. Internal Revenue Code 4%.

Guidance Note: For flexible premium universal life insurance policies as defined in Section 3.D of the Universal Life Insurance Model Regulation (#585), this is not intended to prevent an interest rate guarantee less than the nonforfeiture interest rate.
Jason,

With regard to APF 2020-05, you may want to address how riders and supplemental benefits are treated with regard to immediate payment of benefits. Per page 10 of the Valuation Manual, Section II, Subsection 6. B:

"For supplemental benefits, including Guaranteed Insurability, Accidental Death or Disability Benefits, Convertibility, or Disability Waiver of Premium Benefits, the supplemental benefit may be included with the base policy and follow the reserve requirements for the base policy under VM20, VM-A and/or VM-C, as applicable."

So, it is possible for a company to include supplemental benefits in the NPR calculation. I assume it’s the same with riders.

Thank you,

Manny

Manuel V. Hidalgo, FSA, MAAA, CFA
Insurance Actuary | State of Connecticut Insurance Department
P.O. Box 816 | Hartford, CT 06142-0816 |
( 860.297.3828 | Fax: 860.297.3978 | † manuel.hidalgo@ct.gov
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force Amendment Proposal Form*

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

   Jason Kehrberg, Vice President, PolySystems, Inc.

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:


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.)


   4. The NPR shall reflect the immediate payment of claims.

   Proposed VM-20 3.C.4 (revised):

   4. The NPR shall reflect continuous deaths and the immediate payment of death claims, including death claims on any riders or supplemental benefits for which the NPR is being calculated.

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

   I believe the intent was that 3.C.4 apply to death claims, e.g. not to payment of positive cash surrender values upon lapse, and that on a present value basis the calculated periodic death claim payments equate to immediate claim payment on deaths assumed to occur continuously.

* 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: VM APF 2020-05R
March 4, 2020

Reggie Mazyck  
National Association of Insurance Commissioners  
1100 Walnut Street – Suite 1500  
Kansas City, MO  64106-2197

Re: VM-20, Exposure 2020-02

I appreciate the opportunity to provide comments on the Amendment Proposal Form 2020-02 submitted jointly by NAIC staff and Staff of Office of Principle-Based Reserving, California Department of Insurance.

My comments relate to the proposed addition of Section 2.I.

I personally believe the requirements are clear and that the issue being addressed is better handled in VM-31 (which is designed to establish minimum reporting requirements) as opposed to VM-20.

I believe the purpose of the valuation manual, as stated in the Introduction of the Valuation Manual, is to “set forth the minimum reserve requirements…” One of the reasons the movement to principle-based approaches has occurred is it is nearly impossible to define every formula, every assumption, or every process / step required to establish an appropriate reserve.

A couple items of specific note:

1. We file reserves with quarterly statements. How many times a year do we need to show / model, as opposed to analyzing, prescribed spreads and prescribed defaults to prove that the limitation of Section 7.E.1.g. (50% Aa2 and 50% A2 non-callable bonds) produces a higher reserve than the company’s investment strategy? This is already an annual requirement of VM-31, Section D.6.s.

2. In my opinion, PIMR is an ill-conceived concept, appears to be mis-understood by many in the industry, and should be completely eliminated from actuarial literature and reserve requirements. Conceptually, reserves are being set at the level for asset cash flows and future premiums to result in the liquidation of projected benefits. (Section 4.B.) PIMR is an artificial actuarial / accounting construct that does not impact cash flows. Therefore, if PIMR is zero or a non-zero number, conceptually the same reserve should be quantified.
The Deterministic Reserve, as outlined in Section 4.B. is equal to a-b, where b is PIMR. In essence if the PIMR liability is included in starting assets, the value of assets supporting it must be subtracted to determine the Deterministic Reserve. The same goes for the Stochastic Reserve and is further explained in Section 7.D. The embedded file below contains analysis submitted to the Life Actuarial Task Force in 2014. Although not directly related to the required adjustment, it does demonstrate equivalency and irrelevance of PIMR in establishing reserves.

I believe the items in Section 2.I are best confirmed by auditors and disclosed in VM-31. If additional information is desired by the task force to better understand the impact of prescribed assumptions, then VM-31 would appear to be the more appropriate place for periodic disclosures of calculated amounts and methods utilized to comply with the requirements of VM-20, much of what is already included in VM-31. Mandating steps that add no value only increases the cost of establishing reserves resulting in less value provided and more cost to the policyholders.

**Therefore, the Life Actuarial Task Force should not approve the addition of proposed Section 2.I. to VM-20 and specifically exclude from the guidance note the comment relating to PIMR.”**

I would like to thank LATF for the opportunity to comment on this exposure draft.

Sincerely,

William H. Wilton, CFA, FSA, MAAA
March 4, 2020

Mr. Mike Boerner
Chair, NAIC Life Actuarial Task Force

Re: APF 2020-02

Dear Mike:

Nationwide appreciates the opportunity to comment on APF 2020-02 regarding the topic of materiality in VM-20. Materiality is an important consideration within a PBR framework. While we believe VM-20 should ensure that all material risks are reserved for appropriately, any explicit materiality requirements within VM-20 should be balanced against practicality issues facing companies and the resulting operational burden which would be created by potential requirements.

We believe the suggested language in APF 2020-02 is too restrictive and does not consider the practical issues which companies encounter frequently. For example, most companies will at some point encounter immaterial blocks of business subject to PBR, which under any reasonable lens of materiality could be adequately reserved for with a proxy. In these situations, companies should be ready to defend their approach to regulators, but to remove this option entirely is impractical and would result in the unnecessary burden of creating and maintaining additional complex PBR models.

In addition, the proposed language requires certain items, like the alternate investment strategy, to be proven every year. Over time companies will have verified repeatedly that the alternate investment strategy produces a higher reserve. If the additional reserve using the alternate investment strategy is large, and the company’s investment strategy has not changed, does this comparison need to be retested every year? It seems unnecessarily burdensome on companies to repeatedly demonstrate an obvious result. As we move forward under the new PBR framework, it will be important to find appropriate ways to reduce the operational burden associated with the PBR framework.

We appreciate your consideration of our comments.

Sincerely,

Philip Wunderlich, FSA, MAAA
Associate Vice President, Appointed Actuary
Nationwide Financial

Brian J. Wagner, FSA, MAAA
Associate Vice President, Actuary
Nationwide Financial

cc Reggie Mazyck, NAIC
Pete Weber, Ohio Department of Insurance
March 16, 2020

Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force

Re: APF 2020-02

Dear Mr. Boerner:

The American Council of Life Insurers (ACLIs) appreciates the opportunity to submit the following comments on APF 2020-02.

ACLIs is concerned with this APF as drafted. The standard imposed by the language suggests companies perform significant work when actuarial experience or materiality would suggest it is not necessary. We note the following areas of concerns:

1. **Immateriality:** Most companies are going to have small pockets of business where the cost of doing a precise VM-20 calculation will far exceed the reserve, and possibly even the sum at risk. In such situations, the cost of needing to perform a mortality experience study (just to prove that mortality wasn’t higher than the fully loaded prescribed table), building out a full asset model, etc. would be cost and time prohibitive. ACLI believes skipping such steps is reasonable if the impact is truly immaterial, and meets both the spirit and letter of Section 2.G:

   A company may use simplifications, approximations and modeling efficiency techniques to calculate the NPR, the deterministic reserve and/or the stochastic reserve required by this section if the company can demonstrate that the use of such techniques does not understate the reserve by a material amount, and 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.

2. **Annual demonstration:** Actuarial judgment is a necessary and appropriate component to PBR. While demonstrations of the impact of modeling simplifications are appropriate, we are concerned that annual demonstrations are excessive, particularly when the actuary reasonably expects no change in the result. For example, for many companies, the alternative reinvestment strategy will consistently produce a higher reserve; it seems excessive to have to demonstrate this annually when the qualified actuary reasonably expects this to be the case. We support

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1 The American Council of Life Insurers (ACLIs) advocates on behalf of 280 member companies dedicated to providing products and services that promote consumers’ financial and retirement security. 90 million American families depend on our members for life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, dental and vision and other supplemental benefits. ACLIs represents member companies in state, federal and international forums for public policy that supports the industry marketplace and the families that rely on life insurers’ products for peace of mind. ACLI members represent 95 percent of industry assets in the United States. Learn more at www.aclii.com.
addressing this with a simple statement within the VM-31 documentation that notes why the qualified actuary believes a formal demonstration provides no value.

3. **Short-term latitude:** While a few companies have been doing PBR for a few years, 2020 will be the first time it is mandatory for many companies. While companies have done a best effort of getting their products ready, adding this as a mandate creates practical implementation concerns.

ACLI would appreciate the opportunity to further discuss this APF with regulators; we believe we can find a solution that addresses the concerns raised with this APF without codifying excessive requirements that go against the spirit of reasonable model simplifications.

We look forward to a discussion of our proposed language. Thank you.

Sincerely,

[Signature]

cc  Reggie Mazyck, NAIC
The Life Actuarial (A) Task Force met via conference call June 4, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman and Ben Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Manny Hidalgo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. Exposed Revisions to AG 49

Brian Bayerle (American Council of Life Insurers—ACLI) said the language in Section 3.k of the proposed revisions to Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest (AG 49) requires tweaking to clarify how loan leverage option 2 applies to charge reductions. He said as it stands, the language may have unintended consequences. Seth Detert (Securian Financial) suggested removing references to charge reductions from the option 2 language. He said the opportunities for exploiting any loophole created by removing the language are small. Mr. Bayerle said the ACLI will review the language and propose revisions. Mr. Ostlund asked if there is also an issue with the “other enhancements” referenced in the option 2 language. Mr. Andersen said that concern could be addressed later.

Mr. Andersen said constraints were placed on loan arbitrage in 2015 when AG 49 was developed. He said prior to AG 49, loan arbitrage allowed interest credited on the loan values to be substantially higher than the loan interest charges. He said that resulted in illustrations that were inflated. AG 49 placed a limit on the differential between the credited rate and the loan interest rate to 1%. He said a current concern is that the relationship of the overall returns of the illustration and the loan interest rate is higher than when AG 49 was developed, leading to a higher probability of illustrated values being unrealized. He said the loan options being considered address these issues. Birny Birnbaum (Center for Economic Justice—CEJ) recommended that if option 1 is chosen, the differential between the loan rate and the crediting rate should be zero. Mr. Andersen recommended a third option, which would use a 50-basis point differential between the crediting rate and the policy loan interest rate. Mr. Bayerle said the third option could be included in the next exposure of edits.

Mr. Andersen suggested the Task Force decide whether the proposed revisions should apply only to new issues after a certain date or to all illustrations, including in-force illustrations. Mr. Birnbaum said the CEJ is advocating for application of the revisions to all illustrations, so as not to deprive illustrations of the benefits of the revisions. Mr. Serbinowski said the issue is not actuarial. He suggested the issue should be decided by the Life Insurance and Annuities (A) Committee. Mr. Bayerle said the ACLI favors applying the revisions to the illustration of new policies only. Mr. Boerner asked for a straw vote on whether the revisions will apply to illustrations of new policies only or to all illustrations. The Task Force voted to apply the revisions to illustrations of new policies only.

The Task Force agreed to expose the current set of proposed edits (Attachment Four-A) for a seven-day public comment period ending June 12.

Having no further business, the Life Actuarial (A) Task Force adjourned.
THE APPLICATION OF THE LIFE ILLUSTRATIONS MODEL REGULATION TO POLICIES WITH INDEX-BASED INTEREST SOLD AFTER [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption*]

Background

The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an external index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

In 2019, the NAIC decided that illustrations of products with multipliers, cap buy-ups, and other enhancements should not illustrate better than products without such features. This new requirement is intended to apply to illustrations on policies sold on or after the effective date of this guideline while the existing requirements continue to apply for in-force illustrations on policies sold before the effective date of this guideline.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.
2. Limits the policy loan leverage shown in an illustration.
3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective as follows: for all new business and in force illustrations on policies sold on or after [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption*].

i. 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.

ii. Effective March 1, 2017, Section 4 and Section 5 shall be effective for all in-force life insurance illustrations on policies within the scope of this actuarial guideline, regardless of the date the policy was sold.

iii. Sections 6 and 7 shall be effective for all new business and in force life insurance illustrations on policies sold on or after March 1, 2016.

2. Scope

This Actuarial Guideline shall apply to any life insurance illustration that meets both (i) and (ii), below:
i. The policy is subject to Model #582.

ii. Interest credits are linked to an external index or indices.

iii. The policy offers Indexed Credits.

3. Definitions

A. Alternate Scale: A scale of non-guaranteed elements currently being illustrated such that:

i. The credited rate Annual Rate of Indexed Credits for each Index Account does not exceed the lesser of the maximum credited rate Annual Rate of Indexed Credits for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the credited rate Annual Rate of Indexed Credits for each Index Account shall not exceed the average of the maximum credited rate Annual Rate of Indexed Credits for the illustrated scale and the guaranteed credited rate Annual Rate of Indexed Credits for that account. However, the credited rate Annual Rate of Indexed Credits for each Index Account shall never be less than the guaranteed credited rate Annual Rate of Indexed Credits for that account.

ii. If the illustration includes a loan, the illustrated rate credited to the loan balance does Policy Loan Interest Credited Rate shall not exceed the illustrated loan charge. Policy Loan Interest Rate. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 4%.

iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. Annual Net Investment Earnings Rate: Gross portfolio annual earnings rate of the general account assets (excluding hedges for Indexed Credits), less provisions for investment expenses and default cost, allocated to support the policy. Charges of any kind cannot be used to increase the Annual Net Investment Earnings Rate.

C. Annual Rate of Indexed Credits: The total annualized Indexed Credits expressed as a percentage of the account value used to determine the Indexed Credits.

B.D. Benchmark Index Account: An Index Account with the following features:

i. The interest calculation is based on the percent change in S&P 500® Index value only, over a one-year period using only the beginning and ending index values. (S&P 500® Index ticker: SPX)

ii. An annual cap is used in the interest calculation.

iii. The annual floor used in the interest calculation shall be 0%.

iv. The participation rate used in the interest calculation shall be 100%.

v. Interest is credited once per year.

vi. Account charges do not exceed the account charges for any corresponding Index Accounts within the policy in any policy year. If Index Accounts with different levels of account charges are offered with the illustrated policy, more than one Benchmark Index Account may be used in determining the maximum illustrated crediting rates for the policy’s Index Accounts, subject to the requirements of 5.D. However, for each Index Account within the policy, only one Benchmark Index Account shall apply. Any rate calculated in 4(B) shall not apply for an Index Account if the account charges for the applicable Benchmark Index Account exceed the account charges for that Index Account in any policy year. Account charges include all charges applicable to an Index Account, whether deducted from policy values or from premiums or other amounts transferred into such Index Account.
vii. Additional amounts credited are not less than the additional amounts credited for any corresponding Index Accounts within the policy in any policy year. Any rate calculated in 4 (B) shall not apply for an Index Account if the additional amounts credited for the applicable Benchmark Index Account are less than the additional amounts credited for that Index Account in any policy year. Additional amounts include all credits that increase policy values, including but not limited to experience refunds or bonuses.

vi. The Hedge Budget used to determine the cap in 3 (C) (ii) does not exceed the Annual Net Investment Earnings Rate. Charges of any kind cannot be used to increase the annual cap.

vii. There are no enhancements or similar features that provide additional Indexed Credits, including but not limited to experience refunds, multipliers, or bonuses.

viii. There are no limitations on the portion of account value allocated to the account.

ix. A single Benchmark Index Account will be determined for each policy. This can be either an Index Account offered with the illustrated policy or determined according to Section 4(A)(ii) for purposes of complying with this regulation. A policy shall have no more than one Benchmark Index Account.

C.E. Fixed Account: An account where the credited rate is not tied to an external index or indices, there are no Indexed Credits.

F. Index Account: An account where some or all of the amounts credited are Indexed Credits.

G. Indexed Credits: Any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy values that is linked to an index or indices. Amounts credited to the policy resulting from a floor greater than zero on an Index Account are included.

H. Hedge Budget: For each Index Account, the total annualized amount assumed to be used to generate the Indexed Credits of the account, expressed as a percent of the account value in the Index Account. This total annualized amount should be consistent with the hedging program of the company.

I. Loan Balance: Any outstanding policy loan and loan interest, as defined in the policy.

J. Policy Loan Interest Rate: The current annual interest rate as defined in the policy that is charged on any Loan Balance. This does not include any other policy charges.

D.K. Policy Loan Interest Credited Rate: The annualized interest rate is tied to an external index or indices credited that applies to the portion of the account value backing the Loan Balance:

i. For the portion of the account value in the Fixed Account that is backing the Loan Balance, the Policy Loan Interest Credited Rate is the applicable annual interest crediting rate

[OPTION FOR CONSIDERATION: Please see commentary on these approaches in the ACLI Comment Letter; language for Option 1 and Option 2 may need to be tightened up:

Option 1: ii. For the portion of the account value in an Index Account that is backing the Loan Balance, the Policy Loan Interest Credited Rate is the Annual Rate of Indexed Credits, net of any applicable Supplemental Hedge Budget, for that account.

Option 2: ii. For any portion of the account value in an Index Account that is backing the Loan Balance, the Policy Loan Interest Credited Rate is the total of the Annual Rate of Indexed Credits and all illustrated bonuses, charge reductions or other enhancements that impact such values, net of any applicable Supplemental Hedge Budget for that account.]

L. Supplemental Hedge Budget: For each Index Account, the Hedge Budget minus the minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that is used in the determination of the Benchmark Index Account.
4. Illustrated Scale

The credited rate total Annual Rate of Indexed Credits for the illustrated scale for each Index Account shall be limited as follows:

A. Calculate the geometric average annual credited rate for each applicable Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

i. If the insurer offers an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the applicable Benchmark Index Account in 4(A).

ii. If the insurer does not offer an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of the Benchmark Index Account, and shall use that cap in 4(A).

B. For each applicable Benchmark Index Account, the Annual Rate of Indexed Credits shall not exceed the minimum of (i) and (ii):

iii. the arithmetic mean of the geometric average annual credited rates calculated in 4(A) shall be the maximum credited rate(s) for the illustrated scale.

ii. 145% of the Annual Net Investment Earnings Rate.

C. For any 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 maximum credited rate for the illustrated scale. The determination shall Account that is not the Benchmark Index Account in 3(C), the Annual Rate of Indexed Credits illustrated as a percentage of the account value in the Index Account prior to the deduction of any charges used to fund a Supplemental Hedge Budget shall not exceed the minimum of (i) and (ii):

i. The Annual Rate of Indexed Credits for the Benchmark Index Account calculated in 4(B) plus the Supplemental Hedge Budget for the Index Account.

ii. The Annual Rate of Indexed Credits should reflect the fundamental characteristics of the Index Account and the parameters shall have the-appropriate relationship to the expected risk and return of the applicable Benchmark Index Account. In no event shall the illustration actuary use actuarial judgment to determine this value using lookback methodology consistent with 4(A) and 4(B) (i) where appropriate.

B.D. For the purposes of compliance with Section 6(C) of Model #582, the Supplemental Hedge Budget is subtracted from the illustrated rate before comparing to the earned interest rate underlying the Disciplined Current Scale as it is supported by policy charges and not the earned interest rate for the illustrated scale exceed the applicable rate calculated in 4(B).

At the beginning of each calendar year, the insurer shall be allowed up to three (3) months to update the credited rate for each Index Account in accordance with 4(B) and 4(C).

5. Disciplined Current Scale

The earned interest rate for the disciplined current scale shall be limited as follows:
If an insurer engages in a hedging program for index-based interest-Indexed Credits, the assumed earned interest rate underlying the disciplined current scale for the policy, inclusive of all general account assets, both hedge and non-hedge assets, that support the policy, net of default costs and investment expenses (including the amount spent to generate the Indexed Credits of the policy) shall not exceed 145:

i. the Annual Net Investment Earnings Rate, plus

ii. 45% of the lesser of (1) and (2):

1. Hedge Budget minus any annual net investment earnings rate (gross portfolio earnings less provisions for investment expenses and default costs) of the general account assets (excluding floor).

2. The minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that is used in the determination of the Benchmark Index Account.

These amounts should be adjusted for timing differences to ensure that fixed interest is not earned on the hedge cost. The assumed return on hedges for index-based credits allocated to support shall only be used in the disciplined current scale testing to support the illustrated Index Credits in the policy.

Guidance Note: The above approach does not stipulate any required methodology as long as it produces a consistent limit on the assumed earned interest rate underlying the disciplined current scale.

For a product with multiple Index Accounts with different Hedge Budgets, a maximum rate in 5.A. should be calculated for each set of accounts with different Hedge Budgets.

If an insurer does not engage in a hedging program for index-based interest-Indexed 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.

These experience limitations shall be included when testing for self-support and lapse-support under Model #582, accounting for all illustrated benefits including any illustrated benefits and bonuses that impact the policy’s account value.

If more than one Benchmark Index Account is used for an illustrated policy, each set of Index Accounts that correspond to each Benchmark Index Account must independently pass the self-support and lapse-support tests under Model #582, subject to the limitations in 5 (A), (B), and (C). All experience assumptions that do not directly relate to the Index Accounts as to expenses, mortality, investment earnings rate of the general account assets, lapses, and election of any Fixed Account shall equal the assumptions used in the testing for the entire policy.

If the illustration includes a loan, the illustrated rate credited to the loan balance Policy Loan Interest Credited Rate shall not exceed the illustrated loan charge Policy Loan Interest Rate by more than 100 basis points. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 5%.

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. For each Index Account illustrated, a table showing actual historical index changes and corresponding hypothetical interest rates using current index parameters for the most recent 20-year period.
The Life Actuarial (A) Task Force met via conference call May 28, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman and Ben Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. Discussed Comments on the ACLI AG 49 Proposal

Mr. Andersen said a large number of comments were submitted in support of either the American Council of Life Insurers (ACLI) proposal (See May 14 Minutes) or the Independent Proposal (See May 14 Minutes). He said the comment letters (Attachment Five-A), for and against the Independent Proposal, were summarized on a detailed list. He read the summarized list on the conference call.

Bobby Samuelson (The Life Product Review) said Mr. Andersen’s list captured the important points from his comment letter. Mr. Samuelson said the use of indexed universal life (IUL) multipliers and buy up caps is consistent with the requirements of Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest (AG 49). He said the incentives for using buy ups and caps are created by the hypothetical historical lookback methodology used in AG 49. He said the scope of the Independent Proposal broadly affects all IUL products because it is not possible to separate the guideline’s application to multiplier, buy up caps and other similar product features from its application to the base IUL product. Mr. Samuelson said the hypothetical historical lookback methodology applies to hypothetical assumptions about caps to historical data to create the maximum AG 49 rate. He indicated that industry often refers to the use of the hypothetical caps as a proxy for the risk premium. He noted that while a risk premium is created and illustrated in perpetuity, there is no parallel disclosure of the corresponding risk. He said IUL products illustrate better than universal life (UL) products because the reward is not risk-adjusted in the IUL illustration. He reiterated that the rewards of the policy should not be illustrated without illustrating the corresponding risks.

Larry Rybka (Valmark) said consumers do not understand the risks inherent in the IUL illustration. He advocated using a best interest standard for IUL illustrations. Steven Roth (Wealth Management International Inc.) said he is concerned that insurers are not required to disclose the basis for the assumptions on which the caps and participation rates are based nor are they required to justify decreases in caps and participation rates. He said the Independent Proposal remedies those shortcomings.

Mr. Andersen said an equally large number of comments against the Independent Proposal were received. Brian Bayerle (ACLI) said the IUL illustration discussions have been ongoing for a year and a half. He said at no time during that period was the Task Force directed to change the scope of the charge given by the Life Insurance and Annuities (A) Committee. He provided a 2014 ACLI letter (Attachment Five-B) that indicates that several the issues raised by the Independent Proposal were previously addressed by the Task Force. Scott Harrison (High Point Strategies LLC) said when the IUL illustration efforts were initiated more than a year ago the revisions to AG 49 was one of two tracks for addressing the IUL illustration issues. The other track was enhancing the required disclosures for IUL illustrations. He said the members of the IUL Coalition are looking forward to moving on to address the disclosure efforts. Gayle Donato (Nationwide) said Nationwide supports the ACLI proposal. She said the proposal satisfies the directives issued by the Task Force and should be adopted. Seth Detert (Securian Financial) agreed with Ms. Donato and Mr. Harrison, and encouraged adopting the ACLI proposal and moving on to addressing disclosures. Birny Birnbaum (Center for Economic Justice—CEJ) said the Independent Proposal satisfies the Task Force directives and additionally resolves some systemic

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Draft: 7/1/20
problems of AG 49. He said the ACLI proposal is a massive rewrite of AG 49 and does not adhere to the Task Force directives.
He said he doubts that disclosures will help consumers understand the IUL policy risks and rewards.

Mr. Andersen provided an explanation of the hypothetical historical lookback methodology. He said the 145% net investment interest rate test reflects the historic equity risk premium present in other NAIC standards. He said the returns on stocks can be replicated using a combination of a bond returns portfolio and a Standard & Poor’s (S&P) 500 call option. He said the risk for a call option is much higher than the risk of S&P 500 investments and the call option should have a higher return to reflect the higher risk. He said the return on the S&P call option has historically been roughly 45% but the investor must understand that 25% of the time the option will result in a complete loss. He said the Independent Proposal assumes the call option earns no more than the net investment earned rate due to the risk neutral assumption applied by the proposal. He said the Independent Proposal goes beyond the current Task Force charge by not only aligning IUL multiplier and cap buy ups illustrations with regular IUL illustrations, but also by aligning IUL multiplier and cap buy up illustrations with regular UL illustrations, even though returns for IUL products have historically outperformed returns for regular UL products. He noted that the Independent Proposal is more conservative than the Task Force desires but could be considered in the future if AG 49 abuses continue.

Brian Lessing (AXA-Equitable) said the Equitable proposal (Attachment Five-C) blends elements of the ACLI and the Independent Proposals. He said the proposal uses the Black-Scholes methodology and proposes a 5% safe harbor for equity returns.

The Task Force conducted a straw vote to determine whether the Task Force favored the ACLI proposal or the Independent Proposal. The Task Force voted 15-2 to proceed with the ACLI proposal, with Mr. Carmello and Mr. Kupferman voting for the Independent Proposal. The representative from New Mexico did not respond when called to vote.

Having no further business, the Life Actuarial (A) Task Force adjourned.
Summary of Comments on AG 49A Proposals

Comments for the Bobby Samuelson proposal
- Levels playing field b/w IUL and UL
- Changes scope of current charge from products with charged-for enhancements to all IUL designs

Comments against the Bobby Samuelson proposal
- Historical look is not appropriate
- Historical performance for IUL exceeds that for UL, reflects risk premium
- Risks are understated and illustrations can be unrealistic, particularly with loans, multipliers, bonus designs
- ACLI proposal addresses multiplier & other enhancement issues; Option 2 addresses loan issue
- ACLI proposal has consensus among range of views of companies
- Differentiated risk from UL
- Illustrations will be inconsistent
- Better manages consumer performance expectations
- Makes illustrations more understandable
- More conservative risk illustration is warranted
- Risk neutral valuation may not be appropriate for this purpose
- Application will be inconsistent
- Already decided by LATF that IUL should be illustrated to a higher rate
- ACLI proposal addresses multiplier & other enhancement issues; Option 2 preserves additional complexity & lack of transparency and does not differentiate risk from UL
- Better manages consumer performance expectations
- More conservative risk illustrations are warranted
- Risk neutral valuation may not be appropriate for this purpose
- Application will be inconsistent
- Already decided by LATF that IUL should be illustrated to a higher rate

Integrates ACLI w/ Bobby proposal, 20% option return

Equitable Proposal
- ACIT composite for AG 49
- ACIT proposal will lead to more game playing
- Reduces marketplace concerns
- More conservative risk illustrations are warranted
- Risk neutral valuation may not be appropriate for this purpose
- Application will be inconsistent
- Already decided by LATF that IUL should be illustrated to a higher rate
- Better manages consumer performance expectations
- More conservative risk illustrations are warranted
- Risk neutral valuation may not be appropriate for this purpose
- Application will be inconsistent
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ACIT proposal has consensus among range of views of companies
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- Makes illustrations more understandable
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- Risk neutral valuation may not be appropriate for this purpose
- Application will be inconsistent
- Already decided by LATF that IUL should be illustrated to a higher rate
May 27, 2020

Mr. Mike Boerner, Chairperson, Life Actuarial (A) Task Force (LATF)
Mr. Fred Andersen, Chairperson, IUL Illustration (A) Subgroup
National Association of Insurance Commissioners

Re: Bobby Samuelson’s Proposal

Mr. Boerner and Mr. Andersen,

Thank you for the opportunity to provide comments in response to Mr. Samuelson’s proposal for Actuarial Guideline 49 (AG 49).

During the LATF call on May 14, 2020, interested parties made a number of unfounded claims. Many of these claims were also made when AG 49 was originally developed, so the ACLI created a whitepaper in 2014 to correct the misinformation. We encourage you to review the whitepaper for discussion of the following topics:

- Why analysis of the BXM index is not indicative of the value of an IUL policy (page 8);
- Why a 45% return assumption on highly leveraged investments is reasonable (page 9); and
- Why the use of options should be evaluated as a part of an entire investment portfolio and not in isolation (page 9).

When AG 49 was originally developed, LATF considered a proposal from Mr. Samuelson that would limit IUL illustrated rates at the fixed account rate. After careful review, LATF rejected that proposal and voted in 2015 for an approach that allowed the illustration of risk premium. LATF also included an alternate scale illustration at the fixed account rate to educate policyholders on the potential for different levels of interest.

Here again, Mr. Samuelson’s proposal would effectively limit IUL illustrated rates at the fixed account rate. We urge LATF to reject this proposal because it removes risk premium from IUL illustrations, which adds conservatism for illustrations of all products (including products without multipliers or other enhancements). In addition, the proposal contains fundamental flaws that would take significant time and effort to correct.

The Importance of Illustrating Risk Premium in IUL Policies

As shown in the spreadsheet provided by Mr. Samuelson, the proposal would lead to illustrated rates that do not exceed the NIER. As a result, IUL illustrated rates would be roughly equal to fixed account rates and IUL policies would illustrate the same as traditional fixed UL policies. This would not only limit the illustration of multipliers and buy-up caps, but would also limit the illustration of products without such features, leading to overly conservative illustrations of IUL policies.

The proposal neglects to recognize the risk premium that is inherent in indexed products such as IUL. The existence of risk premium is supported by both theory (as shown in the ACLI white paper) and experience. At Allianz, we are proud of the value our IUL products have delivered to our customers and this value clearly shows the existence of risk premium.
The table below contains a breakdown of our actual customer experience. The table shows the average index credits and fixed account credits by issue year. Note that our fixed account rates have been approximately equal to our option budgets.

<table>
<thead>
<tr>
<th>Issue Year</th>
<th>Index Credit</th>
<th>Fixed Credit</th>
<th>Risk Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>6.77%</td>
<td>3.86%</td>
<td>75%</td>
</tr>
<tr>
<td>2007</td>
<td>6.65%</td>
<td>3.98%</td>
<td>67%</td>
</tr>
<tr>
<td>2008</td>
<td>6.78%</td>
<td>4.09%</td>
<td>66%</td>
</tr>
<tr>
<td>2009</td>
<td>8.70%</td>
<td>3.97%</td>
<td>119%</td>
</tr>
<tr>
<td>2010</td>
<td>7.12%</td>
<td>4.04%</td>
<td>76%</td>
</tr>
<tr>
<td>2011</td>
<td>7.50%</td>
<td>3.93%</td>
<td>91%</td>
</tr>
<tr>
<td>2012</td>
<td>7.52%</td>
<td>4.13%</td>
<td>82%</td>
</tr>
</tbody>
</table>

Table includes all policy credits through 12/31/2019.
Risk premium = \( \text{Index Credit} / \text{Fixed Credit} - 1 \)
Table shows average policy credits; individual policy credits vary and have been as low as 0%.

In aggregate, we have credited our IUL policies an average index credit of 7.18% and an average fixed credit of 3.97%. This demonstrates an average realized risk premium of 80%, which is more than the 45% return limit in AG 49. If the illustrated rate had been limited to the fixed account rate as proposed, the illustrations for these policies would have omitted the illustration of risk premium. This would have denied our customers relevant product education and understanding of the features of IUL.

Although past performance is not a prediction of future results, the underlying theory of risk premium that was present when these policies were sold continues to be present for the policies sold today.

**The Misuse of Black-Scholes in the Proposal is Fundamentally Flawed**

The Black-Scholes formula was designed to calculate the price of calls and puts. The user inputs the current stock price, a strike price, the risk-free interest rate, volatility, and the dividend yield, and the formula outputs a cost for the call or put. This output is not a growth rate and should not be used to project illustrated values. In addition, Black-Scholes cannot be used for the many index accounts that are supported by hedge instruments other than calls and puts.

Furthermore, although the Black-Scholes formula uses a risk-free interest rate to calculate the cost of a put or call, it should not be misunderstood that puts and calls are risk neutral. In reality, option returns will be driven by real-world interest rates and volatility, not the risk-free interest rates and implied volatility used in a Black-Scholes valuation.

Creating an option valuation framework for AG 49 that can be used for all index accounts, has agreed upon inputs, and reflects the expected option returns would be a complex task and may significantly delay the implementation of an updated AG 49.

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In conclusion, we do not support Mr. Samuelson’s proposal because it goes against previous LATF decisions to allow the illustration of risk premium and it misuses Black-Scholes. Instead, we strongly support the ACLI proposal because the ACLI proposal accomplishes the goals set forth by regulators, has broad industry support, and is close to completion.
Thank you for the opportunity to provide these comments.

Regards,

Austin Bichler, FSA, MAAA
Senior Director Actuary & Illustration Actuary
Allianz Life Insurance Company of North America
May 27, 2020

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

Dear Mr. Boerner,

On behalf of the American Academy of Actuaries Life Illustrations Work Group (the “Work Group”), I appreciate the opportunity to provide comments to LATF on the “Independent Proposal.”

The methodology is very different from the methodology that has been in place for most indexed universal life (IUL) product illustrations even before Actuarial Guideline XLIX (AG 49) went into effect, and although there are few modifications to the text of AG 49 in the Independent Proposal, applying the proposal would not be a simple modification.

On the surface, the proposal appears to limit the illustrated rate to an amount approximately equal to the option budget or fixed account rate due to no risk premium being assumed on the option. This would cause the illustrated scale to be nearly identical to the alternate scale, because the alternate scale generally uses the fixed account rate. Illustrating at the fixed rate was discussed when AG 49 was originally drafted, and this concept was rejected in 2015.

We note that using an option cost-pricing formula to calculate an illustrated credited interest rate seems disconnected. The Work Group would need more time to consider whether it is reasonable to use a pricing formula such as Black-Sholes to calculate a longer-term illustrated credited rate. The Work Group would also need to consider how the short-term nature of the Black-Sholes formula (12 months) can be reconciled with ASOP No. 24, Compliance with the NAIC Life Insurance Illustrations Model Regulation, section 3.4.1, which states that actuaries “should consider an appropriate time frame commensurate with [business or economic] cycles” when setting investment return assumptions.

In addition, the Work Group would like to make some general comments in response to some of the verbal comments made during the presentation of the proposal. First, while options are commonly priced using a risk-neutral methodology, the pricing methodology should not be misunderstood to imply that the options themselves are risk-neutral. Second, options should be

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1 The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted 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.
evaluated as a part of an entire investment portfolio (i.e., not in isolation), because options are often mixed with other types of investments to achieve a desired risk profile. Even though some option positions may not seem particularly valuable when considered in isolation, it does not discredit them; indeed, some investors are willing to incur costs to ensure that they are protected from rare events (i.e., investment insurance).

Finally, we also note the Independent Proposal does not address the question of what should be included in the 100-basis-point limit between loan charges and loan credits.

We hope these comments are helpful. Given the relatively short exposure period, The Work Group has not had sufficient time to evaluate all aspects of the proposal. If LATF would like us to provide more specific comments about the proposal, we would require additional time to review the proposal and the spreadsheet examples.

The Work Group appreciates the efforts of the LATF and IUL Illustration Subgroup to review AG 49. If you have any questions or would like to dialogue on the above topics, please contact Ian Trepanier, life policy analyst, at trepanier@actuary.org.

Sincerely,

Donna Megregian, MAAA, FSA
Chairperson, Life Illustrations Work Group
American Academy of Actuaries
May 27, 2020

Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force (LATF)

Mr. Fred Andersen  
Chair, NAIC IUL Illustration (A) Subgroup

Re: ACLI Comments on AG 49-A and Independent Proposal

Dear Messrs. Boerner and Andersen:

The American Council of Life Insurers (ACLI)\(^1\) appreciates the opportunity to provide further commentary on the ACLI proposal and the Independent Proposal. We appreciate the hard work of the Life Actuarial (A) Task Force (LATF) and the IUL Illustration (A) Subgroup (Subgroup), and the contributions from the American Academy of Actuaries, individual companies, consumer advocates, and others.

The ACLI proposal best achieves the stated regulatory objectives and represents industry consensus. The ACLI proposal is a product of a year of dialogue with regulators, consumer advocates, and others. Our proposal does not represent the interests of a handful of IUL writers, but rather the input of a broad collection of companies, including those who write IUL (with and without multipliers), and non-IUL writers. We have crafted a proposal consistent with regulators’ decisions. Further, in our accompanying spreadsheet, we have provided illustrative examples of how our proposal meets the goal of regulators to restrict the illustration of multipliers and other enhancements (see below). Furthermore, for ease, we have added the Independent Proposal calculation to our spreadsheet, along with a summary of the current AG49 approach against the two proposals (‘Summary of Results’).

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\(^1\) The American Council of Life Insurers (ACLI) advocates on behalf of 280 member companies dedicated to providing products and services that promote consumers’ financial and retirement security. 90 million American families depend on our members for life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, dental and vision and other supplemental benefits. ACLI represents member companies in state, federal and international forums for public policy that supports the industry marketplace and the families that rely on life insurers’ products for peace of mind. ACLI members represent 95 percent of industry assets in the United States. Learn more at [www.acli.com](http://www.acli.com).
While we appreciate the effort put forth in the Independent Proposal, we believe it goes far beyond the stated objectives, having a significant negative impact on the illustrations for all IUL products, including products without enhancements. While any initial proposal will require modification and input from other parties, the Independent Proposal has critical flaws that would further slow resolution of this important issue. We note our following concerns regarding the Independent Proposal:

1.) **Independent Proposal Disregards Prior Regulator Decisions**

The Independent Proposal seemingly disregards the past year of dialogue by attempting to re-litigate issues that were resolved back in 2014.

At that time, regulators considered a proposal to limit the illustrated rate to the fixed rate but rejected that proposal in favor of an approach that allows the illustration of some risk premium. Regulators also wanted to include an illustration of more conservative returns, so they created an alternate scale that illustrates at the fixed rate. The alternate scale is shown side-by-side with the illustrated scale to ensure that policyholders see both scales.

ACLIM has attached our October 28, 2014 letter that addresses many of the concerns raised, notably on the rationale of the 145% factor.

2.) **The Independent Proposal is Overly-Conservative**

The direction from LATF was to reduce the illustrated value of charged-for index features. The Independent Proposal takes conservatism to the next level, by fundamentally changing how all IUL products are illustrated.

The Independent Proposal limits the illustrated rate to the hedge cost, dramatically restricting illustrations of all IUL products. Even in the case of the Benchmark Index Account, the illustration is limited to the hedge cost. This proposal may lead to identical illustrations across virtually every IUL product, causing confusion among policyholders who will have no way to differentiate features among carriers. This is not consistent with the regulator request.

3.) **Concerns with the Independent Proposal Would Take Significant Time to Resolve**

The Independent Proposal contains a number of flaws that would take substantial time to resolve and further delay implementation of a solution. In the short exposure period, we have identified the following flaws (elaborated on below): inappropriate use of Black-Scholes to model illustrated credits,
elimination of any level of risk premium, undue volatility in illustrations, and missing assumptions and inputs for the proposed approach.

The Independent Proposal approach, while reasonable for determining hedge costs, is not a reasonable basis to illustrate credits. The Black-Scholes formula is risk neutral and while appropriate to price a call or a put, it is not intended to determine the expected return on the option. Our October 28, 2014 letter (p.9) explained the justification of what ultimately led to the 145% limit in AG 49.

We have identified several technical flaws in the Independent Proposal that would further delay this process to thoroughly address. Given the Independent Proposal relies solely on hedge cost, illustrated rates could vary quite significantly from year to year. To illustrate this, we are providing the following examples. The Black-Scholes method will return a value equal to the option cost. As a result, we only need to look at historical option costs to see the variability.

<table>
<thead>
<tr>
<th>Year</th>
<th>Avg Cost 12% Cap</th>
<th>NIER</th>
<th>Illustrated Rate</th>
<th>Chg. in IR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4.82%</td>
<td>5.00%</td>
<td>5.06%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>4.89%</td>
<td>5.00%</td>
<td>5.06%</td>
<td>0.07%</td>
</tr>
<tr>
<td>2017</td>
<td>4.57%</td>
<td>5.00%</td>
<td>5.13%</td>
<td>-0.34%</td>
</tr>
<tr>
<td>2018</td>
<td>5.20%</td>
<td>5.00%</td>
<td>4.80%</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>5.18%</td>
<td>5.00%</td>
<td>5.46%</td>
<td>0.66%</td>
</tr>
</tbody>
</table>

The Independent Proposal utilizes costs from the prior year to generate the illustrated rate for the then current year. For example, the 2016 rate of 5.06% is derived as 4.82% x (1 + 5.00%). The above table shows that, with an unchanging cap, the illustrated rate varies by 66bps over the past 3 years. In contrast, applying the AG49’s lookback calculation with a 12% cap to that index history produces a maximum illustrated rate for a 12% cap has varied by 10bps, resulting in a more consistent outcome for consumers.

While the example above assumes that a company’s cap remains the same during this sample period (2015-2019), it is also worth considering an example where the cap rate does change. Under the Independent Proposal, if the hedge cost changes each year, a change to the cap would result in no change to the illustrated rate. For example, if a 12% cap costs 5% one year, but then the costs decrease and a 13% cap now costs 5%, both would be illustrated at 5%. This would convey no important information to consumers regarding changes to their policy which would stand in contrast with AG49’s stated objective of aiding consumer understanding.

Finally, the Independent Proposal may require an administrative procedure to collect and publish historical data to be used as inputs for the Black-Scholes model, which will take time to determine.

We urge LATF to recognize that the Independent Proposal does not implement the direction from regulators and turn their attention to resolving the remaining issues with the ACLI proposal.

We look forward to a discussion on this important issue.

Sincerely,

cc    Reggie Mazyc, NAIC
May 26, 2020

Sent via email to RMazyck@NAIC.org

Mr. Fred Andersen
Chair, NAIC IUL Illustration (A) Subgroup
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Re: AG49 Independent Proposal

Mr. Andersen and Members of the Committee:

I added my name to the proposal Bobby Samuelson previously forwarded to the subgroup laying out the merits of the Independent Proposal. This letter amplifies my hope that the committee will adopt the Independent Proposal as submitted.

Having spent the better part of the last 14 years working with Trustees and Fiduciaries nationwide in the Trust Owned Life Insurance (TOLI) space, I have seen firsthand how Index UL illustrations can cloud the decision making process of professionals who have a duty to “do right” by the client.

Consumers also struggle to comprehend illusive illustrations that generate unrealistic expectations. This often leads to client dissatisfaction that harms the life insurance industry.

I believe that the stated goal to “to ensure that illustrations do not mislead purchasers of insurance and to make illustrations more understandable” is noble – and needed.

I believe that the best way to get there is to adopt the Independent Proposal and urge the committee to do so.

Thank you for your time and consideration,

Michael Brohawn, CFP®, CLU®, CAP®
Comments for the Center for Economic Justice
To the NAIC Life Actuarial Task Force

Support for the AG49 Independent Proposal / Opposition to the ACLI Proposal

May 27, 2020

CEJ writes in support of the Independent Proposal (“IP”) and in strong opposition to the ACLI proposal for revisions to AG49 to stop the problems with current indexed universal life (“IUL”) insurance products.

Gut-Check Time for Insurance Regulators

As insurance regulators, there are a few times in your career when you can make an era-defining difference. What would you do differently if you had the chance to go back to 1990 and review LTCI rate and form filings? What would you do differently if you had the chance to go back and stop the vanishing premium illustrations? For many of these epochal consumer protection failures, regulators did not have the information or knowledge to do things differently. Who expected a decade or more of interest rates lower than any time in the prior 50 years?

Indexed UL is undoubtedly a new era in life insurance and now accounts for more than a third of new permanent life insurance sales. But when it comes to AG49, you are not only at another epochal point in regulatory history, but you have the knowledge and foresight to prevent future consumer harm. How do you want to be judged in 10 or 20 years? As the regulators who ensured consumer retirement security or the regulators who destroyed that security for millions of consumers?

Both Proposals Start from the Same Two Values

Both the IP and ACLI proposal start from the same two values – Net Investment Earnings Rate and Market Cost of Hedges, as universally determined by application of the Black-Scholes option pricing model, to support the indexed product features. The IP relies on the NIER, which is not disclosed on the illustration, for illustration actuary testing and uses the Black-Scholes option valuation model for the purposes of illustrated performance.
In contrast, the ACLI proposal starts with these values and then transforms these values into a variety of other values which are then used to develop the maximum crediting rate. The ACLI proposal starts with the market cost of hedges to create the Hedge Budget and the Supplemental Hedge Budget. The ACLI proposal creates a BIA crediting rate cap based on the lesser of the Section 4A hypothetical historical credited rate (HHCR) or NIER x 145%. Both of these values bear no – none, zero, zilch, nada, null – relationship to historical returns or future expected returns. As a result, the maximum credit rate is based on numbers picked out of thin, very thin air. We are not aware of the ACLI presenting long-term historical data or testimony of an independent third party on the validity and appropriateness of either the HHCR or the 145% factor applied to the NIER.

The HHCR is a flawed measure of historical outcomes and unlike anything we’ve seen used to evaluate historical performance of financial instruments. The calculation is based on 42 years of daily calculations of 25 year geometric returns requiring a 66-year experience period. Then the arithmetic mean of these nearly 11,000 results is calculated. This procedure gives massively unequal weight – 25 to 1 – to different years’ outcomes. Years 1 and 66 get one year’s worth of weight, while years 25 to 42 get 25 years’ worth of weight. Early and late years in the 66-year period get far less weight than middle years. As a result, the calculation bears no relationship to actual historical returns and, consequently, the ACLI part 4Bi is a nonsensical value.

ACLI part 4Bii is NIER times the unsupported and fabulous 145%. Again, no relationship to actual historical returns and certainly not remotely reasonable of future long-term expected returns. Nevertheless, the 145% now takes center stage in the ACLI proposal as a guardrail. If 145% were a reasonable expectation, then why wouldn’t other investment managers be using this methodology to enhance their long-term returns? Why would investment managers instead advocate selling options rather than buying them? And, finally, why would regulators believe that 45% annual profits forever should serve as the baseline expectation for consumers purchasing a fixed life insurance product?

It is beyond baffling why regulators would prefer the ACLI approach -- overly complex, untethered to reality and virtually impossible for regulatory or consumer accountability -- to develop a maximum crediting rate to the IP approach -- direct, tightly-linked-to-market-values, and much simpler with greater accountability to regulators and consumers.
ACLI Proposal Fails to Address the Reward without Risk Problem While the IP Solves It

As has been discussed in prior comments, the current AG49 and ACLI proposal continue to permit illustrations to show riskless arbitrage benefits. This shows up in the loan arbitrage provisions. In addition, even if the ACLI proposal stops the riskless arbitrage for cap buy-ups, multipliers and bonuses, it doesn’t stop the problem from occurring with other product designs. The IP proposal solves the riskless arbitrage benefit problem.

The ACLI Proposal is a Massive Re-Write of AG49. Any Argument That the IP Exceeds the Narrow Parameters of the LATF Guidance Doesn’t Hold Water.

In prior meetings, the IP was criticized or dismissed because it allegedly went beyond the decisions / guidance by LATF. Given the massive re-write of AG49 in the ACLI proposal with a host of new sections and new terms, it is not reasonable or fair to lodge these criticisms of the IP.

ACLI’s introduction of Annual Percentage Rate Will Likely Confuse Consumers

In section 3.A. Alternate Scale – ACLI introduces a number of new terms, including “annual percentage rate.” Annual Percentage Rate or APR has a well-known meaning in consumer finance much different than used in the ACLI proposal.

We Continue to Have Concerns about Anti-trust Violations with ACLI’s Coordination of Industry Comments and Possible Suppression of Dissenting Insurer Views

We understand that ACLI has sent a message to its members to support the ACLI proposal and to oppose the IP. At best, such action by ACLI can prevent LATF members and other interested parties from learning the views and recommendations of insurers. At worst, such an action is coordination among insurers on an issue directly related to product design and an antitrust violation. While it is one thing for regulators to ask the ACLI for advice and feedback, it is completely different for ACLI to promote collusion or stifle dissenting voices. We ask LATF to determine if ACLI has sent such a letter and, if so, to actively encourage individual insurers to offer their perspectives. Given prior comments like those of Equitable, we expect there are insurers who disagree with the ACLI proposal, but now fear speaking out for the IP.

Application to All New Illustrations

We’ve discussed this issue several times so will be brief here. The ACLI proposal applies the new AG49 guidelines only to illustrations for new and in-force policies issued on or after the effective date. This means that for policies issued prior to the effective date, all new illustrations for those policies will continue to use an older methodology/guideline.
The purpose of the AG49 exercise is to stop unrealistic illustrations and provide consumers with better information and expectations about how the product will operate and perform. The revisions to AG49 are intended to provide consumers with better information, presumably to make more informed decisions and have more realistic expectations about the future performance of the IUL product.

ACLI argues against applying AG49 to all new illustrations based on false claims about consumer confusion and retroactive application of a guideline. Applying a revised AG49 to all new illustrations is clearly not retroactive application as AG49 was not written into any IUL contract. The argument about consumer confusion is simply jaw-dropping – We lied to you before with the earlier illustrations, but we want to keep lying to you because the truth will confuse you.

The sad fact about this argument – beyond the absurd claims of consumer confusion and “retroactivity” – is the tacit acknowledgement that illustrations don’t serve the purpose they are intended for – to educate consumers about the operation of the product – but function to mislead consumers. Why else would insurers resist providing better information to consumers?
AG49 Comment Letter

Mr. Fred Andersen

Chair, NAIC IUL Illustration (A) Subgroup

Re: ACLI proposed draft of Actuarial Guideline 49-A

Dear Mr. Andersen:

Equitable appreciates the opportunity to submit this follow-up to our proposal regarding AG49-A on prospective requirements for IUL illustrations.

This follow-up proposal integrates select elements of the Independent and Equitable proposals into the ACLI proposal structure. The resultant “Integrated Proposal” leverages the effort to develop the ACLI proposal but adjusts features required to satisfy our understanding of regulator objectives – including several valid concerns raised by non-ACLI commentators about the ACLI proposal that, if not addressed, jeopardize the durability of the AG49 revisions. Critical features of the Integrated Proposal are its greater clarity and simplicity.

A draft of the Integrated Proposal, redlined from the ACLI proposal, is attached for reference.

The remainder of this letter is organized to accomplish the following objectives:

1. Articulate our (refined) understanding of the regulator governance objectives
2. Propose an “integrated proposal” that accomplish regulator objectives
3. Suggest next steps for regulators to finalize AG49 revisions

I. Our (refined) understanding of the IUL illustration governance objectives

The stated goals of AG 49 are to (i) guide the determination of maximum illustrated crediting rates and earned interest rates for the disciplined current scale and (ii) require additional side-by-side illustrations and disclosures to aid consumer understanding. As noted in our prior letter, we believe this reflects the overarching regulator desire to ensure policy illustrations depict a realistic projection of long-term policyholder returns upon which a current or prospective policyholder can establish realistic expectations for account performance and funding requirements.

From a technical perspective, we bifurcate the elements of the illustration that require governance into the:

a) Size of the “option budget”: the amount of total contract value “put at risk” by investing in equity options or other risky investments.
b) **Rate-of-return on the “option budget”:** the illustrated long-term return of the instruments in which the option budget is invested.

**Figure 1: Elements of the IUL illustrated return and associated regulator concerns**

With respect to the **size** of the option budget, we understand the foremost regulator concern to be option budgets that are substantially larger than what can be supported by investing the contract value at yields on prevailing high-quality investments — especially given the expected decline of current portfolio NIERs given far lower prevailing investment yields. This concern has not been addressed by the ACLI proposal, which was developed before interest rates declined to their present level and the examples for which continue to reflect assumed NIERs of 4.5%.

With respect to the **rate-of-return** on the option budget, we understand the foremost regulator concern to be illustrated returns well in excess of high grade investment yields — i.e. overly optimistic assumptions about the realization of market risk premia.

These concerns manifest in the ultimate regulator concern that consumers predicate decisions on unrealistic expectations of contract performance, irrespective of whether the option budgets themselves are overstated or the rate-of-return on the option budget are overstated.

**II. Proposed “Integrated Solution”**

In order to address these concerns in a manner that builds upon the time and thought invested into the ACLI proposal, Equitable proposes to integrate elements of the Independent Proposal and prior Equitable proposal into the ACLI proposal structure. The table below summarizes the principal adjustments to the ACLI proposal that we believe are necessary to accomplish the regulator objectives. The table includes a description and rationale for each adjustment.
The key beliefs behind the Integrated Proposal adjustments to the ACLI proposal are below:

- **Past performance is no guarantee of future returns**: The Integrated Proposal reduces the reliance on backtesting to forecast long-term future returns. Equitable believes backtesting of a given strategy can be part of the product sale process – as reflected in the section 7 table of historical index returns – but has a limited role in the illustration of long-term returns given their unproven predictive power for future returns over multiple decades.

- **A 45% annual excess return is an imprudent basis for long-term return expectations**: The Integrated Proposal reduces the maximum long-term realization of risk premia to 20% per year. Equitable believes this level could still be viewed as overly optimistic – but strikes a compromise relative to the existing 45%. To be sure, a 45% annual return over a multi-decade illustration timeframe leads to significant levels of
projected contract outperformance (three-fold account levels over 50 years), as summarized in the table below.

Table I: Long-term accumulated returns of $1 by proposed annual return cap

<table>
<thead>
<tr>
<th>Return cap</th>
<th>Contract return (5% hedge budget)</th>
<th>Projection length (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>120%</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>145%</td>
<td>8</td>
</tr>
</tbody>
</table>

Of paramount importance to the success of AG49 is that the policyholder expectation for contract performance does not rely on excessive long-run outperformance of the instruments in which the option budget (of whatever size) is invested. The table above demonstrates the considerable outperformance that is assumed in current proposals.

- The size of the option budget should be governed distinctly from the rate-of-return of the option budget: The prior belief notes the significant impact of high annual illustrated risk premia. Better governance of the rate-of-return enables more latitude in the illustration of option budgets that rely, in part, on supplemental charges (not investment returns). This view reflects a belief that (a) a policyholder may reasonably seek a contract with greater market exposure than what can be created by an option budget supported only by prevailing yields on high quality investments – and hence who desire a larger option budget and (b) an outsized (e.g. 145%) rate-of-return on the supplemental charges is not illustrated given more strict governance of the rate-of-return.

To reinforce this point, we consider Indexed UL as offering a spectrum between fixed UL and Variable UL – and a VUL policy has a 100% market exposure since all contract value can be invested in equities, far above the proposed 5% cap for IUL illustrations.

- Standardization of option budget sizes is critical to consistency of illustrations: The Integrated Proposal embraces the Independent Proposal use of Black-Scholes to determine option budget size. Use of a Black-Scholes methodology will ensure consistent inputs are used to size the illustrated option budgets. The prospect of two companies with substantially similar index crediting features and NIERs that illustrate different returns is an objectionable feature of the ACLI proposal.

- Black-Scholes is the best available method to ensure consistent option budgets: Black-Scholes is simply another term for market pricing – and is a practical and robust method to size long-run option budgets. First, Black-Scholes inputs are readily accessible (the ACLI analysis demonstrates this). Second, any market risk premia in Black-Scholes has been demonstrated to be modest over time and, to be sure, any conservatism is far more than offset by the allowance of up to 20% annual excess returns on the option budget investments. Third, any concerns about rate stability year-over-year are irrelevant given (i) rates are, by nature, not stable given fluctuations in market risk from year-to-year and (ii) rate stability has not been identified as a regulator objective.
• **Realistic ‘downside scale’ performance add valuable transparency to consumers:**
The requirement to include an equally prominent, side-by-side illustration of the downside (aka “alternate”) scale that differs only in the rate-of-return of the option budget offers consumers valuable insight into contract performance and potential funding requirements should risk premia not be realized. Holding constant all other elements of the illustration helps to ensure such alternate illustrations are not disregarded as overly conservative by consumers.

### III. Suggested next steps for regulators to close out AG49 revisions

Equitable believes the Integrated Proposal represents a pragmatic solution that leverages the investment of time in the ACLI proposal with critical adjustments to ensure its durability.

To bring the AG49 revisions to a close we suggest the regulators confirm or reject the concerns outlined in Section I and the associated key beliefs behind the “integrated proposal” in Section II. This will enable a more rapid convergence on the final features of the AG49 revision and use of the Integrated Proposal (practical given it starts with the structure of the ACLI proposal).

Thank you once again for the opportunity to share our thoughts with you on this important issue. Please do not hesitate to contact me should you have any questions or concerns regarding our proposal.

![Signature]

Aaron Sarfatti, ASA
Chief Risk Officer
May 27, 2020

Mr. Fred Andersen  
Chair, NAIC IUL Illustration (A) Subgroup  
Mr. Reggie Mazyck  
Life Actuary, NAIC

Re: Exposure of Independent Proposal and Draft AG49

Dear Mr. Andersen and Mr. Mazyck,

At the fall NAIC meeting, LATF members indicated that illustrations of products with multipliers, cap buy-ups, and other enhancements should not illustrate better than products without such features. The American Council of Life Insurers Proposal (ACLI Proposal) achieves this objective by clarifying AG49 requirements for these new IUL product designs. As detailed below, the Independent Proposal:

1. Changes the AG49 requirements for all IUL illustrations, not just the new designs. This was beyond the scope sought by LATF and is not in the spirit of AG49.
2. Increases variability in illustrated rates that will deter consumer understanding. The stability of illustrated rates for a given cap fosters consumer education and the Independent Proposal replaces stability with variability.
3. Contradicts itself in its advocacy, creating further confusion for the consumer. This utilization of different credited rate methodologies fails to meet AG49’s goals.

Global Atlantic recommends rejection of the Independent Proposal and adoption of the ACLI Proposal.

Changes to All IUL Product Illustrations

The Independent Proposal purportedly replaces the lookback approach in AG49 Section 4 with a Black-Scholes calculation. As shown in the examples provided by the Independent Proposal team, however, the detailed Black-Scholes description covers up the calculation’s simple use of the hedge budget. This change is applicable to all IUL designs. Illustrations for all IUL products, not just those with multipliers or cap buy-ups, would change under this proposal. The original draft of AG49 considered the same suggestion as the current Independent Proposal, choosing the lookback approach within AG49 over this proposed approach. The Independent Proposal thus changes the spirit of AG49 beyond that previously established and currently requested by LATF.

The Independent Proposal indicates that the lookback approach is only used with index products. IUL products are the only products subject to the Illustration Regulation that utilize a lookback approach. AG49 was developed because of IUL’s crediting feature and the lack of illustrated rate consistency prior to AG49. All products subject to the Illustration Regulation, including IUL, declare a non-guaranteed credited parameter. For UL, it is the fixed credited rate. For WL, it is within the dividend scale. For both UL and WL, the declared rate is the rate illustrated. For IUL, the declared parameter, for a
Benchmark Account, is the cap. The cap is not the credited rate within the illustration. IUL is therefore the only product that needs to translate the declared parameter into an illustrated rate. It is therefore not noteworthy that illustration requirements stipulate a lookback approach only with IUL products as suggested by the Independent Proposal. It is simply out of necessity. The drafting of AG49 recognized this necessity and developed the lookback approach as a straightforward, understandable approach to foster consistency of illustrations and consumer understanding of product design. This approach should be retained, not replaced.

**Increased Variability in Illustrated Rates**

The Independent Proposal replaces the lookback calculation within AG49 Section 4 with an alternate calculation. The lookback approach was designed to bring consistency and stability in maximum illustrated rates. It also fosters consumer education as the lookback approach is understandable.

The Independent Proposal’s approach will produce notably more variability in maximum illustrated rates year-over-year for a given cap. Variations in option costs will generate these notable changes. This lack of stability will cause consumer confusion, further hindering the consumer’s understanding. AG49’s lookback approach, retained within the ACLI Proposal, maintains maximum illustrated rate stability, benefitting the consumer.

<table>
<thead>
<tr>
<th>Year</th>
<th>Avg Cost Cap 12%</th>
<th>Independent Proposal Illustrated Rate</th>
<th>Change</th>
<th>AG9 &amp; ACLI Proposal Illustrated Rate</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>4.89%</td>
<td>5.06%</td>
<td></td>
<td>6.90%</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>4.57%</td>
<td>5.13%</td>
<td>0.07%</td>
<td>6.92%</td>
<td>0.02%</td>
</tr>
<tr>
<td>2018</td>
<td>5.20%</td>
<td>4.80%</td>
<td>-0.34%</td>
<td>6.96%</td>
<td>0.04%</td>
</tr>
<tr>
<td>2019</td>
<td>5.18%</td>
<td>5.46%</td>
<td>0.66%</td>
<td>7.00%</td>
<td>0.04%</td>
</tr>
</tbody>
</table>

**Contradictory Methods to Illustrated IUL’s Crediting Feature**

The Independent Proposal adds an additional requirement in Section 7B. This would add additional crediting rates to the illustration. These rates are calculated using a lookback approach. The approaches in Sections 4 and Sections 7 of the Independent Proposal therefore contradict each other, producing a myriad of unstable rates determined using different methodologies within a single illustration. Additional rates using different methodologies fails to foster consumer education. It instead will decrease consumer understanding and add to consumer confusion. If the display of lookback interest rates in line with that required by the index annuity illustration is desired, they could be added to the ACLI Proposal which maintains the lookback approach that the Independent Proposal abandoned.

**Summary**

Global Atlantic remains supportive of updating AG49 to ensure that new IUL product designs are illustrated within the spirit of AG49. The ACLI Proposal succeeds in doing so, meeting LATF’s objectives. The Independent Proposal fails to do so and should be set aside. The Independent Proposal team’s recommendation for additional disclosures within the ACLI Proposal should also be set aside. Requiring disclosure of the NIER within IUL illustrations would lead to an uneven playing field as...
universal life and whole life products are not required to display their NIER. Listing the NIER will likely lead to companies seeking to have the highest rate displayed. The original illustration regulation was developed to eliminate this exact situation. The Independent Proposal’s recommendation for just IUL products therefore further contradicts the premise of the entire illustration regulation. Requiring such disclosure would also reveal proprietary information, thereby leading to anti-trust issues.

We appreciate your continued work ensuring the spirit of AG49 and welcome further engagement on the subject.

Thomas A. Doruska  
Head of Life Product Development

David P. Wilken  
President - Life
May 27, 2020

Mr. Fred Andersen
Acting Deputy Commissioner of Insurance
Chair, NAIC IUL Illustration (A) Subgroup
Minnesota Department of Commerce
85 7th Place East, Suite 280
St. Paul, MN 55101

Via E-Mail only to: rmazyck@naic.org

Dear Mr. Andersen:

This letter is to convey the reasons for our support for the Independent Proposal. In no way should our support for the Independent Proposal be interpreted to denigrate or minimize the incredible efforts and countless hours your subgroup and the industry and actuarial organizations have expended in the effort to improve the illustration of Indexed Universal Life.

The chief reasons for our support for the Independent Proposal are listed below. The opinion below are our own personal opinions and observations.

The Independent Proposal is a more complete solution.

The alternative is the ACLI proposal, and while it does a reasonable job addressing the target issues, it does so in a complicated and incomplete manner. The Independent Proposal does a better job of minimizing the potential for future modifications to AG 49 to address product designs that are unknowable at this time.

The Independent Proposal reflects the current environment.

As with fixed Universal Life, it is important to reflect the current economic environment in the illustrated crediting rate. Basing the illustrated crediting rate for a fixed UL policy on historical average interest rates is not appropriate because it does not reflect current economic and market conditions. We believe the same principle should apply to indexed products as well. While history does provide some frame of reference for future performance (and we support the additional return disclosure in section 7 of the Independent Proposal), predicting future performance is not a valid use of illustrations.
The Independent Proposal promotes proper usage of illustrations.

This crucial issue is one identified many years ago in the Final Report of the SOA Task Force for Research on Life Insurance Illustrations. In the report, Type A illustration usage – which is defined as illustrating how the policy works – makes an illustration a useful tool. It is important to show how the policy being illustrated functions under different scenarios of future non-guaranteed experience. A weakness in the industry’s current approach is that it focuses on a single maximum-rate illustration, and it is shown along with the required and frequently ignored guaranteed and midpoint scenarios.

Type B usage is defined as projecting likely or best estimate future performance, and evaluating comparative cost or performance of several policies – and therefore helps the consumer understand which policy is the “best buy.” This type of usage is savaged by the SOA’s task force report as being a wholly inappropriate usage of illustrations.

Further from the report, “It can be seen that Type B usage is inappropriate unless the illustrations include a measure of relative risk. For example, if one illustration shows 15 percent lower premiums, but has a 60 percent greater risk of not achieving projected values, then lack of risk disclosure renders the comparison meaningless. Type B questions assume similar degrees of relative risk...However, since there are really no practical means of assuring similar relative risks, Type B usage for illustrations is fundamentally inappropriate.” [emphasis added]

Many of today’s IUL product illustrations include one or more of these features:
- borrowing to pay premiums
- borrowing to provide retirement income
- cap buy-ups
- multipliers
- non-guaranteed bonus features
- increased policy charges that are leveraged for investment gain

These features can be easily demonstrated to affect the relative risk of failing to achieve illustrated policy performance. In spite of the SOA task force report’s sage advice, policies which contain these features have the appearance of identical relative risk as those that do not – and that has a potential to misrepresent the risks of policy underperformance to the consumer, which is contrary to one of the primary purposes of insurance regulation, i.e. to protect the public.

The opaque nature of Indexed Universal Life demands more illustration discipline and disclosure than fixed Universal Life.
With fixed UL, it was understood by most that interest rates in the 1980’s would not stay at historically high levels indefinitely into the future. Agents and policyholders had a reasonable expectation that fixed UL credited rates would generally follow prevailing rates on investments. In spite of this, many did not fully focus on the severity and required remediation of the effects of declining interest rates on policy performance.

With Indexed UL, policyholders (and possibly agents) DO NOT understand all – or perhaps any – of the factors that will affect policy performance due to changes in the crediting rate and how those are likely to fluctuate in the future. For instance, what future economic conditions would make a “cap” go up or down? What would make a “participation rate” go up or down?

We must admit that the use of illustrations as a competitive tool (Type B usage) is a prevalent use of illustrations. The more we can make use of illustrations to demonstrate how the policy works (Type A usage) and thus allowing the agent and consumer to make an informed decision regarding their financial future, the better we will serve our customers.

Having primary responsibility over the parameters at which IUL credited rates are illustrated, the subgroup should take this opportunity to adopt a guideline that will:

- Base maximum illustrated rates on the current environment and in a prudent manner.
- Minimize manipulation of policy features that increase the risks of policy underperformance, presented in an illustration that is ill-suited for disclosure of the nature and magnitude of such risks.

We believe the Independent Proposal serves these goals better than the ACLI proposal, and we encourage the subgroup to adopt the framework advocated therein.

Respectfully,

Christopher H. Hause
Randall A. Stevenson
May 27, 2020

Fred Andersen  
Deputy Commissioner of Insurance  
Minnesota Department of Commerce  
Chair, NAIC IUL Illustration (A) Subgroup

Re: IUL Coalition Comments on the ACLI’s Proposed AG 49-A and Other Proposals

Fred:

Thank you for the opportunity to comment on the ACLI’s Proposed AG 49-A, and another proposal recently submitted by Mr. Samuelson and others. This letter is submitted on behalf of the following companies listed below (the “IUL Coalition”).

Lincoln Financial Group  
Pacific Life Insurance Company  
National Life Group  
John Hancock  
Sammons Financial Group

The IUL Coalition strongly endorses the ACLI’s proposal and urges its timely adoption by the NAIC Life Actuarial Task Force (“LATF”). Along with the ACLI and others, we also have very serious concerns with the alternative proposal.

The starting point for consideration of the merits of either proposal is whether it achieves the objectives laid out by LATF in votes taken in October and December of last year. Those votes directed that changes to AG 49 be made that ensure that IUL products with charged-for indexed features not illustrate more favorably than IUL products without those features.

As the table on the first page of the ACLI comment letter demonstrates, the ACLI proposal satisfies that test: IUL products with charged-for indexed features will not illustrate more favorably than IUL products without those features. Achieving this goal was a highly complex and time-consuming undertaking that included active involvement and input from a broad spectrum of the life insurance industry; including many companies that are not active writers of IUL products. The ACLI comment letter accurately describes its proposal as representing the consensus of a “broad collection of companies.”

In contrast, the proposal put forth by Mr. Samuelson is inconsistent with LATF’s stated objectives. Mr. Samuelson’s proposal overreaches, extending far beyond regulator direction. The Samuelson
proposal would fundamentally alter illustration practices for every IUL product in the market. The IUL Coalition does not believe that broad and sweeping changes to IUL illustrations – including IUL products without enhancements - are what LATF and other regulators intended when the current review of AG 49 began last year. Neither vote taken by LATF directed or even contemplated such far-reaching impact on every IUL product in the market.

It is also worth mentioning that the key elements of the Samuelson proposal are not new. In fact, these same ideas and arguments were presented to and rejected by LATF in 2015, when AG 49 was originally adopted by the NAIC after extensive debate and discussion.

The IUL Coalition also concurs with the ACLI’s concerns that Mr. Samuelson’s proposal is fundamentally flawed. We note that many of these same flaws were addressed and refuted in an October 28, 2014, ACLI white paper. The ACLI has attached that paper to its comment letter for your review. Any attempt to fix those flaws – even if that could be achieved - would take significant time, potentially months, without any associated consumer benefit. The ACLI proposal by contrast could be finalized in the coming weeks. Taking the time to attempt to fix a fundamentally flawed proposal would needlessly delay the regulators’ stated intent to move quickly on changes to AG 49 before moving on to a “Phase Two” discussion of enhanced consumer disclosures in IUL illustrations.

We appreciate the opportunity to provide our comments and look forward to further discussions.

Respectfully Submitted,

Scott R. Harrison
High Point Strategies, LLC
scott@highpointstrategies.llc

cc: Reggie Mazyck, NAIC
May 27, 2020

Fred Andersen  
Acting Deputy Commissioner of Insurance  
Minnesota Department of Commerce  
85 7th Place East, Suite 280  
St. Paul, MN 55101

Dear Fred,

The undersigned companies present these comments in response to the NAIC IUL Illustrations (A) Subcommittee request for comments on the exposed draft of the Samuelson Proposal for recommended changes to AG49.

Respectfully,

Seth Detert, Securian Financial  
Pete Rothermel, Nationwide  
Jacqueline Fallon, Penn Mutual Life Insurance Co  
Seth Harlow, Mutual of Omaha

We believe that without substantial revisions, the Samuelson Proposal’s exposed revisions to AG49 do not meet the stated requirements of LATF:

- That products with charged-for multipliers and/or buy-up accounts illustrate substantially similar to those products without the additional charges.

- That, within an illustration, there is consistent treatment of policy features such as multipliers, index bonuses, participating loan crediting, and non-benchmark indices across the industry.

Furthermore, we believe that the exposed version is an attempt to relitigate decisions pertaining to the original AG49. If adopted, the Samuelson Proposal would result in Indexed Universal Life contracts being at a disadvantage versus other fixed products from an illustration perspective.

Below are some concerns we have with the Samuelson Proposal. It is not to be viewed as an exhaustive list of our concerns.

- The proposal as written doesn’t establish guidelines for consistent application of the proposed rules to the variety of different ways products credit interest (such as multipliers, bonuses linked to index credits, or persistency bonuses).
  - The examples provided by Samuelson show their approach to achieve the desired LATF results on a variety of product designs. However, the wording in their proposal leaves the application of the regulation to the discretion of each carrier.

- Several clarifications and definitions would need to be added to AG49 to provide clarity and allow for consistent application throughout the industry.
Without the NAIC or another industry group publishing the required inputs, there is a lot of ambiguity around the inputs for the Black-Scholes valuation that will lead to inconsistencies throughout the industry.

Using 12 months average lookback on implied volatility will cause volatility in maximum illustrated rates from year to year versus the current AG49 66-year lookback methodology.

With LIBOR being phased out, it is not a good long-term choice. This section needs to be revisited because “another appropriate interest rate measure” is too generic and will result in inconsistent application throughout the industry.

Section 7 is acknowledging and showing the risk premium associated with different index crediting strategies. We find this inconsistent because the concept of long-term risk premium is the main premise underlying the Samuelson Proposal’s concerns with the ACLI’s recommendation.

The Samuelson Proposal lists concerns that they have with the ACLI proposal, but we do not see how their proposal addresses those concerns:

- The Samuelson Proposal puts emphasis on how each carrier defines their inputs for the Black-Scholes Valuation. Therefore, we believe there is incentive for carriers to use proprietary or less used indices to increase the illustrated rate. Proprietary and lesser used indices will have less consistent data around the Black-Scholes inputs and this could be manipulated by carriers.

- While there is always the potential for new, innovative product designs, the Samuelson Proposal is also susceptible to its application not being applied effectively to new product designs. As currently written, the Samuelson Proposal does not effectively cover the variety of already existing product designs.

- We don’t believe the Samuelson Proposal addresses the “timing differences” noted because the basis for which you credit interest or take asset charges on is not defined.

In closing, we believe that the Samuelson Proposal is farther reaching than the stated goals of LATF when they opened up AG49 for revision. Due to the issues we raised above, the Samuelson Proposal in its current form is incomplete and needs meaningful revisions before it is even to be considered as a solution to LATF’s stated goals. That process will take time, and meanwhile the stated goals of LATF would continue to be unmet and IUL contracts with multipliers and buy-ups could continue to show aggressive illustrations to new clients. For those reasons, we strongly urge the Subcommittee to bring forward the ACLI proposal for vote and ultimate adoption. The ACLI recommendation is a meaningful step forward in the consistent illustration of IUL products and by Samuelson Proposal’s admission addresses the goals of LATF.
May 27, 2020

Fred Andersen
Acting Deputy Commissioner of Insurance
Minnesota Department of Commerce
85 7th Place East, Suite 280
St. Paul, MN 55101

Dear Fred,

Securian Financial presents these comments in response to the NAIC IUL Illustrations (A) Subcommittee request for comments on the exposed draft of the ACLI recommended changes to AG49.

Securian believes the ACLI’s exposed revisions to AG49 accomplishes the main tasks set forth by the Subcommittee:

- That products with charged for multipliers and/or buy-up accounts illustrate substantially similar to those products without the additional charges.

- That within an illustration there is consistent treatment of policy features such as multipliers, index bonuses, participating loan crediting, and non-benchmark indices across the industry.

We would like to commend the ACLI for the job they have done in facilitating the drafting sessions and allowing interested parties to comment on the proposed language. We believe the ACLI has appropriately brought together the previous exposed recommendations to AG49, including new language to address the majority of the concerns raised during the drafting sessions.

We recommend the Subcommittee adopt Option #2 of the ACLI comment letter in regard to the applicability of loan leverage. We believe that the impact of participating loans is unique to the IUL product and that in and of itself gives IUL products certain advantages over other product types in the industry. Thus, it is important that illustrations be inclusive of all types of credits in the loan leverage calculation and not over emphasize the impact participating loans can have on the illustrated values of IUL products.

Securian urges the Subcommittee to bring forward the ACLI proposal for vote and ultimate adoption. The ACLI recommendation is a meaningful step forward in the consistent illustration of IUL products. Additionally, Securian looks forward to working with LATF and the industry on new illustrated practices and disclosures as part of the continued evolution towards transparency and furthering consumer understanding of IUL products.

Respectfully,

Seth Detert, Securian Financial

Securian Financial is the marketing name for Securian Financial Group, Inc. and its affiliates. Insurance products are issued by its affiliated insurance companies. Securities and investment advisory services offered through Securian Financial Services, Inc., registered investment advisor, member FINRA/SIPC.
May 22, 2020

RE: AG49 Independent Proposal Request for Adoption

Dear Mr. Anderson,

I implore the committee to adopt the Independent Proposal as it best aligns with the stated goals of NAIC’s Model Illustrations Regulation and helps better protect consumers from misleading sales illustrations. The complexity of IUL products is staggering especially with products using multipliers, bonuses, and proprietary indexes. The illustration is a woefully incomplete picture of such products, yet that is precisely what consumers are shown to induce a purchase. It is simply unreasonable to expect consumers to identify omissions of material facts, infer under-disclosed risks, or catch inherent nuances in language that imply significant performance reliability (that doesn’t exist) when reviewing IUL illustrations. Consumers need stronger protections from current IUL illustration practices, and the adoption of the Independent Proposal is a good step for the committee to help protect vulnerable consumers.

I have been in the life insurance industry for 28 years, working for life insurance companies, as a producer, and now in the role of VP, Insurance Analytics at Valmark Financial Group. I have written extensively on life insurance topics and given countless speeches to agents, financial planners, CPAs, attorneys, and trustees helping them to better understand products. Frustration with the common public misperception that the illustration is an accurate representation of a life insurance policy contract was the inspiration behind an article I co-authored, “Beyond Illustrations – The Importance of Contract Language”, which was published in the Journal of Financial Service Professionals in July 2017. I work every day with agents, life wholesalers, and other professional advisors reviewing and trying to understand products and illustrations. I have found that few people really understand or appreciate the complexity of IUL products and the significant on-going administrative expertise required over many decades to avoid consumer headaches down the road.

A quirk in the life insurance business is that policy contracts with client specific pricing and features are not available until a policy is issued for delivery. Reversal of the course of action is often impractical at that point especially in cases involving Section 1035 exchanges. As a result, consumer expectations of the product are, unfortunately, shaped almost exclusively by the sales illustration. Consumers are not harmed when an IUL product performs better than expected.

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Securities offered through Valmark Securities, Inc., Member FINRA, SIPC
However, product underperformance can be devastating for consumers. The reliance upon IUL illustrations puts consumers at risk of:

- Unrealistic expectations of product performance
- Failure to understand the sequence of return risk
- Misinterpretation of carrier control over key drivers of policy performance
- Misunderstanding of the broad spectrum of product risks
- Increased out of pocket premiums
- Loss of insurance protection for family members
- Elimination of an anticipated source of retirement income
- Potentially large income tax bills if coverage terminates (in policies using loans for retirement income)

Like many of the supporters of the Independent Proposal, I have seen numerous dubious IUL illustration designs that are, in my opinion, destined for disaster. The net effect of the Independent Proposal is to produce a more conservative illustration than the current AG49 standards or the modifications proposed by the ACLI. It is important to take a step back from the calculation minutia and look at the big picture effect of what a more conservative illustration means to the consumers. It is likely that a more conservative illustration would:

- Effectively require a higher illustrated premium. However, if the consumer experiences better actual performance over time, future premiums may be reduced at the discretion of the consumer. Alternatively, the consumer may utilize the higher cash values that result from better than expected performance.
- Lead to a better statistical probability of adequate funding to achieve policy goals and reduce the risk of harmful policy termination.
- Create a policy better positioned to absorb two key elements that aren’t adequately reflected in illustrations, but which are key drivers of actual policy performance: sequence of returns and carrier changes to non-guaranteed elements like caps, participation rates, or thresholds. (It should be noted that products using multipliers, bonuses and some proprietary indexes are often much more sensitive to changes in these elements.)
- Inherently protect the consumer from some of the poorly understood mechanics and risks unwittingly assumed when purchasing complex IUL products.
- Better manage consumer performance expectations in the IUL products they purchase.
- Reduce some of the marketplace conduct concerns in IUL sales.

A more conservative illustration would NOT:

- Restrict the consumer’s choice of carrier, product, or features.
- Prevent a carrier from utilizing creative product designs or having innovative features.
- Eliminate leverage or arbitrage opportunities in the product if the consumer wanted to utilize it.
There's little downside to the Independent Proposal. It would help protect vulnerable consumers from the bad actors without restricting choices in the marketplace. I encourage the committee to make the bold choice to embrace the Independent Proposal and better protect the consumers that rely upon the leadership of the committee and other NAIC members.

Respectfully,

[Signature]

Thomas R. Love, CLU, FLMI
VP, Insurance Analytics
Mr. Fred Andersen  
Acting Deputy Commissioner of Insurance  
Minnesota Department of Commerce  
Chair, NAIC IUL Illustration (A) Subgroup  
85 7th Place East, Suite 280  
St. Paul, MN 55101

Re: Life Actuarial Task Force (LATF) request for comments on the Samuelson’s Proposal

Dear Mr. Andersen:

Broadly-speaking, we feel the objective of life insurance product illustrations should be to help consumers make informed financial decisions by demonstrating how the product works and the potential risk and return opportunities. While we believe sales professionals are accountable for reviewing the risk and return associated with indexed universal life insurance policies with consumers, we also see an opportunity for improvement in the way these products are illustrated. We look forward to continuing to work with the NAIC on longer-term, more holistic changes to provide better consumer clarity.

The direction that LATF gave in late 2019 was that index accounts with multipliers, cap buy-ups, and other index-linked enhancements should illustrate the same as an index account without such features. We believe that the ACLI’s AG 49A proposal represents a collaborative effort by the industry and accomplishes LATF’s directives.

We are concerned that many of the issues discussed over the past year and carefully considered when drafting the ACLI’s AG 49A proposal, will not be resolved by the Samuelson Proposal. The Samuelson Proposal makes minimal changes to the wording in AG 49 and does not account for all product designs. As such, the Samuelson Proposal changes the foundation set by LATF for AG 49 and introduces substantial complexity that would require further review. Furthermore, the calculations in the Samuelson Proposal lack transparency for the consumer through the use of the Black-Scholes option valuation in determining illustrated rates.

We continue to support the ACLI AG 49A proposal as submitted on April 30, 2020. We welcome the opportunity to discuss and I can be reached at (614) 249-5947.

Regards,

Pete Rothermel  
VP, CFO – Individual Life
RE: AG49 Independent Proposal Request for Adoption

Dear Mr. Andersen,

I am writing to express my support for the Independent Proposal on the IUL AG49 refinements. I have been in the life insurance industry for 40 years.

I am a lawyer by education and admitted to the bar in Ohio, my home state, and Florida, and I am frequently asked by attorneys, accountants, and trustees to review IUL proposals that are being promoted to their clients. I can personally attest to the lack of consumer understanding of IUL products and misleading nature of the sales pitch using the IUL illustration. The consumer isn’t educated in the subtleties of illustration disclosure language or the mathematics used in the illustration. As a result, consumers are frequently left with the impression that their IUL will outperform equity markets with zero risk to them.

The risks are particularly understated in products using policy loans and multiplier or bonus designs which, in my experience, is the prevalent product structure being promoted today. This lack of understanding has been exacerbated by the influx of products using multipliers, buy-up caps, and other mechanisms to use an effective earnings rate that is several percentage points higher than the stated return on the illustration.

AG49 has been abused by life insurers and agents to sell life insurance policies with illustrated results that have no possibility of coming true. Consumers are sheep being lead to financial slaughter with no disclosure of the risks involved with financed and non-financed IUL proposals.

The ACLI proposal will only result in greater product complexity and consumer confusion beyond the high levels of confusion today. The Independent Proposal is a better alternative to protect consumers. I urge the committee to adopt the Independent Proposal.

Richard Connolly, J.d.

Ward & Connolly
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Suite 250
Columbus, OH 43220

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614-486-5103 Fax
rich@wardcon.com
www.wardcon.com
Fred,

Thank you for exposing the Independent Proposal and providing the opportunity to comment on it.

A Fundamental Misconception about Multipliers and Buy-Up Caps

The Independent Proposal was created and submitted for a very specific reason, but perhaps not the one that the members of the Subgroup or the supporters of the ACLI proposal imagine. For the past 18 months, the Subgroup has been evaluating newly created features of Indexed UL products that appear to circumvent the letter and spirit of the original AG 49. Late last year, the Subgroup took a directional vote that these features, particularly multipliers and buy-up caps, should not provide any illustrated benefits in excess of a base Indexed UL product. The implication from the Subgroup’s vote is that a product with these features should illustrate net performance no better than a product without them.

However, these new features are part and parcel to a base Indexed UL product. In fact, buy-up caps were contemplated by the original AG 49 and determined to be in accord with both the letter and spirit of the guideline. They were specifically accommodated by the allowance for multiple Benchmark Index Accounts. Similarly, multipliers are also consistent with the letter and spirit of the original AG 49 in that they do not augment illustrated performance beyond the applicable BIA rate. See below for a table of examples demonstrating the consistency of both buy-up caps and multipliers with AG 49.

<table>
<thead>
<tr>
<th>Current Cap</th>
<th>BIA 1</th>
<th>Multiplier 1</th>
<th>BIA 2</th>
<th>Multiplier 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option Cost</td>
<td>10.00%</td>
<td>8.00%</td>
<td>14.00%</td>
<td>8.00%</td>
</tr>
<tr>
<td>AG 49 Illustrated Rate*</td>
<td>5.05%</td>
<td>4.18%</td>
<td>6.64%</td>
<td>4.18%</td>
</tr>
<tr>
<td>Implicit Charge</td>
<td>6.20%</td>
<td>5.13%</td>
<td>8.15%</td>
<td>5.13%</td>
</tr>
<tr>
<td>Explicit Charge</td>
<td>0.00%</td>
<td>0.87%</td>
<td>0.00%</td>
<td>0.87%</td>
</tr>
<tr>
<td>Multiplier</td>
<td>0.00%</td>
<td>20.81%</td>
<td>1.59%</td>
<td>1.59%</td>
</tr>
<tr>
<td>Net Illustrated Rate</td>
<td>6.20%</td>
<td>6.20%</td>
<td>6.56%</td>
<td>6.56%</td>
</tr>
</tbody>
</table>

*Adjusted so that ratio of Black-Scholes valuation to AG 49 Hypothetical Historical Lookback valuation is constant

Despite claims to the contrary, the companies using multipliers, buy-up caps and other types of product designs were not circumventing or aggressively interpreting AG 49. These companies were, in fact, operating in a manner consistent with the letter and spirit of the original guideline, using the tools specifically provided to them to augment their illustrated performance. The Subgroup is revisiting AG 49 because companies did exactly what the guideline allowed – and even encouraged – them to do. Accomplishing the goals set forth by the regulators regarding multipliers and buy-up caps is not a matter of replacing a faulty heart valve with a new one while keeping the heart itself intact. The guideline is clearly afflicted by a broader disease, of which multipliers and buy-up caps are only some of the symptoms. Limiting the reach of the disease, which is what the ACLI proposes, is only a temporary solution with problematic side effects. The Independent Proposal, by contrast, would permanently cure the disease – quickly, simply and with beneficial side effects for consumers and insurers alike.

The Hypothetical Lookback Methodology in AG 49 Shows Reward, but Not Risk

The source of the disease within AG 49 is readily apparent. The SOA Task Force on Illustrations described the incubator for such a virus in their 1992 report by writing that:
It can be seen that Type B usage [that is, usage of illustrations as performance projections] is inappropriate unless the illustration can include a measure of relative risk. For example, if one illustration shows 15% lower premiums but has 60% greater risk of not achieving projected values, then lack of risk disclosure renders the comparison meaningless.

It is well known and an uncontested fact that Type B usage of illustrations is pervasive in the market for all product types, not just Indexed UL. But Indexed UL has a particular advantage for Type B illustration usage that the Task Force clearly describes as “inappropriate” — AG 49 allows for the illustration of a “risk premium” without a commensurate measure of the risk. Although the ACLI and its constituent companies have repeatedly argued in favor of showing a risk premium in the illustrated scale, they have omitted a mathematical measure of the risk that creates the reward. Fortunately, calculating the risk within the strict confines of the maximum AG 49 illustrated rate is relatively easy.

The illustrated risk premium for Indexed UL is a function of the hypothetical historical lookback methodology (HHLM) detailed in Section 4 (A) of AG 49. This calculation is entirely arbitrary in that it defines a 66 year lookback period, prescribes 25-year rolling geometric averages and uses the arithmetic average of all of the observations as the maximum illustrated rate for the product. Currently, for example, a 10% Cap BIA would result in a 6.2% illustrated rate. Had the parameters been altered to different start dates and different segment lengths (50-10 years), the maximum illustrated rate could have ranged from a low of 5.83% to a high of 7.49%. Most importantly, the calculation uses the average of all of the 25-year segments. The lookback methodology prescribed in AG 49, in effect, dictates that the illustration should show the risk premium associated with a 50% failure rate based on the assumption of constant caps and future index performance mirroring past index performance.

To put this in stark terms, imagine the following example: A client purchases an Indexed UL product and plans to fund the product with a minimum premium to maintain coverage for life. Running the illustration at the maximum AG 49 illustrated rate produces an illustrated level premium of, say, $10,000 annually. What is the likelihood that the $10,000 will maintain coverage through maturity? Roughly 54%, using the actual historical data driving the HHLM in AG 49. Graphically, here is the outcome of returns for this scenario based on the hypothetical historical data feeding the maximum illustrated rate in the current AG 49 calculation for a 10% Cap BIA.
However, even this overstates the true likelihood of success because it rests on the assumptions that the index parameters will not change, that future equity performance will mirror past equity performance and does not show the impact of return volatility. Each of these assumptions are false or wildly aggressive. Future equity returns are **broadly expected** to be less than 7% and nowhere near the historical average of 11% for the S&P 500 Total Return. Indexed credits are vary in the real world and cause sequence of return risk. But most importantly, caps have fallen consistently since 2015 as a result of falling general account yields and adverse option pricing. For example, the ACLI spreadsheet assumes the price of a 10% cap to be 4.31% based on 2015-2019 data and the Black-Scholes formula. Today, an option budget of 4.31% would purchase an 8.5% cap. Below is the same graph as above but recalibrated with today’s fair-market cap of 8.5% as opposed to the 10% cap shown in the first graph.

Note that while the Independent Proposal would produce roughly the same illustrated rate for both caps because of the rising price of the options, the hypothetical historical lookback proposal currently used in AG 49 and preserved by the ACLI proposal would produce wildly different illustrated rates, highlighting the real-world instability of the HHLM and misleading clients as to performance expectations.

Despite the fact that the baseline failure expectation of an illustration using the maximum AG 49 illustrated rate is nearly 50%, none of this risk is disclosed to clients. They see a risk premium, but no risk. It is little wonder, then, why Indexed UL has become the fastest growing part of the life insurance industry and now commands over a 3rd of new permanent life insurance premiums. It is also little wonder why multipliers and buy-up caps, which simply increase the risk and the potential reward of the strategy, have come to dominate the market. If the only thing clients are seeing is reward without any measure of risk, why would they choose anything different?

And, finally, it is little wonder why the ACLI and its constituents are clinging to this flawed methodology. Illustrations sell. Illustrations that show reward with no risk sell even better. What will happen to the Indexed UL sales if the product can no longer illustrate reward without risk? This is not an academic question, but a practical and essential one for life insurers selling Indexed UL. Of the top 20 Indexed UL writers, Indexed UL makes up the majority of sales for 16. More than half of Indexed UL premium is written at life insurers where Indexed UL makes up more than 80% of sales. Much is at stake. But as one regulator noted on a previous call, informed clients would not change their decision based on illustrated performance. In my experience working with countless retail clients, I completely agree with this sentiment. Informed clients see illustrations for their Type A usage, not for improper Type B projections. If life insurance companies have the same view, then why would they be so resistant to replacing a flawed methodology that has now resulted in two regulatory actions to rein in real or perceived abuses stemming from overly aggressive illustrations with something more reflective of fair-market values?
The Independent Proposal Provides the Only Permanent Solution

Remedying this disconnect between illustrated reward and non-illustrated risk is the only way to satisfy the goals stated by regulators. Both the ACLI proposal and Independent Proposal recommend eliminating the impact of the illustration of reward without risk. The ACLI proposal attempts to achieve the goals of the regulators by specifically eliminating the illustration of reward without risk for index-linked features, including multipliers and buy-up caps, that are funded with option budget in excess of the NIER. But in doing so, the ACLI proposal substantially modifies the original guideline in both its letter and spirit, introduces new and ambiguous definitions and formulas and allows non-disclosed elements to affect illustrated performance, rendering illustrations less understandable for consumers. We have detailed the problems with the ACLI proposal in previous letters. The long-run side effects of the strategy proposed by the ACLI proposal may prove to be worse than its benefits.

The Independent Proposal, by contrast, eliminates the illustration of reward without risk for all index-linked credits regardless of how they are funded. It is simple, effective and comprehensive. It meets all of the goals stated by the regulators regarding multipliers and buy-up caps. It does not “renegotiate” AG 49 – it requires just one simple change to Section 4, which is a modular section that can be swapped out without any impact to the rest of the guideline. It does not change the 145% factor in Section 5. Furthermore, the rates shown by the Independent Proposal would accurately reflect the level of the current index parameter, allowing for clear differentiation between the rates shown by different companies or in different accounts.

The only side effect of the Independent Proposal is that it produces more realistic and robust illustrations for consumers that will set expectations such that policies are funded to have a high likelihood of success over the long run. This is the basic concept behind all other fixed life insurance illustrations, where the likelihood of success is 100% assuming no changes to the non-guaranteed elements. The equivalent likelihood of success for an Indexed UL product assuming no changes to non-guaranteed elements and illustrating at the maximum AG 49 rate is 56%. It would be a bizarre argument for one to make the case that, somehow, clients are better served with illustrations that have lower illustrated premiums or higher illustrated distributions but a very high likelihood of failure. If regulators did not choose this illustration regime for other fixed products, then why Indexed UL?

However, the Independent Proposal recognizes that Indexed UL has the real possibility of outperformance as well as underperformance, particularly over short periods of time. Understanding the variability of returns and the potential for both upside and downside is absolutely essential for consumers to make an informed decision. As a result, the Independent Proposal provides for augmented supplemental crediting reports that show a range of variable returns, including those with a clear risk premium. This same methodology has been used in Fixed Index Annuity illustrations with broad support from life insurers. As in FIA, this methodology used in the supplemental crediting reports described in Section 7 of AG 49 would enhance the understanding of consumers, allow life insurers to differentiate their products and promote the potential benefits (and risks) of the index-linked crediting strategy. All of the marketing and promotion done by life insurers about the merits of their crediting strategies, including multipliers and buy-up caps, could be fully demonstrated in these reports. Life insurers would not be constrained in any way to both innovate their crediting strategies and position them with clients.

As a result, I urge the Subgroup to adopt the Independent Proposal. The ACLI and other life insurers who have spoken with their own voice, such as Equitable, can further enhance the proposal. On behalf of my co-signers, I would welcome their input and input from regulators.

Bobby Samuelson
Executive Editor
The Life Product Review
May 26, 2020

Mr. Fred Andersen, Chair of the IUL Illustrations Subgroup
National Association of Insurance Commissioners
IUL Illustration (A) Subgroup
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

Sent via E-mail to RMazyck@NAIC.org

Re: Proposed Actuarial Guideline XLIX (49) Revisions

Dear Mr. Andersen and Members of the Subgroup:

I support the adoption of the Independent Proposal. I am an actuary, fee-only insurance advisor, and expert witness in insurance litigation – and in my view, the current abuses surrounding the illustrations of Indexed Universal Life (IUL) polices are eerily reminiscent of past episodes that ended up being embarrassing and harmful for the entire life insurance industry.

Furthermore, I strongly believe that the ACLI proposal would ultimately be a step in the wrong direction if it were adopted, leading to more complexity, less transparency, more gamesmanship, and no doubt the reconvening of another NAIC subgroup to tackle the next round of abuses. (It’s worth noting that because I am compensated by my clients on only an hourly or project fee basis, I have no financial interest in favoring the Independent Proposal – in fact, maintaining the status quo or adopting the ACLI proposal would no doubt create more future business opportunities for me than adopting the Independent Proposal would.)

Our industry has basically been in a continuous cycle of product (or more accurately illustration) innovation pushing the bounds of plausibility and regulation attempting to reel in perceived abuses. High interest rates in the late 1970s and early 1980s (and the development of widespread computing power) led to arguably the first battleground for illustration wars, where the “best” illustrations had significant marketing advantages. Universal Life (UL) and whole life (WL) each had their moments in the sun, and many consumers purchased policies in the 1980s with false expectations that had been created by unreasonable illustrations used as the primary basis for the purchase decision.

The next battleground emerged within the next decade as booming stock market returns shifted the focus to variable products as the product du jour that could win the illustration wars.
My personal opinion is that the Illustrations Regulation that was promulgated in the 1990s was initially quite effective in curbing illustration abuses, but over time, the effectiveness of that regulation has eroded. With the advent of indexed products, it was apparent that there was a giant loophole in the Illustrations Regulation that did not address such products – and now IUL is the most prominent battleground in the current illustration wars. The original AG 49 attempted to close that loophole, but one need only look at today’s marketplace (and the existence of this subgroup) to see that we are further away than ever from the original intent of the Illustrations Regulation. And again, I do not believe that the ACLI proposal will do anything other than create opportunities for more gamesmanship whose sole purpose is to increase the allowable illustrated rate. Companies and agents have long recognized that the best way to sell insurance policies is to have the best illustration – and as long as regulation exists that rewards the companies that are most willing to push the envelope, there will always be a back and forth between abuses and regulations intended to curb those abuses.

The Independent Proposal properly reflects that the hedges used to mitigate the investment risks within an IUL policy are insurance rather than investments. I have yet to see any reasonable basis for believing that a hedging program is itself a source of profit; indeed, it seems that the primary justification for increasing the amount of hedging (through features like rate multipliers) within an IUL policy is to increase the effective illustrated rate of return (even though the stated illustrated rate of return is unchanged).

This leads to disturbing observations in today’s IUL illustrations that are commonplace – and observations that in my view would ultimately NOT change under the ACLI proposal (because it keeps the door open for other potential abuses, some of which have already been identified in the Independent Proposal and others that we can’t anticipate). As I write this, I’m looking at a representative IUL multiplier illustration with an account value that increases by 7.8% from one year to the next, net of expenses and cost of insurance charges with no premiums paid in that year, in spite of the fact that the stated illustrated rate is 5.67%. This very same illustration shows a cash value and death benefit IRR at age 100 of 7.6%, which again is quite remarkable when the stated illustrated rate is only 5.67%. What consumer wouldn’t be attracted to an illustration that shows an effective rate of return in excess of 7% when it is being compared with other IUL and non-IUL products that are not taking advantage of the multiplier loophole (and therefore have effective illustrated returns likely under 5%)? Ultimately, I believe that these types of illustrations will continue to exist even if the ACLI proposal were adopted – they would just manifest themselves in ways other than the current multiplier technique.

This IUL illustration problem manifests itself in two other ways via leveraging. First, it is quite commonplace for IUL illustrations to show heavy internal borrowing for distributions during retirement. The most attractive illustrations utilize indexed loans, which combine a fixed policy loan rate with credited rates on borrowed funds that are unaffected by the
Creating Client Value Through Fee-Only Insurance Advice

borrowing activity (think non-Direct Recognition on WL policies). When you combine a loan rate of say 4.67% with a 5.67% IUL illustration (100 bps is the widest spread allowed with AG 49 currently) that has an effective illustrated return of more than 7%, you arrive at the inescapable conclusion that you are better off by borrowing sooner, borrowing more, and borrowing longer – and that’s exactly what the most “competitive” illustrations do – without capturing any of the risk presented by the extra leveraging or the possibility of the dreaded “surrender squeeze” phenomenon on heavily loaned policies.

Second, it is increasingly common for premium financing proposals to utilize aggressively illustrated IUL as the product of choice. Again, when you are able to combine an initial premium financing loan rate of under 4% with an illustrated effective IUL return upwards of 7%, it’s easy to see how compound interest works its magic – at least on an illustrated basis. In my experience, these proposals often barely acknowledge the multi-layered risk that exists with the reliance on a continued positive arbitrage, and it all starts with the portrayal of the illustrated returns within the IUL policy being deemed reasonable and sustainable. Quite often, these premium financing proposals become dramatically less attractive or fall apart completely if they use a non-multiplier IUL or a non-IUL product instead of the IUL product with multipliers (or whatever the next version of a multiplier product would be under the ACLI proposal).

By utilizing the widely recognized Black-Scholes option valuation methodology, the Independent Proposal creates what I believe is a more transparent and more appropriately level playing field, not only with IUL vs. IUL comparisons but with IUL vs. non-IUL comparisons.

I believe that the NAIC has the opportunity to proactively address and prevent what may otherwise become another black eye for the industry. With all due respect to the tremendous amount of work encompassed therein, my view is that the ACLI proposal is a band-aid approach that virtually guarantees that we will once again be revisiting this topic and looking for regulatory revisions within the next few years.

Sincerely,

Scott J. Witt, FSA, MAAA
President, Witt Actuarial Services, LLC
October 28, 2014

Mr. Mike Boerner
Chairman – NAIC Life Actuarial Task Force

Re: Actuarial Guideline on Illustrations of Indexed Universal Life Policies

Dear Mr. Boerner;

The ACLI\textsuperscript{1} thanks the Life Actuarial Task Force (LATF) for the opportunity to provide comments on the two exposed Actuarial Guidelines for IUL Illustrations. In the comments that follow, we provide support for the ACLI’s proposal, questions about the alternative proposal, and highlight what we believe to be the strengths of ACLI’s proposal compared to the alternative proposal.

Illustrated rates vs. market conduct items

In our development of the proposed Actuarial Guideline, we focused on the value provided in an IUL and how it translates into an appropriate illustrated rate. We recognize that illustrated rates are not the only issue to be addressed; however, given the current lack of clear guidance, the ACLI chose to address illustrated rates first with an Actuarial Guideline. The advantage of an Actuarial Guideline is that it would:

- Apply to all carriers uniformly and immediately
- Clarify practices for actuarial functions
- Draw authority from existing regulations.

In February, the ACLI Life Insurance Committee charged the IUL Task Force to address, once the illustrated interest rate was settled, other important items such as loan illustrations, variability of returns, and other disclosures. Since these items potentially impact non-IUL life insurance products, and are not actuarial items, the ACLI believes it is appropriate to address them in an initiative separate from this Actuarial Guideline. While this work has currently taken a back-seat to the illustrated rate discussions, ACLI welcomes the opportunity to work with regulators on further improvements for broader illustration considerations. We do not believe that the existence of these

\footnote{\textsuperscript{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.}
other items should preclude resolution of guidance for illustrated rates as addressed in the exposed Actuarial Guideline proposed by ACLI.

The ACLI’s proposal improves customer understanding

IUL illustrations are subject to the life illustration regulation (NAIC Model 582) and Illustration Actuaries are subject to the Actuarial Standard of Practice on such illustrations (ASOP 24). While use of current interest parameters and current charges is clearly allowed in illustrations, existing guidance for the IUL illustrated rate is unclear, since the credited rate relies on the performance of an external index. As a result, various crediting rates are illustrated today.

The limited guidance for the Illustration Actuary and the lack of consumer understanding that results from inconsistent methods of determining illustrated rates was a focus of ACLI activity. The ACLI identified the following goals, and then drafted a proposed Actuarial Guideline that meets those goals:

1. Create consistency in determining illustrated rates for similar IUL products;
2. Ensure customer awareness of the likelihood for variability of returns;
3. Align with existing regulations and other general account products;
4. Allow for uniform and expedient applicability; and
5. Be adaptable for future new product development and future economic scenarios.

The ACLI’s recommendation meets these goals, and highlights the interest crediting features that are unique to IUL. Key features, which were influenced by all participating ACLI members including those who ultimately did not support the end product, include the following:

- Policy values are illustrated at two nonguaranteed interest rates in addition to the guaranteed rate in order to highlight the likelihood of variability of returns.
- A table of historical index rates is provided to highlight year-by-year variability of returns.
- A table of historical averages based on different index parameters is provided to highlight variability of nonguaranteed elements and the impact to credited rates.

The illustrations resulting from ACLI’s proposal will provide valuable disclosure to consumers and will educate consumers on the different types of index crediting options that are available within an IUL policy.

The ACLI’s proposal is technically sound and supported by actual experience

A key question that has been raised is whether a typical company’s investment strategy can support the rates that are determined by a look-back of past index performance. Often, the majority of a company’s assets supporting an IUL policy are typical general account assets (e.g. bonds and mortgages) and a smaller amount of assets are options that generate payoffs to support index-linked crediting rates.

A review of S&P 500 options since 1994 shows the cost of an annual 0%-12% call-spread has been relatively stable. Specifically, the mean cost was 5.09%, with a low cost of 3.74% and a high cost of 6.41%. At the time of the highest cost, a 10% cap would have brought the cost down close to the long-term average for the 12% cap. The average return over that period based on the cost of the

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2 Prices for 12 month S & P options obtained from reports provided by Credit Suisse

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options was more than 50%, implying that a 5% budget would have produced a 7.5% average return with annual rates that varied from 0% to 12%.

In this light, the ACLI’s proposed look-back methodology provides a result that is not unreasonable (7.6% for a one year S&P 500 index, using a 12% cap and a 0% floor). This is particularly true when viewed in the context of the various components of the proposal.

**Strengths of the ACLI Proposal**

The ACLI has reviewed the alternate proposal and all publicly available material in support of that proposal and wants to highlight the following strengths of the ACLI proposal:

An Illustration based on the ACLI proposal will:
- Educate consumers on IUL likelihood of variability of returns,
- Highlight the nonguaranteed nature of interest credits, that an illustration is not a projection,
- Show consistent illustrated rates for products with similar interest crediting options,
- Use illustrated rates that reflect the unique characteristics of the underlying index and crediting method,
- Align with NAIC Model 582 and ASOP 24:
  - Use non-guaranteed elements and actual experience in accordance with ASOP 24,
  - Be based on sound, accepted investment theory and actual experience,
- Be based on a disciplined current scale that results from clear, formulaic guidance for the Illustration Actuary, and
- Highlight risk tradeoffs in interest crediting options.

**Conclusion**

The ACLI continues to support our proposed Actuarial Guideline for IUL illustrated rates and looks forward to separate collaborations to address broader illustration considerations that impact all life insurance product illustrations. The ACLI welcomes the opportunity to work with LATF to discuss the proposed Actuarial Guideline and incorporate suggestions that will improve consumer understanding, protection, and disclosure within an IUL illustration that builds upon the foundation established within Model 582 and ASOP 24. Attached is a paper developed by a group of IUL carriers that provides additional detail and context to the various details of the proposals.

Cc Reggie Mazyck, NAIC
Introduction

On August 14, 2014, the American Council of Life Insurers (ACLI) presented a proposed Actuarial Guideline for Indexed Universal Life (IUL) illustrations to the Life Actuarial Task Force (LATF). In this document we provide sound analytical support for this proposal. In response to the alternative proposal, actuaries from the ACLI majority coalition have put together the following detailed analysis, demonstrations, and case studies in support of IUL and the ACLI’s proposed guideline.

On September 5, 2014, a group of life insurance carriers distributed an alternative proposal for an IUL Actuarial Guideline and a letter describing the rationale behind the proposal. While we disagree with both the alternative proposal and the rationale, we share many of the goals and believe the ACLI’s most recent proposal contains robust solutions needed to address these issues.

In the analysis that follows, we will demonstrate:

- IUL products provide strong value for consumers looking for more growth potential without risk of loss of principal by enabling them to exchange their fixed account return for an index-based return.
- The ACLI’s proposal
  - Is consistent with existing regulation.
  - Is supported by actuarial principles, sound, accepted investment theory, and solid historical evidence.
  - Will enable consumers to understand the risks and rewards of the product.
- ACLI believes that the alternative proposal
  - Is inconsistent with existing regulation.
  - Is inconsistent with observed experience.
  - Does not provide sought-after consistency.

In Appendices A through E, we provide:

- A case study showing actual risk premium credits exceeding 400 basis points.
- An industry history of steady rate setting despite tumultuous market conditions.
- Analysis showing the ACLI’s proposal is calibrated with other UL products on the market.
- A demonstration showing the alternative proposal would cause incongruous disparity between insurers.
- Analysis demonstrating that the last 20 years were not ideal for IUL.

The value of IUL

IULs are a type of universal life insurance product, with flexible premiums and long expected duration. Unlike Traditional Universal Life (TUL), where policy value earns a fixed interest rate declared by the company, IUL provides the opportunity to earn interest based on the performance of a market index. Unlike Variable Universal Life (VUL), where policy value is invested in “subaccounts” that may increase or decrease due to market index changes, IUL is a general account product that provides an interest rate floor (e.g., 0% or higher) that protects against market index losses, and applies index parameters (e.g. caps, participation rates) that may limit the indexed interest earned. Thus, the average level of IUL interest crediting can be thought of as being between TUL and VUL.3

Consumers who purchase an IUL choose to trade the relatively stable fixed account return for a more risky and uncertain return based on an index. IULs provide consumers the ability to earn interest based on a market index, while providing downside protection against market losses.

Because market indexes bear more risk than traditional general account bond portfolios, IUL index options are expected to provide a long-term average return that is higher than the general account rate consistent with capital market theory and practice.

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3 Although IUL credits indexed interest, it is not a security; its value cannot decrease due to market index changes.
IUL Study: Theory, Practice, and Experience

Risk premium: theory and practice

Many insurers use a derivatives-based strategy to back their IUL products. By using call options, these insurers can offer their policyholders a responsible balance between principal protection and market exposure.

Investment portfolios with similar expected volatility (risk) have similar expected returns, and portfolios with higher expected risk will have higher expected reward. This theory is called arbitrage pricing theory,4 is reflected in the capital assets pricing model (CAPM), and it has been supported by historical experience.

Analysis from 1996-2013 has demonstrated a typical IUL portfolio comprised of bonds and call options has close to 300 basis points of risk premium over a portfolio consisting solely of bonds. Depending on the asset assumptions used, a back-tested one-year S&P IUL index interest option would have credited between 9-10% compared with a typical 6-7% general account portfolio yield during the same time period.

One company’s actual weighted average payoff on their option positions from September 2005 to August 2014 was 9.14%, compared with a weighted average option cost of 4.94%.5

The investment mechanics supporting IUL

IUL companies could use a number of strategies to support index-linked interest. The following two strategies would generate returns to match the index-linked interest with floor guarantee:

1. Invest in equities and buy put options for downside protection
2. Invest in fixed income instruments and buy call options for both upside potential and downside protection

Both strategies provide the same return profiles and therefore have similar, meaningful risk premium; strategy 2 is more capital efficient under RBC calculations.6

Support for the ACLI’s proposed Actuarial Guideline

A life illustration is one of many tools used to facilitate consumer education. Ideally, the illustrated values in a life illustration would exactly match future policy performance; however, this cannot be accomplished for TUL, IUL, VUL, or whole life products due to nonguaranteed policy features such as interest rates, policy charges, dividends, and bonuses. Because of this, it is inappropriate to imply that any aspect of an illustration should be used to project or predict the future; illustrations are intended to show how different policy features work.

Although both Model 5827 and ASOP 248 apply to IUL illustrations, IUL illustration actuaries have lacked clear guidance for illustrated rates, so the ACLI formed the ACLI IUL Task Force to develop guidance. The task force identified the following five goals, and then drafted a proposed Actuarial Guideline that meets those goals.

Goal 1. Create consistency in illustrated rates for similar IUL products

The ACLI’s proposal will result in identical maximum illustrated rates for IUL products with the same index, crediting method, and index parameters. Illustration actuaries will benefit from that clarity of the ACLI’s proposed guideline, and consumers will gain a better understanding of the product with this consistency.

Goal 2. Ensure consumer awareness of variability of returns

The ACLI’s proposed Actuarial Guideline includes three mechanisms to address this goal.

The first is the inclusion of a midpoint scenario in addition to the input scenario and guaranteed values. This additional scenario is unique to IUL, and will show the impact of lower interest rates to the various features of an IUL policy. It will also provide a safeguard

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4 Brealy and Myers, “Principles of Corporate Finance”
5 See Appendix A for the full case study.
6 30% Risk Based Capital (RBC) treatment for equities vs. 0.3% to 1% RBC treatment for derivatives
7 Model 582: “Life Insurance Illustrations Model Regulation” published by the National Association of Insurance Commissioners (NAIC)
8 ASOP 24: “Actuarial Standard of Practice No. 24: Compliance with the NAIC Life Insurance Illustrations Model Regulation” published by the Actuarial Standards Board
when indexed loans are being illustrated—illustrated rates will typically be less than loan charges so the loan mechanics will become more transparent.

The second is the historical look back table. This table will illustrate the potential variability of returns from year to year so consumers know not to expect a level interest rate in all years.

The third is a table showing the sensitivity of the look back rate to index parameter changes, which will emphasize that index parameters are nonguaranteed.

**Goal 3. Align with existing regulations and other general account products.**

An Actuarial Guideline should clarify and build upon existing regulations and standards of practice. Section 3.4.1(a) of ASOP 24 prescribes the use of experience factors when determining the investment income for the disciplined current scale:

- **Investment income**, which is defined as an “experience factor,” should reflect the “recent actual investment experience, net of default costs, of the assets supporting the policy block.”

- **Investment income** should also “reflect the insurer’s actual practice for nonguaranteed elements with respect to realized and unrealized capital gains and losses, investment hedges, policy loans, and other investment items.”

The same section of ASOP 24 also requires the use of historical index data specifically for IUL:

- **Investment return factors**, which are used to determine investment income, should “be reasonably based on recent actual investment experience [...] the actuary should consider an appropriate time frame commensurate with such cycles and the characteristics of the underlying index in determining recent actual experience.”

The ACLI’s proposed 25-year look back aligns with ASOP 24 because it uses actual historical index experience and current nonguaranteed elements (i.e. the index parameters).

The use of current index parameters reflects the roughly 10 years of IUL carriers’ experience developing and selling IUL. Over that time period, most carriers’ index parameters have been reasonably stable. Proposed to use “historical” index parameters could result in index parameters that exceed an insurer’s current scale, would conflict with ASOP 24, and would be akin to showing historical fixed rates in a TUL illustration.

The ACLI’s proposed Actuarial Guideline builds on ASOP 24 by specifying an “appropriate time frame” to be used as the basis for the assumed investment returns. Since 1945, the average business cycle has been just over 5 years long. As a result, a 25-year look back period would include 4-5 business cycles. Thus, the 25-year period proposed by the ACLI aligns with the guidance in ASOP 24.

**Goal 4. Uniform and expedient applicability**

Given the current lack of clear guidance, the ACLI first chose to address illustrated rates with an Actuarial Guideline, because Actuarial Guidelines:

- Apply to all carriers uniformly and immediately.
- Clarify practices for actuarial functions (in this case, the role of an illustration actuary).
- Align with existing regulations and standards of practice.

The ACLI established a process in the early spring to address market conduct-related illustration items – such as policy loans, variability of returns, and other disclosures – in a separate initiative. These market conduct items potentially impact non-IUL life insurance products, and are not actuarial items, so it was appropriate to separate them from the IUL Actuarial Guideline. Due to discussions on the illustration interest rates, work on the other issues has been deferred.

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9 Actual historical IUL caps are shown in Appendix B.

Goal 5. Adapt to product differentiation, future new product development, and future economic scenarios

The ACLI’s proposed Actuarial Guideline adapts to new product and emerging economic scenarios.

Many IUL products offer more than one interest option. These interest options fall on a wide continuum—from the stable fixed interest options (similar to TUL) to index options with more upside potential.

Figure 1 shows the impact that volatility of returns has on illustrated rates for various types of life insurance. The analysis to support Figure 1 is contained in Appendix C.

Figure 1: Maximum illustrated rates for various types of universal life products

Practical problems with the alternative proposal

The alternative proposal introduces the following problems:

Problem 1. The alternative proposal does not comply with ASOP 24

The alternative proposal does not use actual experience to determine investment income, does not use actual index experience, and does not reflect the current cap (the nonguaranteed element), in conflict with Section 3.3.4.a. of ASOP 24.

Problem 2. The alternative proposal would result in inconsistent illustrated rates

Under the alternative proposal, two companies with the same index parameters could have two different illustrated rates. The opposite could also be true: two companies with different index parameters could have the same illustrated rates. This inconsistency would cause confusion and hinder consumer understanding.11

Problem 3. The alternative proposal does not provide guidance for the defined “indexed derivative return” (the proxy for equity risk premium)

Each illustration actuary would need to develop an individual evaluation methodology, resulting in ambiguity for compliance and inconsistencies across the industry.

Problem 4. Explanation of “indexed derivative return” within illustration would hinder consumer understanding of the IUL product

Agents would be expected to explain the actuarial derivation of the “indexed derivative return,” which would be further complicated by the inconsistencies among insurers. This detail would confuse consumers and distract them from the relevant mechanics of their policy, rather than improve their understanding of how the policy operates.

In addition, this would cause inconsistencies with all other life insurance product types, which are not required to disclose investment return assumptions in their illustrations.

Problem 5. The alternative proposal applies an arbitrary 12% limit on the “indexed derivative return” without any evidence to support it. According, it would not permit reflection of differences between various index designs.

The 12% cap on the “indexed derivative return” does not allow for the illustration of a risk premium consistent with historical experience, nor does it differentiate between the risk profiles among the index options. For example, under the alternative proposal, an IUL with a 5% fixed interest rate would have a 5.60% maximum illustrated rate, meaning the maximum difference between a general account and any index options would be 0.60%, which is far less than the 300 basis points found in the IUL Risk Premium Analysis.12

11 Appendix D demonstrates the disparity caused by the alternate proposal.
12 See attached IUL Risk Premium Analysis
IUL Study: Theory, Practice, and Experience

Controversial items raised by the alternative proposal

Claim 1: BXM index proves that “options are generally profitable to the seller and are unprofitable to the buyer.”

This assertion does not recognize the difference in risk profile between the covered call reflected in the BXM and the call spread reflected in IUL interest crediting.

A covered call is a strategy in which an investor has a long position in equity (i.e., owns stock) and then sells a call option on that same equity. In doing so, the investor gives up the potential for returns above a certain threshold in exchange for the certainty of the option premium.

A call spread is a strategy in which an investor buys a call at one strike price and sells a call at a different strike price. In the case of IUL, the strike price for the purchased call is typically at the level of the floor (e.g., 0% or 2%) and the strike price for the sold call is typically at the level of the cap. In doing so, the IUL carrier payoff structure matches the interest owed to the policy owner.

The payoffs for a covered call and a call spread purchase are shown in Figure 2.

Figure 2: BXM strategy vs. call spread payoffs

BXM: Covered call

IUL: Call spread

The BXM strategy maintains downside risk if the market decreases because the value of the equity decreases and the call option has no value. If the market increases, the investor must pay the increase to the call buyer; this is offset by the increase in the value of the equity and the investor keeps the call premium from the original sale.

A call spread strategy has limited downside risk; if the market decreases the investor loses the options premium. If the market increases, the purchased call will pay out in all scenarios, but this payoff is offset by the sold call in the event that the market increases beyond a certain strike price (the cap).

The significant difference in structure between the BXM and an IUL means the BXM analysis is not relevant to the value of an IUL.

Claim 2: Stochastic analysis proves the 25-year look back produces unsupportable rates

The analysis described in the alternate proposal support letter uses an Economic Scenario Generator (ESG) that was developed for variable annuity reserving valuation. As such, the ESG is calibrated to be conservative and produce a large number of low or negative equity scenarios relative to actual experience and reasonable assumptions. Thus, it is inappropriate to use these ESG scenarios to analyze the reasonableness of the 25-year look back methodology.

Claim 3: The expected return on a call option over time should be 0%.

One of the citations used to justify this position is academic literature describing risk-neutral valuation. However, the alternative proposal does not consider that risk neutral valuation is “merely an artificial device for obtaining solutions to the Black-Scholes differential equation.” Options and derivatives are not risk neutral, and they carry more risk than general account bond portfolios and even equities.

Claim 4: A 50% annual return assumption is “exorbitant.”

To some, a 50% expected return seems outrageous, especially considering the historical average annual return for the S&P 500 total return index was around 10%. But the letter ignores the fact that a position in a call option is riskier than a position in equity. If an index change is negative (even if only slightly negative) a call option will pay out $0 and the purchaser will lose the entire purchase price. So it would stand to reason that a purchaser of a call would expect a high upside in return for a chance of total loss.

Historical data supports this concept. Analysis of option prices obtained from Credit Suisse demonstrates a 54% historical average annual return for a one-year S&P 500 IUL interest option with a 12% cap and 0% floor.15 If the cap drops to 10%, the average annual return is still 52%.

Question 1: If call options are so profitable, why don’t insurers use them to generate higher returns in their own general accounts?

The purpose of an insurer’s general account is to provide a relatively stable fixed income return; the variable expected return of call options does not fit within that profile. Insurers’ match their assets with their liabilities, and buying call options beyond what is required to support policyholder interest crediting would result in an unmatched portfolio.

Question 2: Why would anyone sell a call if the long run expectation is negative?

Derivatives are rarely used as a sole investment, so one should use caution when analyzing derivatives use separately from the rest of an investment strategy. In addition, every investor’s goals are unique; often one cannot pinpoint the motivation behind an isolated decision.

Four examples of parties who sell call options:

- Owners of equity portfolios who earn fee income by giving up the upside in their holdings. The combined positions (known as covered calls strategies) give up expected upside return for a more reliable stream of fee income.
- Insurers who subsidize the cost of an at-the-money-call purchase by selling an out-of-the-money call (i.e. call spread).
- Index managers and fund managers who protect equity investments against market declines at a reduced cost.16,17

There are many observed examples of rational purchases made when the long run expectation is negative. Insurance in general is a prime example—anyone who buys insurance has a negative long run expectation, yet the benefits to the purchaser justify the cost.

One specific example of buying insurance is common within the variable insurance market. Although the long run expectation of buying a put is negative, variable insurance providers buy puts because they are willing to pay for protection. Another specific example: investment managers (whose fees are based on the value of customer accounts) will also pay for protection in exchange for the more certain income.

Claim 5: Investment professionals, endowments, and pension funds “sell options as a way to generate income.”

In reality, these professionals sell options as a part of the covered call structure described in the BXM analysis section of this paper; they are not sold alone as investments. Such parties who sell options to hedge their net long positions in equities remain net long. An IUL also has a net long position in equity.

15 Annual options purchased once per month (mid-month), covering index changes from 9/16/1994 through 7/18/2014

16 E.g., the CBOE S&P 500 95-110 Collar IndexSM (CLL.SM): http://www.cboe.com/SPXMS/SP500/95-10CollarIndex.aspx
17 E.g., the Russell Strategic Call Overwriting Fund: http://www.russell.com/us/Investment_Products/Russell_Funds/Strategic_Call_Overwriting_overview.asp
Claim 6: Index performance from 1994 through 2013 was “ideal” for an IUL look back.

An analysis of the S&P 500 price index since its inception shows that the most recent 20-year time period was not “ideal” when compared with other historical 20-year time periods in terms of average volatility, interest rates, and equity movements.\textsuperscript{18} Since there is no such thing as a “typical” index period, it is important to follow ASOP 24 and find “an appropriate time frame commensurate with such cycles and the characteristics of the underlying index.” The ACLI’s proposed Actuarial Guideline defines this as a 25-year period. Historically, 25-year periods have been sufficiently long to include 4-5 business cycles, but are not so long as to understare the more recent results of an evolving marketplace.

Conclusion
In this paper, we have demonstrated:

- IUL products provide strong value for consumers looking for more growth potential without risk of loss of principal by enabling them to exchange their fixed account return for an index-based return.
- The ACLI’s proposal:
  - Is consistent with existing regulation.
  - Is supported by actuarial principles, established investment theory, and solid historical evidence.
  - Will enable consumers to understand the risks and rewards of the product.
- ACLI believes that the alternative proposal:
  - Is inconsistent with existing regulation.
  - Is inconsistent with observed experience.
  - Does not provide sought-after consistency.

Important analysis and additional information is contained in the appendices.

We welcome the opportunity to work with LATF to consider additional improvements that will further aid consumer understanding, while remaining consistent with existing guidance and established actuarial principles.

\textsuperscript{18} Appendix E shows that 1994 through 2013 was unfavorable for IUL analysis.
Appendix A

Actual options experience demonstrates significant risk premium

Company XYZ case study

Company XYZ has invested in high quality bonds and equity index call spreads to back its IUL products since 2005, and has exhaustively tracked their historic investment activity. Company XYZ’s actual results for all of their products are far better than the levels the alternative proposal views as possible:

- The one-year S&P 500 product (12% - 13% cap, 0% floor) has produced attractive credits for policy owners, averaging 8.63% since inception.
- Their fixed-income portfolio has supported the options budget every year.
- As a percentage of account value, their average options cost has been 4.94%.
- The weighted average payoff on their option positions has been 9.14%.
- This translates to an 85% return on their options through a very difficult market cycle.
- The average fixed rate during that time was 5.15% with a range from 4.50% to 5.35%.

Company ABC case study

Company ABC has invested in high quality bonds and equity index call spreads to back its IUL products since January 2006, and has tracked their historic investment activity. Company ABC’s actual results are far better than the levels the alternative proposal views as possible:

- As a percentage of account value, their average options cost for all of their one-year S&P 500 products has been 4.64%.
- The weighted average payoff on their option positions has been 8.29%.
- This translates to a 78% return on their options through a very difficult market cycle.
- The average fixed rate during that time was 5.10% with a range from 4.00% to 5.80%.
Appendix B

Actual historical IUL caps were steady despite an unsteady market

IUL products have been on the market since 2002. During that time, caps have been reasonably stable despite tumultuous market movements.

Please note: Both IUL and TUL have nonguaranteed rates, such as crediting rates, mortality charges, and expense charges, and various product designs may result in different rates or different updates to those rates. Thus, an appropriate evaluation of any product considers the entire product, and not one rate alone (e.g., index parameters).

**STEADY: Actual historical caps for one-year S&P 500 annual point to point index option with 0% floor**

<table>
<thead>
<tr>
<th>Calendar year</th>
<th>Company A</th>
<th>Company B</th>
<th>Company C</th>
<th>Company C</th>
<th>Company D</th>
<th>Company D</th>
<th>Company E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>11.00%</td>
<td>11.00%</td>
<td>11.00%</td>
<td>11.50%</td>
<td>12.00%</td>
<td>12.00%</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>11.00%</td>
<td>11.00%</td>
<td>12.00%</td>
<td>11.50%</td>
<td>12.00%</td>
<td>12.00%</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>12.00%</td>
<td>12.00%</td>
<td>12.00%</td>
<td>12.00%</td>
<td>12.00%</td>
<td>12.00%</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>12.00%</td>
<td>12.50%</td>
<td>12.00%</td>
<td>11.50%</td>
<td>12.00%</td>
<td>12.00%</td>
<td>12.00%</td>
</tr>
<tr>
<td>2006</td>
<td>12.00%</td>
<td>12.50%</td>
<td></td>
<td>12.00%</td>
<td>12.00%</td>
<td>12.00%</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>12.00%</td>
<td>12.50%</td>
<td>11.50%</td>
<td>12.00%</td>
<td>12.00%</td>
<td>12.00%</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>12.00%</td>
<td>12.50%</td>
<td>14.00%</td>
<td>11.50%</td>
<td>11.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>12.00%</td>
<td>13.00%</td>
<td>14.00%</td>
<td>11.50%</td>
<td>11.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>12.00%</td>
<td>13.50%</td>
<td>13.50%</td>
<td>12.00%</td>
<td></td>
<td></td>
<td>10.50%</td>
</tr>
<tr>
<td>2011</td>
<td>13.00%</td>
<td>14.00%</td>
<td>13.50%</td>
<td>13.00%</td>
<td>12.00%</td>
<td>12.00%</td>
<td>10.50%</td>
</tr>
<tr>
<td>2012</td>
<td>13.00%</td>
<td>14.00%</td>
<td>13.50%</td>
<td>13.00%</td>
<td>12.00%</td>
<td>12.00%</td>
<td>10.25%</td>
</tr>
<tr>
<td>2013</td>
<td>13.00%</td>
<td>13.50%</td>
<td>13.50%</td>
<td>12.00%</td>
<td>11.00%</td>
<td>12.00%</td>
<td>9.75%</td>
</tr>
<tr>
<td>2014</td>
<td>12.00%</td>
<td>13.50%</td>
<td>12.00%</td>
<td>11.50%</td>
<td>11.00%</td>
<td>12.00%</td>
<td>9.75%</td>
</tr>
</tbody>
</table>

**UNSTEADY: Actual historical market data for the same period**

Figure 4: Significant historical swings in implied volatility

Figure 5: Significant historical downward interest rate trend
Appendix C
The ACLI’s proposal is calibrated with other UL products on the market

There is a wide variety of IUL indexed interest options available in the marketplace today.

<table>
<thead>
<tr>
<th>Crediting type</th>
<th>Crediting periods</th>
<th>Index parameters</th>
<th>Floor guarantees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual point to point</td>
<td>1-5 years</td>
<td>Caps with participation rates, participation rates only, uncapped with spread, uncapped with participation rate</td>
<td>0% to 2%</td>
</tr>
<tr>
<td>Monthly sum</td>
<td>1 year</td>
<td>Monthly caps with participation rates</td>
<td>0%</td>
</tr>
<tr>
<td>Trigger</td>
<td>1 year</td>
<td>NA (trigger interest rate)</td>
<td>0%</td>
</tr>
<tr>
<td>Monthly average</td>
<td>1 year</td>
<td>Participation rates only</td>
<td>0% to 2%</td>
</tr>
</tbody>
</table>

The differences in these interest options are compounded when paired with a variety of underlying indexes with different characteristics (e.g. expected volatility, expected return, correlation, etc.).

Each interest option presents a unique risk profile. Some interest options tend to produce steady, more consistent interest crediting from year to year, while other interest options tend to be more volatile with higher average credits at lower frequencies.

Consistency across UL products
The maximum illustrated rate should be set at a level that is consistent with other products and allows IUL illustrations to illustrate these differences. The 12% maximum illustrated rate was selected for VUL because it was unlikely that an average would exceed 12%. The maximum for IUL illustrations should be set with a similar goal.

The most risky interest option available for an IUL today is the uncapped 5-year option with a 100% participation rate; based on arbitrage pricing theory, it is also the option with the highest expected return. Since this option is uncapped, it should have a similar expected return as the underlying index, with some risk premium lost as a result of the 0% floor guarantee.

This uncapped 5-year interest option is currently available based on the S&P 500 price index. Many VULs available today offer the S&P 500 total return fund. The two differences between the returns in these options are (1) dividends, and (2) the 0% floor. The difference between the maximum VUL illustrated rate and the maximum IUL illustrated rate reflects these differences.

Setting a maximum illustrated rate
The 10% maximum illustrated rate is set at a level where it is unlikely that an IUL average would exceed it, and allows appropriate room for the look back mechanism to allow different indexes with different index parameters to be compared and contrasted in terms of historical performance.

While the 10% maximum is one guardrail, the look back uses a 25-year average that further limits the maximum illustrated rate. The 10% guardrail will be redundant for most interest options—the look back rate for the most common products will be approximately 7.5%.
Appendix D

The alternative proposal would cause disparity between insurers

Figure 7: Comparison of two proposals

<table>
<thead>
<tr>
<th></th>
<th>General account yield</th>
<th>Option budget</th>
<th>Index cap</th>
<th>Index floor</th>
<th>ACLI’s proposal (25-year look back)</th>
<th>Alternative proposal (112% of GA yield)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company 1</td>
<td>5%</td>
<td>5%</td>
<td>12%</td>
<td>0%</td>
<td>7.6%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Company 2</td>
<td>4%</td>
<td>5%</td>
<td>12%</td>
<td>0%</td>
<td>7.6%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Company 3</td>
<td>5%</td>
<td>4%</td>
<td>8%</td>
<td>0%</td>
<td>5.6%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Company 4</td>
<td>5%</td>
<td>3%</td>
<td>6%</td>
<td>0%</td>
<td>4.4%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

Observations:

1) Although Company 1 and Company 2 can use the same illustrated rate under the ACLI’s proposal, to comply with disciplined current scale (DCS) the underlying policy charges would need to be higher for Company 2 so their illustration would perform worse. Under the alternative proposal the impact of the higher charges would be compounded by being forced to use a lower maximum illustrated rate than other companies, despite identical index returns.

2) Under the alternative proposal, Company 3 and Company 4 could theoretically pass DCS testing with lower insurance charges than Company 1, which would provide them higher illustrated values despite their lower caps. The customer would not understand the impact of caps on returns over a long time horizon.
Appendix E
1994-2013 was not “ideal” for IUL

Claim/Null Hypothesis: The most recent 20-year period (1994-2013) was “ideal” for IUL.

Process: Evaluate the most recent period against all other 20-year periods on the following measures:
- Equity returns
- Volatility
- Interest rates

If the most recent period was ideal for IUL, equity returns will be relatively high, volatility will be relatively low, and interest rates will be relatively high. Analysis uses data from 1953 through 2013.\(^\text{19}\)

Conclusion: Reject the Null Hypothesis. The most recent 20 calendar year period was not ideal for IUL. Equity returns were near average, volatility was medium to high, and interest rates were at all time lows.

EQUITY RETURNS

Equity returns during the most recent 20-year period were neither atypical nor ideal for IUL:

Figure 8: 20-year period S&P 500 price index analysis
Geometric average annual index change

<table>
<thead>
<tr>
<th>Percentile</th>
<th>0</th>
<th>0.25</th>
<th>0.5</th>
<th>0.75</th>
<th>1</th>
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<tr>
<td>All periods</td>
<td>2.73%</td>
<td>4.33%</td>
<td>6.75%</td>
<td>9.60%</td>
<td>13.95%</td>
</tr>
<tr>
<td>Most recent</td>
<td>7.13%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Calendar year data was used for equity return analysis (1/1 to 12/31).

VOLATILITY

Volatility during the most recent 20-year period was atypical, but not ideal for IUL:

Figure 9: Historical realized volatility

Realized volatility was generally the same or higher during the last 20-year period with a huge spike in 2009. Thus, volatility was atypical, but was not ideal for IUL during that period.

Note that actual option costs depend on implied volatility, not realized volatility, but there is not enough implied volatility data to determine a trend by looking at implied volatility alone. The following graph shows the relationship between realized volatility and implied volatility since the early 1990’s. The strong correlation between the two implies we can use historical trends in realized volatility to infer trends in implied volatility.

Figure 10: Historical realized volatility and implied volatility

\(^{19}\) 1-year CMT data first available in 1953.
IUL Study: Theory, Practice, and Experience

INTEREST RATES

Interest rates during the most recent 20-year period were atypical, but not ideal for IUL:

Figure 11: 20-year period one-year CMT rate analysis
Arithmetic average annual interest rate

<table>
<thead>
<tr>
<th>Percentile</th>
<th>0</th>
<th>0.25</th>
<th>0.5</th>
<th>0.75</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>All periods</td>
<td>3.84%</td>
<td>4.94%</td>
<td>6.85%</td>
<td>7.93%</td>
<td>8.27%</td>
</tr>
<tr>
<td>Most recent</td>
<td>3.84%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 12: 20-year historical averages – one-year CMT rates
Arithmetic average annual interest rate

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AG49 Comment Letter

Mr. Fred Andersen
Chair, NAIC IUL Illustration (A) Subgroup

Re: ACLI proposed draft of Actuarial Guideline 49-A

Dear Mr. Andersen:

Equitable appreciates the opportunity to submit this follow-up to our proposal regarding AG49-A on prospective requirements for IUL illustrations.

This follow-up proposal integrates select elements of the Independent and Equitable proposals into the ACLI proposal structure. The resultant “Integrated Proposal” leverages the effort to develop the ACLI proposal but adjusts features required to satisfy our understanding of regulator objectives – including several valid concerns raised by non-ACLI commentators about the ACLI proposal that, if not addressed, jeopardize the durability of the AG49 revisions. Critical features of the Integrated Proposal are its greater clarity and simplicity.

A draft of the Integrated Proposal, redlined from the ACLI proposal, is attached for reference.

The remainder of this letter is organized to accomplish the following objectives:

1- Articulate our (refined) understanding of the regulator governance objectives
2- Propose an “integrated proposal” that accomplish regulator objectives
3- Suggest next steps for regulators to finalize AG49 revisions

I. Our (refined) understanding of the IUL illustration governance objectives

The stated goals of AG 49 are to (i) guide the determination of maximum illustrated crediting rates and earned interest rates for the disciplined current scale and (ii) require additional side-by-side illustrations and disclosures to aid consumer understanding. As noted in our prior letter, we believe this reflects the overarching regulator desire to ensure policy illustrations depict a realistic projection of long-term policyholder returns upon which a current or prospective policyholder can establish realistic expectations for account performance and funding requirements.

From a technical perspective, we bifurcate the elements of the illustration that require governance into the:

a) Size of the “option budget”: the amount of total contract value “put at risk” by investing in equity options or other risky investments.
b) **Rate-of-return on the “option budget”:** the illustrated long-term return of the instruments in which the option budget is invested.

Figure 1: Elements of the IUL illustrated return and associated regulator concerns

<table>
<thead>
<tr>
<th>Element 1: Size of the option budget</th>
<th>Element 2: Rate-of-return of option budget investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulator concern #1: <strong>NEW</strong></td>
<td>Regulator concern #3: Illustrated rate-of-return on option budget investments exceeds long-run realistic expectations, fails to consider downside case</td>
</tr>
<tr>
<td>Current NIERs overstate long-term NIERs given low reinvestment yields</td>
<td>Option budget “gains”</td>
</tr>
<tr>
<td>Inv. yield</td>
<td>Contract value</td>
</tr>
<tr>
<td>“Excess charges”</td>
<td>Optimistic case: Option budget sharply increases in value</td>
</tr>
<tr>
<td>Excess charges allocated to risky instruments can lead to rapid account underperformance</td>
<td>Average case: Option budget holds value</td>
</tr>
<tr>
<td>Contract value</td>
<td>Downside case: Option budget loses all value</td>
</tr>
</tbody>
</table>

With respect to the **size** of the option budget, we understand the foremost regulator concern to be option budgets that are substantially larger than what can be supported by investing the contract value at yields on prevailing high-quality investments – especially given the expected decline of current portfolio NIERs given far lower prevailing investment yields. This concern has not been addressed by the ACLI proposal, which was developed before interest rates declined to their present level and the examples for which continue to reflect assumed NIERs of 4.5%.

With respect to the **rate-of-return** on the option budget, we understand the foremost regulator concern to be illustrated returns well in excess of high grade investment yields – i.e. overly optimistic assumptions about the realization of market risk premia.

These concerns manifest in the ultimate regulator concern that consumers predicate decisions on unrealistic expectations of contract performance, irrespective of whether the option budgets themselves are overstated or the rate-of-return on the option budget are overstated.

**II. Proposed “Integrated Solution”**

In order to address these concerns in a manner that builds upon the time and thought invested into the ACLI proposal, Equitable proposes to integrate elements of the Independent Proposal and prior Equitable proposal into the ACLI proposal structure. The table below summarizes the principal adjustments to the ACLI proposal that we believe are necessary to accomplish the regulator objectives. The table includes a description and rationale for each adjustment.
The key beliefs behind the Integrated Proposal adjustments to the ACLI proposal are below:

- **Past performance is no guarantee of future returns**: The Integrated Proposal reduces the reliance on backtesting to forecast long-term future returns. Equitable believes backtesting of a given strategy can be part of the product sale process – as reflected in the section 7 table of historical index returns – but has a limited role in the illustration of long-term returns given their unproven predictive power for future returns over multiple decades.

- **A 45% annual excess return is an imprudent basis for long-term return expectations**: The Integrated Proposal reduces the maximum long-term realization of risk premia to 20% per year. Equitable believes this level could still be viewed as overly optimistic – but strikes a compromise relative to the existing 45%. To be sure, a 45% annual return over a multi-decade illustration timeframe leads to significant levels of

<table>
<thead>
<tr>
<th>Feature of Proposal</th>
<th>ACLI</th>
<th>Independent Proposal</th>
<th>Equitable &quot;Integrated Proposal&quot;</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method to determine hedge budget:</td>
<td>Hedge budget of benchmark index account cannot exceed company annual net investment earnings rate (ANIER).</td>
<td>Black-Scholes methodology</td>
<td>Black-Scholes methodology</td>
<td>- Simplifies entire AG49 - Harmonizes rates across companies - Market information is prudent, realistic and aligned with practice and theory</td>
</tr>
<tr>
<td>Limit on amount of hedge budget supporting illustrated scale:</td>
<td>Company GA annual net investment earnings rate (ANIER).</td>
<td>No limit</td>
<td>Max (5%, ANIER)</td>
<td>- Some supplemental charges to fund option budget is acceptable product design - Historical ANIER already reflects an optimistic view of future GA yields given lower reinvestment yields</td>
</tr>
<tr>
<td>Limit of illustrated rate-of-return on hedge budget:</td>
<td>Min(look-back rate for cap implied by hedge budget of benchmark index account, 145% x NIER)</td>
<td>100% of hedge budget (over preceding calendar year based on Black Scholes valuation)</td>
<td>120% of hedge budget</td>
<td>- 20% excess return in perpetuity already may be considered optimistic - Compromise vs. existing 145% - Downside scale provides transparency if no risk premia realized - Lookback adds complexity with limited governance value</td>
</tr>
<tr>
<td>Ability to illustrate gains on Supplemental Hedge Budget</td>
<td>Disallowed (Portion of index credits supported by policy charges could not be illustrated to the extent they exceed such charges)</td>
<td>None (100% of Black-Scholes option budget includes no risk premia)</td>
<td>Allowed, but limited</td>
<td>- Supplemental charges to fund option budget is an acceptable product design to increase client market exposure, especially in a low interest rate environment - 5% contract value cap on illustrated hedge budget mitigates risk of misunderstood rapid contract value decline</td>
</tr>
<tr>
<td>Downside illustration scale</td>
<td>Alternate scale</td>
<td>None (already limited to 100%)</td>
<td>100% of Option Budget (with client signature)</td>
<td>- Option budget / fixed account both represent return with no risk premia - Illustrated policy performance if risk premia not realized is needed transparency</td>
</tr>
<tr>
<td>Limit on illustrated loan leverage:</td>
<td>100 bps; applies to (1) all index credits (Option 1); or (2) all credits of any kind (Option 2)</td>
<td>N/A (Black Scholes methodology + 100% return eliminate illustrated benefit of SHB)</td>
<td>Option 1</td>
<td>- Limit of 1% illustrated loan leverage retained to address regulator concern</td>
</tr>
</tbody>
</table>
projected contract outperformance (three-fold account levels over 50 years), as summarized in the table below.

Table I: Long-term accumulated returns of $1 by proposed annual return cap

<table>
<thead>
<tr>
<th>Return cap (5% hedge budget)</th>
<th>30</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>4</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>120%</td>
<td>6</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>145%</td>
<td>8</td>
<td>16</td>
<td>33</td>
</tr>
</tbody>
</table>

Of paramount importance to the success of AG49 is that the policyholder expectation for contract performance does not rely on excessive long-run outperformance of the instruments in which the option budget (of whatever size) is invested. The table above demonstrates the considerable outperformance that is assumed in current proposals.

- **The size of the option budget should be governed distinctly from the rate-of-return of the option budget:** The prior belief notes the significant impact of high annual illustrated risk premia. Better governance of the rate-of-return enables more latitude in the illustration of option budgets that rely, in part, on supplemental charges (not investment returns). This view reflects a belief that (a) a policyholder may reasonably seek a contract with greater market exposure than what can be created by an option budget supported only by prevailing yields on high quality investments – and hence who desire a larger option budget and (b) an outsized (e.g. 145%) rate-of-return on the supplemental charges is not illustrated given more strict governance of the rate-of-return.

To reinforce this point, we consider Indexed UL as offering a spectrum between fixed UL and Variable UL – and a VUL policy has a 100% market exposure since all contract value can be invested in equities, far above the proposed 5% cap for IUL illustrations.

- **Standardization of option budget sizes is critical to consistency of illustrations:** The Integrated Proposal embraces the Independent Proposal use of Black-Scholes to determine option budget size. Use of a Black-Scholes methodology will ensure consistent inputs are used to size the illustrated option budgets. The prospect of two companies with substantially similar index crediting features and NIERs that illustrate different returns is an objectionable feature of the ACLI proposal.

- **Black-Scholes is the best available method to ensure consistent option budgets:** Black-Scholes is simply another term for market pricing – and is a practical and robust method to size long-run option budgets. First, Black-Scholes inputs are readily accessible (the ACLI analysis demonstrates this). Second, any market risk premia in Black-Scholes has been demonstrated to be modest over time and, to be sure, any conservatism is far more than offset by the allowance of up to 20% annual excess returns on the option budget investments. Third, any concerns about rate stability year-over-year are irrelevant given (i) rates are, by nature, not stable given fluctuations in market risk from year-to-year and (ii) rate stability has not been identified as a regulator objective.
• **Realistic ‘downside scale’ performance add valuable transparency to consumers:** The requirement to include an equally prominent, side-by-side illustration of the downside (aka “alternate”) scale that differs only in the rate-of-return of the option budget offers consumers valuable insight into contract performance and potential funding requirements should risk premia not be realized. Holding constant all other elements of the illustration helps to ensure such alternate illustrations are not disregarded as overly conservative by consumers.

**III. Suggested next steps for regulators to close out AG49 revisions**

Equitable believes the Integrated Proposal represents a pragmatic solution that leverages the investment of time in the ACLI proposal with critical adjustments to ensure its durability.

To bring the AG49 revisions to a close we suggest the regulators confirm or reject the concerns outlined in Section I and the associated key beliefs behind the “integrated proposal” in Section II. This will enable a more rapid convergence on the final features of the AG49 revision and use of the Integrated Proposal (practical given it starts with the structure of the ACLI proposal).

Thank you once again for the opportunity to share our thoughts with you on this important issue. Please do not hesitate to contact me should you have any questions or concerns regarding our proposal.

---

**Aaron Sarfatti, ASA**

Chief Risk Officer
The Life Actuarial (A) Task Force met via conference call May 21, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Ricardo Lara represented by Perry Kupferman and Ben Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain and Vincent Tsang (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. **Adopted the IUL Illustration (A) Subgroup Minutes**

The IUL Illustration (A) Subgroup met March 3 and Jan. 28 to discuss proposed revisions to *Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest* (AG 49).

Mr. Yanacheak made a motion, seconded by Mr. Weber, to adopt the Subgroup’s March 3 (Attachment Six-A) and Jan. 28 (Attachment Six-B) minutes. The motion passed unanimously.

2. **Exposed Amendment Proposal 2020-07**

Paul Graham (American Council of Life Insurers—ACLI) said the Heroes Act, a bill passed recently by the U.S. House of Representatives, contains a revision to Section 7702 of the Internal Revenue Code (IRC), which for tax purposes provides the definition of life insurance. The definition uses the cash value accumulation test (CVAT) to determine whether a policy qualifies as life insurance, allowing it to avoid being taxed as an investment. The interest rate used in the Section 7702 CVAT is currently floored at 4%. He noted that the 4% nonforfeiture interest rate floor in the *Standard Valuation Law* (#820) and the *Valuation Manual* was set to match the 4% floor in the Section 7702 CVAT. Mr. Graham further explained that the Heroes Act changes the CVAT by replacing the interest rate floor from the 4% static rate to an indexed rate. He said the change necessitates a similar change in the *Valuation Manual* for policies issued after the congressional bill is adopted by the U.S. Senate. He said the challenge is that the timing of the Senate adoption is uncertain. Brian Bayerle (ACLI) said amendment proposal 2020-07 (Attachment Six-C) removes *Valuation Manual* references to the 4% interest rate floor and replaces it with language that sets the nonforfeiture rate floor in the *Valuation Manual* to the rate determined by Section 7702, eliminating the need for future adjustment to align the two sets of requirements. He reiterated that the change will not affect any existing policy.

Mr. Tsang said lowering the nonforfeiture rate will result in higher cash values. He asked if there is a business reason for lowering the rate. Mr. Graham said that as interest rates decline, premiums on new policies will increase. He said providing higher cash values as premiums increase is a matter of equity. John Norton (Globe Life) said Globe Life is not in favor of the change recommended in amendment proposal 2020-07. He said Globe Life is concerned the change will lead to higher costs that will affect the affordability of basic life protection. He said Globe Life is supportive of comprehensive reform of the nonforfeiture laws. Jim Hodges (National Alliance of Life Companies—NALC) said that the NALC agrees with the Globe Life viewpoint.

Mr. Yanacheak made a motion, seconded by Mr. Tsang, to expose amendment proposal 2020-07 for a 21-day public comment period ending June 10. The motion passed unanimously.

3. **Accepted Amendment Proposal 2020-04 As an Editorial Change**

Bill Wilton (unaffiliated) said amendment proposal 2020-04 (Attachment Six-D) recommends reordering the rows of the Exhibit 7 reserve table in Section 3.A.5 of VM-30, Actuarial Opinion and Memorandum Requirements, to match the rows of Exhibit 7 in...
the Life and Health Annual Statement. The Task Force agreed, without objection, to accept the recommendation in amendment proposal 2020-04 as an editorial change.

4. Exposed Amendment Proposal 2020-05

Jason Kehrberg (PolySystems) said amendment proposal 2020-05 (Attachment Six-E) recommends modifying VM-20, Requirement for Principle-Based Reserves for Life Products, to clarify that in Section 3.C.4, the net premium reserve reflects death claims and assumes continuous deaths and immediate payment of claims.

Mr. Leung made a motion, seconded by Mr. Yanacheak, to expose amendment proposal 2020-05 for a 21-day public comment period ending June 10. The motion passed unanimously.

5. Exposed Amendment Proposal 2019-58

Mr. Bock said amendment proposal 2019-58 (Attachment Six-F) proposes revising Section A.1 of the Valuation Manual, Introduction, Section I, Process for Updating, to require that updates to templates prescribed by the Valuation Manual be considered substantive and, therefore, subject to the Valuation Manual change requirements.

Mr. Robinson made a motion, seconded by Mr. Chou, to adopt amendment proposal 2019-58. The motion passed unanimously.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The IUL Illustration (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Feb. 3, 2020. The following Subgroup members participated: Fred Andersen, Chair (MN); Ted Chang (CA); Andrew Greenhalgh (CT); Mike Yanacheak (IA); Vincent Tsang (IL); Rhonda Ahrens (NE); Bill Carmello (NY); Peter Weber (OH); Mike Boerner, John Carter and Rachel Hemphill (TX); Tomasz Serbinowski (UT); and Craig Chupp (VA).

1. Discussed Comments on the IUL Illustration Jan. 28 Exposure

Brian Bayerle (American Council of Life Insurers—ACLI) proposed revisions to Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest (AG 49). He said the revised guideline, titled AG 49-A, (Attachment Six-A1) is designed to be prospectively applied to new business. He noted that the ACLI is not in favor of retroactive application of AG 49. He said the revision uses a single Benchmark Index Account (BIA), and it proposes several new or revised definitions. The revision attempts to address the major concerns of state insurance regulators, while avoiding unnecessary complicated language. Mr. Tsang asked whether a product with a multiplier will illustrate better than a non-multiplier product under the ACLI proposal. Mr. Bayerle said the net effect on the account values should be the same. He said the ACLI’s hope is to provide examples at the Spring National Meeting.

Seth Detert (Securian Financial) discussed the proposal (Attachment Six-A2) jointly submitted by Mutual of Omaha, Nationwide, Penn Mutual, Prudential, and Securian Financial. He said the ACLI proposal potentially allows policies that use charges to increase cap rates to illustrate better than policies that do not allow charges to increase cap rates, which is inconsistent with the request of the Life Actuarial (A) Task Force to have the products illustrate the same. He said the language in the joint proposal does a better job of closing that loophole than the ACLI proposal. He said the five companies generally agree with the ACLI changes to the illustrated scale, but they have questions related to Section 4.B. He said the five companies are generally in favor of the changes, with possibly a few minor tweaks, to the disciplined current scale proposed by the group represented by Scott Harrison (High Point Strategies).

Graham Summerlee (Lincoln Financial) said the IUL Coalition proposal (Attachment Six-A3) adds language for the process of selecting the BIA. He said the ACLI proposal is ambiguous about which account one would select for the BIA. The IUL Coalition proposal also proposes revisions for the language related to the determination of the illustrated rate.

Tom Doruska (Global Atlantic) said Global Atlantic’s proposal (Attachment Six-A4) stresses that designs with more index growth potential should have higher illustrated rates. He said the proposal differentiates itself from the ACLI proposal in the treatment of cap buy-ups and multipliers and the determination of the portion of assets backing the product that should be subject to the earned interest rate.

Tom Love (Valmark Financial) read comments (Attachment Six-A5) from a group of independent life insurance professionals concerned about the state of indexed universal life (IUL) illustrations. He said illustrations can be used to display the mechanics of the product (type A) or used as means to show performance projections (type B). The group is concerned that Task Force decisions are designed to address type B illustrations without regard for the education of the consumer on the functioning of the product. He said the group recommends using the fixed indexed annuities (FIA) illustration standards for AG 49 and using a Black-Scholes model to determine the intrinsic value of the options strategies instead of the historical lookback approach to providing the index credits for the illustration. Mr. Andersen said the current work on AG 49 is just a single step in a multi-step process. He said after addressing the IUL illustrated rate issue by revising AG 49, other issues, such as disclosures and potentially opening the model regulation for long-term changes, could be addressed by the Subgroup, as directed by the Life Insurance and Annuities (A) Committee. Mr. Chupp asked if Securian Financial could comment on its reasons for advocating a single BIA instead of multiple BIAs. Mr. Detert said Securian Financial understood the Task Force direction on buy-up and multiplier accounts to mean that any type of charge could not be used to enhance the crediting rate or create multiple benchmark accounts.

Austin Bichler (Allianz) said the Allianz comment (Attachment Six-A6) expressed its agreement with the ACLI and IUL Coalition proposals as bases for revising AG 49.
Mr. Tsang said his comment (Attachment Six-A7) supports having products with multipliers illustrate no better than non-multiplier products. He suggested setting the crediting rate and account value for the non-multiplier product as an upper bound for all illustrations. Mr. Andersen suggested that those developing future drafts of AG 49 should note when they have included or omitted Mr. Tsang’s recommendations.

Donna Megregian (American Academy of Actuaries [Academy] Life Illustrations Work Group) said the Academy comment (Attachment Six-A8) focuses on the historical background of illustrations. She the Society of Actuaries’ (SOA’s) Task Force for Research on Life Insurance Sales Illustrations, which defined the type A and type B uses for illustrations, noted that while type A usage can be handled well with illustrations, type B usage cannot. She said the Academy is concerned that the Subgroup decisions may result in limits on type A usages while trying to address issues related to type B usages. She said the Academy comment letter recommends a number of principles through which to evaluate potential changes to AG 49.

Mr. Andersen said that during the Oct. 17, 2019, conference call, it was determined that multiplier products should illustrate no better than non-multiplier products (possibility 2). He said the Subgroup was directed to address the crediting rate for loans in a manner reflecting possibility 2. He said industry members have said their perception is that the loan issue had not been decided. Mr. Weber said addressing loans using possibility 2 is appropriate as a current solution. He said a better, longer term solution can be considered in the future. Mr. Boerner agreed. Mr. Harrison said industry members feel that ample opportunity to discuss the decision was not provided. Mr. Andersen said any revisions submitted to the Subgroup should reflect the use of possibility 2 or add commentary on why it is believed that possibility 2 should not apply.

Having no further business, the IUL Illustration (A) Subgroup adjourned.
March 24, 2020

Mr. Fred Andersen  
Chair, NAIC IUL Illustration (A) Subgroup  

Re: ACLI proposed draft of Actuarial Guideline 49-A

Dear Mr. Andersen:

The American Council of Life Insurers (ACLI)¹ appreciates the opportunity to submit the following draft of AG49-A on prospective requirements for IUL illustrations.

During the March 3rd call of the Subgroup, multiple commenters suggested possible language to revise the Guideline. ACLI reviewed the various proposals and attempted to harmonize a version that both addresses concerns raised by regulators while providing consumers with the information necessary to make informed decisions on products they are considering for purchase.

The attached revisions (Attachment One) borrow concepts raised by the various drafts, and we’re appreciative of all the thought that went into each of these efforts. We note that, while this draft reflects our best-effort, there remain items that require additional consideration.

Consistent with the ACLI’s established opposition to retroactivity, AG49-A assumes that these new requirements are applicable on a prospective-only basis, and solely for policies issued after the guideline’s effective date.

ACLI notes the following in this best-effort draft:

- Definitions in Section 3 were refined from the earlier ACLI 02-21-20 draft.
- Language in Section 4 and 5 were largely borrowed from the Securian et al draft, with several modifications. We note the language in Section 5 requires additional consideration.
- For the treatment of Policy Loans (Section 6 and within the definition of “Alternate Scale”), industry is offering two proposals for regulators to consider. We note that the language in this section may require additional modification. This language attempts to capture the two main approaches previously submitted.

Indexed UL products may allow the loaned amount to remain in the index and earn index credits. When the index return is higher than the loan charged rate then the loan is “leveraged”. IUL products are the only product type where actuarial guidelines endorse this type of leveraging in

¹ The American Council of Life Insurers (ACLI) advocates on behalf of 280 member companies dedicated to providing products and services that promote consumers' financial and retirement security. 90 million American families depend on our members for life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, dental and vision and other supplemental benefits. ACLI represents member companies in state, federal and international forums for public policy that supports the industry marketplace and the families that rely on life insurers’ products for peace of mind. ACLI members represent 95 percent of industry assets in the United States. Learn more at www.acli.com.
illustrations. An objective for regulators in tightening this language is to ensure that the Supplemental Hedge Budget is not double counted.

During a straw poll at the end of the October 17 conference call, the vote favored language similar to Option 2. However, some of the language proposed subsequent of this call was similar to Option 1. We lay out arguments below for each approach, and we recommend further discussion on the topic.

We note there are advantages of each approach:

- **Option 1:** 100 bp loan leverage limit only applies to index credits:
  - Provides consistent treatment of illustrated bonuses between fixed UL and indexed UL, as well as consistent treatment of standard loans and indexed loans within an indexed UL.
  - Is consistent with the original scope of AG49, which was to apply to index-linked credits.
  - Allows for the illustration of consistent maximum crediting rates between IUL policies with a loan and IUL policies without a loan.
  - The Option 2 language may pose technical difficulties to implement.
  - The Option 2 language may be read to disadvantage innovative product designs, such as policies that offer wellness credits to customers who engage in activities that help them live longer and healthier lives.

- **Option 2:** 100 bp loan leverage limit applies to index credits and other types of bonuses:
  - If the limit only applies to Index Credits, loan leverage may exceed 100 bps using fixed rate bonuses or other innovative product designs.
  - Since all index accounts will illustrate similarly under the new AG 49, other bonus types may become more common.
  - This is a maximum illustration limit to prevent illustrations that are overly optimistic.
  - Products could still offer other bonus types and demonstrate how they work at lower interest rate illustrations or when loans are not illustrated.

We look forward to a discussion of our proposed language. Thank you.

Sincerely,

[Signature]

cc Reggie Mazyck, NAIC
THE APPLICATION OF THE LIFE ILLUSTRATIONS MODEL REGULATION TO POLICIES WITH INDEX-BASED INTEREST SOLD AFTER [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption*]

Background

The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an external index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

In 2019, the NAIC decided that illustrations of products with multipliers, cap buy-ups, and other enhancements should not illustrate better than products without such features. This new requirement is intended to apply to illustrations on policies sold on or after the effective date of this guideline while the existing requirements continue to apply for in-force illustrations on policies sold before the effective date of this guideline.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.
2. Limits the policy loan leverage shown in an illustration.
3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective as follows: for all new business and in-force illustrations on policies sold on or after [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption*].

i. Sections 1 and 5 shall be effective for all new business and in-force life insurance illustrations on policies sold on or after September 1, 2015.

ii. Effective March 1, 2017, Section 4 and Section 5 shall be effective for all in-force life insurance illustrations on policies within the scope of this actuarial guideline, regardless of the date the policy was sold.

iii. Sections 6 and 7 shall be effective for all new business and in-force life insurance illustrations on policies sold on or after March 1, 2016.

2. Scope

This Actuarial Guideline shall apply to any life insurance illustration that meets both (i) and (ii), below:
The policy is subject to Model #582.

Interest credits are linked to an external index or indices.

The policy offers Indexed Credits

3. Definitions

A. Alternate Scale: A scale of non-guaranteed elements currently being illustrated such that:

i. The credited rate total annual percentage rate of Indexed Credits for each Index Account does not exceed the lesser of the maximum credited total percentage rate of Indexed Credits for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the credited rate total annual percentage rate of Indexed Credits for each Index Account shall not exceed the average of the maximum credited total percentage rate of Indexed Credits for the illustrated scale and the guaranteed credited total percentage rate of Indexed Credits for that account. However, the credited rate total annual percentage rate of Indexed Credits for each Index Account shall never be less than the guaranteed credited total percentage rate of Indexed Credits for that account.

ii. If the illustration includes a loan, the illustrated rate credited to the loan balance does not exceed the illustrated loan charge. Policy Loan Interest Credited Rate shall not exceed the illustrated loan charge. Policy Loan Interest Rate. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 4%.

iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. Annual Net Investment Earnings Rate: Gross portfolio annual earnings rate of the general account assets (excluding hedges for Indexed Credits), less provisions for investment expenses and default cost, allocated to support the policy. Charges of any kind are not included in the Annual Net Investment Earnings Rate.

B.C. Benchmark Index Account: An Index Account with the following features:

i. The interest calculation is based on the percent change in S&P 500® Index value only, over a one-year period using only the beginning and ending index values. (S&P 500® Index ticker: SPX)

ii. An annual cap is used in the interest calculation.

iii. The annual floor used in the interest calculation shall be 0%.

iv. The participation rate used in the interest calculation shall be 100%.

v. Interest is credited once per year.

vi. Account charges do not exceed the account charges for any corresponding Index Accounts within the policy in any policy year. If Index Accounts with different levels of account charges are offered with the illustrated policy, more than one Benchmark Index Account may be used in determining the maximum illustrated crediting rates for the policy’s Index Accounts, subject to the requirements of 5.D. However, for each Index Account within the policy, only one Benchmark Index Account shall apply. Any rate calculated in 4 (B) shall not apply for an Index Account if the account charges for the applicable Benchmark Index Account exceed the account charges for that Index Account in any policy year. Account charges include all charges applicable to an Index Account, whether deducted from policy values or from premiums or other amounts transferred into such Index Account.

vi. Additional amounts credited: The amount used to determine the cap in 3 (C) (ii) does not exceed the Annual Net Investment Earnings Rate. Charges of any kind are not included when determining the applicable cap rate.
vii. There are not less than the additional amounts credited for any corresponding Index Accounts within the policy in any policy year. Any rate calculated in 4 (B) shall not apply for an Index Account if the additional amounts credited for the applicable Benchmark Index Account that are less than the additional amounts credited for that Index Account in any policy year. Additional amounts include all credits that increase policy values linked to an index or indices in excess of the interest calculation, including but not limited to experience refunds or multipliers and bonuses.

viii. There are no limitations on the portion of account value allocated to the account.

ix. A single Benchmark Index Account will be determined for each policy. A policy shall have no more than one Benchmark Index Account.

C.D. Fixed Account: An account where the amounts credited rate is not tied to an external index or indices.

D.E. Index Account: An account where the amounts credited rate is tied to an external index or indices.

F. Indexed Credits: Any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy values that is linked to an index or indices. Credits to the policy resulting from a floor are included.

G. Hedge Budget: For each Index Account, the total annualized amount assumed to be used to generate the Indexed Credits of the account, expressed as a percent of the account value in the Index Account. This amount should be consistent with the hedging program of the company.

H. Loan Balance: Any outstanding policy loan and loan interest, as defined in the policy.

I. Policy Loan Interest Rate: The annual interest rate that is charged on any Loan Balance. This does not include any other policy charges.

J. Policy Loan Interest Credited Rate: The annual interest rate credited that applies to the portion of the account value backing the Loan Balance, as defined in the policy.

i. For the portion of the account value backing the Loan Balance that is in a Fixed Account, the Policy Loan Interest Credited Rate is the applicable annual interest crediting rate, as defined in the policy.

[OPTION FOR CONSIDERATION: Please see commentary on these approaches in the ACLI Comment Letter; language for Option 1 and Option 2 may need to be tightened up:

Option 1: ii. For any portion of the account value backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage rate of Indexed Credits, net of any applicable Supplemental Hedge Budget, for that account, as defined in the policy.

Option 2: ii. For any portion of the account value backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage rate of Indexed Credits and all illustrated bonuses, charge reductions or other enhancements that impact the portion of the account value backing the Loan Balance, net of any applicable Supplemental Hedge Budget for that account, as defined in the policy.]

K. Supplemental Hedge Budget: For each Index Account, the Hedge Budget minus the Annual Net Investment Earnings Rate. The Supplemental Hedge Budget will never be less than zero. This amount should be consistent with the hedging program of the company.

4. Illustrated Scale

The credited total annual percentage rate of Indexed Credits for the illustrated scale for each Index Account shall be limited as follows:
A. Calculate the geometric average annual credited rate for each applicable Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

i. If the insurer offers an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the applicable Benchmark Index Account in 4 (A).

ii. If the insurer does not offer an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of the Benchmark Index Account, and shall use that cap in 4 (A).

B. For each applicable Benchmark Index Account, the total Indexed Credits illustrated as a percentage of the account value in the Index Account shall not exceed the minimum of (i) and (ii):

iii.i. the arithmetic mean of the geometric average annual credited rates calculated in 4 (A) shall be the maximum credited rate(s) for the illustrated scale.

ii. 145% of the Annual Net Investment Earnings Rate

C. For any 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 maximum credited rate Account that is not the Benchmark Index Account in 3 (C), the total Indexed Credits illustrated as a percentage of the account value in the Index Account prior to the deduction of any charges used to fund a Supplemental Hedge Budget shall not exceed the minimum of (i) and (ii):

i. The maximum Indexed Credits for the Benchmark Index Account calculated in 4 (B) plus the Supplemental Hedge Budget for the illustrated scale. The determination shall Index Account

ii. The total Indexed Credits that reflect the fundamental characteristics of the Index Account and the parameters shall have the appropriate relationship to the expected risk and return of the applicable Benchmark Index Account. In no event shall the illustration actuary use actuarial judgment to determine this value using methodology consistent with 4 (A) and 4 (B) (i) where appropriate.

B. D. For purposes of compliance with Section 6 (C) of Model #582, the credited rate for Supplemental Hedge Budget may cause the illustrated rate to exceed the earned interest rate underlying the Disciplined Current Scale. applicable rate calculated in 4 (B).

At the beginning of each calendar year, the insurer shall be allowed up to three (3) months to update the credited rate for each Index Account in accordance with 4 (B) and 4 (C).

5. Disciplined Current Scale

The earned interest rate for the disciplined current scale shall be limited as follows:

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

iii. the Annual Net Investment Earnings Rate, plus
iv. 45% of the lesser of the Hedge Budget minus any floor and the Annual Net Investment Earnings Rate, adjusted for timing differences to ensure that fixed interest is not earned on the hedge cost.

The above approach does not stipulate any required methodology as long as it produces a consistent limit on the assumed earned interest rate.

For a product with multiple Index Accounts with different Hedge Budgets that are less than or equal to the NIER, a maximum rate in 5.A. should be calculated for each set of accounts with different Hedge Budgets.

B. If an insurer does not engage in a hedging program for index-based interest indexed 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 Annual Net Investment Earnings Rate.

C. These experience limitations shall be included when testing for self-support and lapse-support under Model #582, accounting for all illustrated benefits including any illustrated benefits and bonuses that impact the policy’s account value.

D. If more than one Benchmark Index Account is used for an illustrated policy, each set of Index Accounts that correspond to each Benchmark Index Account must independently pass the self-support and lapse-support tests under Model #582, subject to the limitations in 5 (A), (B), and (C). All experience assumptions that do not directly relate to the Index Accounts as to expenses, mortality, investment earnings rate of the general account assets, lapses, and election of any Fixed Account shall equal the assumptions used in the testing for the entire policy.

6. Policy Loans

If the illustration includes a loan, the illustrated rate credited to the loan balance Policy Loan Interest Credited Rate shall not exceed the illustrated loan charge Policy Loan Interest Rate by more than 100 basis points. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 5%.

7. Additional Standards

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. For each Index Account illustrated, a table showing actual historical index changes and corresponding hypothetical interest rates indexed credits using current index parameters for the most recent 20-year period.
February 21, 2020

Fred Andersen
Acting Deputy Commissioner of Insurance
Minnesota Department of Commerce
85 7th Place East, Suite 280
St. Paul, MN 55101

Dear Fred,

The undersigned companies present this proposal and the attached AG49 with examples, in response to the NAIC IUL Illustrations (A) Subcommittee request for comments on AG49 on the January 28, 2020 call. We would be happy to discuss the revisions and examples at your convivence and on the next Subcommittee call.

Respectfully,

Seth Detert, Securian Financial
Pete Rothermel Life CFO, Nationwide
Jacqueline Fallon, Penn Mutual Life Insurance Co
John Ponte, Prudential
Seth Harlow, Mutual of Omaha

We believe that the proposed revisions accomplish the main tasks set forth by the Subcommittee to date:

- That products with charged for multipliers and/or buy up accounts illustrate substantially similar to those products without the additional charges.

- That there is consistent illustrative treatment of policy features such as multipliers, index bonuses, participating loan crediting, and non-benchmark indices across the industry.

During this comment period the majority of our revisions were to Sections 3 and 4 to accomplish the Subcommittees’ goals in a transparent manner and clarify existing issues. We also made revisions to Section 5 for clarity and consistency throughout AG49.

At this time, we have declined to comment on the applicability to policies sold before the effective date of the new revisions. We believe that the applicability to inforce policies is a conversation better served when we understand the impact of the revisions.

In the attached draft of AG49 we recommend these changes:

- In Section 3 we have added definitions for Annual Net Investment Earnings Rate, Index Credits, and Supplemental Hedge Budget.

- We have modified the definition of Benchmark Index in 3 (C)
  - We believe that there should only be ONE Benchmark Index for any given product.
  - As such we modified Section (C) (vi) to clearly state that only the Annual Net Investment Earnings Rate can be used when determining the Cap for the Benchmark Index account.
We modified Section (C) (vii) to identify that for the Benchmark account that no additional credits through bonus or multipliers apply.

- In Section 4 we changed the focus of the section from the illustrated credited rate to be concerned with illustrated Index Credits.
  - We believe this is important because as we have seen products with similar credited rates can produce significantly different illustrated values due to the Index Credits produced through multipliers and bonuses.
  - In section 4 (A) and 4 (A) (i & ii) we made small modifications to align with the concept of only having one Benchmark Index per product.
  - In Section 4 (B) we changed the wording to define the maximum Index Credits for the Benchmark Index (versus the maximum illustrated credit rate) and we implemented an additional limit to the maximum Index Credits to be 145% of the Annual Net Investment Earnings rate.
  - In Section 4 (C) we defined how an illustration actuary would determine the maximum Index credited rate for non-benchmark indices.

- In Section 5 (A) & (B) we updated the language to be clearer and consistent with the rest of the revisions to the guideline.
  - We believe Section 5 (D) can be eliminated due to the change to limit to one Benchmark Index per policy.

- In Section 6 we added language to clarify that the 100 bps of loan arbitrage of should be inclusive of any policy credit that increases the account value of the policy.

The attached examples are included to show the impact of the proposed revisions on illustrated Index Credits. The examples are hypothetical, however they do provide a good representation of the types of products currently available in the industry.
THE APPLICATION OF THE LIFE ILLUSTRATIONS MODEL REGULATION
TO POLICIES WITH INDEX-BASED INTEREST

Background

The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an external index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.
2. Limits the policy loan leverage shown in an illustration.
3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective as follows:

i. 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.

ii. Effective March 1, 2017, Section 4 and Section 5 shall be effective for all in-force life insurance illustrations on policies within the scope of this actuarial guideline, regardless of the date the policy was sold.

iii. Sections 6 and 7 shall be effective for all new business and in force life insurance illustrations on policies sold on or after March 1, 2016.

2. Scope

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

i. The policy is subject to Model #582.

ii. Interest credits. The policy offers interest credits, multipliers, factors, bonuses, or other enhancements to policy values any of which are linked to an external index or indices.

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3. Definitions

A. Alternate Scale: A scale of non-guaranteed elements currently being illustrated such that:

i. The credited rate for each Index Account does not exceed the lesser of the maximum credited rate for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the credited rate for each Index Account shall not exceed the average of the maximum credited rate for the illustrated scale and the guaranteed credited rate for that account. However, the credited rate for each Index Account shall never be less than the guaranteed credited rate for that account.

ii. If the illustration includes a loan, the total amount credited as a result of the loan balance, including Index Credits and all other illustrated benefits and bonuses that impact the policy’s account value, illustrated rate credited to the loan balance does shall not exceed the illustrated loan charge.

iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. Annual Net Investment Earnings Rate: Gross portfolio annual earnings rate, less provisions for investment expenses and default cost, of the general account assets (excluding hedges for Index Credits) allocated to support the policy. Policy charges of any kind are not included in the Annual Net Investment Earnings Rate.

B.C. Benchmark Index Account: A policy shall have only one Benchmark Index Account, which has the following features:

i. The interest calculation is based on the percent change in S&P 500® Index value only, over a one-year period using only the beginning and ending index values. (S&P 500® Index ticker: SPX)

ii. An annual cap is used in the interest calculation.

iii. The annual floor used in the interest calculation shall be 0%.

iv. The participation rate used in the interest calculation shall be 100%.

v. Interest is credited once per year.

vi. Only the Annual Net Investment Earnings Rate is used to support the cap in 3 (C) (ii). Policy charges of any kind are not included when determining the applicable cap rate. Account charges do not exceed the account charges for any corresponding Index Accounts within the policy in any policy year. If Index Accounts with different levels of account charges are offered with the illustrated policy, more than one Benchmark Index Account may be used in determining the maximum illustrated crediting rates for the policy’s Index Accounts, subject to the requirements of S.D. However, for each Index Account within the policy, only one Benchmark Index Account shall apply. Any rate calculated in 4 (B) shall not apply for an Index Account if the account charges for the applicable Benchmark Index Account exceed the account charges for that Index Account in any policy year. Account charges include all charges applicable to an Index Account, whether deducted from policy values or from premiums or other amounts transferred into such Index Account.

vii. There are no additional amounts credited that are linked to an index or indices in excess of the interest calculation, including but not limited to multipliers and bonuses.

viii. There are no limitations on the portion of account value allocated to the account.
C.D. Fixed Account: An account where the credited rate is not tied to an external index or indices.

E. Index Account: An account where the credited rate is tied to an external index or indices.

F. Index Credits: Any interest credit, multiplier, factor, bonus, or other enhancement to policy values that is linked to an index or indices.

D.G. Supplemental Hedge Budget: For each Index Account, the annualized amount available to generate the Index Credits as determined by the illustration actuary minus the Annual Net Investment Earnings Rate, not less than zero. This amount is expressed as a percent of the account value in the Index Account and adjusted for timing to align with when the Index Credits are applied.

4. Illustrated Scale

The total Index Credits credited rate for the illustrated scale for each Index Account shall be limited as follows:

A. Calculate the geometric average annual credited rate for each applicable Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

i. If the insurer offers an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the applicable Benchmark Index Account in 4 (A).

ii. If the insurer does not offer an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of a Benchmark Index Account, and shall use that cap in 4 (A).

B. For each applicable Benchmark Index Account, the total Index Credits illustrated as a percentage of the account value in the Index Account shall not exceed the minimum of (i) and (ii):

i. The arithmetic mean of the geometric average annual credited rates calculated in 4 (A).

B.ii. 145% of the Annual Net Investment Earnings Rate.

C. For other any Index Accounts that does not meet the definition of the Benchmark Index Account in 3 (C) using other equity, bond, and/or commodity indexes, and/or using other crediting methods, the total Index Credits illustrated as a percentage of the account value in the Index Account shall not exceed the minimum of (i) and (ii):

i. The maximum Index Credits for the Benchmark Index Account calculated in 4(B) plus the Supplemental Hedge Budget for the Index Account

C.ii. The total Index Credits that the illustration actuary shall use actuarial judgment to determine the maximum credited rate for the illustrated 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 applicable Benchmark Index Account. In no event shall the credited rate for the illustrated scale exceed the applicable rate calculated in 4 (B). The illustration actuary shall use actuarial judgment to determine this value using methodology consistent with 4 (A) and 4 (B) where appropriate.

D. At the beginning of each calendar year, the insurer shall be allowed up to three (3) months to update the credited rate for each Index Account in accordance with 4 (B) and 4 (C).

5. Disciplined Current Scale

The earned interest rate for the disciplined current scale shall be limited as follows:
A. If an insurer engages in a hedging program for index-based interest Index Credits, the assumed earned interest rate underlying the disciplined current scale, inclusive of all general account assets and hedge assets that support the policy, net of default costs and investment expenses, including the amount spent to generate the Index Credits of the policy shall 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 interest Index 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 testing for self-support and lapse-support under Model #582, accounting for all benefits including illustrated bonuses.

D. If more than one Benchmark Index Account is used for an illustrated policy, each set of Index Accounts that correspond to each Benchmark Index Account must independently pass the self-support and lapse-support tests under Model #582, subject to the limitations in 5 (A), (B), and (C). All experience assumptions that do not directly relate to the Index Accounts as to expenses, mortality, investment earnings rate of the general account assets, lapses, and election of any Fixed Account shall equal the assumptions used in the testing for the entire policy.

6. Policy Loans

If the illustration includes a loan, the illustrated ratetotal amount credited to as a result of the loan balance, including Index Credits and all other illustrated benefits and bonuses that impact the policy’s account value, shall not exceed the sum of illustrated loan charges and the Supplemental Hedge Budget by more than 100 basis points.

7. Additional Standards

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. For each Index Account illustrated, a table showing actual historical index changes and corresponding hypothetical interest rates using current index parameters for the most recent 20-year period.
March 25, 2020

Fred Andersen
Deputy Commissioner of Insurance
Minnesota Department of Commerce
Chair, NAIC IUL Illustration (A) Subgroup

Re: Proposed Changes to Actuarial Guideline 49

Fred:

On behalf of the companies listed below (the “IUL Coalition”), we are submitting this letter in response to proposed changes to Actuarial Guideline 49 (“AG 49-A”) submitted by the ACLI to the Indexed Universal Life Illustration (IUL) Subgroup (“IUL Subgroup”). These proposed changes are intended to implement regulators’ stated intent over the last several months.

Lincoln Financial Group
Pacific Life Insurance Company
National Life Group
John Hancock
Sammons Financial Group

The IUL Coalition has worked closely with ACLI as it drafted AG49-A and sincerely appreciates the effort to collaborate and compromise up to this point.

First, the IUL Coalition strongly agrees with ACLI that AG49-A should be applied on a prospective-only basis to policies issued after the effective date of changes. We refer you to prior comments we have made on this issue.

Second, the IUL Coalition concurs with the ACLI comment letter where a consensus was reached. The IUL Coalition provides further comment below on the one area of the ACLI letter where a consensus was not reached.

The Coalition Supports ACLI Option 1 Regarding the Treatment of Policy Loans

While the ACLI was able to reach a consensus on most provisions, one exception was with respect to the treatment of policy loans. As a result, the AG49-A draft contains two proposals for the treatment of policy loans: Option 1 and Option 2. Both Options limit the maximum crediting rate on the portion of the policy that is collateral for an index loan to a rate that is not higher than 100 bps above the illustrated loan interest charge rate (the “1% limit”). The difference between these options is that Option 1 applies the limit on index-related performance while Option 2 applies the limit on all credits, regardless of whether they are tied to an index or not.
We agree with the ACLI that further discussion on this topic is warranted. Below we provide more clarification and education to the regulators beyond the comment letter distributed by the ACLI and describe why we support Option 1.

In evaluating the two proposed options as well as the arguments supporting each, it is the IUL Coalition’s belief that there are flaws and inconsistencies in Option 2 as described below:

1. **Applying loan “leverage” to Non-Indexed Credits.** One of the purposes of AG49 was to limit the loan leverage shown in the illustration. While the term “leverage” is not defined within AG49 itself, it is defined within the comment letter provided by the ACLI. Within that document, it defines loan “leverage” as when the index return is higher than the loan charged rate. Option 2 indicates that the loan leverage may exceed 100 bps via means of fixed rate bonuses or other innovative product designs. We respectfully disagree. Since non-indexed credits do not impact the index return nor the loan charged rate, the loan leverage remains consistent between Option 1 and Option 2.

2. **Inconsistent treatment of Indexed Loans.** Option 2 creates various inconsistencies as outlined below:

   a. **Loan vs. Non-Loaned within IUL product.** Option 2 allows the Non-Indexed Credits to be fully illustrated on non-loaned values but they may be limited on loaned values. The leads to difficulties for an applicant to compare and understand the costs associated with a loan and the impact on benefits under the policy.

   b. **Standard Loans vs. Indexed Loans within IUL product.** Option 2 allows the Non-Indexed Credits to be fully illustrated on Standard Loans but they may be limited on Indexed Loans. This creates confusion to the policyholder when determining which type of loan would be best suited for them.

   c. **Varying by Index Return.** Option 2 advocates that “products could still offer other bonus types and demonstrate how they work at lower interest rate illustrations or when loans are not illustrated.” The implication is that at higher illustrated returns, the Non-Indexed Credits cannot be illustrated since the true loan leverage is already at 100 bps. However, at lower return scenarios, they are allowing you to illustrate the bonus as you would no longer be illustrating any leverage. To illustrate items such as fixed credits differently across the return scenario is inconsistent, arbitrary and misleading as it gives the impression that the bonus amount truly varies by index performance.

   d. **UL vs. IUL.** UL policies illustrated with a loan can include Non-Indexed Credits (subject to self-support/lapse-support tests) while the IUL policies illustrated with the loan will only be able to reflect the Non-Indexed Credits that don’t cause the 1% limit to be exceeded. This difference will make it more difficult for the applicant to understand which product better suits his or her needs and will also make it more difficult to compare the mechanics of each product. The ACLI letter cautions that non-Index bonuses may become more common. We note, however, that these bonuses have been in common use for many years and have proven beneficial to many policyholders. There are no negative implications associated with a possible increase in the use of these bonuses.
To summarize, and for additional clarity, when a simplified example is shown to demonstrate how Option 1 and Option 2 would illustrate a Non-Indexed Credit under various scenarios, the inconsistency becomes apparent:

<table>
<thead>
<tr>
<th>Fixed Persistency Bonus (% of Policy Value)</th>
<th>0.50%</th>
<th>Illustrated Fixed Persistency Bonus</th>
<th>Illustrated Fixed Persistency Bonus</th>
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<tbody>
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</tr>
<tr>
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<td>5</td>
</tr>
<tr>
<td>Indexed Loan - Indexed Account (lower index return)</td>
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<td>5</td>
</tr>
<tr>
<td>Indexed Loans - Indexed Account (higher index return)</td>
<td>1,000</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

3. **Innovative products will be disadvantaged.** Many innovative products are designed to add Non-Indexed Credits that could increase a customer's policy value. The best way for a customer to understand the benefits derived from these types of products is in the illustration. By applying the 1% limit to Non-Indexed Credits, illustrated values for the product when a loan is taken will reflect the full charge associated with the innovative feature but may not be permitted to reflect the full potential benefit. This would create a disadvantage for innovative product designs, such as policies that offer wellness credits to customers who engage in activities that help them live longer and healthier lives.

4. **Option 1 does not provide any undue “optimism” compared to Option 2.** Within the comment letter distributed by the ACLI, one of the arguments provided for Option 2 is that it “prevents illustrations that are overly optimistic.” The implication is that Option 1 is allowing overly optimistic illustrations. This is not true. The inclusion of an item like a fixed bonus is not adding any additional optimism in that the bonus will be paid regardless of index performance. Therefore, the level of “optimism,” in projecting uncertain items like indexed return, is identical between the two options.

The IUL Coalition feels that Option 1 as outlined in the ACLI draft and comment letter is the appropriate direction. The IUL Coalition believes that Option 1 provides consistent treatment of Non-Indexed Credits to allow a policyholder to properly understand the implication of a loan. In addition, Option 1 limits illustrated index loan leverage while encouraging innovative product designs. And, while each of the points above get into detail as to why we prefer Option 1, it’s also wise to step back and remember the overall goal of AG49. It was created to prevent over-illustrating indexed performance within IUL illustrations. Option 2 restricts the illustrations beyond index-related items which we don’t believe aligns with the objectives of AG49.

**Comments on other changes to AG49-A**

The revisions in AG49-A accomplish the main objectives of the IUL Subgroup’s request. The guideline establishes a maximum level of index credits based on hedge budgets that are no greater than the earned rate on assets supporting the product. At maximum levels for illustrated rates and hedge budgets,
features like multipliers or higher caps illustrate at a similar level as products without those features. We don’t believe there are openings to illustrate a net value for a BIA that is higher than the limits shown by the examples submitted by the ACLI.

We note that the ACLI is continuing discussions on a few remaining items and may have some additional changes to propose. Once the ACLI has completed discussions on any remaining changes, we plan to provide more detailed comments at that time.

The IUL Coalition is committed to working with stakeholders to promptly implement the intent of regulators, even during this time of economic and social uncertainty. We note that, over the coming months, regulators may need to consider providing increased flexibility regarding comment deadlines and decision-making as regulators and companies operate under emergency plans in response to the COVID-19 pandemic. While IUL Coalition members’ first priority is to maintain essential services to our policyholders during this public health emergency, we stand ready to continue progress on this issue as appropriate.

We appreciate the opportunity to provide input to the IUL Subgroup and look forward to further discussions.

Respectfully Submitted,

Scott R. Harrison
High Point Strategies, LLC
scott@highpointstrategies.llc

cc: Reggie Mazyck, NAIC
February 14, 2020

Mr. Fred Andersen  
Chair, NAIC IUL Illustration (A) Subgroup  
Mr. Reggie Mazyck  
Life Actuary, NAIC

Re: Questions on IUL Illustrations

Dear Mr. Andersen and Mr. Mazyck,

Global Atlantic supports the continued review of Actuarial Guideline XLIX (AG49) considering new policy designs which have once again brought a lack of uniformity in illustrated values that can be confusing to potential buyers, in addition to creating uncertainty for the illustration actuary. We continue to believe that all index product designs should illustrate consistently and within the spirit of the current guideline. The current guideline provides for illustrated values based on the product’s index growth potential, using restrictions on the credited rates, earned interest rates within the disciplined current scale and loan leverage.

Global Atlantic is submitting a draft update that, we believe, develops illustrated value uniformity across index products while maintaining the spirit of AG49. The attached draft addresses the issues within the January 2020 exposure document as follows:

**Issue #1**  
Section 3.B.ix. of the draft requires all sources of index credits to be included in the Benchmark Index Account. The different maximum AG49 lookback rates are therefore eliminated.

Additionally, the draft does not utilize the “Supplemental Option Budget” term, thereby eliminating the issues raised with defining that item.

**Issue #2**  
The current AG49 allows for more than one Benchmark Index Account to be used. The attached draft builds on this through:
1. Section 3.B.ix requiring all sources of index credits to be included in the Benchmark Index Account.
2. Section 4.A.iii. providing guidance on determining the maximum credited rate for Index Accounts that differ from the Benchmark Index Account.

**Issue #3**  
The attached draft specifies utilization of policy values subject to index interest, eliminating the interpretation differences of dollar amount and interest rate approaches listed in the exposed document.

**Issue #4**  
AG49 applies to policies that have interest credits linked to an external index or indices. The attached draft requires all credits linked to an external index or indices to be considered within the 100 basis point limit. This consistent definition clarifies the 100 basis point differential applies to all sources index-based credits as Global Atlantic has suggested in our previous comment letters. Other policy credits, such as a reduction
in policy charges for those who lead a healthy lifestyle, are not derived from an external index and thus are not considered.

We look forward to continued dialogue on this important topic and the suggested revisions we are submitting with this comment letter.

Thomas A. Doruska  
Head of Life Product Development

David P. Wilken  
President - Life
Fred,

Thank you for the opportunity to comment on potential revisions to AG49. While we see merits in the Supplemental Option Budget approach, we believe that it is unable to address the full spectrum of designs that could lead to effective illustrated rates well in excess of the AG49 maximum illustrated rate for the Benchmark Index Account (BIA). For example, it is not effective for dealing with the implications of alternative crediting strategies and hybrid indices that have higher imputed option profits based on the hypothetical historical lookback methodology in AG49 Section 4(A), which already provide for means of illustrating returns well in excess of the BIA maximum illustrated rate in products available for sale today. It is also not clear how the concept of a Supplemental Option Budget would interact with persistency funded multipliers, bonuses or cash infusions, as are commonly found on Indexed UL products currently in market.

As a result, we believe that alternatives to the Supplemental Option Budget approach should be considered that will better align Indexed UL illustrations to Fixed Indexed Annuity illustrations and address the full spectrum of potential indexed crediting and product designs. This letter outlines an alternative methodology with specific AG49 language recommendations. We believe that the changes we are proposing to AG49 will accomplish the goals set forth by the regulators while maintaining the ability for life insurers to clearly differentiate crediting strategies and products on the basis of risk and return characteristics using historical index return data.

Our recommendation is for two primary modifications to AG49. The first is to move the hypothetical historical lookback methodology currently used in 4(A) to the crediting rate reports described in Section 7. We also recommend that Section 7 be augmented to encompass best case, worst case and most recent case historical returns over 10 years, aligning Indexed UL illustrations with Fixed Indexed Annuity illustrations. Finally, we recommend that Section 7 be clarified to allow any additional credits or charges contractually related to providing indexed interest which, again, is in accordance with Fixed Indexed Annuity illustrations. Taken together, these changes will augment the insurer’s ability to show how variability of returns can impact crediting performance in a variety of scenarios for each indexed crediting option, thereby increasing consumer understanding of the crediting mechanics and potential risks and returns of the strategies.

Second, we recommend using an option valuation methodology for Section 4(A) with pricing inputs being drawn from the previous calendar year. We recommend using the Black-Scholes formula, a universally accepted valuation methodology for derivatives, including call options, and is commonly applied to the valuation of financial products containing derivatives-based payoffs, such as warrants and retail structured products. Replacing 4(A) with an option valuation formula aligns the maximum illustrated rate with the denominator for all indexed-linked credits in the contract, regardless of whether they are funded through the insurer’s portfolio yield, additional policy charges or persistency. This modification to 4(A) will eliminate the illustrated benefits of multipliers and buy-up caps.

It would also align the illustrated benefits of alternative crediting strategies and hybrid indices with the Benchmark Index Account. There would be differences in the illustrated rates for the various accounts based solely on the fair market value of the options, which is a true and reasonable indicator to consumers of the current intrinsic value of the indexed crediting option. However, consumers would still be able to see the potential risks and rewards of these strategies in the hypothetical historical crediting reports described in Section 7 based on historical index returns. By combining these two approaches, consumers will be able to make an informed decision about choosing an indexed crediting strategy based on both the current fair-market valuation of the replicating options for the strategy (Section 4(A)) and its potential to deliver performance in a variety of historical return scenarios (Section 7).
The changes to the AG49 language proposed herein would accomplish the following goals stated by regulators:

1. Standardizing illustrated rates across Benchmark Index Account options, in accordance with the stated goals of the original Indexed UL Illustration Subgroup in 2013.
2. Limiting the ability for alternative crediting strategies and indices to illustrate more advantageously than traditional indices and crediting strategies, in accordance with the stated goals of the original subgroup.
3. Ensuring that products with multipliers illustrate similarly to products without multipliers, in accordance with the recent vote taken by the IUL Illustration Subgroup.
4. Ensuring that products with buy-up caps illustrate similarly to products without buy-up caps, in accordance with the vote taken at the most recent NAIC meeting in Austin.
5. Bringing Indexed UL illustrations into alignment with Fixed Indexed Annuity illustrations.
6. Maintaining the majority of the current AG49 language, including the 145% factor for illustration actuary testing, thereby avoiding a time-intensive rework of the guideline.

The language proposed herein would also satisfy the following concerns raised by life insurers:

1. Continuing to provide for the ability of life insurers to differentiate their products and crediting methodologies by demonstrating the potential for different indexed crediting options to offer different risk/return profiles, including multipliers, buy-up caps and proprietary/hybrid indices.
2. Providing for illustrated loan arbitrage to a similar degree as Whole Life, thereby ensuring that Indexed UL is not at a competitive disadvantage to Whole Life in terms of illustrated loan treatment.
3. Providing for the continued illustration of persistency-based, embedded multipliers and bonuses, thereby ensuring that Indexed UL is not at a competitive disadvantage to other types of Universal Life products.

Specific AG49 language changes, with accompanying comments, are appended. We appreciate the opportunity to comment and respectfully submit our proposal.

Signed,

Bobby Samuelson, Executive Editor, The Life Product Review
Larry Rybka, President & CEO, Valmark Financial Group
Joseph M. Belth, professor emeritus at Indiana University
Chris Hause, FSA, President, Hause Actuarial Solutions
Richard M. Weber, President, The Ethical Edge, Inc
Barry Flagg, President, Veralytic
Stephen R. Leimberg, Publisher, Leimberg Information Services, Inc
Bill Boersma, President, OC Consulting Group
Tom Love, VP, Insurance Analytics, Valmark Financial Group
Mike Brohawn, President, Your Life Insurance Solution
Steven Roth, President, Wealth Management International, Inc., Licensed Life & Disability Insurance Analyst
Ben Baldwin Jr
Suggested AG49 Language Modifications

1. Replace 4(A) with:

   A. Calculate the value of the replicating option trades for the Benchmark Index Account over the preceding calendar year, based on the Black-Scholes formula using the following inputs calculated on each trading day:

      i. Average closing implied volatility for 12-month, at-the-money S&P 500 call options
      ii. Average closing implied volatility for out-of-the-money 12-month S&P 500 call options with a normalized strike price equal to the currently declared cap
      iii. Average dividend yield on the S&P 500
      iv. Average 12-month LIBOR

   This section is designed to replicate the reasonable price of replicatively hedging the current index parameters in the Benchmark Index Account. An alternative approach may be for the NAIC to publish standard tables of the estimated price for hedging index participation parameters at defined intervals (0.25%, for example) with allowance for insurers to interpolate between the datapoints. This would limit the degree to which insurers with identical index participation parameters would have different illustrated performance. LIBOR may also be exchanged for another measure of Risk Free Rates.

2. Replace 4(B) with:

   B. The value calculated in 4(A) shall be the maximum credited rate(s) for the illustrated scale.

3. Remove 3(A) – The Alternate Scale

4. Replace 4(C) with:

   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 judgement to determine the maximum credited rate for the illustrated scale. The determination shall reflect the fundamental characteristics of the Index Account as relates to the inputs for the Black-Scholes valuation formula, including realized volatility, implied volatility, volatility targets (if applicable), embedded fees (if applicable), deduction of an interest rate component (if applicable), dividend participation (if applicable) and other factors that may apply.

   This section is designed to ensure that products using different crediting methodologies, indices or combinations of the two illustrate in the same methodology as the Benchmark Index Account in accordance with their fundamental, underlying characteristics

5. Replace 7 with the following:

   A. A table showing the minimum and maximum of a geometric average for any available Benchmark Index Account using the following methodology:
i. Calculate the geometric average annual credited rate for each applicable Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

ii. Calculate the arithmetic average of the geometric average annual returns in all 25-year periods.

B. For each Index Account illustrated, a table showing actual annual historical index changes and corresponding hypothetical interest rates using current index parameters, including any applicable asset-based charges and asset-based interest bonuses or index credit multipliers paid within the first 10 years of the policy:

i. The 10-year period with the lowest calculated returns within the period referenced in 7(A)(i)

ii. The 10-year period with the highest calculated returns within the period referenced in 7(A)(i)

iii. The most recent 10-year historical period as calculated on the final trading day of the preceding calendar year

C. If an index has not been in existence for 10 years, the table shall replace the figures with the maximum available back-tested performance.

*This section is designed to bring Indexed UL illustrations into alignment with Fixed Index Annuity illustrations. These demonstrations will also provide latitude for insurers to demonstrate the potential risk and return profiles of various crediting strategies, indices and policy mechanisms.*

The following sections of AG49 were not altered for the following reasons:

5. There is no need to change the 145% provision in 5(A) as it will provide a cushion for the inevitable mismatches between the standardized illustrated price of the replicating options calculated in 4(A) and the insurer’s own pricing for options, expectations of prices or cap-setting process. Retaining the 145% will allow insurers who have economies of scale in hedging, are supporting higher caps with higher policy charges or other designs to illustrate benefits and costs accordingly. However, it may be advisable to adopt some of the clarifications to this language previously proposed in other comment letters.

6. There is no need to change the 100 basis points allowance for illustrated loan arbitrage. As with Section 5, there are inevitable mismatches between what an insurer is willing to charge on a loan and the value of what it may credit by providing current index participation parameters. This section preserves the ability for insurers to reflect those changes. However, it may be prudent to add clarifying language about the inclusion of illustrated bonuses and multipliers for the 100bps allowance.
February 21, 2020

Mr. Fred Andersen, Chairperson, IUL Illustration (A) Subgroup
National Association of Insurance Commissioners

Re: Proposed Changes to Actuarial Guideline 49

Mr. Andersen,

Allianz has had the opportunity to preview a number of different proposals for changes to Actuarial Guideline 49 and we appreciate the opportunity to provide our comments on the matter.

In the spirit of gaining industry consensus, we support using the ACLI and IUL Coalition proposals as the foundation for the revised guideline. The companies represented by the ACLI and IUL Coalition offer a variety of product designs and serve a broad range of consumer needs, and these proposals accomplish the goals set forth by regulators while also being clear, direct, and broadly applicable.

Where there are differences between the proposals, we support the approach that is more broadly applicable to the various product designs offered throughout the industry.

Thank you for the opportunity to provide these comments.

Regards,

Austin Bichler, FSA, MAAA
Senior Director Actuary & Illustration Actuary
Allianz Life Insurance Company of North America
Dear Fred;

Thank you for the opportunity to comment on the proposed Actuarial Guideline 49 (AG 49) “The Application of The Life Illustrations Model Regulation to Policies with Indexed-Based Interest.”

Members of the Life Actuarial Task Force (LATF) Indexed Universal Life (A) Subgroup had previously voted to promote the general principle of “not allowing multiplier products illustrate better than products without multipliers.” The objective of revising the AG 49 is to clarify the guidance and applicability for this general principle. Examples noted in the current version of the proposed AG 49 also demonstrate the essence of this general principle. During the 2019 NAIC Winter Meeting, members of the subgroup voted to further expand this general principle to cover the “cap buy-up” feature of Indexed Universal Life (IUL) products.

As indicated in the provided document for the Jan 28, 2020 conference call, both Option A and Option B for Sections 3.G and 4.E of the proposed AG 49 leave rooms for companies to illustrate higher net credited rates for multiplier products than non-multiplier products. As both options violate the general principle of “not allowing multiplier products illustrate better than products without multiplier,” we prefer neither Option A nor Option B.

Regardless of the final option (A, B or others) being adopted, no regulations or actuarial guidelines may cover all future product innovations and terms used in insurance contractual provisions. Innovative IUL products or contractual provisions may gradually limit the effectiveness of the final AG 49 on IUL illustration. It is also not practical for regulators to continually revise the definitions of the AG 49.

While we should continue to revise the language of AG 49 to achieve the general principle, we may also consider implementing a supplementary approach of defining the net credited rates and the projected account values of the base IUL product (without multipliers, cap buy-up or other credit enhancing features) as the upper bounds for the net credited rates and the projected account values of IUL products with multipliers, cap buy-up or other credit enhancing features. The combination of the two approaches may minimize the loopholes of AG 49 and reduce the frequency for updating AG 49.

In conclusion, we do not prefer either Option A or Option B on a stand-alone basis. Besides revising the languages for Section 3.G and 4.E, we encourage the subgroup to consider amending the AG 49 by defining the net credited rates and the projected account values of a base IUL product as the upper bounds for the IUL product with multipliers, cap buy-up or other enhancing product features.

Thank you.

Very truly yours,

Vincent Tsang, FSA, MAAA

Illinois Department of Insurance
February 21, 2020

Mr. Fred Andersen  
Chair, IUL Illustration (A) Subgroup  
National Association of Insurance Commissioners (NAIC)

Dear Mr. Andersen,

On behalf of the American Academy of Actuaries' Life Illustrations Work Group (the “Work Group”), I appreciate the opportunity to provide comments to the IUL Illustration Subgroup regarding the illustrations of Indexed Universal Life (IUL) insurance policies under Actuarial Guideline XLIX (AG 49).

In the early 1990s, the Task Force for Research on Life Insurance Sales Illustrations researched life insurance sales illustrations and published a report of its findings in the Transactions of the Society of Actuaries 1991–1992 Reports (see attachment). We believe this report is important because it formed part of the basis for the Life Insurance Illustrations Model Regulation (adopted later that decade) and much of it continues to be relevant today.

The research indicated there are two major uses of illustrations:

- **Type A Usage** is intended to show the consumer the mechanics of the policy being purchased and how the policy values or premium payments change over time. The emphasis is a matter of *how* and *what* rather than *how much*.
- **Type B Usage** tries to project likely or best estimates of future performance and compare cost or performance of different policies. It attempts to show *how much* on the premise that the *hows* and *whats* are comparable enough for this to be meaningful.”

Although the Task Force concluded that “illustrations handle Type A requirements well,” the report states that “Type B usage for illustrations is fundamentally inappropriate” and “illustrations are structurally incapable of handling Type B questions.”

During subsequent development of the Life Insurance Illustrations Model Regulation, a majority of regulators agreed with the conclusions of the Task Force:

“A regulator suggested that a provision be added to refer to comparison between policies, recognizing that people will compare policies whether the working group thinks it is

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1 The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted 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.
appropriate or not. The majority decided the NAIC should not go on record in any way encouraging what they consider an inappropriate use of illustrations.” (Proceedings of the NAIC, 1995 Proc. 2nd Quarter 537.)

We are concerned that the recent direction from the Life Actuarial Task Force (LATF) will result in the inability to show the consumer the mechanics of the policy being purchased (i.e., inhibit Type A usage). We understand LATF’s concern that illustrations could be misleading if consumers believe the illustrated rates are best estimates (Type B usage), but it is also misleading to deprive consumers of the ability to see how certain product features work (Type A usage).

Therefore, the Work Group offers the following principles for evaluating potential changes to AG 49:

1. Product features are adequately disclosed and reasonably demonstrated in all illustrated scenarios, to support Type A usage and educate consumers on what they are buying (e.g., costs, functionality, benefits/risks/limitations, impact on illustrated values, etc.).
2. Discourage Type B usage through disclosures in the illustration and through consumer education.
3. Illustrated values that are supportable through DCS testing.
4. Maximum illustrated rates that are reasonably related to the product features and also reflect the economic environment.

In addition, we suggest that Section 7.C. of AG 49 be reviewed to improve disclosure of total credits and charges (not only credited rates).

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The Work Group appreciates the efforts of the IUL Illustration Subgroup to review AG 49. If you have any questions or would like further dialogue on the above topics, please contact Ian Trepanier, life policy analyst, at trepanier@actuary.org.

Sincerely,

Donna Megregian, MAAA, FSA
Chairperson, Life Illustrations Work Group
American Academy of Actuaries
TRANSACTIONS OF SOCIETY OF ACTUARIES
1991-92 REPORTS

FINAL REPORT* OF THE TASK FORCE†
FOR RESEARCH ON LIFE INSURANCE SALES ILLUSTRATIONS
UNDER THE AUSPICES OF THE
COMMITTEE FOR RESEARCH ON SOCIAL CONCERNS

EXECUTIVE SUMMARY

Purpose

The Task Force for Research on Life Insurance Sales Illustrations reports
to the Society’s Committee for Research on Social Concerns. The Task Force
was formed in recognition of the declining level of consumer confidence in
the life insurance industry and, in particular, to investigate how sales illus-
tration practices can add to, or detract from, consumer confidence.

In developing this report, the Task Force surveyed life insurance company
illustration practices, reviewed available literature and regulatory require-
ments, held open forums at Society of Actuaries (SOA) and Canadian In-
institute of Actuaries (CIA) meetings, and considered the methodology applied
to other financial products.

Situation Analysis

Sales illustrations have been developed to meet a variety of needs from a
variety of consumers, all placing different requirements on an illustration.
There are two major uses of illustrations:

• **Type A Usage** is intended to show the consumer the mechanics of the
  policy being purchased and how policy values or premium payments
  change over time. The emphasis is a matter of how and what rather than
  how much.

• **Type B Usage** tries to project likely or best estimates of future perform-
  ance and compare cost or performance of different policies. It attempts
  to show how much on the premise that the hows and whats are compa-
  rable enough for this to be meaningful.

Illustrations handle Type A requirements well, especially if several illus-
trations are used to show different scenarios. Illustrations inherently do not

*Opinions expressed herein are those of the Task Force for Research on Life Insurance Sales
Illustrations and of the Committee for Research on Social Concerns. This report does not pur-
port to represent the views of the Society of Actuaries or of its Board of Governors.
†udy A. Faust (Chairperson), Benjamin J. Bock, Bruce E. Booker, John W. Keller, John R.
Skar, Linden N. Cole, Staff Liaison, W. Steven Prince, CIA Liaison, and Michael J. Roscoe, AAA
Liaison.
handle Type B requirements well. How credible are any nonguaranteed numbers projected 20 years into the future, even if constructed with integrity? How does a consumer evaluate the credibility of two illustrations if they are from different companies or even from the same company if different products with different guarantees are being considered? Most illustration problems arise because illustrations create the illusion that the insurance company knows what will happen in the future, and that knowledge has been used to create the illustration.

In many countries, Type B usage of life illustrations is prevented, in effect, through use of standardized assumptions. It is acknowledged that there are real differences in performance between companies, but such differences cannot be described through illustrations. Within North America in other financial products such as mutual funds, it is recognized that future performance cannot be illustrated. The emphasis of these illustrations is to disclose expense charges, not the performance of the underlying fund.

Life insurance policies are complex financial contracts. There is no simple measure or analysis to compare future performance of unpredictable events. This fact is well understood in the securities industry and needs to be assimilated into the life insurance industry as well.

CONCLUSION: Illustrations are a valuable tool for the consumer and third-party advisors when used properly. Most companies are making a good-faith effort to comply with the regulatory requirements and disclose material facts on the illustration. However, the consumer would benefit from illustrations that demonstrate the sensitivity and operation of nonguaranteed elements and better methods/measures to compare policies and companies.

Alternatives to Current Practices

The Task Force considered a number of alternatives to current practices for illustrations. Specific recommendations are contained in Sections VI and VII of the report. The recommendations fall into these main categories:

- Educational Efforts: A large educational effort should be undertaken with consumers, agents and head office personnel concerning the limitations of illustrations for Type B purposes. The sales process should emphasize selling of the product, not the illustration.

- Standards, Disclosures and Regulations: The CIA and American Academy of Actuaries (AAA) should consider developing specific standards
on what assumptions should be used in illustrations or on required disclosure of assumptions used. It should be required that unique product features are prominently disclosed as well.

- **Optional Improvements**: Companies could require a consumer signature on illustrations. Historical data could be provided separately from the illustration. Illustrations could be accompanied by graphs or quinquennial summaries to avoid the illusion of precision.

- **Continuing Research**: The proposed alternatives are not a complete solution to the problem of properly explaining a policy to a consumer and allowing an informed choice to be made. Research on methods to achieve this should continue.

### 1. SCOPE OF RESEARCH

A life insurance policy illustration is a mathematical calculation of benefits and values over time under specific, simplified, and generally static assumptions. Illustrations have evolved into relatively sophisticated marketing tools. Their popularity and importance have increased not only with easier access to fast, powerful computers, but also as the result of heightened consumer need to understand what is being purchased and how much it will cost.

Consumers and their advisors use illustrations to understand how a policy operates and its expected cost over time. When a consumer is comparing several products, illustrations are often used to determine relative performance or cost. While current practices may have some flaws, illustrations are an important source of information to the consumer.

The Task Force on Life Insurance Sales Illustrations was formed to research life insurance company sales illustration practices from the perspective of the consumer. Much of the motivation for this research was based on the perception that:

- Serious problems exist with respect to the use of life insurance sales illustrations in the U.S. and Canada.
- More than two decades of regulations and required disclosures have not solved the problems; if anything, the situation is getting worse.
- Actuaries are familiar with these problems and should be involved in the solutions. Our goal is to encourage an efficient market by applying principles of actuarial science. These principles include:
  - Appropriate and consistent recognition of the time value of money.
- Use of probability to measure uncertainty or risk.

As part of this research, the Task Force undertook to investigate:

- Current illustration practices, including regulatory requirements and the flexibility that companies provide agents to customize illustrations in the field
- Alternatives to current illustration practices
- Advantages and disadvantages of current and alternative practices
- Appropriate uses for illustrations.

To support these efforts, the Task Force considered:

- How consumers currently use illustrations
- How to make illustrations more intelligible to the consumer
- The appropriate disclosures to the consumer
- How to maintain credibility with the consumer in the illustration process
- What data and assumptions should be displayed on the illustration
- Illustration practices in other countries
- Illustration practices for other financial products.

While the following items may have an impact on the illustrations delivered to the consumer and merit study, they are beyond the scope of this research paper:

- How agents modify illustrations beyond the flexibility provided by the company
- The setting of profit standards and pricing assumptions within a company
- The appropriateness of policy provisions and their conformance with regulatory or actuarial standards
- Variable life insurance.

Further, we focused primarily on life insurance. Annuities and health insurance were not generally considered. While our comments are specific to sales illustrations, many of them apply equally to in-force illustrations. We did not consider variable product illustrations, except as an example of alternative illustration methodology. While we primarily focused on the situation in the U.S., we believe our research and conclusions are equally appropriate to Canada.

It may be useful to describe our research activities:

- We surveyed 87 life insurance companies regarding their current illustration practices and sought their ideas on positive change. These companies were selected as being major writers of participating insurance policies, universal life and/or innovative life insurance policies in the U.S. and Canada. Their responses are summarized in Appendix I.
LIFE INSURANCE SALES ILLUSTRATIONS

- We compiled a bibliography from actuarial literature, which is shown in Appendix IV.
- We reviewed the work of other organizations and state regulations.
- We talked with actuaries from other countries to gain an understanding of their illustration practices and the associated strengths and weaknesses.
- We talked with our counterparts in other financial services to determine whether their illustration practices were adaptable to life insurance.
- We sought input from our colleagues: actuaries, legal counsel, compliance officers, agents, marketing officers, regulators, and others.

The result of these efforts is this white paper. To those who contributed, we appreciate your input. The development of regulations and standards of practice is beyond the purview of the Society of Actuaries. However, we hope that this paper will provide input, and serve as a catalyst, to the organizations that can effect such changes.

II. REGULATORY REQUIREMENTS FOR LIFE INSURANCE ILLUSTRATIONS

The policy performance and features illustrated to the buyer have been an issue with regulators for at least a century. At the turn of the century, there was concern about the tontine dividends that companies illustrated to their customers. An outgrowth of the Armstrong Commission was the required annual distribution of dividends and the elimination of tontines based on survivorship.

During the 1930s, there was again concern about illustrations because dividend scales were decreasing due to the economic environment. Among the issues discussed were:
- The appropriate number of years for dividend illustrations (20 years was common but thought too long, given the uncertainties of the 1930s)
- Display of year-by-year dividends or 3–5 year totals
- Disclosure to the buyer of the nonguaranteed nature of dividends and the assumptions underlying the current scale.

More recently, there has been concern about the impact of policy illustrations on the industry's credibility in the context of changes in interest rates, asset quality and policy features. Policies are more flexible and more complex than in the past and place greater emphasis on nonguaranteed values.

The insurance code of each state has certain requirements that apply to illustrations. While these requirements vary by state, the following are generally applicable:
• If dividends are illustrated, the illustration must use the insurer’s current dividend scale.
• If nonguaranteed elements other than dividends are illustrated, the illustration must use the insurer’s current interest rate, mortality charges and expense charges.
• If the policy provides for a separately identified interest credit, the interest rate used in the illustration must be displayed. If the interest rate is linked to an index, the index must be described. Any limitations on the crediting of interest must also be described.
• Any reference to dividends or nonguaranteed elements must include a statement that such elements are not guaranteed.
• Illustrations of nonguaranteed values must display, with equal prominence, the comparable guaranteed values. If nonguaranteed and guaranteed values are shown combined as a single sum, they must also be shown separately in close proximity thereto.
• For policies providing for flexible premiums and/or death benefits, all data shall be displayed assuming the schedule of anticipated premiums and death benefits.
• Interest adjusted cost indexes must be displayed for specified durations. These indexes are the net payment cost index and the net surrender cost index. If the policy is participating, the interest-adjusted equivalent level annual dividend also must be displayed.
• If the guaranteed policy cost factors or the initial policy cost factor assumptions would result in policy values becoming exhausted prior to the policy’s maturity date, such fact shall be disclosed.

Additionally, for U.S. business, Exhibit 8, Question 3 of the Annual Statement requires a company to opine on its ability to support the nonguaranteed elements currently illustrated for new and existing business. This applies only to illustrations authorized by the company. Schedule M requires an attachment that describes the precise methods by which dividends are calculated. In Canada, the valuation actuary must comment on the appropriateness of the dividend scale but not any other nonguaranteed elements.

The purpose of these illustration requirements is to ensure that both the guaranteed and nonguaranteed performance of the policy are disclosed to the buyer. The cost indexes are intended to help the buyer judge the relative value or cost of an insurance policy. However, the Life Insurance Buyer’s Guide points out that cost comparisons should only be made between similar plans of insurance. Further, it states that other information, such as company financial strength and historical performance, will be needed on which to
base the purchase decision. When the cost indexes were originally developed, they were perhaps more useful than they are now. Policies had, at that time, fixed premium patterns with fairly consistent design features and profit margins. This is not the case with most permanent, cash value life insurance being sold today.

Regulations and requirements must change to remain appropriate and effective. Evolving marketplace and economic conditions necessitate periodic updating of regulations, including rescinding requirements that are no longer helpful. The regulations of the early 1980s did not anticipate the product features, payment options and anomalies of the succeeding decade. As examples:

- Illustrations of a vanishing premium for a fixed-premium product depend upon the nonguaranteed policy factors to support premium payments after the vanish year. Should the accompanying guaranteed values be based on the illustrated premium outlay by the buyer or the payment of full premiums in all years?

- Companies are required to illustrate the current dividend scale or the current scale of nonguaranteed factors as appropriate. At a time when interest rates, mortality experience and expenses may not be improving, current scale may provide an overly optimistic projection of future results. Many companies currently provide agents with the flexibility to illustrate performance under alternative dividend scales or scales of nonguaranteed factors. While such sensitivity analysis is not explicitly provided for by most states, we believe it provides valuable information to the buyer.

- There is a great deal of discretion given to companies in the development of current dividends or nonguaranteed factors. There is no regulation, or any required disclosure, of the degree of risk or contingency associated with those nonguarantees.

- When a company increases its current dividend scale to distribute accumulated surplus over a specified period of years, there is no required disclosure of the likelihood of lower dividends at the end of that period.

- There is no regulation or disclosure of policies that are lapse supported, that are not self-supporting or that are based on assumptions that are inconsistent with a company’s experience. Each of these items increases the performance risk to the buyer.

- The Internal Revenue Code in the U.S. contains sections which may have an impact on the tax treatment to the buyer or beneficiary of death proceeds, policy surrenders and partial withdrawals of policy values.
Most companies alert the buyer to possible tax implications through some disclosure on the illustration, although such disclosure is not required.

III. CURRENT PRACTICES

A. General

To better understand current illustration practices, we surveyed 87 companies; 56 responded. A sample questionnaire with responses summarized is contained in Appendix 1.

The first section of the survey provided companies with an opportunity to present their perspective on life insurance sales illustration practices. Over 95 percent of the companies responding to our survey perceive a problem with current industry sales illustration practices in terms of successfully communicating with the potential buyer in a good-faith manner. Of these, 65 percent thought that the problem was serious but could be fixed.

Based on the comments from respondents, the perceived problems are:

- The typical consumer does not understand which values in 50-year projections are guaranteed.
- The consumer cannot determine if the underlying assumptions are realistic.
- The consumer cannot evaluate the relative conservatism of the nonguaranteed policy values illustrated by different companies.
- Footnotes and other narrative disclose assumptions and other important facts, but they are often not carefully reviewed by the consumer.
- Providing agents with the ability to run their own illustrations limits the control companies have over what the consumer is shown.
- Companies have too much discretion in illustrating nonguaranteed elements.

Some companies provide the agent with tools to customize illustrations to particular client needs, or agents can buy or develop these tools on their own. The tools that companies provide allow flexibility with respect to column selection and formats, variations on nonguaranteed elements, and different premium patterns. Many companies that allow this flexibility require that the client also be given a ledger illustration in an approved format.

Companies are generally opposed, or neutral, to such complete flexibility. Respondents are concerned about outside programming that alters policy values or eliminates required columns or footnotes. There is also concern as to whether the consumer receives the complete illustration package, including the pages of caveats and footnotes.
While information regarding company size and financial strength is important to the consumer, most companies do not provide this as part of the illustration.

Respondents believe that the best features of their illustrations are flexibility, completeness and conservatism. Completeness includes disclosure of the contract’s operation and the tax consequences to the buyer. Basing non-guaranteed elements on current experience and lack of “gimmicks” were cited by several companies as examples of the conservatism built into their illustrations.

Respondents offered a number of suggestions regarding how illustrations could be improved to the benefit of the consumer.

- Simplify illustrations; there are too many numbers and too much “legalese.”
- Educate the consumer that an illustration demonstrates the operation of a contract under only one scenario and that there is a range of possible outcomes as to nonguaranteed benefit levels.
- Establish standards for illustration practices; in particular, provide more specificity in the definition of current experience and require disclosure of assumptions.
- Require that scenario testing with defined assumptions be part of the illustration package.

B. Dividend-Paying Policies

Of the 56 companies responding to the Task Force survey, 35 write participating policies.

When asked the question, “Which, if any, of the following dividend factors as illustrated anticipate a change from current experience, either by projecting trends or on some other basis? . . . Mortality, Interest, Expense,” one company indicated that it used mortality projections in its current illustrations. Three companies responded positively regarding interest and two reported anticipated changes in expense.

The comments accompanying this question indicate that only one company is anticipating lower expenses in its illustrations. One company occasionally anticipates higher expenses in its illustrations. At least two of the three companies projecting interest rates are companies that only allow agents to select a lower-than-current rate for illustration purposes. The company using mortality projections is assuming improved mortality in the future.

To the question, “Are such changes disclosed to the consumer?” three of these companies answered affirmatively.
Seventeen companies, or almost half of the 35 responding, answered yes to the question, "Do your agents have the flexibility to run illustrations at dividend interest rates or mortality rates higher or lower than the current scale?" All 17 companies indicated that they allow fluctuations in the dividend interest rate only. Fourteen of the companies stated that they only allow dividend interest rates to be illustrated that are lower than the current scale. Only two companies allow either higher or lower interest rates to be illustrated. Eight companies cap the maximum variance from current scale at 2 percent. Two of the companies allow the variance to be as much as 3 percent. One company allows agents to choose the average interest rate from the past 8, 12, 20, or 40 quarters.

Ten of the 35 responding companies answered "yes" to the question "Has your company received an increasing number of policyowner complaints about dividends paid versus dividends illustrated?" Eight companies indicated that the largest number of complaints concerned the vanishing point of premiums. Typical comments included:

"Most misunderstandings relate to vanishing premium illustrations and dividend scale changes. Policyholders mistake a vanishing-premium illustration for a promise of a paid-up policy."

"Policyowner complaints have increased as dividend scales have decreased. [Policyowners] do not always comprehend the nonguaranteed nature of dividends."

The Task Force also asked three state insurance departments whether or not they had observed an increase in complaints regarding dividend illustrations. Two (New York and Wisconsin) indicated that very few of the complaints they received were related to life insurance and, further, that they did not keep records in sufficient detail to respond to our questions. However, both expressed great interest in our research and voiced the concern that complaints may become more significant in the future. The third (California) noted that, based on a random sample of recent complaints, illustration complaints arose from decreasing dividend scales which affected total policy values and the vanishing point.

In addition to asking companies to fill in the questionnaire concerning their current practices, the Task Force also asked them to send samples of policy illustrations currently being used. Exhibits A–H are examples, as described below. All exhibits are in Appendix II.
LIFE INSURANCE SALES ILLUSTRATIONS

Exhibit A

Exhibit A is an example of a traditional illustration for a participating whole life policy. It shows dividends, paid-up additions, guaranteed and total cash values and death benefits, increase in total cash value and guaranteed paid-up insurance for each policy year from the date of issue until age 100. It also includes the interest-adjusted surrender and payment cost indexes for 10 and 20 years.

Although the sheer volume of numbers may be overwhelming, the footnotes are kept to a bare minimum. They simply mention that the first dividend is contingent upon the payment of the second-year’s premium, that dividends are affected by policy loans, that dividend figures are based on the current scale assuming no loans, and that dividends are not guaranteed.

Exhibit B

The illustration shown in Exhibit B builds on the traditional model but gives the prospective buyer fewer numbers and a great deal more text material. The first page is a summary of the numerical results at the end of 20 years and at attained age 65. This is followed by two pages of numbers showing year-by-year values from the year of issue to attained age 98. Footnotes are again kept to a minimum, but a statement at the bottom of page 3 warns that two other forms must be enclosed with the illustration. These forms add two more pages of explanatory material.

One form is a listing of all the optional benefits that are available with the policy. The second form contains the dividend caveat, an explanation of illustrative life income figures, a brief explanation of term plans, and some information about the policy loan provision and interest-adjusted indexes.

Exhibit C

Exhibit C is another fairly traditional illustration, but it is included here because of its unusually forthright dividend caveat. Page 1 is a complete illustration showing 20 years of values plus values at attained ages 65 and 75. It has a very brief dividend caveat but refers the prospect to an attached page of footnotes.

Page 2 gives the year-by-year values through age 95. Page 3 is the footnote page. The first footnote assures the client that the policy is not a modified endowment contract. The second footnote pertains to dividends. It first gives the usual statement that dividends are based on the current scale and are not guaranteed. However, it then goes on to say, “Due to new federal taxes and
economic conditions including declining interest rates, dividends based on the 1992 dividend schedule are expected to be lower than those shown in the illustration." Among all the illustrations submitted to the Task Force, this one surely deserves an award for its candor! Several more footnotes follow, including a statement that the illustration does not recognize the time value of money and should not be used to compare policy costs.

Finally, the bottom of page 3 shows the interest-adjusted surrender cost and net payment cost index numbers, and gives an explanation of them.

Exhibits D and E

Exhibits D and E show how two different companies handle illustrating dividend interest rates which differ from the current scale. The illustration in Exhibit D simply takes the standard illustration format and runs it at an alternate dividend interest rate. The actual rate used and the fact that it is less than the current rate are disclosed at the very top of the illustration on each page.

The illustration in Exhibit E compares the results of the current dividend scale and an alternative dividend scale in the same illustration. The first page shows values for the first 20 policy years and at attained ages 65 and 70. Page 2 is an illustration based on the alternative dividend scale showing a vanishing-premium scenario. This page also includes a comparative rate of return. Page 3 gives some summary figures at the end of 20 years and shows the interest-adjusted costs and payments.

The fourth page of the illustration contains several footnotes, including a statement about the hypothetical dividend interest rates and an explanation of the comparative rate of return. At the bottom of the page are listed the actual hypothetical interest rates used in the illustration.

Exhibit F

Since several companies indicated that vanishing-premium illustrations were their largest source of policyowner complaints, it was natural that many of these illustrations were sent in as samples. It is obvious that some companies are trying hard to find ways to educate policyowners to the fact that the vanish point depends on the dividends that will be paid in the future.

The illustration in Exhibit F is a case in point. It illustrates policy values on a vanishing-premium basis but places a full-pay illustration right alongside the vanishing-premium illustration for comparison purposes. The footnotes state that "the term "vanish" does not mean that the premiums are no
longer due, but that the cash premium due reflects the payments of future gross annual premiums through the use of current dividends. If future dividends are reduced from the current, results of the vanish may differ from that illustrated. Additional premium payments may be required if the current scale of dividends is reduced."

Exhibit G

The illustration in Exhibit G is another example of an attempt at complete disclosure. The first page, labeled 1 of 4, shows the vanishing premiums, together with the paid-up additions that need to be surrendered in years 12 through 15. Page 2 shows a guaranteed ledger assuming all premiums paid. Pages 3 and 4 contain explanations, including an explanation of vanishing premiums and a suggestion that an alternate proposal be requested on a lower dividend interest rate. Finally, the policyowner and agent must sign a statement to the effect that they have received and reviewed all four pages of the proposal, including the footnotes.

Exhibit H

Exhibit H represents an innovative approach to showing a vanishing premium plan on both the current scale and 1 percent less than current scale, all on the same page. From the wording in the first footnote, we can see that it is designed to be shown along with a full-pay ledger and is to be accompanied by an explanation of the vanishing premium concept.

C. Universal Life

From the beginning, a necessity for successful marketing of universal life has been the ability of the seller to illustrate the performance of a policy tailored (within policy limits) to the needs and resources of the prospective purchaser. The agent and prospect have the ability to choose almost any pattern of benefits and premiums. No longer is the sale limited to one of several fixed plans of insurance from a ratebook. Each one is different.

Any system of policy illustrations will have some limitations on this flexibility. For instance, few can illustrate off-anniversary changes. Besides such practical constraints and the policy’s inherent restrictions, how should the illustrations be limited? What interest rates can be shown? What cost of insurance rates can be used?

Most observers would agree on the appropriateness of current rates of interest and cost of insurance deductions along with guaranteed rates. But
what about other than current rates of interest and cost of insurance, such as lower or higher interest rates? Should the buyer be able to factor in his or her own conservatism, or optimism, about future economic conditions?

In our survey of insurance company practices in this area, 49 of 56 responding companies reported that they allow the agent or consumer to vary interest rates. Four of these allow higher interest rates than the current scale, usually with a footnote disclosing this fact. Others show both the current rate and another lower rate chosen by the agent. Most of the companies allowing cost-of-insurance variations reported offering a choice of only current or guaranteed deductions.

Since any life insurance policy is a long-term contract, its performance depends more on what happens in the future than on current credits and deductions. Some companies will pay more interest than others. Some companies will charge lower cost-of-insurance rates or loads than others. How can these differences be discerned and/or illustrated at the time of sale? The premiums on this policy have not been invested yet. There is no experience on the mortality and persistency of this year’s sales yet. How can the company show that it is different, and how can a consumer judge differences?

From an actuarial point of view, there is guidance. In the U.S. Actuarial Standards of Practice No. 1, “The Redetermination (or Determination) of Non-Guaranteed Charges and/or Benefits for Life Insurance and Annuity Contracts” (ASOP 1), sets a standard of using anticipated experience factors, that is, “those elements in the redetermination (or determination) of non-guaranteed charges and benefits that reflect expected future experience.” ASOP 1 states that “anticipated, or projected, experience of a factor class means experience expected in the future as determined by the actuary through the application of sound professional judgement.” It should be based on recent experience and expected trends, where applicable. ASOP 1 also explicitly recognizes that current company experience may be of limited value in projecting future experience.

ASOP 1 thus allows a company to use its best judgment in estimating its future experience factors to use in setting parameters for determining illustrative policy values.

Of the 56 responses to the survey, five use mortality assumptions which differ from current experience, eight use different interest rates, and two use different expenses. Since policy illustrations may go for as long as 100 years, and the oldest universal life policy is only 12 years old, some projections of future experience from current are obviously necessary.
The question remains: To what degree will the illustrated differences in policies actually occur? Currently, there are no recognized yardsticks for the consumer to use. At best, a comparison of credited interest rates with bond yields, and a comparison of actual to illustrated cost-of-insurance rates, may show how the company’s customers have fared in the past.

Separate from the questions of the ultimate realization of illustrated interest and cost-of-insurance factors is that of "persistence bonuses." For this purpose, a persistence bonus is a retrospective or prospective credit structure which provides enhanced values to a long-term policyowner compared to a short-term one. If guaranteed, persistency bonuses are limited in most states by the workings of the smoothness test in the Standard Nonforfeiture Law. Simply put, this test requires that policy values grade smoothly within each successive five-year period, so that large, one-time bonuses are not allowed. Most states do not restrict the crediting of properly disclosed nonguaranteed bonuses.

Ten of the 56 survey respondents reported bonuses. The existence of a bonus in the illustrated values is disclosed in footnotes by these companies, along with disclosure of its nonguaranteed nature, if appropriate.

We are aware of at least one company which displays the current cash surrender values in a footnote; only the accumulation values are shown in the body of the illustration.

Companies responding to the survey also provided us with sample illustrations for universal life and interest-sensitive whole life products. The representative illustrations that we selected deal with policy features that are unique to these products. These are shown in Exhibits I-M.

Exhibits I-M

Exhibit I is an illustration showing values on three different bases: current, illustrative and guaranteed. The interest rates associated with each set of values are clearly displayed on the first page. A footnote at the bottom of the page indicates that the policy has a prospective interest rate bonus that is applicable after 20 years. We assume that it is not guaranteed since it is included for only the current values.

For each rate basis, account value, cash value and death benefit are shown. Footnotes describe the assumptions for each rate basis. Cost indexes are shown for all three bases.

A footnote indicates that the policy terminates in year 31 based on guaranteed values. This is a year not displayed on the illustration.
Disclosure of persistency bonuses is a key feature in these illustrations. Exhibit J is an example of a guaranteed bonus. Values are shown on three bases, with both the implicit and nominal interest rates displayed. Pages 4 and 5 describe the assumptions underlying each set of values, as well as the impact of the persistency bonus at each bonus point.

Exhibit K contains several variations. The assumptions, including those for mortality and expense, for both guaranteed and current values are part of the column caption. There is a footnote on page 3 alerting the consumer to a number of tax issues and citing the need for professional advice. Page 4 describes certain product features, including a prospective persistency bonus. The comments on the persistency bonus do not mention whether it is guaranteed.

Exhibit L is included for its use of graphics. Displaying key values graphically is certainly easier for the typical consumer to grasp than seven columns of numbers. The graphic display is based on projected values.

Exhibit M is an example of a product with an accelerated death benefit, or living benefit. The cover page describes how the living benefit works. There is no reference to the tax treatment of the living benefit although the tax treatment of death proceeds is mentioned. This is followed by one illustration page of values and two pages of explanatory notes.

This policy has two types of bonuses: interest and mortality. The consumer is referred to the policy for a complete description of factors affecting the mortality bonus.

D. Term and Term Look-Alikes

Approximately three-fourths of the companies responding to our survey sell these types of products. None of the responses to our survey questions pointed to any potentiality abusive or questionable illustration practices on these kinds of products, nor did contact with state regulators turn up any. We were particularly interested in whether the conversion privilege (or lack thereof) was being adequately explained, and it appears that it is.

However, a couple of problems have been observed. One is that a company will display a cost comparison of its term plan with another company's permanent plan strictly on the basis of premium. Clearly, this is inappropriate. Another problem is that illustrations of indeterminate-premium term plans do not always display the corresponding guaranteed premiums. When the term plan includes a deposit fund, guaranteed values are not always displayed.
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Companies provided us with several representative illustrations, which are contained in Exhibits N and O.

Exhibits N and O

These are two basic term illustrations, displaying current and guaranteed premiums. Exhibit N shows the death benefit, current premium, accumulated premium, and maximum premium for an indeterminate yearly renewable term plan. Interest-adjusted cost indexes are displayed. The only footnote references the nonguaranteed nature of current premiums.

Exhibit O is an illustration of a 10-year re-entry term product. Current premiums are displayed for the second 10-year period, both with and without re-entry. A footnote discloses that re-entry is subject to evidence of insurability.

E. Second-To-Die Policies

Of the 56 responding companies, 39 indicated that they sell a second-to-die product. Only six of the 39 companies offer a product that provides for a cash value increase at the first death. Of those six, only one company answered “yes” to the question, “Are the values shown on your illustration always based on the assumption that both lives remain alive?” Three companies mentioned that agents could choose the year of death for the first death for illustration purposes.

To the question, “Does the illustration contain an explicit statement that there is no death benefit payable on the first death?”, 12 companies answered yes.

Exhibits P and Q are examples of illustrations of second-to-die policies.

Exhibits P and Q

Exhibit P is a survivor life ledger showing a traditional policy with dividends used to purchase paid-up additions. The final footnote makes it clear that no death benefit is paid until the second death. Although a term rider is mentioned in the footnote, it does not seem to be included in the illustration. Also, without further analysis, it is not readily apparent whether or not this policy provides a cash value increase on the first death.

Exhibit Q offers perhaps the ultimate in full disclosure. The first illustration, consisting of six pages, shows a 10-year vanishing premium and both insureds alive. Note that the policy is a combination of permanent whole life and term insurance.
Pages 4 through 6 show results on an alternative dividend scale, but do not include the vanishing-premium concept. Following this six-page illustration is a three-page illustration which assumes that the male insured dies at age 64. All premiums are assumed to be paid. This is followed by another three-page illustration assuming both insureds are alive and also assuming an alternative dividend scale. Then there is another three-page illustration that assumes the male dies at age 64 and that premiums vanish in the eleventh year.

Presumably, in addition to all these alternatives, one could request still more illustrations on different alternative dividend interest rates and different years of death for the first death.

F. Two-Tier Products

A two-tier product is one that has different cash surrender and annuitization values. Typically, the annuity value cannot be commuted and surrendered; it is available only as an income stream. Only five of the 56 companies answering our survey sell two-tier products. Most of these five companies feel that their illustrations clearly indicate that the policyholder who surrenders will receive less than the amount that would be applied toward annuitization at the same point in time. In some cases this is emphasized with additional statements on the illustration.

Another area of concern is whether the annuity income figures shown on the illustration are calculated only using current annuitization rates, or on both current and guaranteed annuitization-rate bases. Again, most but not all companies are showing the results on both bases.

A nonstandard illustration practice we encountered on two-tier products was that of a company whose illustration included a footnote naming its reinsurer—a large, well-known company—and stating that the reinsurer approved of the product.

G. Special Issues for Corporate Buyers

Corporate buyers of insurance are concerned about the accounting and tax impact of the purchase, as well as the product’s operation. Illustrations may be for individual insureds, but it is quite common for the corporation to be given illustrations that include all insureds, either on an actual or modeled basis.

Illustrations typically show all cash flows: premiums, use of dividends or other nonguaranteed elements, policy loans or withdrawals, benefits paid to
employees, annual expected death proceeds paid to the corporation, and the tax impact. The cash flows and asset (cash value) development are summarized to reflect the impact on the corporation’s balance sheet and the profit and loss statement. The illustration might also demonstrate the development of the benefit liability and its impact on the company’s accounting statements.

There are two common ways of reflecting the impact of deaths in the illustration. One is to assume that each insured dies at a specified age, such as 75 or 80. The other method is to adjust for mortality based on an appropriate table; this is known as fractional mortality or partial mortality. Based on discussions with several companies, there is concern that corporate buyers do not appreciate that the timing of the death proceeds is not guaranteed.

Traditional interest-adjusted cost indexes may be shown, but buyers focus on performance measures such as Internal Rate of Return and Net Present Value of Gain. Net present value of gain is usually calculated at the corporation’s after-tax cost of capital. These measures are usually calculated on a basis consistent with the expected death proceeds.

Guaranteed values are not usually displayed prominently next to current values although companies may require an accompanying ledger illustration. There are some group experience-rated contracts used in this market that do not have guaranteed maximum mortality charges and therefore do not have guaranteed values.

As with individual illustrations, illustrations for the corporate buyer are subject to company discretion as to the timing of certain events.

Illustrated funding patterns are more aggressive or flexible in this market than for individual purchases. The most aggressive is a 7-pay contract with premiums paid by policy loan in policy years 1–3 and by the surrender of nonguaranteed values in policy years 4–7, with the only illustrated outlay from the corporation being the payment of policy loan interest. This gives the perception that insurance can be purchased without real premium outlay by the buyer.

Because the products and the benefit plans being funded are very complex, companies attempt to disclose pertinent tax issues such as the impact of TAMRA, TEFRA, etc. Many include footnotes stating that buyers should seek their own tax counsel and not rely on the illustration for any tax advice.

H. Current Practices—Other

Other noteworthy illustration practices that we found included the following: (a) a Product Features Page which gives the answers item by item to
the questions posed in the CLU Professional Practices guidelines; (b) a full page dedicated to the 7-pay test, including the company’s interpretation of some of the aspects of TAMRA; (c) a place for the client to sign the illustration signifying that he or she has read and understands all the disclaimers; and (d) page-numbering schemes that inhibit removal of footnote pages (for example, “Page 1 of 5”). We also found: (a) unclear column headings, for example, lack of clarity as to whether benefits and values shown reflect valuation for tax, and (b) vanishing-premium illustrations in which the guaranteed figures shown alongside the current figures assume premiums paid all the way to maturity.

Survey and preliminary report respondents also expressed the following concerns:

- Whether products that are a blend of whole life and term insurance are in some cases being improperly portrayed as simply “whole life”
- The impropriety of Company X printing comparisons of its non-guaranteed values to Company Y’s guaranteed values
- The appropriateness of calculating net outlay as the premium less the dividend payable at the end of the same policy year, that is, not recognizing the time value of money during the year.

IV. USES OF LIFE POLICY ILLUSTRATIONS

An extensive body of literature already exists on this subject. However, most previous work deals with symptoms, rather than with underlying causes. For example, many articles decry aggressive assumptions, unrealistic non-guaranteed elements, lapse-supported pricing, and question the integrity of some illustrations. However, there is very little written about what caused the symptoms.

One way to get at root causes is to examine appropriate and inappropriate uses of illustrations. If an illustration is used for addressing questions it inherently cannot answer, problems will occur, even if the illustration is built with integrity.

The primary users of life insurance illustrations are:

- Consumers
- Life Insurance Agents/Brokers
- Companies (actuarial and marketing departments)
- Outside Advisers/Third-Party Analysts.

Each of these may have multiple needs which they hope to satisfy with an illustration. In general, these needs are of two primary types:
Type A usage tries to:
- Demonstrate how policy values change over time under specified premium payment and experience (for example, interest rate) scenarios.
- Demonstrate how a particular financial design or concept works, such as deferred compensation or vanishing premium.

Type A usage helps the consumer understand what is being purchased. It focuses on a single contract and its contractual features and mechanisms. It shows how a particular contract responds to illustrative conditions. Multiple illustrations of a single contract demonstrate how contractual values change in response to variations in assumptions.

Type B usage tries to:
- Project likely or best estimate future performance.
- Evaluate comparative cost or performance of several policies.

Type B usage helps the consumer understand which policy is the best buy. It evaluates comparative cost or performance among competing alternatives. It also focuses on projecting most likely estimates of cost.

Type B questions are of great interest to all user groups. Therefore, an objective, credible, inexpensive and quantitative means of answering these questions is highly desirable. Illustrations are quantitative and relatively inexpensive. But are they objective and credible? What can actuaries say about the ability of illustrations to accommodate Type A and B usage?

Illustrations appear well suited for Type A questions. In particular, multiple illustrations run under different premium patterns and interest rates are very helpful in explaining contractual mechanisms.

Type B usage is a different story. Today’s life insurance and annuity products are complex financial instruments, whose ultimate future cost and performance depend on macroeconomic and demographic factors, individual company performance and individual consumer behavior. Type B questions necessarily involve many factors, including:
- Evaluation of the likelihood of future economic events
- Measurement of company-specific performance risks
- Measurement of product-specific performance risks
- The individual consumer’s likely response to various future events.

For today’s individual life insurance products, reliable answers to Type B questions are not possible using illustrations. The footnotes, caveats and disclosures on a typical illustration are already overwhelming for most consumers. Yet this information adds little value in terms of developing a reliable estimate of future performance.
It can be seen that Type B usage is inappropriate unless the illustrations include a measure of relative risk. For example, if one illustration shows 15 percent lower premiums but has 50 percent greater risk of not achieving projected values, then lack of risk disclosure renders the comparison meaningless. Since relative risk cannot be calculated, Type B questions assume similar degrees of relative risk. Regulations try to assure "consistency" between illustrations as a way to keep relative risk equal. However, since there are really no practical means of assuring similar relative risks, Type B usage for illustrations is fundamentally inappropriate.

The incentives associated with Type B questions are considerable. However, an objective actuarial evaluation must conclude that typical life insurance products are too complex and the number of unknowable events is too great to allow for simple answers to questions of this type. Even when developed appropriately and with integrity, illustrations are structurally incapable of handling Type B questions. Illustrations, by their nature, cannot answer these questions. Problems arise because of the illusion that they can.

Many people believe that although illustrations aren't perfect, they are the best available indicator of future performance. They may believe, for example, that all illustrations are somewhat optimistic, but then conclude, "Even if they're all high by 15 percent, I'll still do better with the one which shows the highest values on these illustrations." Actuaries should oppose this myth.

V. OTHER ILLUSTRATION PRACTICES

It is easy to forget that sales illustrations in the U.S. and Canada have a unique history. Life insurance products sold in other countries, and other financial products sold in North America, do not share the same illustration practices. A review of these practices is helpful before evaluating alternatives for our system.

A. Other Countries

A quick survey of illustration practices in other countries reveals the importance of a historical and cultural context. In countries where insurance products are standardized by law, there is little controversy with respect to illustrations. This is the case for much of the Far East and Europe. Where product standardization is the rule, there is little product competition as we know it, and illustrations are naturally limited to noncontroversial Type A usage.
LIFE INSURANCE SALES ILLUSTRATIONS

The United Kingdom and Australia have relatively competitive life insurance markets, with many similarities to the North American market. As in our market, ledger illustrations have been employed for Type B comparative cost and performance evaluation. Not surprisingly, these countries have also encountered problems with sales illustrations.

Japan

Currently, sales illustrations in Japan are based on the “current” dividend scale. There is increasing concern that this practice may cause the consumer to believe that the current scale will remain unchanged in future years. Consequently, procedures will be revised to show the effect of a 0.1 percent decrease in the dividend interest rate. Disclosures will emphasize the variable nature of dividends and the fact that the illustration is based on current scale. In addition, special maturity dividends will be identified and shown separately from regular dividends.

U.K.

Sales illustrations are heavily regulated in the U.K. Regulations were influenced by a number of perceived abuses which developed during the 1980s. Currently, illustrations are constrained in at least three major ways:
(a) Upper-level performance constraint (maximum interest rate)
(b) Risk disclosure, by means of two alternative scenarios at significantly different interest rate levels. The regulators believe that two scenarios are better than either one or three at conveying the basic uncertainty of the investment performance assumption. Low and high investment rates are specified, and only change occasionally, based on underlying inflation expectations. There is a deliberate emphasis against specifying a “best estimate” rate.
(c) Standardized expense and mortality assumptions. All companies are required to use the same nonguaranteed expense and mortality assumptions. These are set by regulation based on current industry averages. While conceding that actual expense and mortality differences could influence the choice of a life carrier, the regulators felt that they should not be reflected in projections. This emphasizes their strong belief that illustrations have a limited scope, and should not be used for comparative performance measurement.
Australia

In early 1991, the Insurance and Superannuation Commission Circular #291 promulgated completely new guidelines for benefit illustrations in Australia. This was the first major change since 1985 and followed growing concerns about overly optimistic assumptions and a lack of consistency in the approach to long-term benefit projections.

The circular takes note of the situation in the U.K., where illustrations have been "ruthlessly standardized" and "serve only to create a generalized impression of the order of magnitude of benefits."

Under the Australian approach, companies have some latitude, through their Appointed Actuary, to reflect individual circumstances in their projections. There is a clear threat that this remaining privilege will disappear if these new guidelines do not work.

Australian companies are required to ensure that agents, brokers or other intermediaries representing them do not alter their benefit projections in any way.

Principal provisions of the Australian regulations are:
- A specified maximum assumption basis, with lower rates permitted if appropriate.
- Specific standards of practice to follow for all promotional material, aimed at avoiding ambiguity or false impressions.
- Two illustrations are normally required. The higher rate cannot be greater than \((CB + 3) \times (1 - t)\) where \(CB\) is the 3-year average 10-year Treasury bond yield, and \(t\) is the maximum tax rate on the type of business in question. The lower rate is no more than 80 percent of the higher rate. If only one illustration is shown, it must be at the lower rate. If more than two rates are illustrated, the third and subsequent cannot exceed the higher rate.
- Projections are required to include an illustration of the effects of inflation, for the term of the projection, with an inflation rate of 60 percent of \(CB\).

In summary, regulation of illustrations in both the U.K. and Australia has been structured to emphasize their suitability for Type A usage only. To enforce this, illustrations are highly standardized and provide little or no opportunity for comparative performance or cost evaluation.

B. Other Financial Products

A review of other financial products’ illustration practices provides interesting comparisons to life insurance.
The securities industry has many complex financial products. The risk and uncertainty of future performance in these products are so well accepted by the public, however, that it is difficult to imagine Type B usage in ledger illustrations. For example, try to imagine a stockbroker advising a consumer on whether to buy IBM or AT&T stock, using a 30-year projection of last quarter’s dividend and change in stock price!

For most securities, the consumer must use something other than illustrations to make judgments about performance. The prospectus is the primary document for this purpose. It is both highly structured and complex. It is difficult, if not impossible, for a consumer to have a quick, easy-to-understand, numerical basis for doing comparative performance evaluation for mutual funds or securities.

The *NASD Manual on Investment Company Securities* gives detailed guidance on what must be done if comparison of investment products or services is to be done.* The essence of this guidance is that comparisons should not be performed unless all factors which could possibly be considered relevant are disclosed.

**Mutual funds** may be illustrated on a “hypothetical” basis, with full disclosure of all expense charges and a statement that the illustration is based on past performance and is not indicative of future performance. The relative simplicity of a mutual fund product structure makes it feasible to use illustrations for this purpose. There are no “nonguaranteed elements” or “participating” expenses and mortality charges to muddy the waters. The prospectuses for both mutual funds and variable annuities include fee table examples, so that buyers can compare expense levels among different products.

**Variable life insurance** illustrations are regulated by the SEC and the NASD. Investment returns must be specified as gross yields. At least one investment return assumption must be 0 percent, and no return can be higher than 12 percent. All expense charges and loads must be shown explicitly in the prospectus. It is easier to attempt Type B comparisons on variable life, particularly since one of the most important factors, investment return, is assumed constant between products. In a more fundamental sense, however, Type B analysis of variable life illustrations may have limited value, since differences in expenses and cost of insurance could be overwhelmed by differences in investment performance. Some observers see a trend toward more nonguaranteed bonuses and charges in variable life products. If this is

* *NASD Manual—Investment Company Securities, Para. 5286(5).*
true, it may be progressively more difficult to use sales illustrations to answer
Type B questions for variable life insurance, as is true today for nonvariable
products.

In general, a review of relevant practices for other countries and other
financial products reveals an understanding that illustrations should not be
used for comparative performance measurement. This is particularly true for
the more complex products containing nonguaranteed performance elements.

VI. ALTERNATIVES TO CURRENT PRACTICES

Our Task Force presented 23 alternatives to current illustration practices
in our preliminary report. During the exposure period, we received a number
of comments on these alternatives, and suggestions of other alternatives that
we might consider.

We categorized the alternatives that were identified during our research
as follows:
• Reduce or limit numbers
• More stringent requirements for nonguaranteed elements
• Product or market specific issues
• Consistency of illustrations
• Strategic/educational efforts.

Our Task Force was charged with researching illustration practices from
the perspective of the consumer. Therefore, we evaluated alternatives on
these criteria:
• Will it improve the consumer’s understanding of the life insurance policy
  being considered?
• Will it improve the consumer’s understanding of life insurance generally?

A. Reduce or Limit Numbers

The road to full disclosure has some pitfalls. In showing as many numbers
on illustrations as most companies already do, a couple of phenomena occur.
First, consumers who are simply not numbers-oriented, and there are many
such people, may tune out or be misled; they may be more interested in a
careful verbal explanation of the basic concepts. On the other hand, there
are consumers who will fixate on the numbers, particularly the current ac-
count value column on a typical universal life illustration or the total value
column on a dividend-paying whole life illustration, which marches mcs-
erizingly toward a 6- or 7-figure number. Compounding this problem is
the fact that the prevailing practice is to show these account values to the
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nearest dollar, which, perhaps unwittingly, ascribes a level of credibility to the numbers that is quite inappropriate, especially for durations in the murky future beyond the 10th or 20th year. These account values are purely illustrative figures that, at best, are based on convenient, reasonable working assumptions as to what future mortality charges and interest rates might be like. Small differences between the assumptions and actual experience will compound to a very large “error” before very many years go by. In short, our Task Force sees a need for the industry to take some definitive steps away from selling our packaging (the illustration) and toward selling products, by reducing the focus on raw numbers.

There are several possible remedies to this general problem:

1. If possible, supplement numeric information with a presentation in graphic form. Technical advances now make this feasible in many instances. This approach addresses the need to emphasize concepts more and numbers less, and the problem of “extra” significant digits in the account values disappears. Safeguards against the misleading scaling of graphs may be needed, however. Graphics, if done well, can be an excellent tool for conveying information to the average person. One reason often cited for the tremendous success of the newspaper USA Today is its very popular and informative graphs.

CONCLUSION: We would encourage actuaries to work with their colleagues in systems and sales/marketing to find new and more customer-friendly ways to present illustration information in graphic form.

2. Limit illustrations of current values to 20 years and every fifth duration thereafter. This, we think, would help to make it clear that we have a sketchier picture of the distant future than of the near future. Also, it reduces the degree to which the client is overwhelmed by numbers and leaves more room on the page for useful narrative. It is important that values be shown to maturity or lapse so that the consumer is aware of any changes in benefits over time. However, if there is a change in premium or if a policy provision first manifests itself after the twentieth year, the illustration should display all durations.

CONCLUSION: Companies should consider adopting this convention on a voluntary basis.

3. Show current values to the nearest $10 per thousand of initial face amount. This rule could apply at all durations, or perhaps just after the fifth or tenth year.

CONCLUSION: Companies should consider adopting this convention on a voluntary basis.
B. More Stringent Requirements on Nonguaranteed Elements

The Task Force identified five alternatives that deal with nonguaranteed elements.

1. More Complete Definition of “Current Experience” or “Current Dividend Scale”

At present, confusion exists as to what is meant by current experience or current dividend scale. For example, a current-dividend-scale illustration may assume mortality improvements built into it, but those improvements are not reflected in the dividends of older duration in-force policies. Is the illustration really based on the company’s “current scale”? Some may define current-scale illustrations much more stringently as only those on a dividend scale having the same experience factors as are currently being paid to in-force policyholders.

In 1978 a paper appeared in the Transactions of the Society of Actuaries (Volume XXX, pp. 447–475) entitled “Choice of Basis for Dividend Illustrations” by Russell R. Jensen. In it Jensen states,

“The simplest definition of current experience would be in terms of those factors of mortality, interest, and expense used in determining dividends currently payable (current allocation). Yet at times this type of definition may not be valid or applicable. There may be no such factors that are appropriate for the illustration of dividends because anticipated mortality, lapses, or expenses of the new business are clearly different from those now experienced on any block of business in force. Or, a company may use different investment yield rates for different eras of business, and there may be a question as to the rate to be applied to current issues.”

A company entering a new market will not have any past experience to illustrate. A new product may require a different investment pattern from anything the company currently has. These and other situations would mean that showing current experience can be more misleading than using currently anticipated experience.

CONCLUSION: We believe that further study and research into this issue would be worthwhile. Therefore, we encourage the AAA and the CIA to:

- Review existing regulations requiring the use of current experience or current dividend scales in life insurance sales illustrations;
- Suggest revisions to those regulations which would clarify the meaning of “current,” and
• Recommend modifications to the regulations which would allow the use of both current experience and deviations from current experience, but, if the latter, only with appropriate and mandated disclosure of the assumptions used.

2. Standards of Practice for “Illustration Actuary”

As part of his response to our survey of current illustration practices, Armand de Palo suggested that the time has come to consider the concept of an “Illustration Actuary.” This individual would be responsible for informing senior management whenever illustrations with unrealistic assumptions are being used. This might be considered as part of the enhanced standards for nonguaranteed elements.

CONCLUSION: We are not ready to endorse this concept at this time, but we agree that it is an idea worth pursuing. Therefore, we encourage the AAA and the CIA to study this concept further.

3. Furnish Historical Data

This alternative would require agents to furnish clients with dividend histories, and dividend history comparisons with other companies, in addition to current illustrations. These would show clients how the company performed over the last 20 years, information similar to that supplied to buyers of mutual funds.

The argument is often made that dividend histories are not subject to manipulation and, therefore, are a more reliable gauge of a company’s performance than are current illustrations. Certainly for those companies included in Best’s annual 20-year history study, the information is readily available, including rankings and comparisons with other companies.

Companies have reasons for arguing that historical comparisons are not pertinent. Today’s products are much different from products issued 20 years ago. For example, 20-year histories of universal life policies are not yet available. A company may argue that it has changed its approach to underwriting, its investment philosophy or its expense controls. Also, the formation of new companies, mergers and acquisitions pose practical problems for presenting 20-year histories.

One danger in using histories is that often the historical results are compared with the illustration provided at the time of issue. Over the past 20 years, of course, actual results have been much better than the illustrated results of 20 years ago. This could give both buyers and agents the false impression that they could expect the same pattern of results in the future,
that is, that illustrations are always conservative and actual results will always be significantly better.

CONCLUSION: We believe there is value to illustrating historical performance and in providing buyers with a company's actual record of dividends or experience rates credited over the past 10 or 20 years. However, given the fact that many of today's products were not being issued 10 or 20 years ago, and that linking past performance of significantly different products with today's products may be misleading, we do not recommend that historical data be made a required part of illustrations.

4. Disclosure of Underlying Assumptions and Current Experience
Supporting Illustrated Performance

Complete disclosure would include publication of interest rates, mortality charges, lapse assumptions, expenses (home office, field, investment, etc.), taxes, and profit assumptions that support current values. Most companies disclose the current interest rates used in their illustrations and some disclose mortality charges. Many companies, however, would object to such full disclosure on the grounds that the information is proprietary and disclosure would be competitively damaging.

Even the information being disclosed today is suspect in that the interest rates disclosed may be before or after investment expenses and taxes, mortality charges may or may not reflect actual experience, and expense charges may or may not cover actual expenses. Would a consumer be able to sort out all of the different experience factors and assumptions used in an illustration to determine if the illustrated values are in fact reasonable or not?

CONCLUSION: We believe that the idea of requiring more complete disclosure deserves further study. Therefore, we recommend that the AAA and the CIA pursue this topic further.

5. Identification of, or Special Reserving Requirements for, Unusual Features Such as Lapse-Supported or Two-Tiered Products, Terminal Dividends, Interest Rate Kickers, Persistence Bonuses

We wholeheartedly support complete and clear disclosure of unusual policy or pricing features, particularly if they result in inconsistent treatment of one group of policyholders relative to another group (for example, persisters versus early terminators).

CONCLUSION: We would encourage the AAA and the CIA to work toward development of appropriate disclosure requirements for such
practices and to determine whether or not special reserves should be required.

C. Specific Product Issues

Based on the illustrations available to us, we believe the following product-specific issues must be resolved.

1. Vanishing Premium Illustrations of Fixed-Premium Products

There should be consistency between the premium patterns assumed for guaranteed and nonguaranteed values, particularly when they are shown next to each other. If the underlying premium pattern is not consistent, the illustration should explicitly show both premium patterns. This is not an issue for flexible premium policies since both current and guaranteed values must be based on the same premium pattern.

Many consumer complaints relate to vanishing-premium illustrations. Consumers do not understand what is guaranteed or the sensitivity of illustrated performance to changes in the nonguaranteed policy factors.

CONCLUSION: The AAA and the CIA should both consider and recommend improvements to these illustrations which will communicate the sensitivity and the associated guarantees. The result should be consistent with the illustration requirements for flexible premium policies.

2. Second-To-Die Products

Second-to-die product illustrations should be required to disclose whether or not there is a cash value increase on the first death. If there is, the illustration should include examples of values after a first death occurs.

For second-to-die products that include a term portion—usually paid for through dividends—it is especially important to illustrate values all the way to the end of the mortality table. It is also crucial to show how these policies perform at lower than current dividend interest rates. While current scales may support the policy adequately for 20 or 30 years, the insureds could be faced with very large premiums due at very advanced ages.

CONCLUSION: We believe that important policy features must be disclosed to the consumer. Further, modular policy design may increase the sensitivity of nonguaranteed policy features. The AAA and the CIA should consider appropriate disclosures and/or standards for sensitivity analysis that will help the consumer understand these features and their impact on performance.
3. Two-Tier Products

The difference between the tiers can be quite large. The tier differential could be viewed (and is viewed, by some regulators) as a surrender charge, so certainly one alternative to current practice is to format the illustration accordingly, possibly even including a column that explicitly displays this surrender charge. Another alternative is to add language to the illustration that provides the needed additional emphasis of the important point that needs to be made to the client: the cost of rolling the funds out of this product to another one is unusually high, that is, the client needs to feel highly committed to staying with this company. Also, as life expectancies and expenses increase, annuitization rates may become less favorable, so a case could be made for using something more conservative than current annuitization rates on the illustration for someone who is not going to annuitize until several decades from now.

Another idea worthy of consideration, which comes from the California Department of Insurance, is to require that the account value column heading say “not available in cash.”

Mandating that the tier differential be explicitly characterized as a surrender charge may be a bit severe and could unduly limit a company’s freedom to illustrate its products in a reasonable way. Adequate disclosure is really the key point. Thus, for example, the idea of requiring the words “not available in cash” for the annuitization account value column heading seems like a good one.

Good-faith disclosure also clearly calls for showing monthly incomes on both a current and guaranteed annuitization-rate basis. As to the idea of using slightly conservative current annuitization rates for this purpose, in anticipation of future increases in life expectancy, this may be laudable but it does not seem necessary, since the juxtaposition of the corresponding guaranteed figure next to the current figure should convey the sense that things may not work out as favorably as the current figure suggests. Furthermore, this could create additional unneeded complexity and could even be latched onto as a defense of using future mortality improvements on life illustrations. Likewise, monthly incomes should be shown based on both the current and guaranteed annuitization account values.

CONCLUSION: The Task Force believes that the AAA and the CIA should consider the appropriate disclosures for two-tier products and appropriate changes to the values displayed.
4. Concept Illustrations

These illustrations demonstrate a concept or a program, such as split dollar or executive benefits. The focus is typically the accounting or tax impact rather than the operation of the insurance policy. Concept illustrations usually do not meet the regulatory requirements for policy illustrations. To demonstrate both concept and policy operation in the same illustration would overwhelm the consumer with numbers.

The Task Force believes that concept illustrations are appropriate. However, these illustrations should be clearly labeled “Concept Illustration Only.” Unless guaranteed values are prominently displayed next to current values, the footnotes should disclose that this is not a policy illustration. This would allow agents to demonstrate concepts while alerting the consumer that the illustration does not demonstrate the operation of the policy.

CONCLUSION: We would recommend the recognition of concept illustrations and would encourage the AAA and the CIA to develop the appropriate disclosure to differentiate concept illustrations from policy illustrations.

D. Consistency of Illustrations

A somewhat more standardized approach to illustrations could make it easier for a buyer to understand the illustration. The Task Force identified five possible areas of standardization.

1. Standard Definition of Terms

Commonly used terms should have the same meaning in all companies’ illustrations. For example, the column labeled “Current-Year’s Death Benefit” should have data that are consistent for all companies. There should be no discretion as to whether it is the death benefit at the beginning of the year, end of the year or some interim value. Standard definitions of terms would increase the clarity of illustrations to all users, not just to consumers.

CONCLUSION: We encourage the AAA and the CIA to consider pursuing this suggestion with industry trade groups, professional organizations and regulatory bodies.

2. Standardized Notes

There are probably too many notes on illustrations today, and they are not consumer-friendly. Furthermore, given today’s product features, regulatory requirements for notes do not keep current with the need for disclosure
of how a product operates. Since the notes are at the end of the illustration, it is not clear how much attention they are given by the buyer. It would seem appropriate that important notes should be placed at the beginning of the illustration.

CONCLUSION: While the complete standardization of notes is most likely unattainable and perhaps not even desirable, we would encourage the AAA and the CIA to determine what degree of standardization might be helpful to consumers.

3. Different Print Sizes

Currently, all the data and notes on an illustration are given equal prominence. To the extent that it is technologically possible, the Task Force believes there is merit to using boldface or different print sizes for emphasis. This would help to ensure that the buyer reads important notes such as the nonguaranteed nature of illustrated values.

CONCLUSION: We encourage the AAA and the CIA to pursue this concept.

4. Standard Assumptions

Three possible models have been described in this paper: the illustration of variable life and the illustration practices in the United Kingdom and Australia. These models for standardization of assumptions help the buyer to understand that the illustrated performance varies with the underlying assumptions and is not guaranteed. The Australian requirement that effects of inflation also be demonstrated for the term of the projection has considerable appeal to the Task Force.

CONCLUSION: We encourage the AAA and the CIA to consider pursuing this alternative with industry trade groups, professional organizations and regulatory bodies.

5. Range Approach/Specified Scenarios

The range approach was advanced by the American Council of Life Insurance to the National Association of Insurance Commissioners in 1988. As proposed, it would apply to both life insurance and annuity illustrations. Use of the approach would have been elective, not compulsory. It would have allowed a range of interest rates only—not of mortality or expense assumptions. Finally, it would have allowed interest rates up to two percentage points higher and two percentage points lower than the interest rates underlying the company’s current scale.
The assumption behind this approach was that the agent would actually show three complete illustrations to the client. One would be on the current scale, one up to two percentage points higher than the current scale and the third based on an interest rate up to two percentage points lower than the current scale. The current-scale illustration would always be required. The other two would be optional, but if an illustration based on an interest rate higher than current scale is shown, then the correspondingly lower-interest-rate illustration must also be shown. The NAIC did not adopt this approach.

An advantage of the range approach is that it allows clients to see how the policy performs under different interest rate assumptions. More importantly, it demonstrates powerfully that variations are likely. In his presentation to the NAIC, Anthony T. Spano, Actuary with the American Council of Life Insurance (ACLJ), said,

"Use of the range approach would demonstrate to the insurance buying public that illustrations are merely examples of how a product may perform rather than benchmarks on how it will perform. An undue focus on the company’s current scale, which would result if illustrations were restricted to current scale, would be a disservice to the consumer in that it may create the impression that there is something magical or permanent about a company’s current scale. This could lead the consumer to feel that current scale figures are tantamount to guarantees."

Needless to say, companies were not unanimous in their support of the ACLJ in advancing the range approach. The most controversial aspect of this proposal was that companies would be allowed to illustrate policies at higher than current interest rates for the first time. The counterbalance to this, of course, was the requirement to also show an illustration at a rate lower than current scale. The fear, however, was that agents would not always show the lower-interest-rate illustration, or even the current-scale illustration, but instead would concentrate only on the higher-interest-rate numbers.

Another concern was that only the interest rate could be varied and not mortality or expenses, which could also be expected to change over time.

Although the NAIC did not adopt the range approach, the industry seems to have gone part way towards it on its own. Several companies are allowing agents to show illustrations at dividend interest rates lower than current scale, while very few allow illustrations at higher than current scale. Most illustrations of products with explicit interest credits allow the interest rate to vary, either up or down.
The Task Force strongly believes that consumers should be made aware of a product’s sensitivity to changes in the environment. The range approach is one approach that might be considered.

**CONCLUSION:** We think further discussion on the range approach within the industry and within our profession is warranted. As stated in Section B-1 above, we encourage the AAA and the CIA to:

- Review current regulations requiring the use of current experience or current dividend scales in life insurance sales illustrations;
- Suggest revisions to those regulations which would clarify the meaning of “current,” and
- Recommend modifications to the regulations which would allow the use of both current experience and deviations from current experience, but, if the latter, only with appropriate and mandated disclosure of the assumptions used.

**E. Strategic/Educational Efforts**

1. **Change Use of Illustration in Sales Process: Consumer Disclosure**

Consumer education efforts should focus on appropriate uses for illustrations. Usage disclosure should be clear and simple. It should indicate that illustrations are only useful for Type A questions, as defined in this paper. Required disclosures should make clear that it is inappropriate for agents, companies, or advisers to use illustrations for Type B questions, regardless of the integrity of the illustrations involved.

This is not a ban on illustrations. Over time, however, such disclosure should reduce the occurrence of abusive practices. Previous regulations and disclosures have not been effective, because it has been possible to design around a rule while still using illustrations for comparative cost purposes.

Sample usage disclosures, for display at the top of the illustration:

a. **Sales illustrations should not be used for comparative policy performance purposes.** Life insurance policies are complex financial instruments, which generally contain both guaranteed and nonguaranteed elements. A sales illustration may be helpful in understanding how a particular policy performs under specified circumstances. It is generally not feasible, however, to use sales illustrations to determine whether one policy is a better buy than another.

b. **The only promises a life insurance company makes when it sells a policy are the contractual guarantees.** Policy illustrations are not promises. Rather, they are hypothetical examples of what might happen if certain assumptions are met.
c. Policy illustrations should not be used for comparing the relative cost or performance of life insurance products.

d. Most life insurance policies are complex financial contracts which contain both guaranteed and nonguaranteed features which depend on unpredictable future events. Consequently, the amount of risk associated with a particular sales illustration cannot be determined.

   If illustrations cannot be used as a comparative performance measure, many people will demand to know, “What can be used?” The honest answer is that there is no simple measure or analysis which can be done for such complex financial products. The consumer bears a degree of future performance risk, and this cannot be readily estimated, especially for competing policies. This fact is already well understood in the securities industry. It needs to be assimilated in the life insurance industry.

   Of course, there are other factors to consider, including rating agency analyses and retrospective cost measures. There are also many service and quality factors. Contractual features which have value to the consumer’s individual situation may be more important than generalized cost estimates. Finally, an evaluation and recommendation by the agent or broker may be of critical importance. Ultimately, although many factors may be considered, the final decision on the best policy must be based on individual judgment.

   **CONCLUSION:** The AAA and the CIA should encourage their respective regulatory bodies to mandate inclusion of sales illustration disclosures of the type shown above. At least one of the disclosures should be prominently displayed at the top of every page.

2. **Consumer Brochure**

   A small, easy-reading brochure, developed by an industry or professional association, could supplement the proposed disclosures and explain proper and improper uses of policy illustrations in more detail. It could also cover other due diligence questions which a consumer might want to ask before making a decision. The brochure should be offered in every situation in which an illustration is used as part of a decision to buy, lapse or replace life insurance coverage. It should be designed as a way to educate the consumer about both insurance and illustrations.

   **CONCLUSION:** There are many associations that could sponsor or contribute to this effort, including the ACLI and the Canadian Life and Health Insurance Association (CLHIA). We believe that it is important to have active actuarial sponsorship of this publication. We recommend
that the AAA and the CIA take the lead in developing the text. The brochure could replace the current buyers’ guides used in the U.S. and Canada.

3. Consumer Hotline

Though it would be a logistic challenge to set up, an industry-funded consumer hotline could be established, staffed by actuaries or other industry personnel interested in addressing the illustration problem on a one-on-one basis with the public. Consumers would call in (or fax) their questions.

This approach would be the most proactive of all the methods of addressing the illustration problem discussed in this paper, since it is a direct, hands-on approach rather than just another report or regulation. The concept is similar to that of the Legal Aid hotlines set up by various bar associations.

CONCLUSION: We do not recommend proceeding with this approach. In our opinion, most questions of this type are best handled by the individual company or the servicing agent.

4. Consumer Signature

There is value in having the consumer acknowledge something about the process used in deciding to buy, lapse or replace life insurance coverage. This is similar to the requirement that a consumer receive a prospectus prior to buying securities. The acknowledgment should be simple and short enough that it actually gets read before it is signed.

A sample might be: “I understand that my decision to buy/lapse/replace this life insurance policy should not be based on illustrations of nonguaranteed future performance or cost. If I was shown an illustration, I was given a copy of the brochure, Life Insurance Illustrations.”

CONCLUSION: Companies should implement such disclosures on a voluntary basis.

5. Illustrations as Road Maps

As technology advances, it may soon be possible to store the illustration upon which the sale was made in the home office’s computer. Then each year on the anniversary, the total current value would be compared to the value originally illustrated for that anniversary and, if it is less, the policyholder would be given (a) the reason(s) why it is less, and (b) the chance to make up the difference via an additional premium payment, if feasible. Illustrations would thus be used as road maps instead of just as point-of-sale
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projections, credibility would be enhanced, and the workings of the policy would be clearer to the buyer on an ongoing basis.

CONCLUSION: Companies should consider providing “in-force illustrations” on a voluntary basis to help educate and inform their customers.

6. Agent and Home Office Education

A knowledgeable, well-informed agent is critical to ensuring that illustrations are used and interpreted properly. Our industry already invests a great deal of money in home office and field training of agents. With respect to illustrations, this effort is currently focused principally in two areas: (a) how to explain the “performance” of their own illustrations in a positive way; (b) how to discover and discredit “unreasonable” assumptions in competing illustrations. The sense of our Task Force is that agent education about illustrations should refocus on proper and improper usage, as described previously in this paper.

Once the concept of Type A and Type B usage is widely understood and accepted, agents will have more time to spend on activities which truly benefit themselves and their clients. For example, they can try to understand and explain the contractual differences between two policies (Type A), rather than trying to infer which policy will have the lowest cost over the next 40 years (Type B).

Educational efforts should not be limited to agents. Home office marketing, sales and product areas must understand and accept the concepts involved before meaningful progress can be made among agents.

CONCLUSION: The effort to refocus agent and home office education should start with the industry’s professional societies and trade associations, including SOA, AAA, CIA, ACLI, CLHIA, Life Underwriters Association of Canada (LUAC), Association Des Intermediaries En Assurance de Personnes du Quebec (AIAPQ), and The American College. Trade publications, such as the National Underwriter and Best’s Review, are important educational forums which should be used to further this effort.

VII. SUMMARY OF RECOMMENDATIONS AND NEXT STEPS

To summarize, the Task Force endorses the use of illustrations for Type A purposes. We do not believe they are appropriate for Type B purposes. Educating the consumer and others on the appropriate uses for illustrations
is a long-term effort. In the interim, we must deal with the Type B uses, and our report makes recommendations specific to these uses. The need for some of these recommendations may diminish as consumers understand the uses for, and limitations of, illustrations.

Several persons commented that we must provide consumers with a basis on which to compare different policies and companies. Past committees of the SOA and others have grappled with this issue, and have “tolerated” the use of illustrations and interest-adjusted indexes for this purpose. We would recommend that the actuarial profession renew its efforts to develop appropriate methodologies or indexes on which to compare products and companies.

Our recommendations are in four areas:

- Educational Efforts
- Standards, Disclosures and Regulations
- Optional Improvements
- Continuing Research.

**Educational Efforts**

Educational efforts represent a long-term strategy for the industry. These efforts will necessarily involve insurance professionals from a number of disciplines, including agents, actuaries, regulators and company management. Without management commitment, these efforts are not likely to succeed.

We would recommend that the AAA and the CIA consider the educational efforts that have been identified and develop a strategic plan for development and implementation. These organizations would determine the appropriate forum for bringing in other insurance disciplines.

Among the alternatives that we believe have particular merit for further consideration are:

- Agent education and licensing
- Home office education
- Consumer brochures.

**Standards, Disclosures and Regulations**

These recommendations represent the short-term approaches to deal with the problems arising from Type B uses. They also deal with the changes needed to support and enhance Type A uses. The AAA and the CIA should be charged with the development of an integrated program of standards, disclosures and regulations to improve illustrations in the near term. This Task Force believes that the following have considerable potential:
• Standard assumptions, following the variable life or Australian model
• Disclosure of underlying assumptions
• Review of actuarial standards for establishing nonguaranteed factors
• Disclosure of unique product features
• Display of alternative scenarios or sensitivity testing.

The Task Force strongly recommends the adoption of changes to vanishing premium illustrations in order to properly communicate the concept, and its nonguaranteed nature, to the consumer.

Optional Improvements

The Task Force identified several alternatives that could improve illustrations that companies could implement on an optional basis. These would include:
• Consumer signatures on illustrations
• Presentation of historical data, separate from the illustration
• Use of graphs to supplement numerical data
• Display only quinquennial durations after year 20
• Round current values to nearest $10 per 1000 of initial face amount
• Illustrations as road maps.

Continuing Research

We would recommend that the SOA form a task force to research an appropriate methodology for comparison of products. The Task Force believes that in the current product environment, a measure that is not adjusted for risk is not helpful to the consumer or any reviewer of life insurance illustrations and contracts.

CONCLUSION: The illustration practices of most companies are consistent with regulatory practices and attempt to communicate in a good-faith manner with the consumer. However, there is room for improvement. Life insurance policies are complex, and consumers often do not understand which benefits are guaranteed and which benefits are not.

The Task Force strongly encourages the AAA and the CIA to consider our recommendations and to work with the other industry groups and regulatory bodies to improve illustration practices and to develop educational materials that will aid consumers.
APPENDIX I
SAMPLE SURVEY AND SUMMARY OF RESPONSES

1. GENERAL

A. To what extent does your company feel that a problem exists within the industry regarding life illustration practices today, in terms of successfully communicating with the potential buyer in a good-faith manner?

(5) We think there is a serious problem but the nature of today’s products makes it unavoidable.

- Problem is that the people selling them (producers, agents, reps, etc.) oftentimes will do and say anything to make the sale. Product differences and volatility of interest rates, etc. make it difficult for the consumer to compare products and understand all the pieces.
- The trend in the industry seems to be a return to more responsible illustrations. But illustrations still create a strong visual impact. Footnote, disclaimers, and ledger have trouble competing for the buyer’s attention.
- So long as agents are allowed to run their own proposals, there will never be assurance that what the company intended is shown. Also, differences between companies will never be able to be accurately portrayed.

(35) We think there is a serious problem which can be fixed.

- We do not, however, believe that policies with adjustable elements will ever be completely understood by the buying public.
- Many agents sell on the basis of a 40–50 year projection of policy values as if these had a reasonable probability of materializing. Furthermore, they frequently misunderstand some of the fundamentals (that is, they often compare UL policies at a fixed rate of interest for several products even though companies take margins differently and may actually be paying very different rates at the time the illustration was prepared).
- We feel that some companies are misleading their customers by showing unrealistic illustrations, for example, a rate of interest which the agent knows will never be attained. This raises the issue of integrity because the individual agent and company are left to decide how to illustrate nonguaranteed elements, so long as the guaranteed elements are shown. The industry should develop, and the state regulators should adopt, a
standard by which all companies must conform when illustrating non-guaranteed elements. This would eliminate the practice of companies and agents competing by way of misleading sales illustrations which give the customer unrealistic expectations.

- It is important to disclose what is being illustrated rather than restrict or complicate the illustration.
- Many aggressive companies do not want to fix this problem and choose to illustrate values that are not likely to be paid, or will be paid only to a very few policyowners. These companies, in general, cannot be competitive on actual performance. However, there are still a few quality companies doing the right thing, although they are considered old fashioned since they believe in giving good value to the policyholder and in paying out real value, rather than illusions.
- The lowering of dividend scales has helped agents finally understand that dividends really are not guaranteed!
- Many companies show unrealistic interest rates and have great flexibility in making products look better. Disclosure statements and footnotes should be required to improve situation.
- The fix will require a realignment of some companies’ fiber of integrity and a decision to include guidelines in full disclosure.
- Our company position is that the insurance industry must take steps to begin monitoring the practices of its representatives and initiate consistent regulation of the industry throughout the country.
- We have been working on consumer education pieces to supplement illustrations which provide additional information on the nature of illustrations.
- Illustrations of unrealistic projection of mortality and bonuses.

(13) We think there is a problem, but it’s not serious.

- In Canada, some UL illustrations may use unrealistic interest rates. Major complaints arise from (name of company)’s unbelievable Par illustrations.
- Most agents and companies are OK, the bad cases get a lot of attention.
- Some illustrations need improvement in both stock and mutual companies; however, most companies do an adequate job.
- As the marketplace becomes more sophisticated, so must products sold in these markets. Illustrating complex products in a simple fashion causes unavoidable problems for the consumer.
● Overall practices are acceptable. Very few problem areas. TAMRA should be handled better. Handful of copies allow illustration at much higher interest rates than current credited rates, and some companies do utilize projected improvements in future mortality rates.
● I don’t see how to enable the prospective policyowner to judge the relative value of nonguaranteed policies from different companies.
● Any attempt to fix may make the cost of doing business too high.
(2) We think current practices are acceptable.

B. Software packages are available that enable an agent to take the numerical output from a company produced illustration program and “recast” the results into a format individually tailored by the agent. Examples include the ability to rearrange, add or delete columns, and to change headings and footnotes. Also, some agents have sufficient programming skills to accomplish this on their own. What is your company’s position on this?
(9) We promote it (for example, we make such software available).
● However, we strongly discourage any alterations and/or deletions of information.
● We don’t like it, but competition has forced us to make it available.
(4) We condone it.
● Some flexibility is necessary to meet the needs of sophisticated markets.
(10) We are neutral.
(19) Officially we’re opposed, but there’s little enforcement.
● Difficult to enforce in brokerage environment. Can control branch offices easier, but it still happens.
● We do everything we can to ensure that this doesn’t happen, but you can never have 100 percent control of software running on a PC.
(6) We oppose these practices and vigorously enforce this.
● But it is difficult to catch individuals that doctor illustrations. We fire any that are caught.
● Officially we’re opposed . . . however, we do encourage agents to have Head Office review proposals.
● Our software is designed to prevent these practices.
(8) Other.

- It is available, but we don’t promote it—those that find it are capable and we work with them.
- We allow agents to add additional information by adding columns to the standard illustration.
- Allow specified adjustments.
- Currently, we make available a software package which translates our company-produced illustration into a different format. The format is chosen by the agent from a menu of formats, and so the individual agent cannot modify or otherwise rearrange the output to suit his/her needs. The software company, however, has the ability to add or modify formats, and we have basically trusted them not to abuse or misrepresent our products. Only one area of disagreement has arisen to date: the software’s treatment of a MEC is different from ours, and our solution is to not pass the data over from our company’s system if the policy turns out to be a MEC. Hopefully, solutions for all disagreements can be accomplished as easily.
- We promote use of (name of company), but our illustration is required.
- Different marketing channels follow different approaches. The largest one opposes. Other channels encourage or attempt to limit to company-approved programs. In any case, it is very difficult to control agents who are computer-literate and can design their own spreadsheets.
- We have asked our field to show us their special charts for review. While we do not receive many, we do review all that come in and we have requested changes where appropriate.
- Agents have the ability to customize columns but not numerical values. We condone customization of this type and oppose agent programming that allows altering values in any manner.

Please indicate the illustration flexibility, if any, that your company provides to your agents, or explicitly allows them to use.

- Graphic interfaces.
- We provide ability to download data and reformat it using commercial graphics packages. This facility is used by relatively few agents. Minimum disclosure requirements for such presentations are being developed.
- An agent may edit a print file created from the illustration. However, we feel that this is a better option than allowing an agent the flexibility of typing his own error-prone illustration.
• Customize column selection from a predetermined list, output to an ASCII file, limited interest rate flexibility, and input Universal Life in-force information.
• Cannot alter form or format of proposal. May only change the current credited rate and this should be done only when company declares a change in rate.
• We allow the agent to use a lower interest rate than the current rate.
• We use a company called (name of company). We require all agents to show the company-produced illustration; it is automatically printed, but the agent can always throw it away (that is, enforcement may be impossible).
• Illustrations can not be modified. Agents can incorporate them in their sales package, but they must include “all” pages generated by our proposal system.
• We offer the (name of company) system.
• We allow agents to use a software package that reformats columns and rewords headings and footnotes in whatever manner the agent desires, so as to produce a snazzier-looking illustration. However, company policy is that this second illustration is to be provided to the client in addition to (not instead of) the regular company-approved illustration.
• Choice of interest rate for some products; no choice on others.
• Headings and footnotes cannot be changed. A variety of pre-set and user-defined illustrations may be selected from a menu.
• Ability to illustrate with their own interest rate assumptions as well as the current rate. Some flexibility as to what output is produced—optional graphs, additional notes, etc.
• Our illustrations can be converted to (name of company). Agents then can produce whichever numbers they choose. Footnotes are not converted, however.
• Our software allows agents to rearrange or delete columns, or add columns from a group of columns that are available through the software. VUL is an exception, however, as no alterations may take place.
• Our software allows column add/deletion only—no footnote or header editing.
• Company provided software with fixed formats; other formats require our ledger to be attached.
• We allow customization of illustration output; however, we strictly maintain footnotes that require a standard illustration that provides all guaranteed values.
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- A limited range is ±½ of 1 percent on interest rate assumptions.
- We support an interface to Advanced Underwriting Software but do not provide such software.
- An agent can always retype any illustration, even without a PC. We take strong action if we find erroneous numbers or an outrageous illustration that is not company-produced. All software has flexibility and the market demands this flexibility, but we always require a ledger and footnote to precede any summary. However, no one is with the agent to ensure that he gives it to the customer. All pages are numbered as “x” of “y” pages, that is, page 1 of 4, etc. Company illustration system has over 200 available columns of information that can be displayed, but standard formats exist. The results of the PC version can be captured by agent-owned software that we have little control over. Outside independent vendors, who we cannot control, have our rate files.
- None for company-provided computer system. If outside PC software is used, we have no control.
- Minimal flexibility is provided.
- Lower dividend interest rate, first-death scenarios for survivorship, optional columns to show, for example, face amount of PUA’s, cost of 5th div rider.
- (name of company), cash needs analysis, advanced needs analysis, split dollar.
- We require agents get pre-approval on any special format illustrations.
- Planners have only the ability to select the pages that are included in the sales presentation. They must always include the ledger (numerical) illustration.
- We have little or no flexibility.
- Ability to add, delete and customize columns; however, we require a “compliance” page which shows GTD values. Portfolio rates may be illustrated with lower assumptions—not higher.
- Difficult to summarize briefly. Column selection is available to some agents and brokerage offices. Changing headings and footnotes is generally not condoned.
- For our universal life product, we allow agents to select an interest rate for illustration from 4–14 percent inclusive. Current rates are, however, disclosed.
- We allow download into prearranged packages.
- We support (name of company).
- None, except for illustrative rate flexibility.
• Ability to vary interest rates, and specify premiums (within policy limits).
• Some column selection and report writing capabilities; (name of company) download conversion.
• All life products (including UL) are participating, and only current dividend scale can be shown. Agents have flexibility to show various interest rates for annuity illustrated.
• Agent can enter interest rate but not change format.
• Flexibility about what pages to produce, what columns to output.
• Any illustrated rate between 4½ percent and 14 percent can be shown, but whatever is illustrated is disclosed. Mortality and expenses are only shown at current levels with no option to vary. Of course the premium and face amounts in a UL illustration may also vary.
• Column customization, funding flexibility, optional report selections.
• The agent can illustrate changing premium patterns, death benefits and interest rates, but footnotes, column headings, guarantees cannot be altered.
• Agent can download for graphics. Once downloaded, however, the possibility of rearrangement exists.

C. Do your illustrations routinely contain text about:
   (5) Your company’s ratings from the various rating agencies.
   (5) Company size.
   (4) Company financial strength.
• Yes. Yes. Yes. Marketing page that is available.
• Yes. Yes. Yes, but do not explicitly state our surplus.
• This information can be produced as an OPTION on the software.
• Yes. Yes. Yes. But agent has to request.
• No. No. No. Separate sales publications are used for above.
• (1) Optional on some products.
• This is an area we are exploring.

D. What do you consider to be the best feature of your illustrations?
• Electronic data transfer to (name of company)/graphics.
• Illustrated values are generally based upon reasonable assumptions. Volatility disclosed by way of mandatory conservative rate illustration.
• The fact that it is maintained “in-house” and has a large degree of flexibility.
• Flexibility to customize to consumer’s own situation.
• Strong vendor who produces the software, comprehensive system that is state-of-the-art and accurate.
• The menu of options on our flexible UL allows agents to be very flexible in illustrating deposit and withdrawal scenarios. Proposals may almost appear custom-tailored.
• Checks for DEFRA, TAMRA, etc.; can vary premium, death benefit, etc.
• We have no gimmicks (COI give-backs, retroactive interest rate bonuses, etc.).
• Our alternative illustration demonstrates the impact of IIT, AIDS, etc. No other Canadian company illustrates lower dividend rates even when the IIT was introduced and everyone knew it would decrease dividends by 50–75 bps on the investment return.
• Consistency.
• User-friendliness of input screens; speed of calculations, especially on solve-for-the-premium requests.
• Our sales illustrations are developed to comply with state laws and regulations. While the expiration date of the policy is not required by law, it is an important feature because it lets the customer know how long the policy will remain in-force, based on guaranteed factors and planned premiums.
• Meaningful disclosure of contract guarantees and current values.
• Illustrate specific products well. Flexible enough to assist an agent in selling with different marketing strategies (U-Life).
• We feel that our illustrations present a fair, conservative picture. We do not overstate values, and these values are based on our current experience.
• The column add/delete feature allows the agent to adjust the complexity of the illustration to suit his client.
• Honest, straightforward, no gimmicks.
• Readability and easy to understand.
• Our illustration systems are very flexible.
• The completeness.
• User-friendly input.
• They are clear, concise, and complete.
• Flexibility.
• A decoupled dividend interest scale can be run showing dividend interest lower than currently payable. The allowable range is between current and guaranteed. Also complete and extensive footnotes exist. Note: This is very unusual. Most companies cannot do this.
• Accurate/complete including benefits.
• Integrity through promotion of conservatism in assumptions and well-documented disclosure of assumptions and guarantees.
• Pertinent and accurate information and dividends are based on current experience.
• Simple to understand.
• Flexibility in showing premium payment options (borrow or surrender PUs only in certain years, use paid-up add riders to achieve quick pay in targeted years), and in showing cash distributions from policies.
• Integration of products on one software piece.
• Can illustrate flexibility of the products (for example, future changes); footnotes regarding compliance with tax laws.
• Simplicity of basic input; marketing support including graphics and concepts display.
• The fact that it can be easily read and understood by our prospects as well as our field force.
• Simplicity of use.
• User-friendly system with no “trick” illustrations or assumptions.
• Flexibility; accuracy compared with administrative system (ties in very well).
• The large number of available page formats, and the flexibility to tailor new formats to a specific need.
• Alternate interest rate scenarios. On vanishing premium illustrations, a “low side” illustration is now produced automatically by our major systems.
• They are short and easy to read.
• Flexibility, user-friendliness.
• Flexibility of sales presentations.
• Ease of use, flexibility, supplement pages with text explaining product and marketing concept.
• TAMRA and TEFRA premium checks.
• Interest-sensitive products show intermediate values from use and an illustrative interest rate. In addition to current and guaranteed.
• Ease of use for agent.
• The disclosure regarding the nonguaranteed elements.
• Variability of interest/premiums to match prospects’ outlook and needs.
• Simplicity, user-friendliness, speed.
• Ease of use to agent, easy to read.
• Their flexibility.
• User-friendly.
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- Flexibility relative to formats and supporting reports.
- Completeness and correctness. We check for TEFRA and TAMRA.
- Uniformity of presentation on all products, straightforward presentation.
- Straightforward, easy-to-use software, which does not project improvement in any factors except possibly interest with disclosure. There are also a lot of options to allow the agent to solve for solutions to the client needs.

E. How, if at all, would you change illustrations to improve them from the consumer’s standpoint?

- Show the consumer how his needs are being solved, ask for signature.
- Reduce the amount of data presented which tends to suggest more accuracy and higher probability of realization than is warranted. More emphasis should be placed on the volatility of future results.
- Try to make them more efficient from a time perspective (that is, make them faster). Greater disclosure with respect to variable products.
- Better disclosure about proper use—should not be used as a prospective cost measure.
- Standardize footnotes for all companies so consumer can make a fair comparison.
- Use graphics.
- No illustration of “gimmicks” unless guaranteed and reserved for. Greater clarity and explanation of the fluctuation of interest (particularly the down side). Include a couple of interest rate indexes such as 5-year treasuries and Moody’s AAA bonds with explanation of the companies interest rate margins and the risks of crediting too high a rate.

1. Simplify them. The total volume of numbers intimidates many clients.
2. De-emphasize the importance of illustrations to the sale. In many cases the agent uses the 40th-year CSV as the key selling point as if it were a given.
- Use the illustrations to explain the product rather than just show numbers.
- Only show first 10 years of values, and quinquennial thereafter. More disclosure. In short, fewer numbers and more words, as it should be for a “concept” sale.
- Companies should not be allowed to show illustrated values which are greater than those currently being credited. As the rates change, the customer should be notified accordingly.
- Require disclosure if illustration does not reflect current assumptions.
• Require disclosure of improved lapse, mortality and/or expense assumptions shown in the illustration, and require an alternative illustration showing results if the improvements are not realized.
• More explanation aimed at the “average person,” not just legalese. Perhaps also cut down on the level of technical detail that is presented in our standard illustrations.
• As it happens, we are undertaking some research to establish the answer to that very question.
• Should explain unusual features. Remove the requirement to show guarantees on the same page. (Still must show them.) Space could be used to make numbers easier to follow.
• Consumers need education about products to understand them before illustration changes will help—anyway, an interest cap will help.
• From the consumer’s standpoint, all of our illustrations are very well caveated.
• In the same way a valuation actuary needs to sign off on reserves, require an actuary to sign off on illustration procedures.
• Similar terminology; more graphic illustrations.
• Make them more clear, concise and complete.
• Better caveats and explanations, more control over “current experience” requirements, better agent education.
• Require a standard ledger be run with all of the other possible variations.
• No change.
• We attempt to stay current with enhancements and modifications which improve the usefulness of our illustrations; no improvements are outstanding at this time.
• Ideally, limit illustrations to 10 or 20 years.
• Disclose all important information in an easy and understandable format.
• Illustrate true performance of product; use of graphics; require financial ratings of at least two rating agencies; indicate investment quality.
• More accurate depiction of expenses and mortality, especially in later years. Show the impact on policy values, when expense and mortality assumptions are kept at current.
• The illustrations are easy to read and understand in the format they are currently in. I wouldn’t change them at all.
• Require a standardized format for traditional, UL, interest-sensitive products. Use would be in addition to customized format.
• Accuracy of mid-year projections; too much verbiage.
• Require more disclosure of the assumptions behind each illustration. Give the consumer the necessary information to properly evaluate the risks involved. (For example 1, possible consequences of future tax law changes; for example 2, current mortality charges assume future improvements in underlying mortality; for example 3, current interest rate would be $X$ percent if company could earn $Y$ percent after investment expenses.)

• This subject is under constant discussion within our marketing and actuarial organizations. We would like to simplify illustration outputs, so that people are not confused by masses of numbers and multiple pages of footnotes. At the same time, we would like the customer to be thinking about a range of possible outcomes. Our new vanishing premium ("abbreviated payment plan") may help us meet this goal. Another idea which is under discussion and has not been implemented is to round nonguaranteed cash values and death benefits to the lower multiple of say, $100 or $1,000. Numbers with six or eight significant digits have an aura of precision which can't be overcome by footnotes or other disclaimers.

• More restrictions regarding disclosure.

• Clear explanation of product features.

• Decrease amount of footnotes on each page by putting clearer notes on a required extra page.

• Provide a page of comparison values: that is, assuming current interest and current mortality project the premium and values, the same assuming guaranteed mortality and guaranteed interest, current interest and guaranteed mortality, etc.

• 1. Bar retroactive mortality or interest credits. 2. Mandate illustrative rate showing results at lower than current interest.

• 1. Require a historical angle to the output. 2. Regulate what is being used in the assumptions or disclose what’s used currently (fully disclose).

• Highlight or emphasize (large print) that illustration is nothing more than a sample of how the contract MAY work.

• Include brief definitions of terminology used on illustrations. Include graphics.

• Use graphics rather than tables of numbers to show results.

• Wouldn’t.

• Yes, I would include company ratings and financial strength.

• Limit number of years that could be illustrated.
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- Automatically include variations of CSV and DB development, less numbers, more verbiage.
- We would prefer to provide easy-to-understand supplemental brochures describing important issues since footnotes on illustrations are not effective.

F. (7) *Does your company have an illustration that you regard as a positive innovation in terms of format, content, or concept, from a consumer standpoint?*

- We produce a policy illustration and include it in the policy. Differences between this independently produced projection and the one originally provided by the agent can and has identified misunderstandings right at the outset when they can most easily be corrected.
- Edit screen on UL.
- We're the only Canadian company to illustrate an alternative (lower only) dividend scale, but this is common in the U.S. (I believe) so it's not really a great innovation.
- Signature page; various columns for IHK calculations; three scenario pages.
- Screen graphics are available—easier to visualize.
- We examine our illustrations regularly to see what improvements we can make. While they may not be "innovative," we believe that they do an excellent job of fairly presenting the product.
- No. But we do allow interest rate modeling, and we have an extensive re-illustration (in-force ledger) system.
- Question is not clear—we have a typical big company type of system, except for our decoupled illustration, and an in-force system.
- The ability to illustrate dividends less than the current scale.
- This is a vanishing premium illustration that automatically produces a low-dividend-interest-rate scenario. Also, the zero premium has been replaced by a special character that references a footnote.
- It isn't so much an illustration, rather that we have adjusted our products to include investment income tax (as stated in the footnotes).

II. DIVIDEND-PAYING PRODUCTS

A. (35) *Does your company sell this type of product? (If no, skip to III).*

B. *Which, if any, of the following dividend factors as illustrated anticipate a change from current experience, either by projecting trends or on some other basis? Please explain the general nature of such changes.*
(1) Mortality.
(2) Interest.
(3) Expense.

- Mortality. Projected improvements.
- Company does not illustrate dividends higher than our current scale.
- We are aggressively attacking the expense issue.
- Performance of our par fund is more than enough to support dividends this year, and our projections suggest we'll be fine in 1992. However, a continued deterioration in the economy could accelerate that occurrence. A few years ago when the AIDS issue was heating up and the IIT was about to be implemented, we specifically showed a reduction to reflect the potential impact. Currently, we simply show a \( \frac{1}{2} \) percent reduction in interest rate to illustrate the effect of a drop in yields. Our field force hates our doing this at all.
- Use current dividend assumptions. For projections, don't try to anticipate change.
- The standard illustrated scale is the actual payable scale with no projection. The agent has the option to run any lower dividend interest assumption the client wants to see.
- Illustrations reflect current experience.
- (This was a response to II-B. and II-C.) Unless otherwise requested, the dividend factors which produce the illustrated dividends will be based on the following: (a) The mortality and expense factors will reflect the current-dividend-scale assumptions. (b) The interest factor will reflect the current-dividend-scale assumptions unless it has been determined that the scale which applies to the policy will in fact contain a lower-interest-rate assumption. If this is the case, this lower rate will be used. If the reverse is true, however, and it is anticipated that the actual interest rate will be higher than the current value, we do NOT reflect this higher rate but instead remain at the current level. Lower only. We do not allow dividends to be illustrated in excess of the current scale. Agents have the flexibility to run illustrations where the interest component can range from zero to a maximum which assumes the default rate as defined in (b) above. The mortality and expense components currently cannot be adjusted. However, an upcoming enhancement will provide the flexibility to completely zero out the dividends. Our illustrations contain a supplementary page which illustrates all nonguaranteed elements otherwise buried within the illustration.
Current scale is projected to continue—no changes in experience are anticipated.
In aggregate the current experience reflects actual; by blocks they don’t. DAC has not been reflected.
Currently illustrated refunds are calculated using expense factors which have become out-of-date. This will be corrected on next change.
We illustrate current scale only; in 1998, when tax laws were changing, we temporarily illustrated a lower-than-current scale.

(3) Are such changes disclosed to the consumer?

- Dividends are not guaranteed on the illustration. Values illustrated may vary depending upon actual experience.
- Yes, though the change is not imminent, so it is shown as an alternative scenario.
- Advise consumer that these factors affect dividends and changes may occur.
- Not specifically, but repredicts are available as requested.

C. (17) Do your agents have the flexibility to run illustrations at dividend interest rates or mortality rates higher or lower than the current scale?

If yes, please indicate the degree of flexibility they have.

- Select interest rate to be assumed within a range rate assumed disclosed on illustration along with actual recent experience.
- Interest only. Higher or lower. Illustration will say “hypothetical.”
- Lower, but not higher.
- Only lower.
- -1%, -2% and -3%.
- Illustrations can be run up to 200 basis points below the current gross crediting rate. Our conservative illustration practices do not allow us to show an increase in dividends.
- We allow up to a 200-basis-point reduction. We do not allow illustrations of a dividend increase.
- Current scale, reduce interest factor 1 percent or 2 percent.
- Interest rate less than current scale only.
- Lower dividend interest rates only may be run.
- At lower rate only. May decrease dividend interest rate by up to 200 basis points.
- Yes—lower only; 200 basis points lower than current.
Agents can illustrate dividend interest rates lower than the current rate. (As low as three percentage points below current.) Mortality rates cannot be varied.

- Up to 2 percent lower than current scale, average of 8, 12, 20 or 40 prior quarter interest rates.
- Can show results of lower interest factor (higher not sanctioned by company).
- Lower interest only. Two percent interest drop, no change in mortality.
- Limited to illustrating increased or decreased dividend interest rate assumption. Maximum differential is 2 percent.

D. (10) *Has your company received an increasing number of policyowner complaints about dividends paid versus dividends illustrated?*

(1) *Have these complaints indicated any common misunderstandings of illustrations furnished at the time of sale? Please explain.*

- No. Consumers thought of dividends as guaranteed.
- No. These plans are relatively new. Track record thus far has been pretty good—dividends have generally exceeded expectations.
- Same. Only in terms of the "vanish" if dividends are decreased and have more premiums will need to be paid prior to "vanish."
- The problem has not been dividends paid versus dividends illustrated, but how the changes in the dividend scale affect the vanish point of the contract. That is, the way they see it, if you had a 1 percent reduction in your dividend scale, total cash to vanish should only increase by 1 percent!
- Policyowner complaints have increased as dividend scales have decreased. They do not always comprehend the "nonguaranteed" nature of dividends.
- The nonguaranteed nature of dividends was not well understood nor presented well.
- Normal level. Most complaints are minor. The majority of the questions concern vanishing outlay or values less than originally projected. However, once the policyowner understands that he/she is still being credited a competitive return versus available options, then the policyowner in general is satisfied.
- Yes, but relatively few so far. Impression, belief, or hope that dividends only increase.
- Many complaints deal with misunderstandings that quick-pay years were guaranteed, or at least highly unlikely to change.
Most misunderstandings relate to vanishing-premium illustrations and dividend scale changes. Policyholders mistake a vanishing-premium illustration for a promise of a paid-up policy.

Policyholders believed dividends would cover premiums by a certain date, and due to a decrease in the dividend scale this is not so.

People seem to think insurance dividends should be unaffected by expense changes and interest swings. They remember the 15–16 percent interest rates of 10 years ago.

We had some complaints immediately following scale drops in 1987 and 1988, but fewer than expected.

The consumer did not understand the relationship of investment yield to product performance.

“Vanish” illustrations are frequently misunderstood regardless of the agent’s explanation at the time of sale.

Most complaints pertain vanish year increasing due to reduction in dividend scale.

III. UNIVERSAL LIFE AND INTEREST-SENSITIVE LIFE PRODUCTS

A. (52) Does your company sell these types of product? (If no, skip to IV.)

B. Which, if any, of the following experience factors as illustrated anticipate a change from current levels, either by projecting trends or on some other basis? Please explain the general nature of such changes.

(5) Mortality.
(8) Interest.
(2) Expense.

• Mortality—can illustrate based upon current or guaranteed maximum scale. Interest—select rate from an allowable range. Mandatory lower rate projection also produced. Expense—administrative fees subject to fixed inflation factor.

• An input assumption.
• All current values are based on company experience.
• Mortality on juvenile issues. Illustrations for juveniles assume conversion to nonsmoker product at minimum allowable attained age.
• Mortality—no, have priced for AIDS. Interest—no, based on current interest rate. Expense—no, have priced for IIT, AST, etc.
• Bonus interest.
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- Negative anticipated changes are not considered when the illustrations are developed. We see this as part of the integrity problem because, while there is no legal obligation to forewarn customers of anticipated negative changes, the company and/or agent may be aware of such changes. For example, a decrease in interest rates may be imminent, but until it's effective, the agents continue to illustrate the higher rate as if that rate will remain in effect for 20 years. Although agents should not be required to provide predictions, they should be honest with the customer if it appears that a change is about to occur.
- All factors reflect current assumptions.
- Projections may be done using an interest table based on anticipated future changes.
- We don't anticipate changes.
- We are opposed to future enhancements in these factors.
- Current level projected to continue—can lower interest assumptions over time.
- Alternate interest rate projections are available.
- Illustration values are based on (1) current assumed interest and mortality and (2) guaranteed rates.
- Mortality—OK in aggregate; in process of repricing. Interest—too high on new premiums; managed down over time. Expense—doesn’t reflect DAC, otherwise OK.
- Expense factors are out of date and need to be updated.
- We expect mortality to continue to improve as it has in almost every period in the past.
- Rates are adjusted for the guaranteed added interest credits at the end of years 10, 15, 17, 18, 19 and 20.
- Use of a higher credited rate (i.e., lower spread) after 5 years.
  (9) Are such changes disclosed to the consumer?
- Mortality and interest.
- Footnotes/guaranteed values illustrated.
- Before the full level of the IIT was known, we advised new clients of the potential range of the impact.
- Not on illustration; in Exhibit interrogatories.

C. Which, if any, of the following experience factors can the agent vary from current levels in your illustrations?
(49) Interest.
(6) Cost of insurance.
(2) Minimum premium.

( ) Policy loads.

- Interest. Cost of Insurance—guaranteed and current, only.
- Interest. Cost of Insurance—choice is current rate or guaranteed maximum scale only.
- None. Our branch offices only can go 3 percent above current interest rate and this is footnoted.
- Interest in a separate section of proposal labelled “projected values.”
- Interest—but must show current rates and a minimum rate illustration. The current rate is the upper limit the agent can use in the projection.
- Interest. Agents are permitted to vary interest rates up or down (up to a maximum of 14 percent). Due to good training and (to some extent) a fear of litigation, more of our agents vary the interest rate downward than upward.
- Interest, from 4 percent to 10 percent. Cost of Insurance, illustration can be run with guaranteed mortality charges.
- Interest, but never more than current rate.
- Interest, additional page only.
- Interest—This is done so we don’t have to provide new software when interest rates change.
- Interest—Our illustrations show Universal Life values on a current basis allowing for an alternate interest rate either higher (subject to a maximum) or lower if desired. In addition, values are illustrated on a guaranteed basis which are based on the guaranteed minimum interest rate and the guaranteed maximum cost of insurance charges.
- Interest—this is an agency input item.
- Interest—but only a lower rate than current, only available on some illustrations systems.
- Interest—However, the current illustration is automatically printed in addition to the assumed-rate illustration.
- Cost of insurance, guaranteed only.
- Cost of insurance, show current and/or guaranteed.
- Interest, range of values. Cost of Insurance, choice: guaranteed or non-guaranteed cost. Minimum Premium, compensation is not based on the premium chosen but on the cost of insurance and policy fees.
D. (10) Does your policy include any contingent credits or persistency bonuses? If yes, how are they disclosed?

- Some policies guarantee a higher credited rate from year 11+ on. Footnote explains.
- Bonus interest credited once policy reaches a certain duration. This feature is fully disclosed and is contractually guaranteed.
- Footnote. Illustration of credit is optional—agents may decide not to show it.
- Contractually guaranteed bonus interest is disclosed in a footnote.
- No. We believe most of these “gimmicks” will be taken away from the consumer unless persistency is lousy. Most “gimmicks” are designed to encourage persistency.
- The bonuses are guaranteed, so they are reflected in both the current and guaranteed values shown on the illustration. In some cases there is further explanation in footnotes also.
- Within the footnotes.
- As a company practice in a footnote.
- They are disclosed in footnotes on the illustration.
- A paragraph describing the requirements to receive the benefit, the amount, and any other restrictions is included.
- A footnote provides the method of calculation and notes that the bonuses are “nonguaranteed.”
- They are illustrated only if they apply in situation illustrated. Caveats explain requirements to get credits.
- On the summary page of the illustration.
- By footnote at bottom of illustration.
- Payroll deduction UL discloses higher interest beginning years 11 and 21 if premiums are paid pro-rata thru 10 years.
- They are disclosed in a footnote in the summary page.
- In the page of notes following the illustration.
- In footnotes.
- Reduced COI after specified cumulative amount of insurance purchased; asterisk on ledger once lower COIs are being charged.
- Bonus interest, described in footnote at bottom of sales proposal, cost disclosure.
- No. We will, however, soon introduce a UL product that includes an interest rate bonus of 1.25 percent after 10 years provided cumulative
target premiums have been paid. This will be fully disclosed in the
explanatory notes section of illustration.
• Interest rate bonus is listed in ledger and in the footnotes.

IV. TERM AND TERM-LIKE (FOR EXAMPLE, GRADED PREMIUM
WHOLE LIFE) PRODUCTS

A. (41) Do you sell this type of product? (If no, skip to V.)
B. (13) Can your agents illustrate conversion to universal life, participat-
ing life or interest-sensitive life plans on a term or GPWL proposal?
(12) If yes, does the conversion illustration show both current and
guaranteed values?
C. (8) Do you sell nonconvertible term?
(10) Or term with a very short conversion period?
(9) If yes, does the illustration prominently disclose that the product
is nonconvertible or very limited in its conversion rights?
• No illustration.
• Very short, first 3 years only on a 20-year decreasing term plan.
• We do not provide illustrations for our NCT product.
• No, but the illustration is entitled “...Nonconvertible Term.”
• Covered in brochure and contract. The term illustration shows rates on
a guaranteed and current basis with and without re-entry.

V. SECOND-TO-DIE PRODUCTS

• These are the wrong questions to ask on this product. You need to
consider both the base policy and the term riders.
A. (41) Do you sell this type of product? (If no, skip to VI.)
• No. We offer a beneficiary insurance rider. It gives the insureds a guar-
anteed right to purchase an additional amount of insurance at the first
death.
B. (6) Does your product provide for a cash value increase on the first
death?
(1) If yes, are the values shown on your illustration always based on
the assumption that both lives remain alive?
LIFE INSURANCE SALES ILLUSTRATIONS

- Yes. Yes. Agents can illustrate death and illustration does prominently disclose the death scenario.
- Yes. No. Agent can choose both alive or first death in any duration.
- Yes. No, can be run to choose year of death of either life.

  ( ) If yes, is this assumption prominently disclosed on the illustration?

C. (14) Does the illustration contain an explicit statement that there is no death benefit payable on the first death?

- Company has death benefit payable on 1st death Rider approach. Two separate policies are issued.
- No, but the illustration is entitled "...Second-to-Die."
- No—but it shows that cash value increases.
- N/A. We offer a guaranteed insurability option that, upon the first death, allows for the use of the death benefit as premium for a Universal Life policy payable upon the death of the second life.

VI. TWO-TIER PRODUCTS

A. (6) Do you sell this type of product? (If no, skip to VII.)

B. (5) Does the illustration clearly indicate the amount payable if the policyholder surrenders rather than annuitizing?

- Additional verbiage also emphasizes this fact.

C. ( ) Are the illustrated monthly incomes (upon annuitization) shown using both current and guaranteed annuitization factors?

VII. OTHER

A. (20) Are there other specialty products on the market for which you feel illustration practices should be researched? If so, please indicate which products:

- First-to-Die, Variable Universal.
- Registered Life, Variable Life.
- Variable Life products.
- Disability Income.
- Living benefits.
- Term-to-100 (basically low premium whole life with no nonforfeiture values and is sold in Canada only). Often assume very high lapses in pricing and illustrations.
- Annuities; lapse-supported illustrations.
B. (35) *Are there specific illustration practices that you believe should be researched? If so, please indicate which practices:*

- On traditional WL illustrations, “guaranteed” values should *never* include any dividends.
- 1. Use of nominal interest rates. 2. Disclosure of only the gross fund value before surrender charge for UL products. 3. Ability to illustrate temporary coverage (say to life expectancy) without adequate disclosure.
- Producers creating their own illustrations via (name of company), etc. Telling consumer wrong information about guarantees.
- Are graphs easier to understand than columns of numbers for the consumer.
- Projecting continual improvement in mortality for UL policies.
- I believe agents put too much emphasis on illustrations during the sale process and some companies go too far in selecting optimistic assumptions to make long term values look good.
- Lapse-supported illustrations; increasing interest rates, mortality improvement. As somewhat already addressed in this survey, the issue of an agent’s ability to manipulate figures in the illustration is of importance because of the potential to mislead customers by illustrating unrealistic interest rates. Further research is needed to ascertain how often such
practices occur. Also of importance is compliance with state disclosure regulations. This issue should be researched and the insurance departments made aware of any widespread noncompliance, so that appropriate action can be taken at a state level to enforce the laws and regulations that govern disclosure.

- Necessity of illustrating at a low interest rate even for asset products like the RRIF.
- Failure to disclose guaranteed charges/costs (mortality, expenses, etc.) and illustrating improved lapse, mortality experience, etc.
- Any illustrations that show the extent to which funds may be attached to and accumulate tax-free within an insurance policy. There is a propensity to liberally interpret the Canadian Income Tax Act.
- Refunding cost of insurance and other bonuses.
- Any illustration practices which have incomplete disclosure, are ambiguous or are confusing, should be examined. Though theses concepts are difficult to formalize, some guidance should be codified.
- Failure to illustrate to age 100, or to such duration where coverage may decrease under current assumptions.
- Persistency or lapse supported illustrations should be made illegal. We should urge the adoption of an IRR approach, a modified Linton-type yield with cost of mortality. There should also be a standardization of decoupled formats. Some companies blend lower new money rates into their portfolio that will not reach a 200 basis point cut for 10–20 years. However, these companies claim they are using the lower rate.
- Concern that some companies are not reflecting current costs (for example, expenses, IIT) in their illustrations.
- Practices which do not adequately disclose nonguaranteed assumptions and values.
- Premium offset.
- Projected improvements in mortality.
- Placing disclosure statements within the illustration, not on a separate sheet that can be discarded.
- List assumed improvements in experience, and bonuses and how they impact the illustration.
- Practice of illustrating improving expenses or mortality assumptions.
- Interest rate kickers, terminal dividends and persistency bonuses, interest rate improvements, assumed mortality improvements, unlabeled columns, that is, BOY/EOY death benefit. Unidentified rider blends.
Illustrations should not anticipate mortality improvement. In the past, guaranteed minimum value used guaranteed interest but current mortality for some companies.

Mortality improvement in pricing or in illustrations. Declared interest rates that cannot be supported. Vanish on a current basis by surrendering PUAs and put these columns next to guaranteed columns (based on a full pay) with the result that the guaranteed values look like they are based on the vanishing premium. Agents compare illustrations at a common declared interest rate—it is not obvious to them or the consumer why this is not a fair comparison.

Nonguaranteed persistency bonuses for which no reserve is held. Also, illustrating mortality improvement. What disclosure is needed if better than current mortality is assumed in a traditional product, or better than current mortality changes is a UL product?

More explicit disclosure of nonguarantees.

Current interest rates and validation.

1. Tontine credits. 2. Interest far in excess of earnings.

Abuse in the super select illustrations. Misuse of annual versus monthly premiums.

Lapse supported bonus arrangements, disclosure.

Reduction in future mortality charges (guaranteed and nonguaranteed). Dividends on universal life, lump sum and accumulated mortality charge persistency bonuses.

Projected improvement in mortality.

Nonguaranteed terminal dividends and bonuses, particularly those that are retroactive.

Illustration of long-term values when product is not expected to persist that many years.

Enhanced mortality and bonus rates—especially higher interest rates than company currently earning.

C. *Undoubtedly all companies get an occasional question or complaint about an illustration from a consumer. What is the most common kind of illustration complaint received in your Home Office?*

Contract performance not as illustrated and additional premiums needed. Surrender charges not understood.

Illustrated policy values are at policy anniversaries. Annual statements based on actual data after anniversary processing so differences occur that require explanation.
LIFE INSURANCE SALES ILLUSTRATIONS

- Why can’t the illustration be run faster?
- Sold on a “vanish” premium, and dividends decreased.
- Don’t understand where the numbers are coming from, “Vanish” year discrepancies when dividends are changed.
- Discrepancies between proposals and “Statement of Policy Benefits & Costs” required by state regulations, which is provided with the policy. These are easily explained. Usually the reason is due to monthly premiums on the proposal versus annual premiums used in the disclosure statement.
- We haven’t any major complaints from our consumers.
- Illustration doesn’t match contract summary pages—usually because policy was not illustrated (mode, riders) as issued.
- Interest rate illustrated versus paid, or premium vanish illustrated versus actual.
- Quick pay illustrations (for example, at 11 percent interest in 1984) not being fulfilled as originally illustrated.
- Specific statistics regarding complaints received concerning sales illustrations are not available. However, our group that handles customer complaints has indicated that the most common kind of complaint involving sales illustrations is the misunderstanding of the surrender charges and their effect on cash values.
- Illustration differs from cost disclosure due to change in interest rates.
- No overall common complaints that I know of.
- Policyowners frequently do not understand that illustrations are projections, subject to change, and they especially are unaware of the results of a dividend change.
- 1. Vanish illustrated at issue differs from current vanish. 2. Want more flexibility, for example, show what happens if dividends fall 25 basis points in each of the next five years, then begin to rise again.
- Vanishing premiums, but using side-funds rather than dividends. Interest rate changes cause the payment stream into the fund to be altered or some “spillover” into a taxable fund.
- Too much compliance information.
- Only that did not understand not all premium earning interest—not illustration itself.
- Dividend scale reduction.
- Premium cease date is later than initially illustrated so client needs to continue paying premiums.
• Illustration too difficult to understand and compare with other company’s products/illustrations.
• We do not get complaints about proposals. We believe that this is a direct result of our philosophy of clear, complete, concise wording. My experience is that agents are usually the people that complain about illustrations.
• Actual performance falls short of illustration—for example, premium vanish period is longer than illustrated.
• Misunderstanding of what the policyowner purchased. Our agents have a good relationship with their clients. We have few real complaints.
• Customer not fully understanding that it is an “illustration.”
• Interest rates on UL policies less than that illustrated.
• Premium offset.
• Consumers don’t understand quick pays; don’t understand effect of loans on policy values.
• Consumers assume the illustration is a “guarantee” of what their policies will look like.
• Removal of detailed illustration from back of annual report for universal life contract.
• Effect of increase or decrease in assumed interest rates especially in relation to vanish.
• We typically do not hear consumers’ complaints first hand. Planners’ complaints about our competitor’s illustrations usually involve the fact that they are often difficult to read and understand. Many times, pages are missing from the presentation.
• Extended vanish period due to dividend/interest rate decreases.
• Regarding unfamiliarity with UL, which is labeled “Flexible Premium.” Term information also shows “end of year” to be consistent with cash value products.
• Actual policy configuration or performance did not match the illustration given by agent.
• That the originally illustrated premium vanish point has not been realized.
• Our most common illustration question is, “What happens after age 75?”
• Illustration does not always match materials received at issue.
• Having to pay more premiums before vanishing the premium with dividends.
• Rarely receive a complaint. Most often they involve the premium illustrated which does not hold when interest falls.

- Vanishing premium.
- Lower values (dividends) than illustrated.
- Policyowner believes illustration was a guarantee.
- Don’t understand why “current” projection goes to maturity but “guaranteed” stops after a few years. Guaranteed is too conservative or too costly.
- The numbers in the policy don’t match the illustration. This is because the policy does not reflect any future changes to premiums or face amounts except as required by tax law, and the illustration can reflect changes that may be contemplated.
- Required to pay more premiums than anticipated to vanish policy (due to drop in interest rates).
- Vanish delays.
- Calculation of settlement options.
- Agent does not show footnotes.

D. (21) *Has the number of illustration complaints your company receives increased over the past five years?*

- Yes—use and volume have significantly increased during past five years.
- Slightly, due to pricing assumptions used and the decline of rates from 11 to 7-8 percent which affect UL, dividends, other interest-sensitive products.
- No, hardly ever get any from clients. Generally get them from agents who complain that our 40th-year CSV is less than some other companies’ 40th-year value given the same premium and death benefit.
- No. The number of such complaints have actually decreased over the past five years. While the exact reason for the decrease in such sales illustration complaints is unknown, we believe that both the agent and customer service representatives are doing a better job of explaining the surrender charges so that the custumers are more aware of the implications of surrender charges.
- Yes, due to falling interest rates as well as changing tax legislation.
- Most complaints are handled by the agencies. We have an 800 number, but the volume of complaints and questions is not that large—maybe a few thousand on an in-force of 500,000 (that is, low percentage).
- Not significantly in relation to increase in volume.
- Not markedly.
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- Yes, due to software systems that are now obsolete, product sold was interest-sensitive whole life which was sold when interest rates were much higher.
- Yes, although the number of complaints from consumers continues to be small.
- This is probably more from an increase in-force business and lower interest crediting rates than from poor illustrations, or improper sales concepts.
- Only because we write a lot more business than 5 years ago.
- Decreased.

E. Please use this space for any comments you'd like to offer regarding life insurance illustrations from the consumer's perspective.

- Regrettably we have let the ease of production push us in the direction of providing the consumer more and more data that clouds basic understanding of the policy being purchased. With the numbers based upon assumptions that are inconsistent between companies, this puts the focus on noncomparable possible values scores of years in the future. More properly, illustrations would provide clearer illustration of the product’s main features with as few numbers (and pages) as is reasonably possible.

- 1. Producers, Home Office personnel, salespeople, all need to have a clear and concise understanding of the products they are selling. Consumers need to fully understand what they are buying. Better training and education of salespeople and insurance people is necessary. 2. Illustrations contain lots of numbers, not all people are numbers people and understand what the numbers represent. 3. Insurance terminology, what does “Vanish” mean, paid-up mean? That is, “if I paid 10 years of premiums on my Universal Life policy, then I will be paid up,” is what people are told when they have an illustration that solved for a 10-year premium paying period to carry the policy to maturity. However, if rates decline, more premiums could be due to sustain the contract.

- We have a concern regarding illustrations of an income stream generated by policy cash values. In some cases that we have seen, the policy lapses within five years or less after the income has been paid. The assumption is that the insured will die before that (based on normal life expectancy). However, if insured lives and policy lapses, this triggers a significant taxable event. This (the tax implications) is not disclosed to the insured. In some cases, the insured is not informed that the policy could terminate prior to death.
• No gimmicks should be illustrated unless guaranteed and reserved for. The impact of lower interest rates needs to be more fully disclosed. The risks of crediting too high an interest rate need to be more fully explained. Perhaps, a comparison of an industry acceptable (probably not possible) index, such as Moody’s AAA bonds less an assumed interest spread (profit margin), with the current rate would tend to bring more realistic rates into the marketplace. Today, my company’s ULs are crediting 8 percent. This is probably a little too high. Yet, we are 75–100 basis points below most of our competitors. We think we can earn about 9 percent in today’s market, but there are products out there crediting 9 percent. What gives?

• The majority of consumers find illustrations confusing and have no concept as to the long-term achievability of the numbers, let alone what they actually mean. Personally, I believe we need very strong guidelines regarding illustrations and what can be shown, either at the professional or legislative levels. Otherwise, consumers are likely to view them as little more than smoke and mirrors which will further damage the public’s general view of the insurance industry.

• In-force projections should be provided at anniversaries, allowing the customer to see if the policy will behave as intended, based on new nonguaranteed elements and past premium payment patterns and cash value accumulations. In many instances, the consumer’s attention is drawn to the current illustrated values without mention of the guaranteed values. Although the guaranteed values are required by regulation to be included in the illustration, the agents often fail to mention the fact that there are minimum guaranteed. The consumer should be informed of the “worst-case scenario,” so that there are no misconceptions as to the accumulation of cash values. In other words, the agent should give equal time during the sales presentation to explaining what the minimum guarantees are and what effect they may have on the policy values.

• Illustration practices vary considerably from one company to the next, for example, beginning or end-of-year cash values? Beginning or end-of-year death benefit? How are internal rates of return calculated? This is particularly a problem in later years, when large dividends are typically paid, since the point in time illustrated can have a substantial impact on illustrated values. This is a key concern in highly competitive markets, such as the second-to-die marketplace.

• The main problem is that aggressive companies are illustrating values not likely to be paid. The illustrations of most mutual companies do not
have this problem. It is mostly a problem found in the UL illustration of a stock company. There is no easy solution, but the problem is getting worse, not better. The Annual Statement disclosures of dividends and other nonguaranteed elements are either not given to the consumer or the responses are not meaningful. Few companies state that their nonguaranteed elements are not based on realistic assumptions. Historic performance is useful, but many companies do not have good track records and new products may not be comparable. Dividend history IACs are subject to manipulation if noncomparable products are used or if very little of the "historical" product is still in-force. The only solution to the problem that I can foresee is to provide the client with an illustration using standard assumptions, in addition to the company's regular illustration. The standard assumptions used could be as follows: 1. assume no lapses and accumulate net premiums underlying cash values by: 2. crediting an interest rate equal to 10 percent less actual investment expenses and priced for the spread of the product; the spread should be disclosed; 3. never charging mortality less than 100 percent of S/NS 75–80 S&U table; the company can disclose if current experience is better; 4. using a realistic expense assumption; 5. charging a defined profit margin. If these assumptions and accumulated premium less expense and mortality charges are used, the values are much less than the illustration. (The client should also ask more questions.)

- 1. Illustrations are only one piece of a sales/disclosure process and should not be used to select companies without considering such things as actual dividend history, financial strength, etc. 2. Illustration assumptions should be modified as soon as possible after new schedules of credits or charges are authorized. Additional Comment: In general, our company does not believe in letting distributors do "what-if" illustrations which: (a) assume future improvements in interest, mortality, expenses; (b) "solve" for loan or other transaction patterns which cannot be supported administratively. However, some producers do use the output from our illustrations as input to spreadsheet applications, massaging the data as they see fit. Although we are uncomfortable with this practice, we recognize that it is basically beyond our control.

- We believe that life insurance sales illustrations should be easy to understand and to read. In addition, they should provide complete disclosure regarding the assumptions that are used in the generation of the numbers.
LIFE INSURANCE SALES ILLUSTRATIONS

- There should be enough information available for a consumer to figure out the risks of buying life insurance based on the illustration.
- Consumers are in a very vulnerable position. They don’t look at illustrations until they are ready to buy. They are too often sold a vanishing premium illustration as a “paid-up” policy without understanding that it is really a source of PUAs or other type of use of policy values to carry the premium in the future. Carriers must recognize that the people who sell insurance products usually do not feel comfortable asking for a lifetime commitment of significant premiums, so they resort to overselling the possibility of a reprieve (via vanish) as a certainty. A new “lesson in life insurance” easy to understand and to explain should be part of every sales presentation. It should be worded in such a way that agents will want clients to see it rather than keep it from them.
- Nonguarantees too commonly seen; consumers end up depending on these nonguarantees for long term.
- A due diligence type of approach should be used to illustrate products for the consumer. Show all possible combinations of factors subject to change, from worst-case scenario to best-case scenario and some in between.
- Illustrations should only be a part of the sales process. They should be fair and should provide the consumer with a sense of the range of values possible over the future from guaranteed to current scale. Excessive footnotes and mandated exculpatory working should be guarded against.
- The two-tier, superman and kicker abuses are the most flagrant. We’d like to see historical data included much like Mutual Fund hypotheticals.
- Computer projections have reduced life insurance sales to a ledger sale, not a needs sale, the higher ledger numbers or lower premium gets the sale. Insurance sales emphasize investment performance rather than protection, tax deferral, safety and needs satisfaction or completion. Illustrations have not done our business much good in the last five years. All illustrations are not alike but the customer can’t tell the difference. We have to level the playing field.
- In order to protect themselves, companies list numerous disclosures and disclaimers. This coupled with the ability to show almost unlimited changes during the years illustrated, causes the client/prospect to be unsure of what he/she expects of the product and will often cause the prospect to delay making a decision. Illustrations need to be used as supportive material in the sales process rather than being used to sell future projected values.
## APPENDIX II

### SAMPLE ILLUSTRATIONS

**EXHIBIT A: PAGE 1 OF 2**

**LEDGER ILLUSTRATION PREPARED FOR INSURED**

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<th>PUA</th>
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5% interest adjusted cost indices for base plan only

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The dividend payable at the end of the first year is contingent upon payment of the second year's premium.

The amount of the dividend is affected by any policy loans outstanding. The dividend figures are based on the current scale assuming no loans. Dividends are not guaranteed.

This policy is based on male rates.
## Exhibit A: Page 2 of 2

### $100,000 Traditional Life

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### % Interest Adjusted Cost indices for base plan only

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### The dividend payable at the end of the first year is contingent upon payment of the second year's premium.

The amount of the dividend is affected by any policy loans outstanding. The dividend figures are based on the current scale assuming no loans. Dividends are not guaranteed. This policy is based on male rates.
EXHIBIT B: PAGE 1 OF 5

Plan: Whole Life  
Insured: Classification: Preferred Non-smoker  
Age: 35  
Sex: Male  
Basic Policy

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Dividends based on Jan. 1991 scale that uses current interest, mortality and expense rates. Illustrative monthly income based on May 1991 settlement option rates. Illustrative figures are not guarantees or estimates for the future.

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Annual $1,245.00;  
Semiann. $670.00;  
Monthly $112.00
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EXHIBIT B: PAGE 2 OF 5

© 2020 National Association of Insurance Commissioners 79
## Exhibit B: Page 3 of 5

### Annual dividends used to buy paid-up additional insurance

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<th>Illustrative Cash Value</th>
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*Guaranteed cash value, cash value of additional insurance and any terminal dividend.

†Paid-up insurance available if you stop paying premiums and reduced paid-up insurance option is chosen. Illustrative paid-up insurance includes paid-up insurance bought by dividends. Any remaining optional benefits and riders end when paid-up option takes effect.

‡Benefit applicable to principal insured, includes basic insurance, additional insurance, any terminal dividend and any rider insurance value.

§Age at life expectancy, U.S. population life tables.

Dividends based on Jan. 1991 scale that uses current interest, mortality and expense rates. Illustrative figures are not guarantees or estimates for the future.

Explanatory notes form ___ and form ___ must be enclosed.
EXHIBIT B: PAGE 4 OF 5

BENEFITS THAT MAY BE AVAILABLE

Following are descriptions of benefits provided by riders that may be included with your policy. These benefits are subject to certain limitations and exclusions which are not described below. For full details, ask to see a specimen form.

DISABILITY WAIVER OF PREMIUMS BENEFIT. Provides that, if you become totally disabled as described in the rider, before your age 60 and your disability lasts for at least six months, you will not have to pay premiums while totally disabled. There is also a limited waiver benefit for total disability which occurs between the ages 60 and 65.

ACCIDENTAL DEATH BENEFIT. Provides additional insurance, usually equal to the face amount of insurance, if you die from an accident. An amount equal to twice the A.D.B. amount is paid if the accident occurred while you were a fare-paying passenger in a licensed public conveyance being operated by a common carrier for passenger service.

FAMILY INCOME BENEFIT. Provides a monthly income to your family if you die before the end of a specified period (10, 20 or 30 years). The monthly income is paid for the balance of the period and is in addition to the amount payable under the basic policy. A similar income benefit on a spouse is also available.

ONE-YEAR TERM INSURANCE BENEFIT. Provides renewable and convertible level term insurance payable if you die before the end of the specified one-year period. This benefit is also available on a spouse.

10-YEAR LEVEL TERM INSURANCE BENEFIT. Provides renewable and convertible level term insurance payable if you die before the end of the specified 10-year period. This benefit is also available on a spouse.

GUARANTEE TO ISSUE NEW INSURANCE WITHOUT EVIDENCE OF INSURABILITY. Guarantees you the right to buy a new policy on your life without evidence of insurability for an amount of insurance up to the specified option amount. The new policies may be purchased only on an option date.

CHILDREN’S TERM INSURANCE BENEFIT. Provides term insurance on each covered child to the policy anniversary at the child’s age 25, or to the policy anniversary at the insured’s age 65 if earlier. An insured child may obtain a new policy without evidence of insurability.

ONE YEAR COST OF LIVING TERM INSURANCE BENEFIT. Provides one-year term insurance which varies annually to match yearly fluctuations as indicated by the CPI.

PAID-UP ADDITIONS RIDER. A permanent additional insurance rider that provides supplemental growing cash values. This rider also provides the potential for enhanced premium flexibility and for advancing the year when out of pocket premium payments are no longer required under the Accelerated Premium Payment plan, or when the policy can be fully paid up or matured for its face amount.

ACCELERATION OF POLICY BENEFITS FOR LONG-TERM-CARE RIDER. Provides for the acceleration payment of a portion of the death benefit for the long-term care of the insured. Such care can be provided either in a qualified convalescent facility or at home when the insured has a qualified disability. The benefit payments are made each month and continue as long as the insured remains disabled and the maximum benefit under the rider has not been paid. The size of the monthly payments and the maximum benefit are stated in the rider (subject to state approval).
EXHIBIT B: PAGE 5 OF 5

EXPLANATORY NOTES

ACCELERATION OF DEATH BENEFIT RIDER. Provides for a one-time discounted payment of all or a portion of the death benefit to the policyowner once the insured has been determined to be terminally ill with 12 months or less to live. The size of the benefit payments and the maximum benefit are stated in the rider. There are no premiums or fees for this rider (subject to state approval).

DIVIDEND INFORMATION. Dividends paid by ____ depend on future experience as to interest earned, operating expenses, claims paid, and taxes. All of these factors may be that dividend scales will change from time to time. The dividends shown in this proposal are an illustration of our current dividend scale and are not a guarantee or estimate of future results.

Terminal dividends may be paid on Whole Life, Life Paid Up at 95, and Life Paid Up at 98 policies. There are no terminal dividends payable on term life insurance plans.

ILLUSTRATIVE LIFE INCOME. Any illustrative life income figures shown in this proposal are based upon our life income plan rates currently in effect. These rates are not guarantees or estimates for payments starting in the future. After monthly life income payments begin, the amounts will be fixed.

TERM PLANS. Term Life insurance plans and term insurance riders provide insurance protection only. They do not provide cash or loan values.

The POLICY-LOAN provision provides for an adjustable policy loan interest rate that is charged daily at the rate we set from time to time. This rate will never be more than the maximum allowed by law and will not change more often than once a year on the policy anniversary. Loan interest is due at the end of each policy year. Interest not paid within 31 days after it is due will be added to the loan principal.

INTEREST-ADJUSTED INDEXES. These indexes, if shown in this proposal, provide a means for evaluating the comparative cost of the policy under stated assumptions. They can be useful in comparing similar plans of insurance, a lower index being better than a higher one.

Indexes are approximate because they involve assumptions, including the rate of interest used, the dividends being paid in cash and the continuation of current dividend scales. Indexes apply to the basic policy only. They exclude any optional riders such as accidental death.

"Total premium less illustrative cash value," "total premiums less total dividends," "net increase or decrease in business surplus," etc., should not be used in policy cost comparisons because they do not consider the effect interest could have on payments made at different times. They can sometimes be helpful for accounting purposes.

Any application for insurance will be subject to underwriting rules.
### EXHIBIT C: PAGE 1 OF 3

#### HYPOTHETICAL POLICY ILLUSTRATION

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**Coverage**
- Insuror: $100,000
- Waiver: $100,000
- A. D. B.: $100,000

**Monthly Income**

**Dividends**
- Dividends are not guaranteed and are subject to significant fluctuations. Changes in dividends will change all nonguaranteed values.

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### EXHIBIT C: PAGE 2 OF 3

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Note: Dividends are not guaranteed and are subject to significant fluctuations. Changes in dividends will change all nonguaranteed values. See page 3 for footnotes, assumptions and explanations.
As illustrated, this policy would not become a modified endowment contract (MEC) under the Internal Revenue Code. Loans and distributions from a MEC are subject to income tax and may also trigger a penalty tax. Changes made to the policy may cause the policy to become a MEC.

*This footnote pertains to column(s) 3, 4, 5, 6, 7:
Based on the 1991 dividend schedule. Dividends are not guaranteed. Due to new federal taxes and economic conditions including declining interest rates, dividends based on the 1992 dividend schedule are expected to be lower than those shown in the illustration. Transfer of policy ownership to a qualified pension or profit-sharing plan would result in a different dividend schedule. The first year dividend, although included in this illustration, is contingent on payment of the entire second year premium. The first year dividend is not used in the calculation of first year paid-up insurance and first year monthly life income.
This policy is available at issue with a policy loan rate of either 8% or an annually adjustable rate. This illustration assumes no policy loans. For the 8% policy, loans will affect dividends.

*This footnote pertains to column(s) 4, 6:
The components of this column are depicted separately in this illustration.

*This footnote pertains to the monthly income figures shown:
Based on total cash surrender value using the current rate which is not guaranteed.

*This footnote pertains to the monthly income figures shown:
Monthly income shown assumes the right to commute unpaid payments has been waived.

This illustration does not recognize the time value of money and should not be used to compare policy costs.

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The interest-adjusted cost comparison indexes provide two means of comparing the relative cost of similar plans of insurance issued by the same company or different companies. A low index number represents a lower cost than a higher one. These indexes reflect the time value of money by applying a 5 percent interest factor to policy premiums, dividends, and for the surrender cost index, the 10- and 20-year cash values. The dividends used in calculating these indexes are based on current year’s scale and are not guarantees nor estimates of future dividends.

The indexes do not consider: (1) the value of the services of an agent or company; (2) the relative strength and reputation of the company and its actual dividend performance; or (3) differences in the policy provisions.
EXHIBIT D: PAGE 1 OF 3

Based on 3.00% dividend interest rate, which is less than the current dividend interest rate
$100,000 Life Plan
For Age 35 Male
Annual Premium $1,335.00
Dividends used to purchase paid-up additions

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<th>Cash Value Increase*</th>
<th>Total Payments</th>
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Premiums
- Insurance: 1,533.00
- Waiver: 41.00
- 100,000 Accidental Death: 74.00
- 75,000 Additional Purchase: 126.75

Subject to underwriting limits

Dividends assume no loans; loans will reduce dividends. Illustrated dividends (1991 scale) reflect claim and expense experience and are not estimates or guarantees of future results. They may be larger or smaller than those illustrated. This illustration does not reflect that money is paid and received at different times. 8% loan provision.
### EXHIBIT D: PAGE 2 OF 3

Based on 8.00% dividend interest rate, which is less than the current dividend interest rate.

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**Premiums**

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**Subject to underwriting limits**

*Dividends assume no loans; loans will reduce dividends. Illustrated dividends (1991 scale) reflect claim and expense experience and are not estimates or guarantees of future results. They may be larger or smaller than those illustrated. This illustration does not reflect that money is paid and received at different times. 8% loan provision.*
EXHIBIT D: PAGE 3 OF 3

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*Dividends assume no loans; loans will reduce dividends. Illustrated dividends (1991 scale) reflect claim and expense experience and are not estimates or guarantees of future results. They may be larger or smaller than those illustrated. This illustration does not reflect that money is paid and received at different times. 0% loan provision.
EXHIBIT E: PAGE 1 OF 4

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This illustration compares the cash values and death benefits that would be provided by the basic policy if dividends are used to purchase paid-up additions in each of the following future scenarios:

1. No dividends are ever paid, guaranteed values
2. The current dividends scale is maintained indefinitely
3. Dividends are paid based on the alternate dividend scale described in the footnotes to the following illustration.

This illustration is merely intended to demonstrate the effect of our current dividend scale and variations in the interest rate underlying that scale. It is not an illustration of the coverage you have selected. This illustration assumes that no premiums are paid in addition to the basic policy premium.
### EXHIBIT E: PAGE 2 OF 4

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<td>586,310</td>
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<tr>
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<td>1,268,486</td>
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Please see attached sheets with important footnotes.
### EXHIBIT E: PAGE 3 OF 4

Summary at 20 Yrs:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Total Premiums</td>
<td>285,960</td>
</tr>
<tr>
<td>(Less) Total Cash Value:</td>
<td>424,086</td>
</tr>
<tr>
<td>(Guaranteed)</td>
<td>391,600</td>
</tr>
<tr>
<td>(Value of Dividends)</td>
<td>32,486</td>
</tr>
<tr>
<td>Difference</td>
<td>-138,126</td>
</tr>
<tr>
<td>Average difference per year</td>
<td>-6.5%</td>
</tr>
<tr>
<td>Average death benefit</td>
<td>1,034,086</td>
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<tr>
<td>CRR (1)</td>
<td>6.22%</td>
</tr>
<tr>
<td>5% Interest-adjusted costs (2):</td>
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</tr>
<tr>
<td>at 10 Years</td>
<td>5.6%</td>
</tr>
<tr>
<td>at 20 Years</td>
<td>4.05</td>
</tr>
<tr>
<td>5% Interest-adjusted payments:</td>
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</tr>
<tr>
<td>at 10 Years</td>
<td>18.74</td>
</tr>
<tr>
<td>at 20 Years</td>
<td>15.33</td>
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</table>
EXHIBIT E: PAGE 4 OF 4

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is 4.00%.

All cash values shown are end-of-year values.

All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on a hypothetical dividend scale. That scale has the same factors as the 1991 dividend scale, except for the interest return. The interest return is based on assumed rates that would credit, which may vary by policy year. These rates are shown at the end of these footnotes, and do not exceed our current rate of 10.50%.

Actual future dividends may be higher or lower than those illustrated depending on the company’s actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of 8.00%. Dividends are affected by policy loans. To the extent the dividend scale is based on an interest rate greater than 7.00%, in any given policy year the greater the amount of loan, the smaller the dividend.

(This does not apply to term, which has no loan value.)

The number of years of required cash outlays depends upon age at issue, policy class, face amount, and continuation of current dividend scale, and assumes no policy loans. This is not an automatic dividend option. Policy owner must request change of dividend option at policy year indicated. He may pay the balance of premium by surrendering a portion of paid up insurance.

This is not a paid-up policy, premiums are due and payable in all policy years.

1. The comparative rate of return shown represents the rate, not considering the effect of taxes, which the policyholder would have to earn on an adjusted series of outlays to accumulate to the total cash value at the end of the period. The adjusted series of outlays equals the actual outlay in each year less the cost of insurance protection for that year, which is based on the 1986 CSO Basic Table (K).

2. Interest adjusted cost indexes are based on the policy excluding riders and are useful in comparing policies of similar types.

Assumed dividend interest rate for non-loaned values:

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<th>Year Thru Year</th>
<th>Interest Rate</th>
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<td>2</td>
<td>9.43%</td>
</tr>
<tr>
<td>3</td>
<td>8.50%</td>
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<tr>
<td>4</td>
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<tr>
<td>5</td>
<td>7.00%</td>
</tr>
<tr>
<td>6</td>
<td>6.55%</td>
</tr>
<tr>
<td>7</td>
<td>6.51%</td>
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<td>6.54%</td>
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<tr>
<td>9</td>
<td>4.00%</td>
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<tr>
<td>10</td>
<td>10.50%</td>
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<tr>
<td>11</td>
<td>9.50%</td>
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228
### EXHIBIT F: PAGE 1 OF 2

**Vanishing Premium Plan Prepared for Client**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Premium Due</th>
<th>Net Outlay</th>
<th>Total Cash Value</th>
<th>CV Increase Less Net Payment</th>
<th>Total Cash Value</th>
<th>Total Death Benefit</th>
<th>Cash Premium Due</th>
<th>Guaranteed Cash Value Including Rider</th>
<th>Total Cash Value</th>
<th>Total Death Benefit</th>
</tr>
</thead>
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<td>4,790</td>
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<td>1,175,047</td>
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</tbody>
</table>

This is an illustration and not a contract. Dividends are not guaranteed and are based on the current scale. Cash values and death benefits may vary depending on actual experience. This illustration assumes that recommended premium deposits are always made. This illustration is only valid if all pages are included.
## EXHIBIT F: PAGE 2 OF 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Premium Due</th>
<th>Net Utilty</th>
<th>Total Cash Value</th>
<th>BV Increase</th>
<th>Less Net Payment</th>
<th>Total Cash Value</th>
<th>Total Death Benefit</th>
<th>Cash Premium Due</th>
<th>Guaranteed Cash Value Including Rider*</th>
<th>Total Cash Value</th>
<th>Total Death Benefit</th>
</tr>
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<tbody>
<tr>
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Cost Indexes

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<th>20 Yrs</th>
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<tr>
<td>Equivalent Level Dividend</td>
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<td>3.97</td>
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</table>

This is an illustration and not a contract.

Dividends are not guaranteed and are based on the current scale.

Cash values and death benefits may vary depending on actual experience.

This illustration assumes that recommended premium deposits are always made.

(Name of company) does not give legal or tax advice. Please consult your professional tax advisor regarding any items which involve the interpretation of applicable tax law.

Because of long-term interest-rate trends, all policyholders should be aware that dividend scales at (name of company) and throughout the industry will likely be reduced at some point in the future. (Name of company) believes in providing full disclosure to our prospective policyholders, and we, therefore, suggest you consider obtaining additional illustrations to demonstrate the sensitivity of product values to potential reductions in dividends.

The term “vanish” does not mean that premiums are no longer due, but that the cash premium due reflects the payment of future gross annual premiums through the use of current dividends. If future dividends are reduced from the current, results of the vanish may differ from that illustrated.

Additional premium payments may be required if the current scale of dividends is reduced.

*Guaranteed values do not reflect any loans, surrenders or dividends from the policy.

Cash values are illustrated at the end of the year.

The actual beginning of year cash value will be lower when the dividends are surrendered to pay the premium.

This illustration is only valid if all pages are included.

This illustration assumes the surrender of paid-up values; these may be deemed as taxable income under I.R.C. sections 72(E) and 7702 and others. Please consult your professional tax advisor.

If this policy, in combination with any other insurance policies in-force or applied for, exceeds $_______ dollars, special underwriting, reinsurance or commissioning may be required which could affect the premium and values illustrated.

The insured's tax bracket is 28%.
<table>
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<th>Cash Value of Premium Due</th>
<th>Total Cash Value Increase</th>
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<th>Less Per Payment</th>
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57,108 | 51,436 | 118,245 | 66,800

This proposal is valid only if all pages are included.
### EXHIBIT G: PAGE 2 OF 4

**GUARANTEED LEDGER PROPOSAL PREPARED FOR**

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<tr>
<th>Year</th>
<th>Total Premium Due</th>
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<th>Total Guar Death Benefit</th>
<th>Total Guar Paid-up Insurance</th>
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This proposal is valid only if all pages are included.

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EXHIBIT G: PAGE 3 OF 4

IMPORTANT INFORMATION ABOUT THIS PROPOSAL

(Name of company) has a reputation for its financial integrity and for providing solid, long-term value to our policyholders. In keeping with that tradition, we encourage our clients to fully examine and understand the assumptions used in a life insurance proposal. We have provided the following information to help you make an informed purchase decision. This proposal is not a contract; we recommend that you refer to your policy for a complete explanation of your policy benefits.

GUARANTEES
Only those premiums and values labeled as “guaranteed” in this proposal will be contractually guaranteed in your policy.

DIVIDENDS
Illustrated dividends, and all values depending on illustrated dividends, are based on the July 1990 dividend scale. They are neither guarantees nor estimates of future dividends. The first dividend is dependent upon payment of the first premium due in the second year.

PREMIUM
Premiums due, when reduced by dividends, may vary substantially from the illustrated premiums due, depending on the actual dividends paid in future years.

VANISHING PREMIUMS
The policy illustrated requires that premiums be paid each year without limitation. However, it is possible that at some future date, dividends, and if necessary, the surrender of paid-up additions may become sufficient to pay current and future premiums due. The proposal shows this by indicating a time when premiums “vanish.”

If actual dividends are lower than illustrated, you would have to pay premiums beyond the date at which this proposal shows that premiums might “vanish.” For policies where premiums have already “vanished,” future premiums could be required.

LOANS AND SURRENDERS
The dividends shown in this proposal reflect the loans and loan interest rates as illustrated. Actual policy dividends will vary according to actual loan interest rates and loan activity.

This proposal is valid only if all pages are included.
TAXATION
This proposal may not fully reflect your actual tax or accounting situation. We suggest that you consult your professional advisors regarding the interpretation of current and proposed tax laws and accounting principles.

The individual's illustrated tax bracket is 28%.

PROPOSAL DESIGN
Internal Rates of Return on death have been calculated assuming that death takes place: (1) at the beginning of the year, and (2) at the end of the year (prior to the payment of the dividend). The two figures which result, represent the range of returns that will be delivered by the policy (based on the current dividend scale), depending on when during the year the insured dies.

Internal Rates of Return on death are illustrated on a Traditional and Aggressive basis. While both assume that death occurs at the end of the policy year, the Aggressive basis makes the further assumption that the end of year dividend has been credited.

ALTERNATE PROPOSALS
In light of past interest rate trends, you should be aware that dividend scales at any company, including (name of company) could be reduced at any point in the future. Values illustrated are sensitive to changes in the dividend scale. If you wish to assess the sensitivity of the values illustrated to a drop in our current scale, you should review a second proposal prepared using a dividend scale lower than the scale currently being credited.

I have received and reviewed the proposal, including footnotes. I also understand the implications of the above information on premium amounts and values illustrated.

Policyowner (For Trust: this should be signed by the Trustee)

Date

Presented by: 
Agent
Date

This proposal is valid only if all pages are included
### EXHIBIT H
**ABREVIATED PAYMENT PLAN RESULTS**

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*The Abbreviated Payment Plan uses dividend results to limit the number of premiums paid in cash. Results are not guaranteed. See Form ________________ for details on how the Abbreviated Payment Plan works. Refer to the following "Full" Pay Ledger for a complete schedule of premium payments. Based on the dividend scale reflected, which is not guaranteed, no out-of-pocket cash outlay is required. Premiums are assumed to be paid by application of dividend credits. A reduction in the dividend scale could require you to make additional out-of-pocket cash outlays in one or more of these years.
## EXHIBIT I: PAGE 1 OF 2

### UNIVERSAL LIFE

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**Issue Age:** 35/Male Nonsmoker  
**Specified Amount:** $100,000  
**DB Option:** A/Specified Amount  
**Prepared by:**

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The current rate is 8.50 percent for years 1–20, and 9.50 percent for years thereafter.
**EXHIBIT I: PAGE 2 OF 2**

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|       |       | 5% Interest-Adjusted Cost Indexes |       |       |       |       |       |       |       |       |       |       |       |
|       |       | Surrender Cost | Net Payment Cost | Monthly Income |       |       |       |       |       |       |       |       |       |
|       |       | 10th Yr | 20th Yr | 10th Yr | 20th Yr | @ 65, 10 Yrs | Certain and Life |       |       |       |       |       |       |
| Guaranteed Values |       | 3.58    | 4.91    | 7.00    | 7.00    | 5       |       |       |       |       |       |       |       |
| 7.00% Illustrative Values |       | 1.60    | 1.24    | 7.00    | 7.00    | 381     |       |       |       |       |       |       |       |
| 8.50% Current Values |       | 1.09    | 0.01    | 7.00    | 7.00    | 284     |       |       |       |       |       |       |       |

Cost indexes are useful only for comparison of the related costs of similar policies. Charges for additional benefits have been removed from these indexes. The guaranteed columns reflect a guaranteed interest rate of 4.00% and guaranteed cost of insurance rates. Illustration for use in the state of __________. Initial guideline premiums: Net single 15,176 Net level 1,333. Maximum annual premium that complies with 7-pay test: 3,981

Columns other than guaranteed show values based on current cost of insurance rates and the interest rate indicated, and these columns are not guaranteed. Current interest rate is determined monthly. Using planned premiums this policy will terminate in policy year 31 based on guaranteed values.
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This illustration is only valid if all pages are included.
### Exhibit J: PAGE 2 OF 5

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<th>Assumed @ 7.55% (9.06%)</th>
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53,288

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| 27   | 71  | 2,132       | 0         | 0           | 0           | 83,135     | 83,135     | 250,000     | 76,941     | 76,941     | 250,000     |
| 28   | 72  | 2,132       | 0         | 0           | 0           | 86,833     | 86,833     | 250,000     | 79,743     | 79,743     | 250,000     |
| 29   | 73  | 2,132       | 0         | 0           | 0           | 90,566     | 90,566     | 250,000     | 82,272     | 82,272     | 250,000     |
| 30   | 74  | 2,132       | 0         | 0           | 0           | 110,948    | 110,948    | 250,000     | 100,051    | 100,051    | 250,000     |

63,946

| 31   | 75  | 2,132       | 0         | 0           | 0           | 116,275    | 116,275    | 250,000     | 103,810    | 103,810    | 250,000     |
| 32   | 76  | 2,132       | 0         | 0           | 0           | 121,714    | 121,714    | 250,000     | 107,429    | 107,429    | 250,000     |
| 33   | 77  | 2,132       | 0         | 0           | 0           | 127,273    | 127,273    | 250,000     | 110,861    | 110,861    | 250,000     |
| 34   | 78  | 2,132       | 0         | 0           | 0           | 132,060    | 132,060    | 250,000     | 114,050    | 114,050    | 250,000     |
| 35   | 79  | 2,132       | 0         | 0           | 0           | 138,815    | 138,815    | 250,000     | 116,952    | 116,952    | 250,000     |

74,004

| 36   | 80  | 2,132       | 0         | 0           | 0           | 144,981    | 144,981    | 250,000     | 119,632    | 119,632    | 250,000     |
| 37   | 81  | 2,132       | 0         | 0           | 0           | 151,488    | 151,488    | 250,000     | 121,985    | 121,985    | 250,000     |
| 38   | 82  | 2,132       | 0         | 0           | 0           | 158,414    | 158,414    | 250,000     | 123,928    | 123,928    | 250,000     |
| 39   | 83  | 2,132       | 0         | 0           | 0           | 165,875    | 165,875    | 250,000     | 125,369    | 125,369    | 250,000     |
| 40   | 84  | 2,132       | 0         | 0           | 0           | 205,766    | 205,766    | 250,000     | 151,661    | 151,661    | 250,000     |

85,262

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This illustration is only valid if all pages are included.
EXHIBIT J: PAGE 4 OF 5

IMPORTANT INFORMATION ABOUT THIS PROPOSAL

(Name of company) has a reputation for financial integrity and for providing solid, long term value to its policyholders. In keeping with that tradition, we encourage our clients to fully examine and understand the assumptions used in a life insurance illustration. We have provided the following information to help you make an informed purchase decision. This proposal is not a contract; we recommend that you refer to your policy for a complete explanation of your policy benefits.

GUARANTEED COLUMN ASSUMPTIONS

Only those values labeled as “guaranteed” in this proposal will be contractually guaranteed in your policy. Guaranteed values reflect the guaranteed cost of insurance charges which are not subject to change. Guaranteed values are illustrated using a guaranteed interest rate of 4% at any time and 5.5% over the life of the policy.

CURRENT COLUMN ASSUMPTIONS

Current values are illustrated using a current interest rate of 7.8% and are based on current cost of insurance charges, which are subject to change. Additional interest is credited at the end of every 10th year and will be equal to 30% of the unborrowed interest credited during the previous 10 years. The additional interest feature is guaranteed. The additional interest feature affects the current values in the following manner:

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<td>50</td>
<td>$69,324.55</td>
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</tbody>
</table>

*The interest rate, credited from purchase, required to produce equivalent cash values every 10th year is 9.40%.

This illustration is only valid if all pages are included.
EXHIBIT J: PAGE 5 OF 5

ASSUMED COLUMN ASSUMPTIONS

Assumed values are illustrated at an assumed interest rate of 7.55% and are based on current cost of insurance charges, which are subject to change.

Additional interest is credited at the end of every 10th year and will be equal to 30% of the unborrowed interest credited during the previous 10 years. The additional interest feature is guaranteed. The additional interest feature affects the assumed values in the following manner:

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**The interest rate, credited from purchase, required to produce equivalent cash values every 10th year is 9.06%.

POLICY LOANS AND PARTIAL WITHDRAWALS
No policy loans or partial withdrawals of the cash surrender value are shown on this proposal.

CASE DESIGN ASSUMPTIONS
Your policy is illustrated on an assumed policy value basis.
You should carefully review the full proposal including the section entitled "Important Information About This Proposal."
I have received and reviewed all five pages of this proposal, including the section entitled "Important Information about This Proposal."

Policyowner (For Trust: this should be signed by the Trustee)

Date

Presented by: Agent Date

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## EXHIBIT K: PAGE 1 OF 4
Universal Life Ledger

Prepared For: Confidential Male Age 45 Non-smoker
Presented By: Specified Amount: $2,000,000.00
Policy: (Option 1) Annual Premium: $17,760.00
For Issue In: Additional Payment: $0.00
Issuance Date: 05/27/00

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<th>Loan or Withdrawal</th>
<th>Policy Values Based On:</th>
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<td>29 74 17,760</td>
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<tr>
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</tr>
<tr>
<td>31 76 17,760</td>
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<tr>
<td>32 77 17,760</td>
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<tr>
<td>33 78 17,760</td>
<td>0</td>
<td></td>
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<tr>
<td>34 79 17,760</td>
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<tr>
<td>35 80 17,760</td>
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### Exhibits K: Page 2 of 4

<table>
<thead>
<tr>
<th>End of Year</th>
<th>Premium Outlay for Year</th>
<th>Loan or Withdrawal</th>
<th>Policy Values Based On:</th>
<th>Policy Values Based On:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Guar Min 4.5% Interest</td>
<td>Assumed 8.5% Interest</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Guar Min Insurance Cost</td>
<td>Current Insurance Cost</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Guar Min Expense Charge</td>
<td>Current Expense Charge</td>
</tr>
<tr>
<td>Cash Value</td>
<td>Surrender Value</td>
<td>Death Benefit</td>
<td>Cash Value</td>
<td>Surrender Value</td>
</tr>
<tr>
<td>36</td>
<td>81</td>
<td>17,760</td>
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<td>37</td>
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<td>17,760</td>
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<td>17,760</td>
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<td>5,454,605</td>
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This is an illustration, not an offer of insurance.
### EXHIBIT K: PAGE 3 OF 4

<table>
<thead>
<tr>
<th>End of Year</th>
<th>Age</th>
<th>Total Premiums</th>
<th>Total Loans/Withdrawals</th>
<th>Guaranteed Basis (4.5%)</th>
<th>Assumed Basis (5.5%)</th>
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<td>0 2,000,000</td>
<td>0 2,000,000</td>
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<td>0 2,000,000</td>
<td>0 2,000,000</td>
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<td>48</td>
<td>53,280</td>
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<td>0 2,000,000</td>
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<td>4</td>
<td>49</td>
<td>71,040</td>
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<td>7,044 2,000,000</td>
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<td>5</td>
<td>50</td>
<td>88,800</td>
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<td>17,397 2,000,000</td>
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<td>177,600</td>
<td>0</td>
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<td>143,439 2,000,000</td>
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<td>15</td>
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<td>118,390 2,000,000</td>
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<td>355,200</td>
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<td>5,454,605 5,509,151</td>
</tr>
</tbody>
</table>

The first year basic annual premium including riders is: $17,760.00.

**WARNING! TAX NOTICE:** This illustration makes no representation or guarantees as to the tax treatment of life insurance transactions. The tax rules are complex and subject to change. This illustration is intended to comply with the rules limiting the amount of premiums (DEFRA) to meet the tax definition of life insurance. Loans or withdrawals may be taxable if premiums exceed allowances set forth under the law. The DEFRA and TAMRA premium limits are listed below only for the initial insurance amount. Any policy change would change these limits:

- **DEFRA Single Premium Limit**: $418,425.53
- **DEFRA Annual Premium Limit**: $35,638.30
- **TAMRA Annual Premium Limit**: $91,960.00

The information contained in this illustration is not intended to be legal or tax advice. Advice must be obtained from applicant's own counsel.

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EXHIBIT K: PAGE 4 OF 4

EXPENSE DEDUCTIONS: An expense deduction is made from each premium paid on the policy. The present deduction is 3.5% on policies with attained specified face amount less than $1,000,000, and 2.5% on policies of $1,000,000 or above. These percentages may be changed by the company at any time but can never exceed 6%. In addition, a monthly expense deduction is assessed against policies with attained specified amount less than $1,000,000. This charge is $5 on policies between $25,000 and $99,999, and $3.50 on policies between $100,000 and $999,999.

CASH AND SURRENDER VALUE DEFINITIONS: Cash value is the policy value before the application of surrender charges. Surrender value is the policy value less any applicable surrender charges, withdrawals and outstanding loans. It is the amount actually available upon policy surrender.

PERSISTENCY BONUS, INSURANCE COSTS, EXPENSES AND INTEREST RATES: The current and assumed interest rate accumulations include an annual one half percent persistency bonus after the 10th year. The present insurance costs, expense charges and interest rates are subject to change by the company at any time. It may credit excess interest which may vary from time to time under a pattern that depends upon the date of premium payments. Variation may be caused by such factors as investment income, expenses, mortality and withdrawal experience under this series of Universal Life policies.

GUARANTEED BASIS: The expense charges and cost of insurance are illustrated at the maximum allowed. The guaranteed minimum rate of interest on policy cash values is 4.5%.

Loan amount is increased, each year, by the interest due on the loan. Premium payment in excess of the basic premium will be applied to reductions of any loan. The death benefit shown is the "net" after loans or withdrawal amounts. Interest on loans will be charged in advance at 8% and will be capitalized on the policy anniversary date, policy termination or loan repayment.

Values illustrated are end of year values. Premium payments, loans and withdrawals are assumed to occur at the beginning of the policy year.

<table>
<thead>
<tr>
<th>Indices</th>
<th>Guaranteed 10 year</th>
<th>Guaranteed 20 year</th>
<th>Assumed 10 year</th>
<th>Assumed 20 year</th>
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<td>5.83</td>
<td>7.69</td>
<td>3.45</td>
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<td>8.88</td>
<td>8.88</td>
<td>8.88</td>
<td>8.88</td>
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Indexes assume the time value of money to be 5 percent. An explanation of the cost indexes is provided in the “Life Insurance Buyer’s Guide.”

This is an illustration, not an offer of insurance.
# EXHIBIT I: PAGE 1 OF 3

<table>
<thead>
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<th>Initial Face Amount: $100,000</th>
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<td>Initial Death Benefit Option: A Level Amount</td>
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<th>Projected 8.00%</th>
<th>Minimum Guarantee 4.50%</th>
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<td>Cash Surr</td>
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<td>75</td>
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## EXHIBIT I: PAGE 2 OF 3

<table>
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<tr>
<th>End of Year</th>
<th>Gross Annual Outlay</th>
<th>Projected 8.00% Account Value</th>
<th>Cash Surv. Death Benefit</th>
<th>Minimum Guarantee 4.50% Account Value</th>
<th>Cash Surv. Death Benefit</th>
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<tr>
<td>Yr 10</td>
<td>$9,230</td>
<td>$9,774</td>
<td>$100,000</td>
<td>$5,605</td>
<td>$5,605</td>
</tr>
<tr>
<td>Yr 15</td>
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<td>19,853</td>
<td>19,853</td>
<td>100,000</td>
<td>8,980</td>
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<tr>
<td>Yr 20</td>
<td>18,460</td>
<td>37,355</td>
<td>37,355</td>
<td>100,000</td>
<td>12,748</td>
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<tr>
<td>At 65</td>
<td>27,690</td>
<td>101,861</td>
<td>101,861</td>
<td>124,271</td>
<td>14351</td>
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<tr>
<td>At 75</td>
<td>36,920</td>
<td>247,772</td>
<td>247,772</td>
<td>265,116</td>
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### Summary

<table>
<thead>
<tr>
<th>5.00% Interest-Adjusted Indexes</th>
<th>10 Years Projected</th>
<th>20 Years Guaranteed</th>
<th>10 Years Projected</th>
<th>20 Years Guaranteed</th>
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<tbody>
<tr>
<td>Surrender</td>
<td>1.83</td>
<td>4.99</td>
<td>1.53</td>
<td>5.56</td>
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<td>Net Payment</td>
<td>9.23</td>
<td>9.23</td>
<td>9.23</td>
<td>9.23</td>
</tr>
</tbody>
</table>

The current cost of insurance depends upon the premium payment pattern and the account value amount, and may increase or decrease accordingly.

**GUARANTEED VALUES**: Based on guaranteed interest, expense, and cost of insurance rates. The guaranteed interest rate is 75% of the 90 day CD rate, Chemical Bank of New York, but in no event less than 4.50%.

**PROJECTED VALUES**: Based on the projected interest rate, current expense and cost of insurance which are subject to change. Current interest rates are declared quarterly. Projected and Guaranteed Values include guaranteed added interest credits on unborrowed values as follows: 0.25% at the end of year 10, an additional 0.25% at the end of year 15, and 0.125% at the end of years 17, 18, 19 and 20. The interest will be credited retroactively from the date of issue and prospectively while the policy is in force. Cash values equal to any outstanding loan balance will earn interest at 4.5%.

*Account Values subject to a graded surrender charge if policy is wholly or partially surrendered in first nine years.
†The Payments shown are not sufficient to maintain a policy in force under these assumptions.
The policy matures at age 100 on a projected basis with an Account Value of $2,093,164.
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This illustration has been checked against federal tax laws.
This illustration has been checked against the 1-pay test.

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EXHIBIT L: PAGE 3 OF 3

Net Gain Analysis

Illustration for: Your Client
Provided by:

Age 35
Death Benefit: 100,000
Initial Premium: 923
(shown in thousands of dollars)

*See attached proposal illustration from ________
   for details and guarantees.

Illustrates total cash accumulation based on current interest rate. Net gain represents cash growth in excess of cumulative payments made into the policy. Net gain at age 65, 74,171. Net gain at age 75, 210,652.
EXHIBIT M: PAGE 1 OF 4

A LIVING BENEFIT UNIVERSAL LIFE PLAN

Living Benefit Universal Life Plan, described below, is one of the most versatile and comprehensive life insurance programs available.

Most of us realize the need to provide additional dollars for our families in the event of our premature death. However, in today’s world of improved technology, the main concern has changed from “What if I die prematurely?” to “What if I survive a serious illness?”

- “How do I pay for expenses not covered by health insurance?”
- “How do I pay for rehabilitation expenses?”
- “How do I make up for lost income?”

The solution to this new problem is “...” With this innovative program, we will pay you a Living Benefit upon confirmed diagnosis of one of several specified conditions. You do not have to die to collect!

Covered Conditions:
- Heart attack
- Stroke
- Life Threatening Cancer
- Renal Failure
- Coronary Heart Surgery

Here’s How It Works
- You will receive $25,000 upon diagnosis of one of the specified catastrophic illnesses.
- If you die after receiving this Living Benefit, your beneficiaries will receive an additional $75,000.
- However, should you never experience one of these conditions, your beneficiaries will receive $100,000 tax-free and probate-free upon your death, plus any additional supplemental benefits.

Thank you for considering our exciting new Living Benefit plan. We hope you will agree that this program offers the highest degree of protection and peace of mind for you and your loved ones.
## EXHIBIT M: PAGE 2 OF 4

### LIVING BENEFIT UNIVERSAL LIFE ILLUSTRATION

<table>
<thead>
<tr>
<th>Age</th>
<th>Total Premium in $</th>
<th>Total Withdrawals in $</th>
<th>Projected Values at 8.00% Interest</th>
<th>Guaranteed Values at 5.00% Interest</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td>Accum. Value</td>
<td>Surrender Value</td>
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### Interest Adjusted Cost

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*Based on guaranteed values, policy coverage would terminate during policy year 36 unless planned periodic premiums are increased at that point. Additional contributions that increase the death benefit of the policy may require evidence of insurability.

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EXHIBIT M: PAGE 3 OF 4

NOTES TO THE UNIVERSAL LIFE ILLUSTRATION

Values are illustrated and based on premiums shown in the Total Premiums column of the Ledger Printout and are subject to policy provisions. Guaranteed values are calculated using the maximum cost of insurance factors that would be contained within the policy and a minimum guaranteed interest rate of 5.0%. Projected values are calculated using projected cost of insurance factors, and a current nonguaranteed interest rate of 8.00%, with an additional nonguaranteed persistency bonus of 0.5% of additional interest beginning in the sixth policy year. The current interest rate and projected cost of insurance factors are not guaranteed and may be changed by the company. Your actual values under the insurance program may change with variations in the interest rates, cost of insurance factors (mortality risk charges), and frequency, timing, and amount of your premium payments. As plan values may change in the future due to these factors, subsequent and similar illustrations may be furnished to you upon request.

Projected costs of insurance factors are based upon our current estimates of future mortality experience and are not guaranteed.

The amount of actual cash value available upon surrender of this coverage is subject to a surrender charge as described in your issued policy. During the first policy year, the amount of such charge would be $363.75. Charges for subsequent policy years are shown on Page 1 of this proposal as the difference between accumulation value and surrender value.

In the event of a policy loan, interest at the rate of 7.4% would be due annually in advance. The current rate of interest being credited to policy values impaired by policy loans is 6.0%

After the first policy year, withdrawals can be made against the net surrender value of the policy for a $25 administrative charge, as long as the amount is at least $500. After the withdrawal is made, at least $500 must remain in the surrender value. Withdrawals decrease the death benefit of the policy by the amount withdrawn.

Premium contributions, loans, and withdrawals are illustrated as of the beginning of the year. All other amounts are shown as of the end of the year.

Death benefits are shown as being reduced by any applicable withdrawals or loans. Any increases in coverage requested by the policyholder may require evidence of insurability, and are subject to the appropriate cost of insurance deductions.
EXHIBIT M: PAGE 4 OF 4

A corridor amount of coverage, designed to comply with the current tax code, must be maintained in order for the coverage to enjoy favorable tax treatment. As such, any single premium, or other substantial additional premium tendered, or any request for a reduction in coverage that would violate the requirements of the tax code may result in the loss of this favorable tax treatment. The tax status of this policy as it applies to the owner of this contract should be reviewed each year.

Every effort has been made to comply with current tax law. However, due to the complexities and frequent changes in the tax code, premium patterns illustrated may not comply with all federal limitations. The content of this illustration should not be interpreted as assurance that premium tests have been satisfactorily met. In the event actual premiums received may adversely affect tax treatment, the policyowner will be notified. For complete information, it is recommended that a qualified tax advisor be consulted.

An explanation of the intended use of the cost indices is provided in the Life Insurance Buyer’s Guide. Such indices are useful only for the comparison of the relative costs of two or more similar policies. These indices have been calculated using the interest adjusted method with an assumed interest rate of 5%.

At the end of the 10th policy year, $1,500.94 was returned to the projected accumulation value by the UL-300 + Plus.

UL-300 + Plus is subject to guidelines which are numerous and complex. Please consult the policy form for complete details and information. Projected cost-of-insurance factors are based upon our current estimates of future mortality experience and are not guaranteed.

The schedule of premiums illustrated on this proposal would qualify the policy for the UL-300 + Plus return of mortality bonus through the 60th year, assuming there were no loans or withdrawals which violated the UL-300 + Plus guidelines. (See the policy for full details.)

This illustration includes an accelerated benefit rider which will pay a pre-death benefit for the conditions outlined in the policy. If the benefit is not paid sooner, it will be included as a death benefit.
## EXHIBIT N

**STATEMENT OF CERTIFICATE (POLICY) COST AND BENEFIT INFORMATION**  
**YEARLY RENEWABLE TERM ILLUSTRATION**

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**Cost Comparison Indexes—Based on 5.00% Interest**

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An explanation of the intended use of these indexes is provided in the buyer’s guide.

*This May 30, 1991 illustration is based on the assumptions shown. Columns marked with an * are neither guarantees nor estimates. Actual experience may be different.*
EXHIBIT D

PROTECTOR ILLUSTRATION

POLICY SUMMARY

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The rates shown for the first 10 years are guaranteed. The re-entry rates shown are not guaranteed and are subject to evidence of insurability. The rates shown under the re-entry columns assume that you elect to re-enter and meet the necessary qualifications. This proposal is for illustration purposes only and is not a contract.
### EXHIBIT P: PAGE 1 OF 2

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### EXHIBIT P: PAGE 2 OF 2

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Please see attached sheets with important footnotes

**Summary at 20 yrs**

| Total Premiums: | 101,191 |
| (Loss) Total Cash Value: | 241,301 |
| (Guaranteed) | 206,035 |
| (Value of Dividends) | 35,466 |
| Difference: | -140,310 |
| Average Difference per Year: | -7,015 |
| Average Death Benefit: | 1,006,626 |

5% Interest-Adjusted Costs:

| At 10 Years | 3.85 |
| At 20 Years | -1.76 |

5% Interest-Adjusted Payments:

| At 10 Years | 16.64 |
| At 20 Years | 10.11 |

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Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is 4.00%.

All cash values shown are end-of-year values.

All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on the 1991 dividend scale.

Actual future dividends may be higher or lower than those illustrated depending on the company’s actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans minus the face amount plus riders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of 8.00%. Dividends are affected by policy loans. Under current economic conditions, in any given policy year the greater the amount of loan, the smaller the dividend. (This does not apply to economix term, which has no loan value.)

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

The death benefit is payable only when both insureds have died.

The target additional amount shown in this illustration is only available if PUA/PUI payments and OYT premiums illustrated are paid. If payments are not made, the target amount may be reduced.

The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.

The initial number of years of cash outlays shown in this illustration may be less than the required number because of the manner in which the illustration was requested. If so, additional cash outlays will be required in later years.

The number of years of required cash outlays depends upon ages at issue, smoking classifications, policy class, face amount, and continuation of current dividend scale and one-year term rates, and assumes no policy loans. This is not an automatic dividend option. Policyowner must request change of dividend option at policy year indicated. He may pay the balance of premium by surrendering a portion of paid up insurance. This is not a paid-up policy; premiums are due and payable in all policy years.

(1) Interest-adjusted cost indexes are based on the policy excluding riders and are useful in comparing policies of similar type.

While it may be possible to exclude the proceeds of this policy from the insureds’ estates, legal advice should be obtained from qualified counsel.
## EXHIBIT Q: PAGE 4 OF 15

| Dividends based on alternate dividend scale described in footnotes. |
|---|---|---|---|---|---|---|---|---|
| 500,000 | Preferred Form | 9,619.15 |
| 500,000 | Target Additional Benefits | 499,092.95 One-Year Term |
| | PU-Q-RDR (Includes 174.68 Term Premium) | 500.00 |

### Illustration assumes both insured living.

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Please see attached sheets with important footnotes.

Summary at 20 Yrs

| Total Premiums | 197,383 |
| (Less) Total Cash Value | 309,312 |
| (Guaranteed) | 206,035 |
| (Value of Dividends) | 103,277 |
| Difference | -111,929 |
| Average Difference per Year | -5,596 |
| Average Death Benefit | 1,004,588 |
| 5% Interest-Adjusted Costs(1): |  |
| At 10 years | 5.31 |
| At 20 Years | 1.85 |
| 5% Interest-Adjusted Payments: |  |
| At 10 Years | 18.10 |
| At 20 Years | 13.72 |

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EXHIBIT C: PAGE 6 OF 15

This illustration is based on the plan, face amount, dividend option and underwriting class specified by the agent. However, results based on dividends are based on a modified scale. The interest rate factor of this dividend scale is assumed to be 8.00%. Other components of this scale are identical with the 1991 dividend scale. This illustration is intended to show what term insurance amounts and costs would be if the dividend scale decreases materially due to a reduction in interest rates.

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is 8.00%.

All cash values shown are end-of-year values.

All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on a hypothetical dividend scale.

Actual future dividends may be higher or lower than those illustrated depending on the company’s actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end-of-year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of 8.00%. Dividends are affected by policy loans. To the extent the dividend scale is based on an interest rate greater than 7.00%, in any given policy year the greater the amount of loan, the smaller the dividend.

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

The death benefit is payable only when both insureds have died.

The target additional amount shown in this illustration is only available if FUA/PUI payments and OVT premiums illustrated are paid. If payments are not made, the target amount may be reduced.

The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of FUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.

(1) Interest-adjusted cost indexes are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insureds’ estates, legal advice should be obtained from qualified counsel.
## EXHIBIT Q: PAGE 7 OF 15

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Please see attached sheets with important footnotes.

Summary at 20 yrs

Total Premiums: 202,383 5% Interest-Adjusted Costs(1):
Less Total Cash Value: 559,266 At 10 Years: -4.86
(Guaranteed) 255,440 At 20 Years: -8.28
(Value of Dividends) 303,826 5% Interest-Adjusted Payments:
Difference: 356,883 At 10 Years: 15.97
Average Difference per Year: At 20 Years: 6.44
Average Death Benefit: 1,012,351
EXHIBIT Q: PAGE 9 OF 15

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is 4.00%.

All cash values shown are end of year values.

All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on the 1991 dividend scale.

Actual future dividends may be higher or lower than those illustrated depending on the company’s actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of 8.00%. Dividends are affected by policy loans. Under current economic conditions, in any given policy year the greater the amount of loan, the smaller the dividend. (This does not apply to economic term, which has no loan value.)

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

The net paid up insurance shown is the amount that can be purchased with the end of year net cash value (remainder after loan has been paid). Since repayment of the loan at this time may have tax consequences, you should consult your agent for alternatives.

Results in this illustration assume death of a specified insured in a certain policy year. Should death occur before or after that specified year, results will be different.

The death benefit is payable only when both insureds have died.

The target additional amount shown in this illustration is only available if PUA/PUI payments and OYT premiums illustrated are paid. If payments are not made, the target amount may be reduced.

The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.

(1) Interest-adjusted cost indices are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insureds' estates, legal advice should be obtained from qualified counsel.

In this illustration must be accompanied by the following supplemental illustrations.
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Please see attached sheets with important footnotes

**Summary at 20 yrs**

- Total Premiums: 202,383
- (Less) Total Cash Value: 316,505
- (Guaranteed) 206,035
- (Value of Dividends) 110,470
- Difference: ∼14,122
- Average Difference per Year: ∼5,706
- Average Death Benefit: 1,004,646
- 5% Interest-Adjusted Costs(1):
  - At 10 Years: 5.31
  - At 20 Years: 1.85
- 5% Interest-Adjusted Payments:
  - At 10 Years: ∼13.72
  - At 20 Years: ∼13.72

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EXHIBIT Q: PAGE 12 OF 15

This illustration is based on the plan, face amount, dividend option and underwriting class specified by the agent. However, results based on dividends are based on a modified scale. The interest rate factor of this dividend scale is assumed to be a level 8.00%, but other components of this scale are identical with the 1991 dividend scale. This illustration is intended to show what term insurance amounts and costs would be if the dividend scale decreases materially due to a reduction in interest rates.

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is 4.00%.

All cash values shown are end of year values.

All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on a hypothetical dividend scale.

Actual future dividends may be higher or lower than those illustrated depending on the company's actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of 8.00%. Dividends are affected by policy loans. To the extent the dividend scale is based on an interest rate greater than 7.00%, in any given policy year the greater the amount of loan, the smaller the dividend.

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

The death benefit is payable only when both insureds have died.

The target additional amount shown in this illustration is only available if PUA/PUI payments and OTV premiums illustrated are paid. If payments are not made, the target amount may be reduced.

The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.

1) Interest-adjusted cost indices are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insured's estates, legal advice should be obtained from qualified counsel.

In __________ this illustration must be accompanied by the following supplemental illustrations.
### EXHIBIT Q: PAGE 13 OF 15

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<td>3,010,808</td>
<td>2,830,857</td>
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Please see attached sheets with important footnotes.

**Summary at 20 yrs**

- Total Premiums: 101,191
- (Less) Total Cash Value: 581,726
  - (Guaranteed) 255,440
  - (Value of Dividends) 126,286
- Difference: -280,534
- Average Difference per Year: -14,036
- Average Death Benefit: 1,010,208

5% Interest-Adjusted Costs(1):
- At 10 Years: -4.86
- At 20 Years: -8.28

5% Interest-Adjusted Payments:
- At 10 Years: 15.97
- At 20 Years: 6.44

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EXHIBIT Q: PAGE 15 OF 15

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is 4.00%.

All cash values shown are end of year values.

All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on the 1991 dividend scale.

Actual future dividends may be higher or lower than those illustrated depending on the company's actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rates upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of 8.00%. Dividends are affected by policy loans. Under current economic conditions, in any given policy year the greater the amount of loan, the smaller the dividend. (This does not apply to economax term, which has no loan value.)

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

Results in this illustration assume death of a specified insured in a certain policy year. Should death occur before or after that specified year, results will be different.

The death benefit is payable only when both insureds have died.

The target additional amount shown in this illustration is only available if PUA/PUI payments and OYT premiums illustrated are paid. If payments are not made, the target amount may be reduced.

The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.

The number of years of required cash outlays depends upon ages at issue, smoking classifications, policy class, face amount, and continuation of current dividend scale and one year term rates, and assumes no policy loans. This is not an automatic dividend option. Policy owner must request change of dividend option at policy year indicated. He may pay the balance of premium by surrendering a portion of paid-up insurance. This is not a paid-up policy; premiums are due and payable in all policy years.

(1) Interest-adjusted cost indices are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insureds' estates, legal advice should be obtained from qualified counsel.
APPENDIX III
SUMMARY OF COMMENTS ON THE PRELIMINARY REPORT

The Task Force received a number of comments on the preliminary report, both in writing and at the open forums. These comments are summarized below. The Task Force carefully reviewed these comments in the development of our conclusions. Copies of all correspondence will be made available to the AAA and CIA for their consideration.

Applicability to variable life
Several commenters noted that the alternatives identified were not appropriate for variable life policies.
The Task Force agreed that our report focused on the illustration practices for general account policies. The first section was changed to exclude variable life policies from the scope of our research, other than as an alternative illustration model.

Define the problem and the role of the actuary
Several commenters suggested the need to define the problems with illustrations at an earlier point in the report and the role of the actuary in solving these problems.
The Task Force agreed and added these points to the first section.

Research methodology
Many commenters suggested that our research should include consumer interviews or focus groups.
The Task Force discussed this approach with market researchers associated with LIMRA. They indicated that focus groups would tell us how they think they should have used illustrations during the sales process, as opposed to how the illustration was actually reviewed and considered by the buyer. For this reason, we did not pursue this methodology.

What data should be on the illustration
One commenter noted that our Task Force does not define the data that every consumer should have available on the illustration.
The Task Force used current regulations to define a starting point. We recommended changes as we deemed necessary and appropriate.
Valuation

One commenter suggested that the underlying problem in the U.S. is its conservative valuation procedures.

The Task Force believes the revision of valuation procedures is beyond the scope of our research.

Concerns with current practices

Several commenters brought what they considered unique or questionable illustration practices to our attention to ensure that the final report would encompass these practices.

The Task Force considered these comments in developing our conclusions.

Alternatives to Type B usage

Many commenters agreed with the conclusion that illustrations cannot be used for Type B analysis in today’s environment. Those who disagreed argued that consumers require a tool to measure relative performance. Among their comments were:

- It should be possible to provide reasonable estimates of future performance based on credible assumptions
- Sensitivity analysis or the range approach should help the consumer determine variation
- Illustrations are the best indicator until some better measure is developed.

The Task Force acknowledges that a methodology for measuring and comparing products should be developed. We have added a recommendation that the SOA continue research in this area. We strongly support sensitivity analysis and the use of reasonable, credible assumptions, but that still does not address the variation among companies regarding relative conservatism in the choice of underlying assumptions.

Concerns with alternative practices

Many commenters pointed out concerns and problems with the suggested alternatives in the areas of implementation, helpfulness to the consumer, and potential for abuse.

The Task Force considered these comments in restructuring the alternatives and developing conclusions on each.
Disclosure and standards

Many commenters stated a preference for solutions involving improved disclosure or standards of practice, rather than increased regulation. Some even provided sample disclosures for the illustration.

These comments will be passed on to the CIA and AAA for their consideration in developing an implementation plan for changes to illustration practices.

Limited control by actuaries

Several commenters noted that the illustration practices are set by company management, with input from the actuaries. Further, neither the actuaries nor management are present when the agent meets with the buyer. Therefore, there is little that actuaries can effectively do to change industry practices.

The Task Force acknowledges the fact that the role of the actuary in the illustration process does not provide our profession with complete control. However, the actuary has a role in identifying shortcomings of current practices for management and others, and in developing appropriate and ethical standards of practice for the profession.
APPENDIX IV


"Illustrations Review," LAUTRO, U.K.


LIFE INSURANCE SALES ILLUSTRATIONS

Discussions from Record of the Society of Actuaries


**Articles from Transactions of the Society of Actuaries**


IUL Illustration (A) Subgroup  
Conference Call  
January 28, 2020

The IUL Illustration (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Jan. 28, 2020. The following Subgroup members participated: Fred Andersen, Chair (MN); Ted Chang (CA); Andrew Greenhalgh (CT); Mike Yanacheak (IA); Vincent Tsang (IL); Bill Carmello (NY); Peter Weber (OH); Mike Boerner, John Carter and Rachel Hemphill (TX); Tomasz Serbinowski (UT); and Craig Chupp (VA).

1. Discussed Comments on the IUL Illustration Questions Exposed on Nov. 1

Mr. Andersen said that in 2019, there were two Life Actuarial (A) Task Force conceptual votes on indexed universal life (IUL) issues. The Task Force voted to prohibit products with multipliers from illustrating better than products without multipliers and products with other product enhancements, such as cap buy-ups, from illustrating better than products without those features. He said there are a number of conceptual issues to be resolved, including the grandfathering of illustrations for previous policies, the handling of loans and the drafting of revised language for Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest (AG 49) to reflect these concepts. Mr. Weber recalled that the Subgroup had agreed by straw poll to put a 100-basis point limit on loan arbitrage. Mr. Boerner had a similar recollection. He asked NAIC staff to review previous Subgroup minutes to confirm his recollection.

Scott Harrison (Harrison Law Office) said he met with several companies to attempt to reach consensus on language to capture the proposed AG 49 revisions. He said during those meetings, a number of interpretational issues were identified. The group decided to list those issues, identify some goals and attempt to provide additional context around the proposed language. He provided an industry document (Attachment Six-B1) intended to identify four issues with the proposed language that may require clarification. Ernest Armijos (Pacific Life) said the first issue is to clarify whether state insurance regulators have a preference for either of the previously proposed versions of the language addressing the supplemental option budget (Option A or Option B). He said both versions achieve much of the Task Force’s objective of restricting the illustration of multiplier and buy-up features, but both still allow illustration of a smaller multiplier benefit. He said if state insurance regulators prefer neither option, industry is willing to pursue a different solution. He said Option A defines the option budget as a charge that explicitly increases the amount spent to generate index credits. It limits the indexed credits such that they can only be as high as the charges. Mr. Armijos noted that there are still a few remaining interpretational issues, as indicated on page 2 of the industry document. He said the differences in interpretations indicate the difficulty in determining how a charge can be used in a given situation. Two examples were provided to demonstrate the variation in interpretations of how charges can be used. Brian Bayerle (American Council of Life Insurers—ACLI) said the ACLI agrees that the two main items in the industry document that the Subgroup will need to address are issue #1 and issue #4. He said the ACLI is open to alternatives to either Option A or Option B and is willing to assist industry in the pursuit of a different solution.

Mr. Armijos said Option B defines the option budget as the amount spent to generate the indexed credits of the policy minus the annual net investment earnings rate, with the indexed credits in the illustration limited to the annual earned interest rate underlying the disciplined current scale (DCS). He said Option B ties the maximum illustrated enhancement to the net investment earned rate and bypasses the issue of where the budget for policy enhancements can come from.

Graham Summerlee (Lincoln Financial Group) said the examples in the industry document are attempting to point out instances that are contrary to the Subgroup’s premise that a product with a multiplier can illustrate no better than a product without a multiplier. He said industry wants the Subgroup to determine whether the results depicted in the examples are acceptable, or if the Subgroup requires its premise to be firmly upheld in all situations. He said the decision is needed in order for appropriate language to be proposed. Mr. Andersen said it does not seem possible to draft language that would be applicable to all situations. He said if the new language results in maximum illustrated rates that are less than the 7% or 8% experienced prior to AG 49, the Subgroup will generally be happy. Gayle Donato (Nationwide) suggested that a fully revised AG 49 be drafted that would address the multiple components that can be included in IUL policies.

Mr. Andersen asked for comments, due by Feb. 14, on the options related to the supplemental option budget presented in the industry document. He said comments that provide pros and cons of either option, provide an additional option, or include proposed draft revisions to AG 49 will be appreciated.

Having no further business, the IUL Illustration (A) Subgroup adjourned.
Since the LATF straw poll taken on October 17, 2019, insurers have submitted drafts of changes to AG49 that reflect their interpretation of the types of revisions that are needed to support LATF’s stated objective: That multiplier products illustrate no higher than non-multiplier products. Those proposed revisions are referred to in this document as the “11/01/2019 Exposure” or “the Nationwide letter”, and the “10/29/2019 Exposure.”

Despite these and other efforts to produce satisfactory changes to AG49, progress has been hindered because certain key provisions that have been proposed are subject to multiple interpretations over which the industry lacks consensus. The uncertainty over the treatment of buy-up accounts, which was resolved at the NAIC Austin meeting, is just one example of differing interpretations of draft AG49 changes requiring guidance from regulators.

To continue the progress that was made in Austin and move toward producing amendments to AG49 in line with LATF’s stated intentions, this document identifies four issues in the proposed language for potential clarification. With respect to each issue we (1) identify the relevant proposed language; (2) describe the possible interpretations; and (3) note the impact each interpretation will have on the illustration. We believe it is critical that any changes to AG49 be clear and unambiguous, which is why receiving clarification from regulators on these provisions is necessary before drafting of changes to the guideline can be finalized.

**Issue #1. Are either of the current options regarding the Supplemental Option Budget which are meant to restrict the illustration of multiplier and buy-up features acceptable to regulators?**

Two different versions of language addressing the Supplemental Option Budget have been proposed (described in more detail below as “Option A” and “Option B”). While both Option A and Option B achieve much of what LATF intended to accomplish on its October 17, 2019 straw vote, they do so in different ways. Both would still allow for some, albeit significantly smaller, multiplier benefits to be shown. Clarification is needed as to whether regulators have a preference between Option A and Option B, or another approach.

**Option A: 11/01/2019 Exposure**
The proposed language provides as follows:

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>3. <strong>G. Supplemental Option Budget:</strong> Any asset-based charges or other policy charges that are explicitly used to increase the total amount spent to generate the Indexed Credits of the policy. This amount is expressed as a percent of the policy’s indexed account value.</td>
<td></td>
</tr>
<tr>
<td>4. <strong>E.</strong> If charges that fund a Supplemental Option Budget are deducted from the illustrated cash value, then Indexed Credits generated by the return from the Supplemental Option Budget within the scenario being illustrated may be illustrated in an amount up to, but not exceeding, such charges.</td>
<td></td>
</tr>
</tbody>
</table>

**Benefit:** Clearly identifies the Supplemental Option Budget as a charge that is explicitly used to increase the total amount spent to generate Index Credits. It is also clear that any Indexed Credits, by the return from the Supplemental Option Budget, can only ever be as high as the charges themselves.

**Interpretational Issues:** The draft language allows for at least two interpretations, each producing different outcomes:

- **Interpretation A:** The draft language does not allow illustration of bonuses other than those funded through NIER to enhance the maximum AG49 values.
- **Interpretation B:** The draft language allows a bonus without a charge to enhance the maximum AG49 values since it is already limited by DCS testing as modified in Section 5B.

The differences in interpretation result from the fact that policy charges in general can be used for a variety of purposes. Determining how a charge is being used in every situation could be extremely difficult to ascertain.

What follows are examples of how, working combination with section 5B, this section may still allow for bonuses that take the shape of a multiplier to be illustrated.

**Example 1:** Assuming a cap of 10% and a maximum AG49 lookback of 6.15%, suppose we assume that the cost of such an account is 4.5%. 145% of 4.5% is 6.525%. Based upon those assumptions it would be possible to illustrate a persistency bonus not explicitly funded by charges but which provides a credit expressed as a percentage of index-linked credits and which is supported by hedges. The supporting hedges could increase the earned rate from 6.15% to 6.525% and still comply with this draft language.

**Example 2:** Assume with an option budget of 4.5%, a cap of 10% can be afforded with a multiplier of 0%, resulting in a maximum AG49 lookback rate of 6.15%. The option budget
of 4.5% could alternatively purchase a cap of <10% and a multiplier > 0%, such as a cap of 8% and a multiplier of 15%, resulting in a maximum AG49 lookback rate of 5.15%. The chart below shows the effective illustrated rates for these two indexed accounts.

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<tr>
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<th>Index Account 1</th>
<th>Index Account 2</th>
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<tbody>
<tr>
<td>Option Budget</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Supplemental Option Budget</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Cap</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>Multiplier</td>
<td>0%</td>
<td>15%</td>
</tr>
<tr>
<td>Max AG49 Lookback Rate</td>
<td>6.15%</td>
<td>5.15%</td>
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<tr>
<td>Effective illustrated rate post multiplier (assuming 3% illustrated rate)</td>
<td>3% x (1+0% multiplier) = 3.0%</td>
<td>3% x (1+15% multiplier) = 3.45%</td>
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<tr>
<td>Effective illustrated rate post multiplier (assuming 4% illustrated rate)</td>
<td>4% x (1+0% multiplier) = 4.0%</td>
<td>4% x (1+15% multiplier) = 4.6%</td>
</tr>
<tr>
<td>Effective illustrated rate post multiplier (assuming max AG49 illustrated rate)</td>
<td>6.15% x (1+0% multiplier) = 6.15%</td>
<td>5.15% x (1+15% multiplier) = 5.92%</td>
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</tbody>
</table>

Other issues: Many discussions have centered on the potential issues that defining the Supplemental Options Budget as a charge could create. Policy charges in general can be used for a variety of purposes and it could be difficult to ascertain whether a charge is being used explicitly for the purposes of generating indexed credits. For example, it would be difficult to know whether a portion of COI charges or per 1000 Face Amount charges is being used to increase the option budget. Another example would be that a source other than a charge could be used to fund a supplemental option budget, such as reducing a persistency bonus in later years to fund a supplemental option budget.

Option B: 10/29/2019 Exposure

The proposed language provides as follows:

3. G. Supplemental Option Budget: The total amount spent to generate the Indexed Credits of the policy minus the Annual Net Investment Earnings Rate. This amount is expressed as a percent of the policy’s indexed account value.

4. E. The total Index Credits illustrated shall not exceed the annual earned interest rate underlying the disciplined current scale as defined in 5 (A) and (B).
Benefit: This version bypasses the issue of where the budget for policy enhancements can come from by tying the maximum illustrated enhancement to the Net Investment Earned Rate. This would help close a potential loophole it is tied to a well-defined metric.

What it still allows: In combination with section 5B, this section may still allow illustration of charged for policy enhancements such as multipliers and buy-up accounts. A simple example of this would be to assume a cap of 10% and a maximum AG49 lookback of 6.15. Assume further an earned rate of 4.5% and a hedge cost of 4.5%. 145% of 4.5% is 6.525%.

Here are two examples:

Example 1: Given that 4.E. does not mandate that charged for features only credit back the charges, there is an avenue that a charged for multiplier could exist to increase the credit up to 6.525% from 6.15%. The multipliers or buy-up features that result from this difference (6.525% - minus 6.15%) are significantly reduced from the multipliers that exist in the market today. In the example above, the resulting multiplier would be 6% and the charge for such a multiplier could be 27bps of Account Value. Although the enhancements and charges are significantly reduced in this scenario, they would still be illustratable.

Example 2: Assume with an option budget of 4.5%, a cap of 10% can be afforded with a multiplier of 0%, resulting in a maximum AG49 lookback rate of 6.15%. The option budget of 4.5% could alternatively purchase a cap of <10% and a multiplier > 0%, such as a cap of 8% and a multiplier of 15%, resulting in a maximum AG49 lookback rate of 5.15%. The chart below shows the effective illustrated rates for these two indexed accounts.
**Effective illustrated rate post multiplier (assuming max AG49 illustrated rate)**

<table>
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<tr>
<th>Calculation</th>
<th>Result</th>
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<tbody>
<tr>
<td>6.15% x (1+ 0% multiplier)</td>
<td>6.15%</td>
</tr>
<tr>
<td>5.15% x (1+ 15% multiplier)</td>
<td>5.92%</td>
</tr>
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</table>

**Other issues:** Some concerns around the language in 4E should be converted to a return on assets to be comparable to the annual earned interest rate.

**Issue #2: What are the appropriate ways to set the maximum illustrated rate for Index Accounts that have a different risk profile than the Benchmark Index Account?**

This issue relates to the current language in Section 4.C, which states:

> 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 maximum credited rate for the illustrated 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 applicable Benchmark Index Account. In no event shall the credited rate for the illustrated scale exceed the applicable rate calculated in 4 (B).

**Why guidance is needed:**

Many index accounts have a different risk profile than the Benchmark Index Account. For example, certain index accounts use bonds, cash or commodities or use different crediting methods. AG 49 provides that the maximum illustrated rate for these index accounts is determined using actuarial judgment, subject to two requirements: the maximum illustrated rate (1) shall reflect an appropriate relationship to the expected risk and return of the applicable Benchmark Index Account and (2) shall not exceed the maximum illustrated rate for the Benchmark Index Account. The guideline provides little guidance for the first requirement. Are regulators okay with the fact that assessments of expected risk and return may vary in the industry? As an example, varying assessments could result in maximum illustrated rates that differ between products that have the same index, same crediting method, and same index parameters.
Issue #3: Clarification is needed as to whether the intent is to limit this to the dollar amount of earnings produced by the GA assets or the interest rate of earnings on the GA assets.

The direction provided by the IUL Subgroup is that the hedge cost that can assume a 145% return is limited to the earnings on the GA portfolio.

Example:

GA portfolio assets = $1000
Earned rate on GA portfolio = 5%
Dollar amount of GA earnings = $50

If the account value also equals $1000, using the dollar amount or rate allows the same hedge cost of up to $50 to assume a 145% return, resulting in a hedge return of $72.50.

However, when the account value is higher or lower than the assets, the two approaches can produce a different result.

Under the dollar amount approach, up to $50 of hedge cost can assume a 145% return, resulting in a hedge return of $72.50.

If the account value is $800, the $50 hedge cost assuming 145% is 6.25% of the AV ($50 / $800)

If the account value is $1,200, the $50 hedge cost assuming 145% is 4.17% of the AV ($50 / $1,200)

Under the interest rate approach, 5% of the account value can assume a 145% return, resulting in different amounts of hedge cost that assumes 145% than the dollar amount earned by the GA assets.

If the account value is $800, 5% of the account value or $40 of hedge cost can assume 145%, producing a hedge return of $58.

If the account value is $1,200, 5% of the account value or $60 of hedge cost can assume 145%, producing a hedge return of $87.
The Nationwide letter dated 11/12/2019 identifies two possible methods of incorporating hedge cost and return in DCS testing (Section 5.B.A) which can produce different results. Guidance is needed as to whether these differences are acceptable.

ISSUE #4  Should any credits, such as a fixed bonus, that are not directly tied to the performance of an index account, be included within the 100 basis point limit?

Proposed language for section 6.B in the 11/01/2019 Exposure indicates that credits, such as a fixed bonus, that are not tied directly to the performance of an index account, should not be included within the 100 basis point limit:

If the illustration includes a loan, the total index credits to the policy loan balance shall not exceed the interest rate charged to the loan by more than 100 basis points. For example, if the loan charge is 4% of the loan balance, index credits to the loan balance cannot exceed 5%, regardless of product features available.

However, the language above should include the following:

- Incorporating the pre-defined term “Indexed Credits” into the language above. From the “Definition” section of the 11/01/2019 exposure:
  o Indexed Credits: Any interest credit, multiplier, factor, bonus, or other enhancement to policy values that is linked directly or indirectly to an index or indices.
- How to incorporate charges used to fund a Supplemental Option Budget that apply to the loan balance
- Suggested revised language:

If the illustration includes a loan, the total Indexed Credits as a result of the policy loan shall not exceed the illustrated rate charged to the loan by more than 100 basis points. The illustrated rate charged on the loan is inclusive of any asset-based fee or other policy charges used to fund a Supplemental Option Budget. For example, if the illustrated rate charged on the loan is 4% of the loan balance, Indexed Credits as a result of the policy loan cannot exceed 5%, regardless of product features available.

Additionally, there are philosophical differences concerning whether credits, such as a fixed bonus, that are not directly tied to the performance of an index account, ought to be included within the 100 basis point limit. Guidance from regulators is therefore needed regarding the following two options:

Option #1: The limit is absolute and therefore should apply to the total amounts credited to indexed account (inclusive of any non-indexed bonus).
**Option #2:** The limits should only apply to the credit that is tied to the index performance and the addition of a bonus that is **not** impacted by index performance should not be affected by the 100 basis point limit.

Once there is clarification around which option is preferred, additional language can be added to increase transparency around the issue.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Identification:
Brian Bayerle, ACLI

Title of the Issue:
Remove 4% Floor from Life Standard Nonforfeiture Rate.

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:

January 1, 2020 NAIC Valuation Manual – VM-02 Section 3.A

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 attached.

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

Upon any possible tax code (IRC, S. 7702) modifications to remove the hardcoded interest rate floor starting in 1/1/2021, the life standard nonforfeiture rate is being updated to ensure the minimum funding under state requirements does not exceed the maximum funding under federal requirements for life insurance contracts issued starting in 1/1/2021.

* 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: VM APF 2020-07
VM-02

Version 1: Remove floor

Section 3: Interest

A. The nonforfeiture interest rate for any life insurance policy issued in a particular calendar year beginning on and after the operative date of the *Valuation Manual* shall be equal to 125% of the calendar year statutory valuation interest rate defined for the NPR in the *Valuation Manual* for a life insurance policy with nonforfeiture values, whether or not such sections apply to such policy for valuation purposes, rounded to the nearer one-quarter of 1%, provided, however, that the nonforfeiture interest rate shall not be less than the applicable interest rate used to meet the definition of life insurance in the Cash Value Accumulation Test under Section 7702 (*Life Insurance Contract Defined*) of the U.S. Internal Revenue Code 4%.

**Guidance Note:** For flexible premium universal life insurance policies as defined in Section 3.D of the *Universal Life Insurance Model Regulation* (#585), this is not intended to prevent an interest rate guarantee less than the nonforfeiture interest rate.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

William H. Wilton, FSA, MAAA
VM-30 – Reserve Table

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:


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.)

The current reserve table for Exhibit 7 appears as follows:

<table>
<thead>
<tr>
<th>Statement Item</th>
<th>Formula Reserves (1)</th>
<th>Principle-Based Reserves (2)</th>
<th>Additional Reserves (3)</th>
<th>Analysis Method (4)</th>
<th>Other Amount (5)</th>
<th>Total Amount = (1)+(2)+(3)+(4) (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhibit 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premium and Other Deposit Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guaranteed Interest Contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplemental Contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annuities Certain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends Accumulations or Refunds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Exhibit 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

However, the Annual Statement Blank is presented as:

EXHIBIT 7 - DEPOSIT-TYPE CONTRACTS

I think our reserve table would be better presented in the order of Exhibit 7, i.e.

Guaranteed Interest Contracts

© 2010 National Association of Insurance Commissioners
Annuities Certain
Supplemental Contracts
Dividend Accumulations or Refunds
Premium and Other Deposit Funds

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

In my opinion, the listing of items in the reserve table should be consistent with the presentation in Exhibit 7.

* 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:

W:\National Meetings\2010...\TF\LHA\
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

   Jason Kehrberg, Vice President, PolySystems, Inc.

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:


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.)

   
   4. The NPR shall reflect the immediate payment of claims.

   Proposed VM-20 3.C.4:
   
   4. The NPR shall reflect continuous deaths and the immediate payment of death claims.

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

   I believe the intent was that 3.C.4 apply to death claims, e.g. not to payment of positive cash surrender values upon lapse, and that on a present value basis the calculated periodic death claim payments equate to immediate claim payment on deaths assumed to occur continuously.

* 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:

<table>
<thead>
<tr>
<th>Dates: Received</th>
<th>Reviewed by Staff</th>
<th>Distributed</th>
<th>Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/30/20</td>
<td>RM</td>
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</tr>
</tbody>
</table>

Notes: VM APF 2020-05
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form

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

Staff of Office of Principle-Based Reserving, California Department of Insurance – Address the topic of prescribed templates.

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:

Valuation Manual (January 1, 2019 edition), Introduction, Section I, A.1

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 attached Appendix.

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

See attached Appendix.

NAIC Staff Comments:

<table>
<thead>
<tr>
<th>Dates: Received</th>
<th>Reviewed by Staff</th>
<th>Distributed</th>
<th>Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>APF 2019-58 (CA APF DN)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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ISSUE:
Now that the concept of a prescribed template has been introduced into VM-31, it should be made clear what the rules are surrounding making changes to such templates.

SECTIONS:
Introduction, Section I, Process for Updating the Valuation Manual, Section A.1

REDLINE:

1. Substantive Items

Substantive changes to the Valuation Manual are proposed amendments to the Valuation Manual that would change or alter the meaning, application or interpretation of a provision. All changes to the Valuation Manual (or to templates prescribed for use by the Valuation Manual) will be considered substantive, unless specifically identified as either a nonsubstantive item or an update to a table by simple majority vote of the Life Actuarial (A) Task Force/Health Actuarial (B) Task Force. Any item placed on the Active List as substantive will be exposed by the Life Actuarial (A) Task Force/Health Actuarial (B) Task Force for a public comment period commensurate with the length of the draft and the complexities of the issue, but for no less than 21 days. The comment period will be deemed to have begun when the draft has been placed on the appropriate public NAIC web page. The Life Actuarial (A) Task Force/Health Actuarial (B) Task Force will hold at least one open meeting (in person or via conference call) to consider comments before holding a final vote on any substantive items. Subsequent exposures of substantive items will be for a minimum of seven days. Meeting notices for Life Actuarial (A) Task Force/Health Actuarial (B) Task Force meetings will indicate if a vote is anticipated on any substantive items. Adoption of all changes at the Life Actuarial (A) Task Force/Health Actuarial (B) Task Force will be by simple majority.

REASONING:

Help assure readers that there no back doors through which to create new requirements.
The Life Actuarial (A) Task Force met via conference call May 14, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman and Ben Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Ramirez represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. Discussed Comments on the ACLI AG 49 Proposal

Mr. Andersen said in 2018, the Life Insurance and Annuities (A) Committee identified features of indexed universal life (IUL) products, including multipliers, that should be illustrated in a manner consistent with Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest (AG 49). He said a series of public meetings of the Task Force and the IUL Illustration (A) Subgroup followed, resulting in several state insurance regulator decisions. The decisions included: 1) initially addressing issues related to the illustrated rate instead of focusing on disclosures; 2) not re-litigating current AG 49 concepts but focusing instead on newer product features, including multipliers and other product features that resulted in crediting rates greater than 6.75%; 3) prohibiting products with multiplier features from illustrating better than products without multiplier features; and 4) prohibiting products with cap buy up features from illustrating more favorably than products without cap buy up features. Mr. Andersen said preliminary discussions also included the possibility of tightening guidance related to loan arbitrage. He reiterated that actions that may lead to disclosures or more drastic changes to the structure of life illustrations would be deferred. He said that leading into spring 2020, it was determined that industry experts should work together to coalesce their divergent thoughts on enhancing AG 49 requirements. The American Council of Life Insurers (ACLI) gathered a broad cross-section of companies to work on the effort, resulting in the currently exposed ACLI proposal (Attachment Seven-A), which combines the best efforts of previous proposals submitted by numerous entities. Mr. Andersen expressed confidence that the ACLI proposal conforms to the direction provided by the Task Force and makes good progress in eliminating the problems that led to the charge from the Life Insurance and Annuities (A) Committee. He said the ultimate goal is to have a high likelihood that consumer expectations will be met, and the market will be fair and stable.

Brian Bayerle (ACLI) reviewed the highlights of the ACLI proposal. He noted that the document assumes the proposed changes are to be applied prospectively to minimize consumer confusion and to lessen the extent of the changes to AG 49. He pointed out that the industry participants did not reach a consensus on the treatment of policy loans. He said the proposal cover letter does offer a list of pros and cons of the two policy loan options. He provided a sample spreadsheet (Attachment Seven-B) that demonstrates the mechanics of the proposal. Mr. Bayerle acknowledged some outstanding commenter questions and agreed to attempt to address them later. He emphasized that the proposal does incorporate the earlier decisions made by the Task Force.

Bobby Samuelson (The Life Product Review) read prepared remarks (Attachment Seven-C) on behalf of the industry advocates, independent consultants and academicians who jointly authored an independent proposal (Attachment Seven-D). The independent proposal advocates the use of the Black-Scholes model to determine the maximum illustrated crediting rate. Ms. Ahrens asked how the Black-Scholes model input will be controlled. Mr. Samuelson responded that suggestions on how to standardize the input would be solicited from insurance companies and other experts. Mr. Tsang said the Black-Scholes model assumes a risk-neutral environment. He asked how the accumulation rate will be determined from the model results. Mr. Samuelson said the equity risk premium will be determined as a factor of the volatility. He said another alternative is to get independent experts to opine on the appropriate equity risk premium. Mr. Chupp asked if examples could be provided to demonstrate how the Black-Scholes model would be used. Mr. Samuelson agreed to provide examples. Birny Birnbaum (Center for Economic Justice—CEJ) discussed his comment letter (Attachment Seven-E) submitted in support of the independent proposal. He expressed concern that the proposal would not be reviewed fairly. He also opined that any changes to AG 49 should be applicable to in-force illustrations for existing...
policies, as well as to new policies. Mr. Andersen said some companies agree with many of Mr. Birnbaum’s comments but have agreed to compromise in support of the ACLI proposal in order to advance the issue.

Donna Megregian (American Academy of Actuaries Illustration Work Group—IWG) discussed the contents of the IWG comment letter (Attachment Seven-F). Mr. Andersen said the Subgroup will consider the technical issues identified in the comment letter. Aaron Sarfatti (Equitable) said the Equitable proposal (Attachment Seven-G) is designed to address two state insurance regulator concerns about illustrations, the size of the option budget and the returns on the option budget. He suggested that the proposal is simpler than the ACLI proposal and could be blended with the independent proposal to form a revised AG 49. Neil Kulkarni (Global Atlantic) said the Global Atlantic comment letter (Attachment Seven-H) supports the ACLI proposal Option 1 method for addressing loan leverage. Gayle Donato (Nationwide) said the ACLI proposal follows the guidance that the Task Force provided. She said its conformance with Task Force directives is the primary reason the Nationwide comment letter (Attachment Seven-I) expresses support for the proposal. Scott Harrison (High Point Strategies) spoke on behalf of the companies comprising the IUL Coalition. He said the companies worked closely with the ACLI to develop the proposal. The IUL Coalition’s comment letter (Attachment Seven-J) reflects its support for the ACLI proposal. Alex Silva (John Hancock) stated the IUL Coalition support for the ACLI proposal Option 1 method. Seth Detert (Securian Financial) said his comments (Attachment Seven-K) represent a group of companies. The companies support the ACLI proposal and recommend adoption of the ACLI Option 2 method for loan leveraging.

Mr. Andersen said the Subgroup will incorporate some of the technical aspects of the comments into the ACLI proposal.

Gary Sanders (National Association of Insurance and Financial Advisors—NAIFA) said that while it will not change the performance of the policy, retroactive application of the AG 49 revisions will cause harm to the producer/client relationship, the agent’s reputation and the client’s trust in the agent.

Mr. Birnbaum asked for exposure of the independent proposal. Subsequent to this conference call, the Task Force chair exposed the independent proposal for a 14-day public comment period ending May 27.

Having no further business, the Life Actuarial (A) Task Force adjourned.
April 14, 2020

Mr. Fred Andersen
Chair, NAIC IUL Illustration (A) Subgroup

   Re:  ACLI proposed draft of Actuarial Guideline 49-A

Dear Mr. Andersen:

The American Council of Life Insurers (ACLI)\(^\text{1}\) appreciates the opportunity to submit the following draft of AG49-A on prospective requirements for IUL illustrations.

During the March 3\(^{rd}\) call of the Subgroup, multiple commenters suggested possible language to revise the Guideline. ACLI reviewed the various proposals and attempted to harmonize a version that both addresses concerns raised by regulators while providing consumers with the information necessary to make informed decisions on products they are considering for purchase.

The attached revisions (Attachment One) borrow concepts raised by the various drafts, and we are appreciative of all the thought that went into each of these efforts. There are relatively small changes from the previously submitted March 24\(^{th}\) draft, which are highlighted in the attachment. We note that, while this draft reflects our best-effort, there remain items that require additional consideration.

Accompanying the draft is a spreadsheet that walks through several examples of how the mechanics of this proposal are operating. One tab, ‘ACLI 04-14-20 Draft-BIA HB=NIER’, demonstrates how this works when the BIA hedge budget is equal to the NIER; these results should be consistent with the March 24\(^{th}\) draft. Tab ‘ACLI 04-14-20 Draft-BIA HB<NIER’ shows the mechanics when the BIA hedge budget is less than the NIER, which shows the impact of many of the additional edits in this proposed version.

Consistent with the ACLI’s established opposition to retroactivity, AG49-A assumes that these new requirements are applicable on a prospective-only basis, and solely for policies issued after the guideline’s effective date.

ACLI notes the following in this best-effort draft:

- Definitions in Section 3 were refined from the earlier ACLI 02-21-20 draft.
- Language in Section 4 and 5 were largely borrowed from the Securian et al draft, with several modifications. We note the language in Section 5 requires additional consideration.
- For the treatment of Policy Loans (Section 6 and within the definition of “Alternate Scale”), industry is offering two proposals for regulators to consider. We note that the language in this

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\(^{1}\) The American Council of Life Insurers (ACLI) advocates on behalf of 280 member companies dedicated to providing products and services that promote consumers’ financial and retirement security. 90 million American families depend on our members for life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, dental and vision and other supplemental benefits. ACLI represents member companies in state, federal and international forums for public policy that supports the industry marketplace and the families that rely on life insurers’ products for peace of mind. ACLI members represent 95 percent of industry assets in the United States. Learn more at www.acli.com.
section may require additional modification. This language attempts to capture the two main approaches previously submitted.

Indexed UL products may allow the loaned amount to remain in the index and earn index credits. When the index return is higher than the loan charged rate then the loan is “leveraged”. IUL products are the only product type where actuarial guidelines contemplate this type of leveraging in illustrations. An objective for regulators in tightening this language is to ensure that the Supplemental Hedge Budget is not double counted.

During a straw poll at the end of the October 17 conference call, the vote favored language similar to Option 2. However, some of the language proposed subsequent of this call was similar to Option 1. We lay out arguments below for each approach, and we recommend further discussion on the topic.

We note there are advantages of each approach:

- **Option 1**: 100 bp loan leverage limit only applies to index credits:
  - Provides consistent treatment of illustrated bonuses between fixed UL and indexed UL, as well as consistent treatment of standard loans and indexed loans within an indexed UL.
  - Is consistent with the original scope of AG49, which was to apply to index-linked credits.
  - Allows for the illustration of consistent maximum crediting rates between IUL policies with a loan and IUL policies without a loan.
  - The Option 2 language may pose technical difficulties to implement.
  - The Option 2 language may be read to disadvantage innovative product designs, such as policies that offer wellness credits to customers who engage in activities that help them live longer and healthier lives.

- **Option 2**: 100 bp loan leverage limit applies to index credits and other types of bonuses:
  - If the limit only applies to Index Credits, loan leverage may exceed 100 bps using fixed rate bonuses or other innovative product designs.
  - Since all index accounts will illustrate similarly under the new AG 49, other bonus types may become more common.
  - This is a maximum illustration limit to prevent illustrations that are overly optimistic.
  - Products could still offer other bonus types and demonstrate how they work at lower interest rate illustrations or when loans are not illustrated.

We look forward to a discussion of our proposed language. Thank you.

Sincerely,

[Signature]

cc Reggie Mazyck, NAIC
THE APPLICATION OF THE LIFE ILLUSTRATIONS MODEL REGULATION TO POLICIES WITH INDEX-BASED INTEREST, SOLD AFTER [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption*]

Background

The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an external index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

In 2019, the NAIC decided that illustrations of products with multipliers, cap buy-ups, and other enhancements should not illustrate better than products without such features. This new requirement is intended to apply to illustrations on policies sold on or after the effective date of this guideline while the existing requirements continue to apply for inforce illustrations on policies sold before the effective date of this guideline.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.
2. Limits the policy loan leverage shown in an illustration.
3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective as follows for all new business and in force illustrations on policies sold on or after [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption].

i. 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.

ii. Effective March 1, 2016, Section 4 and Section 5 shall be effective for all in force life insurance illustrations on policies within the scope of this actuarial guideline, regardless of the date the policy was sold.

iii. Sections 6 and 7 shall be effective for all new business and in force life insurance illustrations on policies sold on or after March 1, 2016.

2. Scope

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

i. The policy is subject to Model #582.
3. Definitions

A. Alternate Scale: A scale of non-guaranteed elements currently being illustrated such that:

i. The credited-rate total annual percentage rate of Indexed Credits for each Index Account does not exceed the lesser of the maximum credited-rate total annual percentage rate of Indexed Credits for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the credited-rate total annual percentage rate of Indexed Credits for each Index Account shall not exceed the average of the maximum credited-rate total annual percentage rate of Indexed Credits for the illustrated scale and the guaranteed credited-rate total annual percentage rate of Indexed Credits for that account. However, the credited-rate total annual percentage rate of Indexed Credits for each Index Account shall never be less than the guaranteed credited-rate total annual percentage rate of Indexed Credits for that account.

ii. If the illustration includes a loan, the illustrated rate credited to the loan balance does not exceed the illustrated loan charge-Policy Loan Interest Credit Rate. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credit Rate shall not exceed 4%.

iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. Annual Net Investment Earnings Rate: Gross portfolio annual earnings rate of the general account assets (excluding hedges for Indexed Credits), less provisions for investment expenses and default cost, allocated to support the policy. Charges of any kind are not included in the Annual Net Investment Earnings Rate.

B.C. Benchmark Index Account: An Index Account with the following features:

i. The interest calculation is based on the percent change in S&P 500® Index value only, over a one-year period using only the beginning and ending index values. (S&P 500® Index ticker: SPX)

ii. An annual cap is used in the interest calculation.

iii. The annual floor used in the interest calculation shall be 0%.

iv. The participation rate used in the interest calculation shall be 100%.

v. Interest is credited once per year.

vi. Account charges do not exceed the account charges for any corresponding Index Accounts within the policy in any policy year. If Index Accounts with different levels of account charges are offered with the illustrated policy, more than one Benchmark Index Account may be used in determining the maximum illustrated crediting rates for the policy’s Index Accounts, subject to the requirements of S.D. However, for each Index Account within the policy, only one Benchmark Index Account shall apply. Any rate calculated in 4 (B) shall not apply for an Index Account if the account charges for the applicable Benchmark Index Account exceed the account charges for that Index Account in any policy year. Account charges include all charges applicable to an Index Account, whether deducted from policy values or from premiums or other amounts transferred into such Index Account.

vii. Additional amounts credited. The hedge budget used to determine the cap in 3 (C) (ii) does not exceed the Annual Net Investment Earnings Rate. Charges of any kind are not included when determining the applicable cap rate.
vii. There are not less than the following additional amounts credited for any corresponding Index Account within the policy in any policy year. Any rate calculated in 4 (B) shall not apply for an Index Account if the additional amounts credited for the applicable Benchmark Index Account that are less than the additional amounts credited for that Index Account within any policy year. Additional amounts include all credits that increase policy values linked to an index or indices in excess of the interest calculation, including but not limited to experience refunds or multipliers and bonuses.

viii. There are no limitations on the portion of account value allocated to the account.

ix. A single Benchmark Index Account will be determined for each policy. A policy shall have no more than one Benchmark Index Account.

C.D. Fixed Account: An account where the amounts credited rate is not tied to an external index or indices.

D.E. Index Account: An account where the amounts credited rate is tied to an external index or indices.

F. Indexed Credits: Any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy values that is linked to an index or indices. Credits to the policy resulting from a floor are included.

G. Hedge Budget: For each Index Account, the total annualized amount assumed to be used to generate the Indexed Credits of the account, expressed as a percent of the account value in the Index Account. This amount should be consistent with the hedging program of the company.

H. Loan Balance: Any outstanding policy loan and loan interest, as defined in the policy.

I. Policy Loan Interest Rate: The annual interest rate that is charged on any Loan Balance. This does not include any other policy charges.

J. Policy Loan Interest Credited Rate: The annual interest rate credited that applies to the portion of the account value backing the Loan Balance, as defined in the policy.

   i. For the portion of the account value backing the Loan Balance that is in a Fixed Account, the Policy Loan Interest Credited Rate is the applicable annual interest crediting rate, as defined in the policy.

[OPTION FOR CONSIDERATION: Please see commentary on these approaches in the ACLI Comment Letter. Language for Option 1 and Option 2 may need to be tightened up:]

   Option 1: ii. For any portion of the account value backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage rate of Indexed Credits, net of any applicable Supplemental Hedge Budget, for that account, as defined in the policy.

   Option 2: ii. For any portion of the account value backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage rate of Indexed Credits and all illustrated bonuses, charge reductions or other enhancements that impact the portion of the account value backing the Loan Balance, net of any applicable Supplemental Hedge Budget for that account, as defined in the policy.

K. Supplemental Hedge Budget: For each Index Account, the Hedge Budget minus the minimum of the Annual Net Investment Earnings Rate and the hedge budget that determines the Benchmark Index Account. The Supplemental Hedge Budget will never be less than zero. This amount should be consistent with the hedging program of the company.

4. Illustrated Scale

   The credited rateannual percentage rate of Indexed Credits for the illustrated scale for each Index Account shall be limited as follows:

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A. Calculate the geometric average annual credited rate for each applicable Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

i. If the insurer offers an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the applicable Benchmark Index Account in 4 (A).

ii. If the insurer does not offer an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of the Benchmark Index Account, and shall use that cap in 4 (A).

B. For each applicable Benchmark Index Account, the total Indexed Credits illustrated as a percentage of the account value in the Index Account shall not exceed the minimum of (i) and (ii):

i. The arithmetic mean of the geometric average annual credited rates calculated in 4 (A) shall be the maximum credited rate(s) for the illustrated scale.

ii. 145% of the Annual Net Investment Earnings Rate.

C. For any 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 maximum credited rate. Account that is not the Benchmark Index Account in 3 (C), the total Indexed Credits illustrated as a percentage of the account value in the Index Account prior to the deduction of any charges used to fund a Supplemental Hedge Budget shall not exceed the minimum of (i) and (ii):

i. The maximum Indexed Credits for the Benchmark Index Account calculated in 4 (B) plus the Supplemental Hedge Budget for the illustrated scale. The determination shall apply to Index Account.

ii. The total Indexed Credits that reflect the fundamental characteristics of the Index Account and the parameters shall have the appropriate relationship to the expected risk and return of the applicable Benchmark Index Account. In no event shall the illustration actuary use actuarial judgment to determine this value using a back methodology consistent with 4 (A) and 4 (B) (i) where appropriate.

D. For purposes of compliance with Section 6 (C) of Model #582, the credited rate for Supplemental Hedge Budget may cause the illustrated scalerate to exceed the earned interest rate underlying the Disciplined Current Scale, applicable rate calculated in 4 (B).

At the beginning of each calendar year, the insurer shall be allowed up to three (3) months to update the credited rate for each Index Account in accordance with 4 (B) and 4 (C).

5. Disciplined Current Scale

The earned interest rate for the disciplined current scale shall be limited as follows:

A. If an insurer engages in a hedging program for indexed based interest Indexed Credits, the assumed earned interest rate underlying the disciplined current scale shall not exceed 145% for the policy, inclusive of the annual net investment earnings rate (gross portfolio earnings less provisions for investment expenses and default costs) on the general account assets (excluding hedges for index based credits) allocated to support the policy and hedge assets that support the policy, net of default costs and investment expenses (including the amount spent to generate the Indexed Credits of the policy) that shall not exceed.
i. the Annual Net Investment Earnings Rate, plus

ii. 45% of the lesser of (1) and (2):

1. Hedge Budget minus any floor.

2. The minimum of the Annual Net Investment Earnings Rate and the hedge budget that determines the Benchmark Index Account.

These amounts should be adjusted for timing differences to ensure that fixed interest is not earned on the hedge cost.

The above approach does not stipulate any required methodology as long as it produces a consistent limit on the assumed earned interest rate.

For a product with multiple Index Accounts with different Hedge Budgets that are less than or equal to the NIER, a maximum rate in 5.A. should be calculated for each set of accounts with different Hedge Budgets.

B. If an insurer does not engage in a hedging program for index-based interest Indexed 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 Annual Net Investment Earnings Rate.

C. These experience limitations shall be included when testing for self-support and lapse-support under Model #582, accounting for all illustrated benefits including any illustrated benefits and bonuses that impact the policy’s account value.

D. If more than one Benchmark Index Account is used for an illustrated policy, each set of Index Accounts that correspond to each Benchmark Index Account must independently pass the self-support and lapse-support tests under Model #582, subject to the limitations in 5. (A), (B), and (C). All experience assumptions that do not directly relate to the Index Accounts as to expenses, mortality, investment earnings rate of the general account assets, lapses, and election of any Fixed Account shall equal the assumptions used in the testing for the entire policy.

6. Policy Loans

If the illustration includes a loan, the illustrated rate credited to the loan balance Policy Loan Interest Credited Rate shall not exceed the illustrated loan charge Policy Loan Interest Rate by more than 100 basis points. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 5%.

7. Additional Standards

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. For each Index Account illustrated, a table showing actual historical index changes and corresponding hypothetical interest rate Indexed Credits using current index parameters for the most recent 20-year period.

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**Annual Net Investment Earnings Rate**
- 4.50%

**Cap**
- 9.5%
- 10%
- 18%
- 9%
- 8%
- 8%
- 9%
- 1%

**Floor**
- 7%
- 1%

**Index Bonus (Multiplier)**
- 0%
- 50%
- 0%
- 50%
- 0%
- 25%
- 20%
- 0%
- 30%

**Hedge Budget**
- 4.36%
- 6.75%
- 5.72%
- 8.58%
- 4.20%
- 4.83%
- 4.64%
- 4.61%
- 4.78%

**Supplemental Hedge Budget**
- 0.00%
- 2.39%
- 1.37%
- 4.23%
- 0.00%
- 0.47%
- 0.28%
- 0.25%
- 0.42%

**Historical Credited Rate for Benchmark Account (A)**

**Comment:** BIA Lookback for Base Case

**Historical Credited Rate for BIA in 4(B) + Supplemental Hedge Budget**
- 8.35%
- 7.32%
- 10.19%
- 5.96%
- 6.43%
- 6.24%
- 6.21%
- 6.38%

**Total Indexed Credits using actuarial judgment, method consistent with 4A/4B if applicable**
- 9.30%
- 9.09%
- 13.63%
- 5.71%
- 6.48%
- 6.22%
- 6.00%
- 6.39%

**Maximum Indexed Credit**
- 5.96%
- 8.35%
- 7.32%
- 10.19%
- 5.71%
- 6.43%
- 6.22%
- 6.00%
- 6.38%

**Non-BIA:**
- min (4(C)(i), 4(C)(ii))

**Implied Max Illustrated Rate**
- 5.96%
- 5.57%
- 7.32%
- 6.79%
- 5.71%
- 5.14%
- 5.18%
- 6.00%
- 4.91%

**Earned rate underlying DCS, adjusted assuming hedge cost BOY and hedge return EOY**
- 6.46%
- 6.46%
- 6.46%
- 6.46%
- 6.39%
- 6.46%
- 6.46%
- 6.46%
- 6.46%

**1% floor**

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Thanks, Fred. I appreciate the opportunity present the comment letter on behalf of the twelve co-signers of the Independent Proposal. We have joined together for no purpose other than to voice our concern about the state of Indexed UL and to present a solution that we believe is in the best interest of our industry and all of its constituents.

Fundamentally, we believe that the ACLI proposal is a highly complex, overly engineered solution that requires significantly more disclosure, makes illustrations less understandable for consumers and leaves the door open for future product designs that will take advantage of its many grey areas and ambiguities. Our letter explores each one of these aspects of the ACLI proposal in detail and paints the contrast between the ACLI proposal and the Independent Proposal, which represents a simple but comprehensive solution to the mandate from LATF.

For context, it’s helpful to understand how we got here in order to also understand why the ACLI proposal is flawed. The original AG 49 prescribes a methodology for determining the illustrated value of the hedges used to create indexed credits in Section 4(A). This methodology is based on hypothetical historical backtesting—hypothetical in that the calculation assumes that the currently available, non-guaranteed indexed parameters based on today’s hedge costs never change. Historical in that the index returns used for the backtesting are actual historical index returns. The net result of combining a hypothetical assumption of constant index parameters with historical index returns is not a historically indicative valuation of the hedges—it is a purely hypothetical valuation. To our knowledge, this hypothetical historical hedge valuation methodology has no empirical or theoretical basis and is not used anywhere except in indexed insurance products.

This methodology is also at odds with how the hedges are actually valued in the marketplace. Life insurers purchase hedges at market prices that can be understood through the universally used and empirically validated Black-Scholes valuation methodology. For example, a 10% cap purchased last year would have cost approximately 4.6% of the notional value. That is the market valuation for the option. However, using the unique hypothetical historical backtesting methodology in AG 49, the illustrated valuation for the option would be 6.12%. This implies a perpetual illustrated valuation arbitrage between the empirically proven, universally used, market-driven Black-Scholes option valuation methodology and the unique, untested, entirely hypothetical option valuation methodology prescribed in AG 49.

This disconnect between the price of options and their illustrated value is what allows Indexed UL to illustrate superior performance to traditional fixed insurance products by a significant margin. It is also what allows Indexed UL products with multipliers and buy-up caps to produce superior illustrated performance to otherwise identical products without them. It also follows that, if the entirety of the account value were to have been used to purchase hedges, that the illustrated performance of that variant of product would have dramatically outperformed even the most aggressive multiplier-driven products on the market today.

As a result, it is clear that the problem with multipliers and buy-up caps is not actually multipliers and buy-up caps. The problem with multipliers and buy-up caps is the assumption of a hedge valuation arbitrage embedded into every Indexed UL illustration, courtesy of the hypothetical historical lookback methodology employed by AG 49 in Section 4(A).

The ACLI proposal is a tacit acknowledgement of that fact. The way that the ACLI has proposed to satisfy the mandate from LATF to limit the illustrated benefits of buy-up caps and multipliers is by bifurcating Indexed UL illustrated rates into two segments—the Hedge Budget, which can illustrate with hedge valuation arbitrage, and the Supplemental Hedge Budget, which does not illustrate perpetual hedge valuation arbitrage.
This segmentation of the illustrated rate is both incongruous with the original letter and spirit of AG 49 and entirely artificial, created for the sole purposes of fulfilling the LATF mandate. This is why the ACLI proposal is so cumbersome, complex and opaque. In order to mechanically accommodate creating an artificial bifurcation of illustrated indexed credits and implement different solutions for each, nearly every clause in AG 49 had to be modified in some way, including the introduction of new definitions, formulas and clauses. By our count, 51 of the 61 clauses in AG 49 were modified by the ACLI proposal.

These modifications and additions to AG49 create their own set of problems. Virtually all of these new factors are uncertified rates determined internally by the life insurer and not disclosed on the illustration. Furthermore, because these factors will be interpreted, defined and set internally at the discretion of the insurer, there will be natural inconsistencies between how life insurers apply them. These inconsistencies will undo the chief goal of the original AG 49, which was to create consistency across illustrated rates for products with identical index parameters. The ACLI proposal manages to simultaneously make illustrations less transparent and less consistent, a combination that renders them almost unintelligible except to the company issuing the product.

But more importantly, the ACLI proposal leaves significant latitude to life insurers, providing them with ample opportunity to find new ways currently not contemplated by the drafters or LATF to generate higher illustrated performance while remaining in technical compliance with the guideline. In our letter, we have detailed at least 5 potential product designs that would produce outsized performance while remaining in compliance with the ACLI proposal, all of which already exist in some form in today’s market. It is only a matter of time before these designs are tuned for optimal illustrated performance under the new AG 49 in the same way that life insurers tuned designs for optimal illustrated performance after the original AG 49 was implemented.

As a result, we believe the ACLI proposal to be fundamentally flawed. It is a limited solution for the particular problem of multipliers and buy-up caps. It relies on internally inconsistent logic that is only tenuously bound together through overly complex and ambiguous language. It is not, by any stretch, a long-term holistic solution to the general problem of prolific, repeated and – most importantly – generously rewarded gamesmanship in Indexed UL illustrations, of which multipliers and buy-up caps are merely the most recent manifestation and hardly the last.

By contrast, the Independent Proposal is a simple and holistic solution. It requires that the illustrated value for the hedges be calculated using the Black-Scholes formula, which will roughly align the actual market price of the hedges with their illustrated value. This will eliminate the possibility for any sort of illustrated valuation arbitrage in the Indexed UL illustration, including excess interest from multipliers and buy-up caps. This simple alignment of actual market hedge valuation and illustrated hedge valuation will satisfy LATF’s mandate without any further modifications to the guideline. But more importantly, it will eliminate the ability for gamesmanship with future product designs for Indexed UL. The proposal is as simple as that. It requires a change to just one section of AG 49, Section 4(A).

We have also recommended that the supplemental crediting reports in Section 7 of AG 49 be augmented to allow life insurers to display the mechanics and potential return profiles of their various crediting strategy, but – and this is key – only in the context of the crediting rate and not in the illustrated scale. Our proposal recommends a methodology for these supplemental crediting reports that would align them to the crediting reports available in Fixed Index Annuity illustrations. This methodology was broadly supported by industry for the purposes of FIA illustrations and recognized as an effective way to educate consumers about the mechanics, variability and potential performance of indexed crediting. To be clear, these supplemental crediting reports are not a part of the illustrated scale and do not have any interaction with the illustration model regulation. The Independent Proposal
in its entirety is in conformity with the illustration model regulation. The augmentation of these supplemental reports also does not constitute “new disclosure” because they already exist in the guideline.

In summary, we believe that the basis for Indexed UL illustrations should align market hedge values with illustrated hedge values. This view is also shared by the ACLI’s proposal – but, in their view, only for the multipliers and buy-up caps specifically called out by LATF and only then because of the LATF vote. We would remind LATF that prior to the vote, many life insurers and their professional advocates voiced support for the continued illustration of multipliers and buy-up caps. These insurers have not changed their minds about the merits of these strategies. They’re simply complying with LATF’s request in order to keep the franchise going and, by that, I mean the franchise of illustrated valuation arbitrage that generates double-digit internal rates of return in Indexed UL illustrations even without multipliers and buy-up caps. As long as that exists, and it certainly will with the ACLI proposal, then gamesmanship in Indexed UL illustrations will continue unabated and we will certainly be revisiting AG 49 in the future.

The Independent Proposal, in contrast, is a simple, holistic solution that rests on a universally-used and empirically proven hedge valuation methodology that will end Indexed UL illustrated performance gamesmanship once and for all. Furthermore, the Independent Proposal maintains the ability for life insurers to demonstrate the mechanics and potential performance of indexed crediting methodologies, but only in the context of supplemental crediting reports that are not a part of the illustrated scale. The Independent Proposal strikes the appropriate balance between restricting illustrated gamesmanship while still providing life insurers a means to demonstrate the mechanics of their indexed crediting methodologies in a way that will both educate consumers as to their mechanics and highlight their potential to perform well in certain environments. We urge LATF to consider the Independent Proposal.

Finally, we would welcome any feedback and questions on the Independent Proposal and request the ability to respond on today’s call.

Thank you.

CUT TEXT
Therefore, the solution to this problem is not to attempt to surgically remove the effects of multipliers and buy-up caps because they are simply a symptom of the larger disease. The solution has to be holistic.

The first segment is a classic Indexed UL product that allows for the illustration of a perpetual disconnect between current hedge prices and the illustrated value of the hedge. In the ACLI proposal, this disconnect can only be assumed for hedges purchased with the company’s Net Investment Earned Rate (NIER). In other words, there’s a certain amount of “allowable” perpetual illustrated riskless arbitrage.

The second segment is comprised of any amount spent beyond the NIER to purchase hedges to provide index-linked credits, including multipliers and buy-up caps. For illustration purposes, the illustrated value of these hedges is equal to their actual cost. There is no illustrated perpetual riskless arbitrage for these hedge purchases.
Not surprisingly, companies selling Indexed UL will voice concerns about some aspects of the Independent Proposal. Allow me to address some of those:

1. The Independent Proposal does not allow for the illustrated benefit of an equity risk premium.
   a. This is not true. The primary market input of the Black-Scholes formula is implied volatility, the market expectation for equity volatility over the same period of time as the option. Volatility is a proxy for risk. As described by the also universally used Capital Asset Pricing Model, more risk means more return. As a result, the expected return for the option until its expiration is explicitly accounted for through market pricing for implied volatility. This is why option prices are constantly changing in reaction to the risk-return dynamics in the marketplace.
   b. Furthermore, the methodology currently prescribed by AG 49 is not an appropriate or accepted measure of the equity risk premium. The burden of proof is on proponents of this obscure methodology to prove that it is empirically grounded. No proof of the robustness and accuracy of the methodology has ever been presented.
   c. However, the Independent Proposal recognizes the fact that over a certain period of time, perhaps even more than a decade, options may be consistently undervalued or overvalued in retrospect relative to their actual returns. For example, the last 10 years have produced stellar risk-adjusted returns in the S&P 500, meaning that option valuations have been consistently underpriced. As a result, we have recommended that Section 7 be expanded to allow more latitude for life insurers to demonstrate hypothetical historical performance of their crediting methodologies over specific period of times, including multipliers and buy-up caps. We believe this is a fair and informative way to demonstrate the mechanics and potential value of various crediting strategies. And, to be clear, this is only for Section 7 – these crediting reports are supplemental and are not a part of the illustrated scale. The Independent Proposal does not require any change to the Model Regulation for complete implementation.

2. The Independent Proposal will cause changes to illustrated rates even if the indexed parameter does not change.
   a. This is true and this currently happens with today’s AG 49 hypothetical historical methodology because the historical period is rolling and changes every year.
   b. The other side is also true – the illustrated rate using the Independent Proposal might not change even if the index parameter does. This will actually provide a more accurate picture to the consumer for setting expectations and a superior solution to the current AG 49 methodology.
      i. For example, if the cap drops from 10% to 9% because option prices increase, the current AG 49 maximum rate would decrease the illustrated rate from 6.14% to 5.67%. This would lead a consumer to believe that their product is now “underperforming” relative to the original expectation.
      ii. This is a false conclusion because the market value of the 10% cap previously is the same as the 9% cap is currently. The Independent Proposal takes actual market valuation into account and will correctly inform the consumer that their value has actually not changed and the product is not “underperforming.”
   c. Over time and taking index parameter changes into account, the Independent Proposal would actually produce more stable illustrated rates than the current AG 49 methodology and therefore enhance consumer understanding and expectations for the product.

3. Finally, and most importantly, the chief criticism of the Independent Proposal will be that it lowers the illustrated rate of Indexed UL products. Or, put differently, it no longer provides for Indexed UL to illustrate long-term perpetual arbitrage between the actual market value of the option and illustrated value of the option based on the untested and empirically unproven hypothetical historical lookback.
methodology. We fail to see why this is a concern for regulators. Furthermore, we fail to see why this is a concern for life insurers. Illustrations are used for explaining the mechanics of the product, not as performance projections. Therefore, a change to the illustrated rate should not change sales or the consumer appetite for the product. An informed consumer would not rely on the illustrated rate to make a decision. Our goal is to have informed consumers and we believe that the Independent Proposal will enhance their understanding of the product and its potential performance. The ACLI proposal, by contrast, will restrict it.

As long as perpetual riskless illustrated arbitrage exists in Indexed UL because of the disconnect between actual option values and the AG 49 hypothetical historical lookback values, there will be gamesmanship in Indexed UL.
Fred,

We have reviewed the ACLI proposal regarding revisions to AG 49 and appreciate the opportunity to comment on it. Overall, we believe that the ACLI proposal effectively fulfills LATF’s stated goals of eliminating the specific illustrated benefits of both Cap Buy-Ups and Multipliers but does so in an overly complex and engineered way that requires more disclosure, makes illustrations less understandable for consumers and leaves the door open for product designs that, if history is any indication, will be created in its aftermath to maximize illustrated performance for the express purpose of competitive positioning.

In stark contrast to the ACLI proposal, the Independent Proposal makes only one modification to the underlying structure of AG 49 to accomplish the goals outlined by LATF and does not, in any way, require changes to the Illustration Model Regulation. The Independent Proposal is far simpler – and far more effective – than the ACLI proposal. Furthermore, the Independent Proposal also includes revisions to Section 7 that will allow life insurers to fully demonstrate the mechanics and potential performance of indexed crediting strategies using supplemental crediting reports in an effort to further consumer understanding and provide a platform for life insurers to differentiate their products in a way that is consistent with Fixed Index Annuities. We fail to see why this approach would be any less appealing for Indexed UL than it is for Fixed Index Annuities, where it was widely supported by life insurers.

The remainder of this letter will detail the challenges with the ACLI proposal and contrasts them with the Independent Proposal.

Proposal Overview

Of the 61 independent clauses in the ACLI proposal, only 10 are unchanged from the original AG 49 language. The ACLI proposal introduces numerous and material new clauses, definitions and formulas. While many of the changes were clarifications to the original guideline, the ACLI proposal relies on the following material modifications to deliver an effective solution to LATF’s request:

1. 3(B) – The formal definition of the Annual Net Investment Earned Rate (NIER)
2. 3(G) – The introduction and definition of the Hedge Budget
3. 3(K) – The introduction and definition of the Supplemental Hedge Budget
4. 4(B)(ii) – The addition of NIER * 1.45 as a maximum illustrated Index Credit as a percentage of AV ("illustrated rate")
5. 5(A)(ii) – The addition of the Hedge Budget as a limitation for application of the 1.45 factor for DCS

Taken together, these material modifications form the mechanical changes to the guideline that limit the illustrated benefits of Buy-Up Caps and Multipliers. However, they also represent fundamentally new additions to the guideline that create their own new challenges that require a response.

By contrast, the Independent Proposal requires just one modification to Section 4(A) to accomplish all of LATF’s goals. The current AG 49 language for Section 4(A) uses a hypothetical historical lookback approach, applying today’s currently available index parameters based on highly dynamic option prices to long-term historical index data, a methodology only used (to our knowledge) in indexed insurance products. The Independent Proposal replaces this rare and untested methodology with the universally accepted and empirically supported Black-Scholes formula for option valuation. In doing so, any option-based strategy used inside of an indexed insurance product will always illustrate at its fair-market value, meaning that any augmentation of the option budget through policy charges will be neutralized for the purposes of the illustrated scale. For example, a 1% asset-based...
charge to buy a 20% multiplier for an account with a 5% Black-Scholes fair-market valuation will result in a net illustrated rate of 5% (5% * 1.2 = 6% - 1% charge = 5% illustrated rate). This simple modification entirely satisfies LATF’s stated goals and does not require any other changes to AG 49 to accommodate it.

Disclosure
In the original AG 49, the entirety of the illustrated scale was directly related to declared non-guaranteed elements or contractual provisions. However, in the ACLI’s proposal, the illustrated scale will be impacted by non-contractual, non-disclosed elements. For example:

1. The maximum illustrated rate for the product may be limited by NIER * 1.45 (Section 4)
2. The maximum illustrated rate for a product with a Supplemental Hedge Budget will be comprised of two separately calculated factors:
   a. 4(B) – Maximum illustrated rate, the minimum of 4(A) calculation and NIER * 1.45
   b. 4(C)(i) – Supplemental Hedge Budget, which is a function of both NIER and the Hedge Budget

In either situation, it will be impossible to calculate the maximum illustrated rate based solely on declared non-guaranteed elements and contractual factors because the NIER, the Hedge Budget and the Supplemental Hedge Budget are not disclosed and are not declared non-guaranteed elements. This is immensely problematic for consumer understanding of illustrated performance and product mechanics and represents a significant step backwards from the original guideline.

In order to remedy this problem, disclosure of the newly defined terms of Net Investment Earned Rate, Hedge Budget and Supplemental Hedge Budget for each offered indexed account, including the BIA, must be required and certified. These rates should be readily available in the illustration along with a description of how these rates formulaically relate to the maximum illustrated rate with numerical examples.

The Independent Proposal, by contrast, presents a simple and straightforward approach to determining the maximum illustrated rate in Section 4(A) using the Black-Scholes formula, the most common options valuation formula in the world, and relying on externally verifiable pricing factors such as LIBOR and index implied volatility. The remaining inputs are the declared non-guaranteed elements of the product relating to indexed performance such as the cap or participation rate. As a result, the entirety of the illustrated scale under the Independent Proposal can be easily sourced using publicly available data or declared non-guaranteed elements, presenting a superior solution for furthering consumer understanding of illustrated performance and product mechanics.

Product Designs
While the ACLI proposal effectively addresses products currently in market using Buy-Up Caps and Multipliers, it leaves open the potential for other product designs created to maximize illustrated performance under the new guideline. These product designs may take many forms, but generally speaking, they may fall into the following categories:

1. Use of proprietary indices and alternative S&P 500 crediting strategies, which can have significantly higher lookback rates than the BIA, to reduce hedge costs without reducing illustrated performance and to reinvest the savings into other product features, including fixed interest bonuses or policy charge reductions. There are already products in market using proprietary indices to generate excess illustrated performance and many of these products would be unchanged under the ACLI proposal.
2. Development of product features that do not technically adhere to the definition of an Index Credit in 3(F) but allow the life insurer to generate an effective illustrated rate in excess of the BIA rate, but is still
supportable under the DCS limitation of NIER + \min(NIER, HB) \times 1.45. There are already products in the market with features that might qualify as indirectly indexed linked.

3. Development of bonuses that exploit seemingly small timing differences to generate outsized performance. For example, a charge for the Supplemental Hedge Budget might be deducted based on the end of year values but its value credited based on the beginning of year values, effectively allowing excess interest from the Supplemental Hedge Budget to appear on the illustration. There are already products in the market using timing differences to increase attractiveness of certain features.

4. Product designs that provide for actuaries to assume a higher Hedge Budget than is actually currently required to hedge the account, such as in the case of assuming a higher Hedge Budget today in order to account for the possibility of future increases in hedge costs. Using a higher Hedge Budget will allow for insurers to illustrate all the way up to the NIER \times 1.45 limit in certain cases, allowing for higher illustrated performance simply by applying a different interpretation of what constitutes a Hedge Budget. Every company already uses a different methodology for determining their hedge budgets.

Each of these product designs represents a way for a life insurer to gain an edge in illustrated performance. However, these designs can also be combined in ways that could produce illustrated performance on par with the products driven by Multipliers and Buy-Up Caps prevalent in today’s market. There is no doubt that designs like these will become the next phase of the ongoing Indexed UL illustration war. Significant revisions and clarifications need to be added to the ACLI proposal in order to prevent the illustrated benefits of designs like these. Without those revisions and clarifications, we will certainly be revisiting AG 49 again in the future.

The Independent Proposal, however, does not leave open the possibility of any of these designs generating outsized performance because all effects of enhancing the option-based returns in the product are neutralized by using only fair-market option valuation for the purpose of the illustrated scale rather.

**Direct Illustration of Defined Hedge Profits**

In the original AG 49, the maximum illustrated rate defined in 4(B) was a function solely of the hypothetical historical lookback methodology (HHLN) prescribed in 4(A) and limited by the 1.45 factor in 5(A) for the purposes of DCS testing. In both the original guideline and the ACLI proposal, the 1.45 factor is only applicable to insurers that engage in a hedge program, which is an indicator that the factor is due to an implied average, long-term return from directly engaging in a hedge program.

In the ACLI proposal, the 4(B) maximum illustrated rate is now also limited directly by the NIER \times 1.45 factor. In effect, the 1.45 factor has now become a visible limitation that directly impacts the illustrated scale as opposed to a DCS limitation that was created to accommodate the illustrated scale. Furthermore, the effective reduction of the factor to 1.0 for the Supplemental Hedge Budget is also a visible limitation.

Considering that the 1.45 factor is *solely attributable to a hedge program and therefore the assumed profits from engaging in the hedge program*, illustrated performance under the ACLI proposal will be sourced directly from illustrated returns attributable solely to the hedge program. This is fundamentally different than how asset returns are modeled in other fixed insurance products, where the declared illustrated rate is based on actual, currently paid returns in aggregate rather than assumed future returns of a specific asset class that directly and attributably impacts the illustrated rate in all years, as in the ACLI proposal.

The Independent Strategy, by contrast, uses the Black-Scholes option valuation methodology and therefore does not have any recognition of “profits” arising from hedging transactions. As a result, the 1.45 factor is repurposed in the Independent Proposal for inevitable temporary disconnects between the insurer’s NIER/hedge budget and
the fair-market valuation of the indexed parameters. The 1.45 factor, therefore, does not need to be directly disclosed or explained in the illustration.

If LATF were to consider to the proposed ACLI framework, it is essential for LATF to consider and formally engage outside experts, including independent actuaries and finance academicians and practitioners, in determining:

1. Whether or not it is appropriate to illustrate directly attributable returns from specific asset classes or strategies, including hedge strategies, in a fixed, non-registered life insurance product
2. If it is appropriate, then what factor most accurately represents the average expected profit from engaging, generally, in hedging strategies that will replicate the various parameters of indexed crediting

The second question is of critical importance because of the central role that the 1.45 factor plays in the ACLI proposal and the fact that the magnitude of the factor itself was never publicly supported with external and independent empirical and theoretical evidence.

In closing, we ask that LATF consider the Independent Proposal on equal footing with the ACLI proposal and allow an exposure period for both proposals. For your reference, a blue-lined version of AG 49 with the suggested changes in the Independent Proposal is below.

Thank you.

Bobby Samuelson, Executive Editor, The Life Product Review
Larry Rybka, President & CEO, Valmark Financial Group
Joseph M. Belth, professor emeritus at Indiana University
Chris Hause, FSA, President, Hause Actuarial Solutions
Scott Witt, FSA, President, Witt Actuarial Services
Richard M. Weber, President, The Ethical Edge, Inc
Barry Flagg, President, Veralytic
Stephen R. Leimberg, Publisher, Leimberg Information Services, Inc
Bill Boersma, President, OC Consulting Group
Tom Love, VP, Insurance Analytics, Valmark Financial Group
Mike Brohawn, President, Your Life Insurance Solution
Steven Roth, President, Wealth Management International, Inc., Licensed Life & Disability Insurance Analyst
Ben Baldwin Jr
Actuarial Guideline XLIX

THE APPLICATION OF THE LIFE ILLUSTRATIONS MODEL REGULATION TO POLICIES WITH INDEX-BASED INTEREST

Background

The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an external index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.
2. Limits the policy loan leverage shown in an illustration.
3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective as follows:

i. 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.

ii. Effective March 1, 2017, Section 4 and Section 5 shall be effective for all in-force life insurance illustrations on policies within the scope of this actuarial guideline, regardless of the date the policy was sold.

iii. Sections 6 and 7 shall be effective for all new business and in force life insurance illustrations on policies sold on or after March 1, 2016.

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

i. The policy is subject to Model #582.

ii. Interest credits are linked to an external index or indices.

3. Definitions

A. **Benchmark Index Account:** An Index Account with the following features:

i. The interest calculation is based on the percent change in S&P 500® Index value only, over a one-year period using only the beginning and ending index values. (S&P 500® Index ticker: SPX)

ii. An annual cap is used in the interest calculation.

iii. The annual floor used in the interest calculation shall be 0%.

iv. The participation rate used in the interest calculation shall be 100%.

v. Interest is credited once per year.

vi. Account charges do not exceed the account charges for any corresponding Index Accounts within the policy in any policy year. If Index Accounts with different levels of account charges are offered with the illustrated policy, more than one Benchmark Index Account may be used in determining the maximum illustrated crediting rates for the policy’s Index Accounts, subject to the requirements of 5.D.. However, for each Index Account within the policy, only one Benchmark Index Account shall apply. Any rate calculated in 4 (B) shall not apply for an Index Account if the account charges for the applicable Benchmark Index Account exceed the account charges for that Index Account in any policy year. Account charges include all charges applicable to an Index Account, whether deducted from policy values or from premiums or other amounts transferred into such Index Account.

vii. Additional amounts credited are not less than the additional amounts credited for any corresponding Index Accounts within the policy in any policy year. Any rate calculated in 4 (B) shall not apply for an Index Account if the additional amounts credited for the applicable Benchmark Index Account are less than the additional amounts credited for that Index Account in any policy year. Additional amounts include all credits that increase policy values, including but not limited to experience refunds or bonuses.

viii. There are no limitations on the portion of account value allocated to the account.

B. **Fixed Account:** An account where the credited rate is not tied to an external index or indices.

C. **Index Account:** An account where the credited rate is tied to an external index or indices.

4. Illustrated Scale

The credited rate for the illustrated scale for each Index Account shall be limited as follows:

A. **Calculate the value of the replicating option trades for the Benchmark Index Account over the preceding calendar year, based on the Black-Scholes formula using the following inputs calculated on each trading day:**

   i. Average closing implied volatility for 12-month, at-the-money S&P 500 call options
   
   ii. Average closing implied volatility for out-of-the-money 12-month S&P 500 call options with a normalized strike price equal to the currently declared cap
   
   iii. Average dividend yield on the S&P 500
   
   iv. Average 12-month LIBOR or another appropriate interest rate measure
v. If the insurer offers an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the applicable Benchmark Index Account in 4 (A).
vi. If the insurer does not offer an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of a Benchmark Index Account, and shall use that cap in 4 (A).

B. For each applicable Benchmark Index Account, the value calculated in 4 (A) shall be the maximum credited rate(s) for the illustrated scale.

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 maximum credited rate for the illustrated scale. The determination shall reflect the fundamental characteristics of the Index Account as relates to the Black-Scholes valuation formula, including realized volatility, implied volatility, volatility targets (if applicable), embedded fees (if applicable), deduction of an interest rate component (if applicable), dividend participation (if applicable) and any other factors that may apply. In no event shall the credited rate for the illustrated scale exceed the applicable rate calculated in 4 (B).

D. At the beginning of each calendar year, the insurer shall be allowed up to three (3) months to update the credited rate for each Index Account in accordance with 4 (B) and 4 (C).

5. Disciplined Current Scale
The earned interest rate for the disciplined current scale shall be limited as follows:

A. If an insurer engages in a hedging program for index-based interest, the assumed earned interest rate underlying the disciplined current scale shall 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 interest, 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 testing for self-support and lapse-support under Model #582, accounting for all benefits including illustrated bonuses.

D. If more than one Benchmark Index Account is used for an illustrated policy, each set of Index Accounts that correspond to each Benchmark Index Account must independently pass the self-support and lapse-support tests under Model #582, subject to the limitations in 5 (A), (B), and (C). All experience assumptions that do not directly relate to the Index Accounts as to expenses, mortality, investment earnings rate of the general account assets, lapses, and election of any Fixed Account shall equal the assumptions used in the testing for the entire policy.

6. Policy Loans
If the illustration includes a loan, the illustrated rate credited to the loan balance shall not exceed the illustrated loan charge by more than 100 basis points.

7. Additional Standards
The basic illustration shall also include the following:

A. A table showing the minimum, maximum and arithmetic average of a geometric average for any available Benchmark Index Account using the following methodology:
   i. Calculate the geometric average annual credited rate for each applicable Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each
subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

B. For each Index Account illustrated, a table showing actual annual historical index changes and corresponding hypothetical interest rates using current index parameters, including any applicable asset-based charges and asset-based interest bonuses or index credit multipliers paid within the first 10 years of the policy:
   ii. The 10-year period with the lowest calculated returns within the period referenced in 7(A)(i)
   iii. The 10-year period with the highest calculated returns within the period referenced in 7(A)(i)
   iv. The most recent 10-year historical period as calculated on the final trading day of the preceding calendar year

C. If an index has not been in existence for 10 years, the table shall replace the figures with the maximum available back-tested performance.
Comments for the Center for Economic Justice

To the Indexed Universal Life Subgroup of the NAIC Life Actuarial Task Force

Proposed Revisions to AG 49

April 30, 2020

The Center for Economic Justice (CEJ) has reviewed the ACLI proposal to address loopholes in AG49 that have resulted in IUL products designed to game AG49 to produce unrealistic, deceptive and misleading illustrations. While CEJ appreciates the effort by ACLI, we urge LATF to reject the ACLI proposal and adopt the Independent Party (IP) proposal.

Our concerns with the ACLI proposal – and which are addressed with the IP proposal – are:

1. The ACLI proposal is complex extension of an already complex set of AG 49 calculations that will move illustrations further away from the core purposes of an illustration – to demonstrate how a product operates and to provide realistic expectations and understanding to the consumer about the product. The ACLI proposal is a classic example of losing sight of the forest because of the trees. In contrast, the IP proposal leads to illustrations and consumer disclosures that improve the outcomes for consumers compared to the current AG49

2. The ACLI proposal is a substantial re-write of large swaths of AG49 and introduces new terms undefined in the policy contract which would result in less accountability to and comprehension by consumers and regulators. In contrast, the IP proposal has revises minimal sections of AG49 to achieve the broader consumer protection and comprehension goals.
3. The ACLI proposal makes the 145% return on the option budget the de facto guardrail for crediting rates in illustrations. This is a radical departure from the current AG49 framework and effectively sets the key guardrail on an arbitrary value that is simply not supportable for a long-term investment horizon. Stated differently, it transforms AG49 compliant illustrations and incentives for product designs into life insurance as an option play. In contrast, the IP proposal does not rely upon an arbitrary value for long-term option return, but relies upon actual market values using the Black-Scholes methodology that has been the standard for nearly 50 years.

4. The ACLI proposal narrowly addresses some loopholes while creating incentives for other product designs to game AG49. In particular, the ACLI proposal encourages the use of data-mined proprietary indices instead of discouraging such practice. In addition, the ACLI proposal introduces new discretion for illustration actuaries that lessen accountability to consumers and regulators and promote disparity of illustration results across similar or identical product design. The IP proposal does not create these additional loopholes because no additional discretion is created and incentives for gaming AG49 through, among other things, proprietary indices is eliminated.

5. It is unclear why LATF would defer the design of fixing the loopholes in AG49 and deceptive nature of current IUL illustrations to the same industry participants who have abused IUL illustrations to create the need for AG49 and then further abused IUL illustrations to create the need for fixing loopholes in AG49. This is a classic example of what economist George Akerlof described as the market for “lemons” – products sold in markets with information asymmetry. In such a market – like the market for IUL – those sellers seeking to provide realistic and comprehensible information (illustrations) to consumers lose out to sellers willing to employ unrealistic, deceptive and incomprehensible illustrations to consumers. Given the nature of a market in which competition rewards the bad players, it seems bizarre for regulators to defer the development of market problem solutions to those players benefiting from the current abuses.

   In summary, while we appreciate the efforts of the ACLI to respond to LATF’s directive, the problems with the ACLI approach are obvious and severe. In contrast, the IP proposal provides a better solution to the problems of multipliers and bonuses without creating new problems and while providing a more comprehensive solution for AG49 that will improve IUL illustrations in a manner consistent with the goals and purposes of those illustrations.

May 8, 2020

Mr. Fred Andersen
Chair, IUL Illustration (A) Subgroup
National Association of Insurance Commissioners (NAIC)

Dear Mr. Andersen,

On behalf of the American Academy of Actuaries\(^1\) Life Illustrations Work Group, I appreciate the opportunity to provide comments to the IUL Illustration (A) Subgroup regarding the illustrations of Indexed Universal Life (IUL) insurance policies under Actuarial Guideline XLIX (AG 49), and the American Council of Life Insurers (ACLI) proposal for AG 49-A exposed April 15, 2020.

We offer the following comments and note certain items that we believe warrant additional clarification as it pertains to AG 49-A as proposed by the ACLI. We have also made some observations related to Section 4 and would like to reserve comments on Section 6 and application to inforce.

Section 3: Definitions

1. 3.A.i.—We believe it is not clear as to what the total annual percentage rate is. We suggest making it clear how to do a “total annual percentage rate” calculation. Also, the definition in 3.A.i. uses “total percentage rate” and “total annual percentage rate” terminology, which leads to a question of the reason for this difference within the definition.

2. 3.B.—We suggest wording changes to last sentence to say “Charges of any kind cannot be used to increase the Annual Net Investment Earnings Rate,” which we believe would help clarify the intent.

3. 3.C.vi.—We suggest wording changes similar to 3.B. above, “Charges of any kind cannot be used to increase the annual cap.”

4. 3.C.vii.—We are unclear on how to do the “in excess of the interest calculation” that is specified in the definition and suggest examples or more wording to provide clarity.

5. 3.C.—We suggest adding clarity on what to do when Benchmark Index Account (BIA) definition is not met. Additional guidance could be to add into Item ix. the definition of Benchmark Index Account (BIA), which states that a hypothetical account needs to be developed using only Annual Net Investment Earning Rate to buy a cap.

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\(^1\) The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted 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.
6. 3.D.—We suggest modifying the definition of Fixed Account to be “An account where no amount credited is tied to an index or indices.”

7. 3.E.—We suggest modifying the definition of Index Account to be “An account where some or all of the amount credited are Indexed Credits.”

8. 3.F.—It is unclear in the definition of Indexed Credits how a company addresses the floor: for example, is this an annual floor or a cumulative floor? Also, is there a difference between interest credit vs. credit to the policy? To be consistent with previous language in the draft, using “Amounts credited to the policy” rather than “Credits to the policy…” when including the floor may be clearer.

9. 3.G.—We suggest modifying the second sentence in the definition of Hedge Budget to read “This total annualized amount should be…” to be clearer.

10. 3.I.—We suggest this should be defined as “The current annual interest rate as defined in the policy that is charged…”

11. 3.J.i.—We suggest modifying the first phrase in the definition of Policy Loan Interest Credited Rate to read, “For the portion of the account value in the Fixed Account that is backing the Loan Balance.”

12. 3.J.ii.—We also suggest modifying the first phrase in the definition of Policy Loan Interest Credited Rate to read, “For any portion of the account value in the Indexed Account backing the Loan Balance,”

13. 3.J.iii.—We note that it is difficult to understand the phrase “as defined in the policy” in Option 2 due to sentence structure.

14. 3.K.—We note that Hedge Budget is a defined term and should be capitalized consistently when relying on that definition.

Section 4

15. In general, we note that hypothetical BIAs may be developed more frequently as a result of the changes in AG49-A, which could make the maximum illustrated rate less transparent.

16. 4.D.—We are concerned that Section D is unclear with respect to the requirement to comply with Section 6(c) of Model #582. Noting an illustrated rate may exceed Section 6(c) of Model 582 does not seem to ensure the illustrated rate will be in compliance with the Model. We believe that AG49 should not contradict or override Model #582. We suggest that this section be clarified.

Section 5

17. 5.A.—The provision indicates the assumed interest rate underlying the Disciplined Current Scale (DCS) is inclusive of “All general account assets and hedge assets that support…” Hedge assets should already be included in “all general account assets,” and do not need separate mentioning. We suggest the following “…inclusive of all general account assets, both hedge and non-hedge assets, that support the policy…”

18. 5.A.ii.1.—We believe this should say “Hedge Budget minus any annual floor.”

19. 5.A.ii.—We believe the sentence starting with “The above approach…” should be a guidance or drafting note because it does not provide instruction. Also, we believe the sentence could be made clearer by adding “underlying the disciplined current scale” after “assumed earned interest rate” at the end of the sentence.
20. 5.A.—The NIER abbreviation should be expanded to “Annual Net Investment Earnings Rate.”

Section 6
21. We would like to reserve comment on Section 6 until the Life Actuarial (A) Task Force (LATF) provides guidance on whether the 1% differential between the policy loan interest rate and the policy loan credited rate should or should not limit illustrated non-indexed credits to any policy loan balance. At that time, we will also review the definition of Policy Loan Credited Interest Rate, and Option 1 or Option 2 for completeness, clarity, and harmony with the rest of the draft.

The work group will also hold any comments on the application of the requirements to inforce policies until final revisions are made to AG49.

Drafters of the background section of AG 49 expressed the concern that, prior to AG 49, there was the possibility of confusing potential buyers when “two illustrations that use the same index and crediting method often illustrated different credited rates.” We note that the guidance from LATF and the resulting draft AG 49-A will cause two illustrations that use different indexes and crediting methods to illustrate similar credited rates. This may hinder consumers’ ability to understand the features of the product being considered. Additionally, with the dependence on an assumed Annual Net Investment Earning Rate in the draft AG 49-A, illustrations that use the same index and crediting method could again illustrate different credited rates.

*****

The work group appreciates the efforts of the IUL Illustration Subgroup to review AG 49. If you have any questions or would like further dialogue on the above topics, please contact Ian Trepanier, life policy analyst, at trepanier@actuary.org.

Sincerely,

Donna Megregian, MAAA, FSA
Chairperson, Life Illustrations Work Group
American Academy of Actuaries
AG49 Comment Letter

Mr. Fred Andersen

Chair, NAIC IUL Illustration (A) Subgroup

Re: ACLI proposed draft of Actuarial Guideline 49-A

Dear Mr. Andersen:

Equitable appreciates the opportunity to submit the following proposal regarding AG49-A on prospective requirements for IUL illustrations.

We believe that the ACLI draft represents quality work. However, we submit a distinct proposal from the ACLI for two reasons. First, the ACLI letter was developed prior to the recent decline in interest rates. A 10-year US Treasury yield of 0.65% interest rates does not align with the annual 4.5% net investment earnings rate assumption underlying the submitted numerical examples.

Second, we believe that the ACLI proposal has a narrow objective to ensure products with multipliers or other enhancements do not illustrate better than products without them. This has led to a result that, in our opinion, is rather extreme: that illustrated index credits reflect solely the options budget that can be supported by each company’s assumed annual net investment earnings rate. We do not believe the original goal of the AG 49 amendment was to eliminate the use of any policy charges to support illustrated indexed credits, but rather to limit the illustration of unrealistically high levels of indexed credits. We are concerned that the resulting proposal may not align well with the actual mechanics of the contracts being illustrated, which would reduce rather than enhance consumer understanding.

Our proposal has been informed by the discussions behind the ACLI draft but diverges in its form and substance in a manner that reflects our understanding of regulator objectives.

The remainder of this letter is organized to accomplish the following objectives:

1- Articulate our understanding of the regulator governance objectives for IUL illustrations
2- Propose a governance framework to accomplish each regulator objective
3- Outline specific parameters to calibrate the proposed framework

I. Our understanding of the IUL illustration governance objectives

The stated goals of AG 49 are to guide determinations of maximum illustrated crediting rates and to identify additional side-by-side illustrations to enhance consumer understanding. We
believe this reflects a broader regulator desire to ensure policy illustrations depict a realistic projection of long-term policyholder returns upon which a current or prospective policyholder can establish realistic expectations for account performance and funding requirements.

From a technical perspective, we bifurcate the elements of the illustration that require governance into the:

a) **Size of the “option budget”:** the amount of total contract value “put at risk” by investing in equity options or other risky investments.

b) **Rate-of-return on the “option budget”:** the illustrated long-term return of the instruments in which the option budget is invested.

Figure 1: Elements of the IUL illustrated return and associated regulator concerns

With respect to the size of the option budget, we understand the foremost regulator concern to be option budgets that are substantially larger than what can be supported by investing the contract value at yields on prevailing high-quality investments. Similarly, we understand the manifestation of that concern to be poor performance of large option budget investments which can lead to more rapid reductions in contract value beyond what clients expect.

With respect to the returns on the option budget, we understand the foremost regulator concern to be illustrated returns well in excess of high grade investment yields. Such returns are considered both volatile and unlikely to be sustained over long-periods, and any performance below illustrated rates-of-return may require the policyholder to contribute substantial premiums to maintain the policy inforce.

II. Proposed illustration governance framework
In order to address these concerns, Equitable believes regulators should seek to govern both elements of the illustrated IUL return. That said, Equitable favors a more lenient “guardrail approach” that simply caps the size of the option budget. This would couple with stricter governance on the rate-of-return of the option budget. This approach reflects our beliefs that:

- A policyholder may reasonably seek a contract with greater market exposure than what can be created by an option budget supported only by prevailing yields on high quality investments – and hence who desire a larger option budget

- The policyholder expectation for contract performance should not rely on excessive long-run outperformance of the instruments in which the option budget (of whatever size) is invested

Equitable proposes a framework that governs distinctly each element of the illustrated return. We believe this approach offers the simplest governance framework for regulators and companies as well as aligns with the two aforementioned beliefs.

Table 1 below summarizes the proposed governance framework:

<table>
<thead>
<tr>
<th>Illustration element</th>
<th>Regulator concern</th>
<th>Governance approach</th>
<th>Rationale for approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of option budget</td>
<td>- Budgets well in excess of levels supported by high quality fixed income assets</td>
<td>- “Guardrail” - Cap amount of option budget as % of contract value</td>
<td>- Allows adequate illustration of products designed to offer more/less market exposure - However, establishes an “upper bound” for the annual contract exposure</td>
</tr>
<tr>
<td>Return on option budget investments</td>
<td>- Returns on budgets which are unlikely to be sustained over long-periods</td>
<td>- “Return limit” - Cap annual return on option budget investments</td>
<td>- Explicitly regulates the long-run returns on instruments in which option budgets are invested</td>
</tr>
</tbody>
</table>

III. Proposed framework parameterization

Equitable believes the parameters for the proposed governance framework should permit illustration of products designed to suit customer needs, but also recognize the limits of downside risk expected for an IUL policy (before a Variable policy may become more appropriate). Moreover, we also seek to integrate the regulator feedback received during the preceding months of discussion on AG49.

The table below contains our proposed framework parameterization and the supporting rationale for the parameterization.
<table>
<thead>
<tr>
<th>Illustration element</th>
<th>Governance approach</th>
<th>Proposed parameter</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of option budget</td>
<td>• “Guardrail”&lt;br&gt;• Cap amount of option budget as % of contract value</td>
<td>• Max(5%, Annual Net Investment Earnings Rate)</td>
<td>• Floors annual loss of value at 5% of CSV&lt;br&gt;• Allows higher option budgets if prevailing investment yields rise&lt;br&gt;• Permits carriers to offer meaningful market exposure even in low interest rate environments (e.g. point-to-point cap of 10%+)</td>
</tr>
<tr>
<td>Return on option budget investments</td>
<td>• “Return limit”&lt;br&gt;• Cap annual return on option budget investments</td>
<td>• Cap set to [110%-130%]&lt;br&gt;• Requirement to illustrate 100%</td>
<td>• Caps option budget performance at realistic levels&lt;br&gt;• Zero outperformance (fixed account return) is a plausible yet prudent downside case</td>
</tr>
</tbody>
</table>

The guardrail on the “size of the option budget” would be 5% in prevailing market conditions. We believe this cap balances the ability to create products with meaningful exposure market performance with the desire to limit contract value declines from underperformance. Moreover, to account for potential changes in prevailing investment yields we include a provision to increase the maximum option budget should prevailing investment yields rise in the future.

Governance over the illustrated rate-of-return on option budget investments contains two elements: a cap on the illustrated rate, and a requirement to project a “plausible but prudent” downside case. Equitable supports a prudent cap on the illustrated rate-of-return within the range of 110% - 130%. The 110% is a level advocated by NY DFS, which reflects the allowance of a prudent risk premium associated with converting the option budget into risky instruments (e.g., a 5% option budget is then illustrated to earn 5.5% in perpetuity). However, we also support a rate-of-return of up to 130%, which reflects the realization of a considerable risk premium (e.g., a 5% option budget is illustrated to earn 6.5% in perpetuity). We would not support levels above 130% on a sustained basis. Moreover, we believe levels close to 130% would require the parallel “downside” illustration of 85-100%. This level is consistent with no additional risk premium earned – a level consistent with a traditional fixed account. We support no lower than 85-100% to ensure the policyholder does not dismiss the downside case illustration as an unrealistic stress scenario. We believe that the existing Alternate Scale illustration could perform this role, if combined with a requirement for the prospective policy owner to acknowledge in writing that they have reviewed it and understand the downside risk.

Thank you once again for the opportunity to share our thoughts with you on this important issue. Please do not hesitate to contact me should you have any questions or concerns regarding our proposal.
Aaron Sarfatti, ASA

Chief Risk Officer
May 1, 2020

Mr. Fred Andersen  
Chair, NAIC IUL Illustration (A) Subgroup  
Mr. Reggie Mazyck  
Life Actuary, NAIC

Re: Exposure of ACLI Comments and Draft AG49

Dear Mr. Andersen and Mr. Mazyck,

Global Atlantic supports the exposed Actuarial Guideline XLIX-A (AG49A) draft, as submitted by the American Council of Life Insurers (ACLI), to bring uniformity in illustrated values and aid potential buyers. Global Atlantic continues to believe that all index product designs should illustrate consistently and within the spirit of the current guideline. The ACLI’s cover letter presents two alternatives regarding loan leverage. Global Atlantic submits this comment letter in support of loan leverage Option 1 as listed in the ACLI submission.

AG49 limits the illustrated index return to no more than 100bps above the illustrated loan rate charged. The excess of index return over the loan rate charge is the leverage. AG49A Option 1 establishes the Policy Loan Interest Credited Rate as the total percentage rate of Indexed Credits, net of any applicable Supplemental Hedge Budget. Option 1 appropriately includes index-based provisions within the Policy Loan Interest Credited Rate and therefore leverage limit.

AG49A Option 2 establishes the Policy Loan Interest Credited Rate as the total percentage rate of Indexed Credits and all illustrated bonuses, charge reductions or other enhancements that impact the portion of the account value backing the Loan Balance. By including all illustrated bonuses, charge reductions and other enhancements, non-index provisions are included within the leverage limit. The background section of AG49, and in fact its title, indicate that its focus is the illustration of index-based benefits. Option 2’s inclusion of other provisions within the leverage limit will result in a lack of uniformity and consumer confusion.

Global Atlantic has for over a decade offered our Wellness for Life® product feature. That feature guarantees cost of insurance (COI) discounts when the insured leads a healthy lifestyle. We have offered the feature on both UL and IUL products. The feature is available on our IUL products regardless of whether policy funds are in the fixed or indexed accounts. The COI discounts are a reduction in policy charges. Option 2 would require that this COI discount be translated into a basis point interest benefit on a loan balance and reduce the loan leverage limit otherwise illustrated. The inclusion of such non-index provisions as included within Option 2 inappropriately restricts the leverage limit for non-index provisions. This was not the intent of AG49 and should not be included in AG49A. Option 2 creates an uneven market. It also creates complexity, if not impossibility, for the illustration actuary to translate non-index provisions that aren’t tied to interest crediting into interest rate benefit applied within illustrations involving loans.
We recommend that AG49A utilize the ACLI’s Option 1 wording to align with the intent of AG49, create a level playing field and provide consistent guidance to the illustration actuary. We look forward to continued dialogue on this important topic.

Thomas A. Doruska  
Head of Life Product Development

David P. Wilken  
President - Life
Dear Mr. Andersen:

Broadly-speaking, we feel that the objective of life insurance product illustrations should be to help consumers make informed financial decisions by demonstrating how the product works and the potential risk and return opportunities. While we believe that sales professionals are accountable for reviewing the risk and return associated with indexed universal life insurance policies with consumers, we also see an opportunity for improvement in the way these products are illustrated. We look forward to continuing to work with the NAIC on longer-term, more holistic changes to provide better consumer clarity.

While additional changes may be important for the long term, the current ACLI AG49 draft dated April 14, 2020, represents a significant step forward for meeting the goals set forth by LATF. Within the ACLI AG49 draft, we support loan Option 2. This language will limit the illustrated loan leverage to 100 bp (1.00%), regardless of product design. Products could still offer additional bonus features and demonstrate how they work by illustrating at a lower index interest rate or when loans are not illustrated, however the loan leverage will never exceed 100 bp. We believe loan Option 2 fits with the spirit of AG49 and is in the best interest of consumers.

We would welcome the opportunity to discuss our position further with you. I can be reached at (614) 249-5947.

Regards,
Pete Rothermel
VP, CFO – Individual Life

April 30, 2020
April 30, 2020

Fred Andersen
Deputy Commissioner of Insurance
Minnesota Department of Commerce
Chair, NAIC IUL Illustration (A) Subgroup

Re: ACLI Proposed Draft of Actuarial Guideline 49-A and clarity on earned rate in the DCS and the percentage rate of Indexed Credits

Fred:

This letter is submitted on behalf of John Hancock, Lincoln Financial Group, Pacific Life Insurance Company and Sammons Financial Group. The purpose of this letter is to ask regulators to consider clarifying language on the relationship between the earned rate underlying the DCS in Section 5 and the percentage rate of Indexed Credits in Section 4 of the ACLI draft. The above noted companies have also submitted a separate letter that supports the direction of the ACLI’s proposed AG49-A including prospective-only application and Option #1 regarding the treatment of policy loans. This letter is meant to supplement that letter.

We believe that having clarity regarding the DCS and the rate of Indexed Credits is a minor but necessary change for the industry to have a common understanding of how to apply AG49-A. Different interpretations for this relationship were identified during discussions among carriers regarding potential changes to AG49.

**Interpretation 1:** The earned rate underlying the DCS in Section 5A is not restricted by the percentage rate of Indexed Credits in an illustration.

**Interpretation 2:** The earned rate underlying the DCS in Section 5A should be restricted by the percentage rate of the Indexed Credits in an illustration.

The ACLI examples represent the first interpretation. Example 1 on the tab with the hedge budget equal to the net investment earnings rate shows Indexed Credits at a level of 6.20%, while the Section 5A rate is calculated at 6.53%. In the illustration testing calculations for this example, Interpretation 1 could allow the earned rate underlying the DCS to be 0.33% more than the illustrated rate of Indexed Credits.

However, in a typical IUL design, the contract will state that the index-linked credits will equal the increase in the underlying index and if a carrier has perfectly hedged the amount of index credits, these amounts would be the same and there would be no additional return on the hedge. The hedge return would match the amount credited to the policy values.
Therefore, we believe that the correct interpretation is number 2, that the earned rate underlying the DCS should be limited by the illustrated Indexed Credits. Otherwise, the illustration tests could include margins that are not contractually realizable. For this reason, the IUL Coalition proposal dated February 21 contained the following in Section 5A:

\[ \text{The assumed return on hedges shall only be used in the disciplined current scale testing to support the illustrated Index Credits in the policy.} \]

If regulators are comfortable with Interpretation 1, that the earned rate underlying the DCS need not be restricted by the level of Indexed Credits, it would be valuable to have AG49-A directly state this or include a drafting note that clearly allows an illustration actuary to use this interpretation. This will ensure there is consistent interpretation on this issue and clarity for actuaries certifying illustrations for these products.

Thank you for consideration of our comments and we are happy to answer any questions or concerns you may have.

Respectfully Submitted,

Scott R. Harrison
High Point Strategies, LLC
scott@highpointstrategies.llc

cc: Reggie Mazyck, NAIC
April 30, 2020

Fred Andersen
Acting Deputy Commissioner of Insurance
Minnesota Department of Commerce
85 7th Place East, Suite 280
St. Paul, MN 55101

Dear Fred,

The undersigned companies present these comments in response to the NAIC IUL Illustrations (A) Subcommittee request for comments on the exposed draft of the ACLI recommended changes to AG49.

Respectfully,

Seth Detert, Securian Financial
Pete Rothermel Life CFO, Nationwide
Jacqueline Fallon, Penn Mutual Life Insurance Co
John Ponte, Prudential
Seth Harlow, Mutual of Omaha

We believe that the ACLI’s exposed revisions to AG49 accomplish the main tasks set forth by the Subcommittee:

- That products with charged for multipliers and/or buy-up accounts illustrate substantially similar to those products without the additional charges.

- That within an illustration there is consistent treatment of policy features such as multipliers, index bonuses, participating loan crediting, and non-benchmark indices across the industry.

We would like to commend the ACLI for the job they have done in facilitating the drafting sessions and allowing interested parties to comment on the proposed language. We believe that the ACLI has done an appropriate job of bringing the previous exposed recommendations to AG49 together in one draft and including new language to address the majority of the concerns raised during the drafting sessions.

We recommend the Subcommittee adopt Option #2 of the ACLI comment letter in regard to the applicability of loan leverage. We also recommend a slight modification to the ACLI’s current language. We would recommend either clarifying what was intended by “charge reductions” or to remove it. We believe that the impact of participating loans is unique to the IUL product and that in and of itself gives IUL products certain advantages over other product types in the industry. Thus, it is important that illustrations be inclusive of all types of credits in the loan leverage calculation and not over emphasize the impact participating loans can have on the illustrated values of IUL products.

We do recognize there are some ongoing concerns with the proposed ACLI revisions to AG49. We understand those concerns, however, we urge the Subcommittee to bring forward the current ACLI proposal for vote and ultimate adoption. The ACLI recommendation is a meaningful step forward in the consistent illustration of IUL products.
The Life Actuarial (A) Task Force met via conference call May 7, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman and Ben Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Range represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by William Carmello (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. Adopted its Minutes and the VM-22 (A) Subgroup’s Minutes

The Task Force met Feb. 27, Feb. 20, Feb. 13, Feb. 6, Jan. 30 and Jan. 23. During these meetings, the Task Force took the following action: 1) adopted its 2019 Fall National Meeting minutes; 2) adopted an amendment to allow the use of different credibility methods for significantly different blocks of business; 3) adopted an amendment to clarify that policies with universal life policies with secondary guarantees (ULSG) business are excluded from the life principle-based reserving (PBR) exemption, whether provided in the base policy or in a rider when the secondary guarantee is material; 4) adopted an amendment emphasizing the requirement for increasing the reserve to reflect the increase in risk for policies resulting from term conversions; and 5) adopted an amendment providing a guidance note to reference Excel examples of mortality aggregation and the reporting of assumptions.

The VM-22 (A) Subgroup met Feb. 26 to discuss potential revisions to VM-22, Statutory Maximum Valuation Interest Rates for Income Annuities.

Mr. Andersen made a motion, seconded by Mr. Weber, to adopt its minutes (Attachment Eight-A) and the VM-22 (A) Subgroup’s minutes (Attachment Eight-B). The motion passed unanimously.

2. Agreed to Forward the Recommendation to Delay Collection of Company Mortality Experience Data

Pat Allison (NAIC) updated the Task Force on the status of the collection of company mortality experience data. She said the presentation (Attachment Eight-C) provides information on the schedule for planned communications with companies that have been selected to report their mortality experience. The communications are intended to keep the companies engaged even though the reporting of data for the 2018 observation year, which would normally be collected in 2020, will be delayed until 2021.

Ms. Allison said a memorandum (Attachment Eight-D) proposing the delay was exposed by the Task Force in April. She shared that the NAIC began serving as experience reporting agent on Jan. 1. She said that at a June 25, 2019, Task Force meeting, NAIC life actuarial support staff presented information on the selection of companies required to submit mortality experience data in 2020. A total of 176 companies were selected, representing 31 states of domicile. Since then, all selected companies were notified, and the data call was planned to begin during Q2, 2020. The memorandum proposes the delay, at the request of the American Council of Life Insurers (ACLI), because of the disruption experienced by life insurance companies due to the COVID-19 pandemic and the corresponding impact on company resources required to support the collection efforts. The memorandum recommends the collection of data for the 2018 and 2019 observation years in 2021. Ms. Allison indicated that section 5.A.3 of VM-50, Experience Reporting Requirements, states that the experience reporting agent “may modify or enlarge the requirements of the Valuation Manual…… to accommodate changing needs and environments.” She suggested that the COVID-19 pandemic has resulted in “changing needs and environments.” She noted that collection of company mortality experience data remains a high priority regulatory issue for the NAIC. She said the proposed delay of data collection should not be interpreted as diminishing either the importance of the issue to the NAIC or the role of experience reporting as the foundation for PBR. Therefore, insurers are admonished to ensure the continuity and quality of experience reporting data submissions. Brian Bayerle (ACLI) said the ACLI comment letter (Attachment Eight-E) expresses support for the proposed reporting delay.

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Mr. Kupferman made a motion, seconded by Mr. Leung, to forward the memorandum proposing the delay of the 2020 experience data collection until 2021 to the Executive (EX) Committee. The motion passed unanimously.

3. **Heard an Update on the ESG**

Ms. Allison gave a presentation (Attachment Eight-F) on the status of efforts to find a new economic scenario generator (ESG) to replace the American Academy of Actuaries (Academy) ESG. During the presentation, she reviewed the timeline of the request for proposal (RFP). She noted that six bids have been received, and they will be reviewed by the Task Force chair and vice chair and three NAIC PBR staff actuaries. Bids will be ranked based on the scoring criteria provided in the RFP. Ms. Allison said the review is expected to be completed by the end of May, and it will then be taken to the Executive (EX) Committee for funding approval in June. The implementation of the ESG is targeted for no earlier than 2022.

4. **Discussed the Cessation of LIBOR**

Ms. Allison provided a presentation (Attachment Eight-G) to raise awareness of the United Kingdom’s (UK’s) Financial Conduct Authority (FCA) intention to cease publishing the London Interbank Offered Rate (LIBOR) after 2021. She said the Alternative Reference Rates Committee (ARRC), formed in 2014 by the Federal Reserve Board and the Federal Reserve Bank of New York, is moving toward using the Secured Overnight Financing Rate (SOFR) as a replacement for LIBOR. She noted that insurance companies will need to inventory their products and processes that currently use LIBOR. She pointed out the need to revise the language in section 9.F.8.d of VM-20, Requirements for Principle-Based Reserves for Life Products, to eliminate the reference to LIBOR.

5. **Exposed Amendment Proposal 2020-06**

Mr. Bayerle discussed a slide presentation (Attachment Eight-H) on the interest rate swap spreads tables in the *Valuation Manual*. He said the *Valuation Manual* prescribes interest rate swap spreads for VM-20 and VM-21, Requirements for Principle-Based Reserves for Variable Annuities. He noted that the use of the NAIC published swap spreads increased substantially with the implementation of the new VM-21 reserve requirements for variable annuities. He said, while the NAIC three-month and six-month current swap spreads should track market observable data, there have been differences as large as 19 basis points (bps). He recommended several actions to address this issue and other issues, including increased clarity of the rate calculation process and the need for a LIBOR replacement.

Ms. Allison said the NAIC’s published data is calculated as an average of data obtained from JP Morgan and Bank of America. She said market observable data is only available at selected tenors of the yield curve, requiring interpolation for the points in between the selected tenors. JP Morgan and Bank of America use proprietary processes to provide data at all points along the U.S. Department of the Treasury (Treasury Department) yield curve. Differences can be expected compared to market observable data because these firms calculate their own Treasury Department yield curve and their own LIBOR values.

Mr. Bayerle introduced amendment proposal 2020-06 (Attachment Eight-I), which provides *Valuation Manual* revisions that address the swap spreads issues by allowing companies to determine their own swap rates from market observable sources. He said the amendment proposal also requires the disclosure of the market observable sources in the PBR Actuarial Report.

Mr. Leung made a motion, seconded by Mr. Kupferman, to expose amendment proposal 2020-06 for a 21-day public comment period ending May 27. The motion passed unanimously.

6. **Exposed Revisions to Model #805**

Mr. Bayerle said the *Standard Nonforfeiture Law for Individual Deferred Annuities (#805)* currently sets the floor for the nonforfeiture interest rate at 1%. He said the current economic environment necessitates lowering the nonforfeiture interest rate to 0% to allow companies to support the nonforfeiture guarantees in their deferred annuity contracts. He submitted a proposal to revise Model #805 to lower the nonforfeiture rate.

Mr. Carmello made a motion, seconded by Mr. Weber, to expose revisions to Model #805 (Attachment Eight-J) for a 21-day public comment period ending May 27. The motion passed unanimously.
Having no further business, the Life Actuarial (A) Task Force adjourned.

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The Life Actuarial (A) Task Force met via conference call Feb. 27, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Jason Wade (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman and Benjamin Bock (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce R. Range represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Amanda Fenwick (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. Agreed to Distribution of the ESG RFP

Mr. Boerner said the need to replace the American Academy of Actuaries (Academy’s) economic scenario generator (ESG) was discussed during the July 16, 2019, joint call of the Task Force and the Life Risk-Based Capital (E) Working Group. The groups agreed, without objection, to have NAIC staff develop a request for proposal (RFP) for a replacement ESG. He said the proposed RFP (Attachment Eight-A1) was developed in response to that decision and in accordance with the direction provided to staff after discussions with a drafting group comprised of state insurance regulators and NAIC staff, Academy and industry representatives.

Mr. Boerner said the goal is to have the Task Force agree, without objection, to allow NAIC staff to release the RFP and provide a memorandum informing the Life Insurance and Annuities (A) Committee of the release of the RFP. Scott O’Neal (NAIC) said the memorandum to the Committee provides the background and history necessitating the RFP and summarizes the deliverables required of potential vendors. Mr. Ostlund questioned the Task Force’s authority to issue the RFP without approval from the Committee. Mr. Boerner said the information provided by NAIC staff is that Committee approval is not required. Reggie Mazyck (NAIC) noted that the RFP was approved by both the NAIC chief operating officer (COO) and the chief financial officer (CFO), and it has been discussed with the Committee chair. Mr. Boerner reiterated his understanding that Committee approval is not required, but he is willing to defer to Mr. Ostlund’s request to obtain Committee approval before recommending distribution of the RFP.

Mr. O’Neal said the RFP provides the minimum requirements expected from an ESG. He discussed the scope of the RFP, including the expected deliverables; ongoing production, maintenance and support requirements, including costs; and other contractual terms of the RFP.

Mr. Ostlund made a motion, seconded by Ms. Eom, to direct the Task Force chair to request permission from the Committee to issue an RFP for an ESG, noting that the ESG RFP memorandum (Attachment Eight-A2) serves as the request, while also providing information on the initiative. The motion passed unanimously.*


Mr. Boerner said amendment proposal 2019-62 was exposed for 14 days after moving the proposed language from a guidance note into the text as an additional paragraph of VM-20, Requirements for Principle-Based Reserves for Life Products, Section 9.C.4. Mr. Leung made a motion, seconded by Mr. Chupp, to adopt amendment proposal 2019-62 (Attachment Eight-A3). The motion passed unanimously.

* Subsequent to the conference call, it was determined that the RFP does not require Life Insurance and Annuities (A) Committee approval prior to distribution. The Task Force used an email vote to agree, without objection, for NAIC staff to release the RFP and to provide the memorandum, as referenced in the minutes above, to the Committee.
3. **Exposed Amendment Proposal 2020-03**

Ms. Hemphill said there were differing interpretations of the treatment of the premium mode when calculating the VM-20 net premium reserve (NPR). She said amendment proposal 2020-03 clarifies that the actual modal premium may be reflected directly in the NPR calculation. Ms. Fenwick suggested modifying the language proposed for VM-20 Section 3.B.3.a to read, “Directly within the calculations” instead of, “Through direct adjustments to the calculations” because the latter may be subject to judgment. Ms. Hemphill said that change works for the direct calculation, but it may not work if using an unearned premium approach. She recommended adding a note to the exposure asking commenters if the revised language proposed for Section 3.B.3.a might necessitate an additional requirement to cover calculations utilizing an unearned premium approach.

Ms. Fenwick made a motion, seconded by Mr. Ostlund, to expose amendment proposal 2020-03 (Attachment Eight-A4), including the change to Section 3.B.3.a and the proposed cover note, for a 21-day public comment period. The motion passed unanimously.

4. **Exposed Amendment Proposal 2019-58**


Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Feb. 20, 2020. The following Task Force members participated:

Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce. R. Ramege represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Bill Carmello (NY); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. **Adopted Revisions to AG 48**

Mr. Boerner said changes were made to *Actuarial Guideline XLVIII—Actuarial Opinion and Memorandum Requirements for the Reinsurance of Policies Required to be Valued Under Sections 6 and 7 of the NAIC Valuation of Life Insurance Policies Model Regulation* (AG 48) to reflect changes to the *Term and Universal Life Insurance Reserve Financing Model Regulation* (#787) (Attachment Eight-A6) adopted by the Reinsurance (E) Task Force.

Mr. Leung made a motion, seconded by Mr. Chou, to adopt the revisions to AG 48 (Attachment Eight-A7). The motion passed unanimously.

2. **Agreed to Forward Revisions to the VM-20 Reserve Supplement**

Jennifer Frasier (NAIC) discussed proposed changes to the VM-20 Reserve Supplement Blank. She said the major changes to the blank include: 1) changing the reporting units from thousands to dollars to be consistent with other annual statement reporting formats; 2) splitting Part 1 into Part 1A and Part 1B to provide the necessary space to accommodate the reporting unit change to dollars; and 3) removing Part 2, which was required only for the three-year transition period.

Ms. Frasier discussed proposed changes to the VM-20 Reserve Supplement instructions to reflect the revisions to the blanks. She noted receiving feedback that the sentence in the instructions for reporting the net premium reserve (NPR) in Part 1B, which reads “Report the floored amount,” may be unnecessary or confusing. She said the sentence was added after reviewing reserve supplements in which companies did not report the floor. She agreed to remove the sentence to provide clarity.

Ms. Frasier discussed the changes to the Variable Annuities (VA) Supplement blanks and instructions that reflect the VA Framework changes effective in the 2020 *Valuation Manual*. She said some feedback she received suggested adding a reference to *Actuarial Guideline XLIII—CARYM for Variable Annuities* (AG 43). She agreed to add that reference by changing the scope-related sentence to read: “Complete this supplement for contracts and certificates subject to VM-21 or AG 43.” She said other feedback suggested breaking proposed line for “Reserves Ceded” into two lines showing the amount of reinsurance ceded to captives and the amount of reinsurance ceded to other non-captive companies. There was no objection to the change.

The Task Force agreed, without objection, to forward the VM-20 Supplement Blank and its instructions (Attachment Eight-A8), and the VA Supplement Blank and its instructions (Attachment Eight-A9), including the agreed upon edits, to the Blanks (E) Working Group.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Feb. 13, 2020. The following Task Force members participated:
Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce. R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Linda A. Lacewell represented by Bill Carmello (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scot A. White represented by Craig Chupp (VA).

1. **Re-Exposed Amendment Proposal 2019-62**

Mr. Boerner presented two options for editing amendment proposal 2019-62. The first option provides leading language to add context to the wording of the guidance note. The second option moves the guidance note language into the text to create a new VM-20, Requirements for Principle-Based Reserves for Life Products (Section 9.C.4.d.) Mr. Chupp said that while either option is acceptable, his preference is for option 2. Mr. Carmello concurred with a preference for option 2. Mr. Boerner suggested exposing the amendment proposal with option 2 and an explanatory note calling attention to the language in Section 9.C.4 and noting that the proposed language was extracted from the previously exposed guidance note.

Mr. Chupp made a motion, seconded by Mr. Ostlund, to expose amendment proposal 2019-62 (Attachment Eight-A10) for a 14-day public comment period ending Feb. 26. The motion passed unanimously.

2. **Exposed Amendment Proposal 2020-02**

Pat Allison (NAIC) said amendment proposal 2020-02 clarifies VM-20 Section 2.H and adds a new Section 2.I to address the skipping of steps mandated in VM-20 on the grounds of materiality or reliance on the allowance of approximations provided in Section 2.G. She said the proposal includes a guidance note that provides examples of steps that cannot be omitted.

Mr. Chupp made a motion, seconded by Mr. Leung, to expose amendment proposal 2020-02 (Attachment Eight-A11) for a 21-day public comment period ending Mar. 4. The motion passed unanimously.

3. **Rejected Amendment Proposal 2017-51**

Mr. Boerner said the amendment proposes allowing final expense policies to be treated similar to pre-need policies, which are exempt from principles-based reserving (PBR). He said pre-need policies have a clearly defined boundary that distinguishes them from other policy types. He said the broad categorization of final expense policies could allow various product designs to fit under the final expense umbrella. Allowing final expense policies an exemption similar to that granted to pre-need policies might allow a PBR exemption to some policies inappropriately. He recommended the rejection of the amendment proposal.

Mr. Carmello indicated that if there were a limit on the face amount of the policies characterized as final expense dollar, he might be more amenable to the proposal, but he could not support it in its current form.

Mr. Carmello made a motion, seconded by Mr. Weber, to reject amendment proposal 2017-51 (Attachment Eight-A12). The motion passed, with opposition from Mr. Ostlund and Mr. Yanacheak.

4. **Discussed Amendment Proposal 2019-33**

Brian Bayerle (American Council of Life Insurers—ACLI) said the ACLI comments (See Attachment B of the Feb. 6, 2020, Task Force minutes) on amendment proposal 2019-33 note concerns with the scope of the definition of “individual risk selection process” and practical implementation concerns. He said in addition to the written comments, the ACLI is also concerned that companies that issue very small group business may be doing more underwriting than is normally done for
group contract. He suggested the consideration of a minimum group size if there is a scope revision. He said consideration should also be given to the appropriateness of the mortality and lapse rates compared to the rates used in the net premium reserve (NPR). He recommended that the Task Force defer consideration until the concerns are addressed. Len Mangini (Academy Life Reserve Work Group—LRWG) said the proposal has a three-year phase-in, which would allow time for edits to the amendment proposal after Task Force adoption. Mr. Chupp said the use of the term “ordinary life” might be problematic because the Valuation Manual uses the term to apply only to individual policies. He said his comment (Attachment Eight-A13) questions whether the proposed language is appropriately placed within the Valuation Manual. The comment recommends a new section to accommodate the language. Mr. Robinson said his comment (Attachment Eight-A14) suggests that the proposal will require changes to VM-51, Experience Reporting Formats. Mr. Mangini said the LRWG will consider the comments.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Feb. 6, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlorinda Myers represented by William Leung (MO); Bruce R. Range represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. **Adopted its 2019 Fall National Meeting Minutes**

Mr. Ostlund made a motion, seconded by Mr. Yanacheak, to adopt the Task Force’s Dec. 5–6, 2019, minutes (*see NAIC Proceedings – Fall 2019, Life Actuarial (A) Task Force*). The motion passed unanimously.

2. **Discussed Amendment Proposal 2019-62**

Leonard Mangini (American Academy of Actuaries [Academy] Life Reserves Work Group—LRWG) said Amendment Proposal Form (APF) 2019-62 (Attachment Eight-A15) clarifies the treatment of additional mortality risk arising from the conversion of term life policies. He said the proposed language also requires a description of the conversion privileges and how the mortality was factored into the aggregation and segmentation. Brian Bayerle (American Council of Life Insurers—ACLI) said the ACLI comment letter (Attachment Eight-A16) supports the proposed amendment. Mr. Chupp said his comment letter (Attachment Eight-A17) suggests that, given the use of the word “must” in the proposed language, the language should not be relegated to a guidance note, but it should be a part of the text. He suggested that the proposed guidance note should become Section 9.C.4.d of VM-20, Requirements for Principle-Based Reserves for Life Products. Mr. Mangini said the LRWG proposed using a guidance note because they did not want to give the impression that they were changing existing requirements. Mr. Boerner said the guidance note could be revised to point to the specific section of VM-20 containing the existing requirements. He recommended deferring action on the proposal until it could be determined whether the guidance note can appropriately point to Section 9.C.4 without requiring revisions to the language in that section.

3. **Adopted Amendment Proposal 2019-61**

Ms. Hemphill said amendment proposal 2019-61 clarifies that all universal life policies with a material secondary guarantee are ineligible for the Life Principle-Based Reserves (PBR) Exemption, regardless of whether the secondary guarantee is a part of the base policy or a rider. Mr. Bayerle said the ACLI comment letter expressed support for the proposal. Mr. Leung made a motion, seconded by Mr. Weber, to adopt amendment proposal 2019-61 (Attachment Eight-A18). The motion passed unanimously.

4. **Adopted Amendment Proposal 2019-60**

Ms. Hemphill said that while the *Valuation Manual* requires a company to use one credibility method for all of its business, the lack of industry factors for 2008 Valuation Basic Table (VBT) is a practical constraint that does not allow application of the Bühlmann method to business issued on the 2008 VBT. She said amendment proposal 2019-60 allows a company using the Bühlmann method for its fully underwritten business to use the Limited Fluctuation method for its business issued on the 2008 VBT. She said it also clarifies that claims using different credibility methods cannot be aggregated for the purpose of determining credibility and the sufficient data period. Mr. Chou made a motion, seconded by Mr. Leung, to adopt amendment proposal 2019-60 (Attachment Eight-A19). The motion passed unanimously.

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5. **Accepted Amendment Proposal 2020-01 as an Editorial Change**

Ms. Hemphill explained that amendment proposal 2020-01 provides two guidance notes that point to documents on the NAIC website to assist users of VM-31, PBR Actuarial Report Requirements for Business Subject to a Principle-Based Valuation, by providing examples. She said the first guidance note points to mortality aggregation examples provided in the Mortality Aggregation excel spreadsheet, and it includes a Mortality Aggregation Presentation from the 2019 Summer National Meeting. The second guidance note points to the Sample Assumptions Summary for PBR Actuarial Report, which may be a useful reference document for individuals developing reporting in accordance with VM-31 Section 3.D.1.a. Mr. Boerner noted that the guidance notes only provide the location of examples and do not change any requirements. Reggie Mazyck (NAIC) said that because the guidance notes are only informational and no requirements are changed, he recommends that the Task Force accept the amendment proposal as an editorial change. Mr. Boerner asked if any Task Force members objected to accepting amendment proposal 2020-01 (Attachment Eight-A20) as an editorial change to the *Valuation Manual*. The proposal was accepted without objection from Task Force members.

Having no further business, the Life Actuarial (A) Task Force adjourned.

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Life Actuarial (A) Task Force
Conference Call
January 30, 2020

The Life Actuarial (A) Task Force met via conference call Jan. 30, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair, represented by Peter Weber (OH); Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou and Jim Jakielo (CT); Doug Ommen represented by Mike Yanacheak (IA); Robert H. Muriel represented by Bruce Sartain (IL); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce. R. Ramge represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Russell Toal represented by Mark Hendrick (NM); Linda A. Lacewell represented by Amanda Fenwick (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. Discussed the Oliver Wyman YRT Reinsurance Reserve Credit Long-Term Solution

Chris Whitney (Oliver Wyman) reviewed the yearly renewable term (YRT) reinsurance reserve credit slide deck (see Attachment B of the Jan. 23 minutes) discussed on the Jan. 23 Task Force call. He acknowledged a request from a Task Force member for an example of how the YRT rates used in the analysis were derived. He said the example will be provided to NAIC staff for distribution to Task Force members. Mr. Whitney reiterated that key takeaways from the previous discussion were:

1) Principles-based projections of reinsurance ceded can allow for scenarios reflecting reinsurer reactions that can produce reserve credits in excess of \( \frac{1}{2} c \).
2) The relative impact of each solution changes over time as the level of margin and remaining projection years change.

Mr. Whitman said because initial field test results are at a point-in-time, they will provide limited information. He said the longer-term projections, expected to be available at the end of February, will be more informative.

Dylan Strother (Oliver Wyman) said the long-term solution supplement document (see Attachment C of the Jan. 23 minutes), providing the assuming reinsurer’s perspective, was developed in response to mirror reserving questions posed at the 2019 Fall National Meeting. He said mirror reserving is not expected under the principle-based reserving (PBR) approach, primarily due to the differing assumptions of the direct writer and the reinsurer. He noted that the mix of business and the mechanics of the PBR calculation also contribute to the unlikelihood of having mirror reserves.

Katie van Ryn (Oliver Wyman) discussed examples where differing assumptions lead to the implausibility of mirror reserving. She noted that for the graphs on slide 6, the credibility assumptions for the ceding and assuming companies differ, with the lower ceding company credibility resulting in a higher PBR mortality margin. A similar comparison is provided on slide 7, except the YRT premium rates are modeled as the current scale plus 105% of the increase in PBR mortality. The adjustment to the YRT premiums reduces the difference between the reserve credit and the assumed reserves.

Mr. Robinson noted that the graphs show instances where the ceded reserve credit is greater than the assumed reserve. He asked Task Force members if it is permissible for the reserve credit to exceed the assumed reserve. He requested that Mr. Whitney provide revised graphs comparing the reserve credit, the assumed reserve, the assumed net premium reserve (NPR) and \( \frac{1}{2} c \). Mr. Boerner said that unless the Valuation Manual prohibits it, the calculated PBR reserve credit may be different from the calculated PBR assumed reserve. Mr. Jakielo said that when reviewing the reserve amounts resulting from the testing of three amendment proposals, the Task Force should consider not only the comparison of the reserve credit and assumed reserve, but also it should consider the differences in the assumed reserve under each amendment proposal.

Having no further business, the Life Actuarial (A) Task Force adjourned.
The Life Actuarial (A) Task Force met via conference call Jan. 23, 2020. The following Task Force members participated: Kent Sullivan, Chair, represented by Mike Boerner and Rachel Hemphill (TX); Jillian Froment, Vice Chair; Jim L. Ridling represented by Steve Ostlund (AL); Ricardo Lara represented by Perry Kupferman (CA); Michael Conway represented by Eric Unger (CO); Andrew N. Mais represented by Wanchin Chou (CT); Robert H. Muriel represented by Bruce Sartain (IL); Stephen W. Robertson represented by Karl Knable (IN); Vicki Schmidt represented by Nicole Boyd (KS); Steve Kelley represented by Fred Andersen and John Robinson (MN); Chlora Lindley-Myers represented by William Leung (MO); Bruce. R. Range represented by Rhonda Ahrens (NE); Marlene Caride represented by Seong-min Eom (NJ); Linda A. Lacewell represented by Bill Carmello and Amanda Fenwick (NY); Glen Mulready represented by Andrew Schallhorn (OK); Todd E. Kiser represented by Tomasz Serbinowski (UT); and Scott A. White represented by Craig Chupp (VA).

1. **Heard a Status Update on the YRT Field Test**

   Jason Kehrberg (Academy YRT Field Test Project Oversight Group—Oversight Group) provided a status update on the yearly renewable term (YRT) field test (Attachment Eight-A21). The update included discussion of the timeline for the project workstreams and the dates of the project milestones. Mr. Boerner noted that the date for the Plenary adoption milestone should be corrected to Tuesday, Aug. 11.

2. **Discussed the Oliver Wyman YRT Reinsurance Reserve Credit Long-Term Solution**

   Chris Whitney (Oliver Wyman) reviewed the YRT reinsurance reserve credit slide deck (Attachment Eight-A22) presented at the 2019 Fall National Meeting. He said questions from Task Force members and interested state insurance regulators indicated that a more targeted review of the presentation would be beneficial.

   Dylan Strother (Oliver Wyman) said the Executive Summary of the slide deck seemed to be clearly understood by participants at the Fall National Meeting. He said one of the questions points to the need for a high-level overview of how the nested modeling and projection modeling depicted on slide #7 work. He clarified that best estimate assumptions are outer loop assumptions, and prudent estimates assumptions are inner loop assumptions. Mr. Strother reminded the Task Force that as the projection moves forward to the next valuation date, the sufficient data period will increase, and inner loop assumptions must be updated for historical mortality improvement up to that point. He said such things are reflected in the Oliver Wyman modeling.

   Mr. Strother said the major goals of the Background section were to set up a baseline analysis comprised of two straightforward base cases for modeling YRT premiums. The base cases will be used to analyze the various amendment proposals being presented. He said the first base case increases the YRT premium to equal the principle-based reserving (PBR) mortality. The second base case sets the current scale equal to the PBR mortality. One goal of the section is to compare the base cases, one conservative and the other aggressive, to the approach using ½ c. Another goal was to look at how the different approaches compare over a projection horizon.

   As Mr. Strother discussed the graph of the mortality and PBR margins, he noted that the lack of future mortality improvement is an implicit margin that is a large part of the total margin in the early years, and reduces to a less significant portion of the total margin in later years. Pat Allison (NAIC) said the graph shows that, assuming that no adjustments are made to the YRT reinsurance premium scale, reserve credits are driven by the difference between the PBR mortality and the best estimate mortality. Mr. Strother noted that the impact of reinsurance on the reserve is largely dependent upon whether the reinsurer chooses to adjust the premium to reflect changes in PBR mortality.

   Katie van Ryn (Oliver Wyman) said the purpose of the Initial Insights and Analysis section is to frame the discussion within the context of amendment proposal 2019-40, amendment proposal 2019-41 and amendment proposal 2019-42, which are being evaluated as part of the field test. She discussed the results of each amendment proposal on the reserve credits under various assumptions of mortality improvement and reinsurance reactions.

Having no further business, the Life Actuarial (A) Task Force adjourned.
March 4, 2020

Re: RFP #2053 – Economic Scenario Generator (ESG)

The National Association of Insurance Commissioners (NAIC) is soliciting proposals from vendors to provide, maintain, and support an ESG producing real-world interest and equity scenarios to be prescribed for use in calculations of life and annuity Statutory reserves according to the Valuation Manual (e.g. VM-20, VM-21) and capital under the NAIC RBC requirements (e.g. C3 Phase 1, C3 Phase 2).

The chosen vendor will deliver an ESG and supporting tools that meet requirements set by regulators, along with robust documentation and training materials. On an ongoing basis, the vendor will produce the scenarios, support end users of the ESG, research changes considered by NAIC’s Life Actuarial (A) Task Force and Life Risk-Based Capital (A) Working Group and implement those that are adopted.

To receive consideration, proposals should be sent electronically to Proposals@naic.org by 5 PM Central on Friday, May 1, 2020. In addition to ensuring your proposal addresses all items within the scope of work, the proposal should clearly state the price plus any service charges or fees that could be incurred in the delivery of this service.

Request for Proposal Schedule

- **Wednesday, 03/04/2020**  Release of RFP
- **Friday, 03/13/2020**  Notification of intent to bid to Proposals@naic.org
- **Wednesday, 03/25/2020**  Submission of questions to Proposals@naic.org
- **Wednesday, 04/08/2020**  Responses to questions provided via email and the NAIC website
- **Wednesday, 04/15/2020**  Discussions held with vendors
- **Friday, 05/01/2020**  Proposal due to NAIC to Proposals@naic.org
- **May 2020**  Vendor Selection and Award of RFP

Please submit questions regarding any aspect of this project to Jim Woody via Proposals@naic.org by close of business on Wednesday, March 25, 2020. All questions will be consolidated and answers provided to all potential vendors and posted to the NAIC website by close of business on Wednesday, April 8, 2020.

Selection Criteria

A committee of NAIC staff will review the proposals and award the project.

The selection will be based on the following criteria:

- Completeness of the proposal
- Qualifications of staff dedicated to developing and supporting the ESG
- Professional reputation of the firm
- Ability to deliver the items listed in Section II
• Capability to perform updates to economic scenario generator (ESG) features, parameters, and tools in a timely manner
• Flexibility in being able to work through the NAIC process to customize ESG features, parameters, and tools as needed
• Robustness of ESG and calibration documentation
• Quality of training materials and other means for providing support
• Price, including one-time and ongoing costs

NAIC reserves the right to reject any or all proposals, request new proposals, or request additional information. NAIC reserves the right to further negotiate with any or all bidders. The NAIC also reserves the right to cancel this RFP at the direction of its membership. Thank you for your consideration.

Sincerely,

James W. Woody  
NAIC Chief Financial Officer

CC: Andy Beal, NAIC Chief Operating Officer/CLO  
Donna Powers, NAIC Strategic Business Initiatives Assistant Director
I. BACKGROUND AND PURPOSE

The American Academy of Actuaries (Academy) has developed an Economic Scenario Generator (ESG), which may be found on the Society of Actuaries website at https://www.soa.org/tables-calcs-tools/research-scenario/ and https://www.naic.org/cmte_e_lrbc.htm. The ESG is currently used by the life insurance industry in calculations of life and annuity reserves and capital.

Beginning in early 2017, the Academy notified the Life Actuarial (A) Task Force (LATF) that it did not have the resources to maintain the ESGs, except in their current form until a suitable replacement can be found. Since the NAIC does not currently have the resources or expertise to develop and maintain an ESG, a third-party ESG vendor is needed for these functions. In an open meeting held on 7/16/19, LATF and the Life RBC Working Group (LRBC WG) requested that NAIC staff consider issuing a Request for Proposals (RFP).

The purpose of this RFP is to solicit proposals from vendors to provide, maintain, and support an ESG producing real-world interest and equity scenarios to be prescribed for use in calculations of life and annuity Statutory reserves according to the Valuation Manual (e.g., VM-20, VM-21) and capital under the NAIC RBC requirements (e.g., C3 Phase 1, C3 Phase 2). The chosen vendor will deliver an ESG and supporting tools that meet requirements set by regulators, along with robust documentation and training materials. On an ongoing basis, the vendor will produce the scenarios, support end users of the ESG, research changes considered by LATF and LRBC WG and implement those that are adopted.

II. DELIVERABLES

This project requires an initial set of deliverables, as well as ongoing maintenance and support. As noted in Section III below, bids should include a detailed breakdown of costs for each of the initial and ongoing items listed in A-P below.

Initial Deliverables (Items with One-Time Costs)

A. An existing ESG capable of producing, at a minimum, real-world interest rate, equity, and bond fund return scenarios for use in calculations of life and annuity Statutory reserves according to the Valuation Manual (e.g., VM-20, VM-21) and capital under the NAIC RBC requirements (e.g., C3 Phase 1, C3 Phase 2). If the ESG can produce additional variables beyond the minimum requirements (e.g. inflation rates, risk-neutral scenarios, corporate bond spreads, implied volatility scenarios,
credit defaults, credit rating migrations, etc.), indicate if there is an additional cost for these features.

B. Meetings with NAIC staff and regulators as needed to discuss the vendor’s existing economic scenario generator (ESG) features and parameters, as well as potential modifications.

C. Customization of ESG features and parameters to reflect any modifications adopted by regulators.

D. A scenario reduction tool to allow companies to choose a specific number of representative scenarios (e.g. 100, 500, 1000, etc.) from a universe of 10,000 scenarios. Scenario subsets provided by the tool as of a valuation date must contain the same scenarios for all users of the tool.

E. Calibration criteria used to determine whether stratified scenario subsets are sufficiently dispersed relative to the universe of 10,000 scenarios.

F. A tool to generate scenarios for the VM-20 Stochastic Exclusion Ratio Test.

G. A tool to generate the VM-21 Company-Specific Market Path method scenarios.

H. A tool to generate statistics on the output of the ESG.

I. Full documentation on the ESG specifications, calibration, and tools.

J. Robust training materials for regulators and industry end-users.

Ongoing Production, Maintenance and Support (Items with Ongoing Costs)

K. Run the ESG as of each month-end and produce the required scenarios on the first business day of the following month. The process to generate the scenarios must be completed in time to post scenarios on business day one of each month. Statistics on the output of the ESG are expected to be delivered simultaneously with the scenarios. Note that NAIC staff intends to provide the scenarios on the NAIC website to ensure they are available to all companies regardless of whether they have licensed the vendor’s software.

L. Develop parameter updates at a frequency determined by the regulators. The process to update the ESG will include the following steps:
   1. Perform research on potential changes as requested by regulators.
   2. Document and present potential changes to regulators for exposure and adoption. Attend regulator meetings as needed to respond to questions/comments received during the exposure period. Materials to be provided for consideration of changes should include a) discussion on how changes were vetted for complex interactions between parameters, b) attribution analysis showing the impact of each change, and c) documentation on the above in sufficient detail to allow independent review.
   3. Modify the ESG to reflect final adopted updates in a timely manner and provide evidence to NAIC staff that they were made appropriately.
4. Update documentation on the ESG specifications.
M. Update training materials for regulators and industry end users.
N. Provide full support to end users of the economic scenario generator (ESG) scenarios who have licensed the ESG software.
O. Provide help desk support to end users of the ESG scenarios who have not licensed the ESG software.
P. Provide scenarios to support field testing of the new ESG under regulatory reserving and capital frameworks.

III. CONTENT OF PROPOSAL

For final evaluation of proposals, it is important that vendors provide the information requested below:

A. A breakdown of the number of staff dedicated to ESG development by division (e.g., parameterization, software development, documentation, training, etc.) along with the resumes of key staff members.
B. The number of life insurance and annuity companies that are currently licensed to use the ESG for real-world liability valuation. Additionally, please provide at least three named clients to act as references along with their contact information.
C. Description of the ESG indicating the type of model (e.g., stochastic log volatility, independent log normal, regime switching lognormal with number and frequency of regimes, stochastic volatility jump diffusion, other etc.). The vendor should also include a discussion of the benefits and limitations of their recommended ESG model.
D. Description of the ESG parameters and how they are determined (e.g. fitting model to actual historical data using maximum likelihood estimation, etc.).
   1. If model fitting is done using historical data, detail the source of the data and length of the period used and whether any adjustments are made to the source data.
   2. Describe how any parameters, including mean reversion parameters, are derived and whether they are static or dynamic.
   3. Provide information on the level of customization available to regulators in specifying ESG features and parameters. For example, regulators may want to specify a certain type of mean reversion formula, the historical period used to determine parameterization, or other items.
E. Description of the types of returns that can be simulated by the ESG (e.g. Treasury rates, bond returns of different maturities and credit qualities, equities of different indices, different types of international equities, currencies, inflation rates, etc.).
F. Details on how credit spreads and defaults are implicitly reflected or explicitly simulated in bond fund returns.
G. Description of the methodology for completing the full Treasury yield curve from the simulated interest rates.

H. The level of dependency between different financial variables in the economic scenario generator (ESG). If the ESG is integrated, describe how the correlations are developed and whether they are dynamic (e.g. either exhibiting both positive and negative correlations if appropriate, etc.).

I. Statistics on the range of scenarios produced (e.g. the percentage of scenarios with low interest rates coupled with low equity returns, low interest rates coupled with high equity returns, etc.).

J. An analysis showing how the range of scenarios produced compares to the current Academy VM-20/VM-21 and C3 Phase 1 ESGs, including testing over different historical and/or potential future economic conditions.

K. The frequency of review and consideration of updates for each ESG parameter. Please describe the rationale for the frequency of each parameter update and specify which parameters require judgement to calibrate and those that do not (e.g. parameters updated formulaically).

L. Information on how end-users of the ESG will be able to generate scenarios on-the-fly through a mechanism such as software licensing, an application programming interface (API), and/or available full documentation of the technical workings the ESG.

M. A copy of existing ESG documentation.

N. A copy of existing ESG training materials, and a description of any other support provided.

O. A detailed breakdown of costs for each of the one-time and ongoing deliverables listed in Section II. Bids should also include both first year and ongoing ESG software licensing costs for NAIC staff, regulators, and companies that may wish to license the software for up to five years.

IV. SELECTION PROCESS

The NAIC will be responsible for the selection of the vendor that will be awarded this project to be funded. Input from regulators and other subject-matter experts may also be sought, but the NAIC will make the final decision.

The following factors will be considered in making the vendor selection:

- Completeness of the proposal
- Qualifications of staff dedicated to developing and supporting the ESG
- Professional reputation of the firm
- Ability to deliver the items listed in Section II
- Capability to perform updates to ESG features, parameters, and tools in a timely manner

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• Flexibility in being able to work through the NAIC process to customize ESG features, parameters, and tools as needed
• Robustness of economic scenario generator (ESG) and calibration documentation
• Quality of training materials and other means for providing support
• Price, including one-time and ongoing costs

V. CONFLICTS OF INTEREST

The NAIC recognizes that, given the broad scope of this project, any vendor with the experience reasonably necessary to produce the ESG may have certain conflicts of interest based upon past associations with industry participants. These conflicts of interest will not automatically disqualify the vendor, but the vendor must have verifiable policies and procedures in place designed in compliance with established industry standards to address conflicts of interest issues that may arise.

VI. CONDITIONS

The NAIC reserves the right to not award a contract for this ESG. Reasons for not awarding a contract could include, but are not limited to, a lack of acceptable proposals or a finding that insufficient funds are available to proceed. The NAIC also reserves the right to redirect the project as is deemed advisable. The NAIC also reserves the right to cancel this RFP at the direction of its membership.

VII. QUESTIONS

Any questions regarding the Scope of Work should be directed to: Proposals@naic.org. Questions related to any other matter should be directed to Jim Woody, e-mail: JWoody@naic.org
NAIC CONFLICT OF INTEREST FORM
FOR RETENTION OF CONSULTANTS SUBJECT TO BID

NAIC RFP 2053

Any *Entity* that desires to contract with the NAIC must complete this form, including vendors, consultants and purchasers of goods or services. All potential conflicts must be disclosed and approved before the contract execution.

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<th>CERTIFICATION</th>
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<td>(“Entity”) did not provide gifts, favors, membership points or any other benefits to any employee or representative of the NAIC to affect the bidding and selection process for this contract.</td>
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<td>• <em>Entity</em> will not provide or receive gifts, favors, membership points or any other benefits to any employee or representative of the NAIC in connection with the negotiation or implementation of this contract.</td>
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<td>• <em>Entity</em> owners, principals and employees negotiating or implementing this contract on behalf of <em>Entity</em> are not former NAIC employees unless disclosed below.</td>
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<td>• <em>Entity</em> owners, principals and employees negotiating or implementing this contract on behalf of <em>Entity</em> are not immediate family members of NAIC employees unless disclosed below.</td>
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The signatory below is a duly authorized representative of *Entity* and hereby certifies to the authenticity and veracity of this disclosure.

| Authorized Entity Signature | Date |
|=============================|------|

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<th>CLOSURE OF POTENTIAL CONFLICT</th>
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<th>DISCLOSURE</th>
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<td>NAIC Executive Approval</td>
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STANDARD TERMS AND CONDITIONS

for

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

PURCHASE ORDERS FOR SERVICES

As used herein, “Seller” means the person, firm, or corporation to whom this Purchase Order is issued; “Buyer” means the National Association of Insurance Commissioners, a nonprofit Delaware corporation.

1. **Acceptance of Terms and Conditions.** Seller agrees to perform the services (“Services”) described in any purchase order (“Purchase Order”) in accordance with these Terms and Conditions. Upon acceptance of a Purchase Order or upon commencement of Services, Seller shall be bound by these Terms and Conditions and all provisions set forth on the face of any applicable Purchase Order, whether Seller signs or otherwise acknowledges these Terms & Conditions or the Purchase Order, unless Seller objects to such Terms and Conditions in writing prior to commencing Services.

2. **Revocable.** This writing does not constitute a firm offer and may be revoked at any time prior to acceptance.

3. **No modification.** No agreement or other understanding in any way altering the terms, prices or conditions of the applicable Purchase Order or these Terms and Conditions shall be binding upon Buyer unless made in writing and signed by Buyer’s duly authorized representative.

4. **Termination.** Buyer may immediately terminate the Purchase Order upon written notice to Seller if Seller fails to perform or otherwise breaches these Terms and Conditions, files a petition in bankruptcy, becomes insolvent, or dissolves. Buyer may terminate the Purchase Order for any other reason upon thirty (30) days’ written notice to Seller. Upon receipt of notice of termination, Seller shall cease to provide Goods and/or perform Services pursuant to the Purchase Order. In the event of termination, Buyer shall be liable to Seller only for those Services satisfactorily performed before the date of termination, less appropriate offsets. Buyer shall not be subject to any charges or other fees as a result of such cancellation. Seller may terminate this Agreement upon written notice to Buyer if Buyer fails to pay Seller within sixty (60) days after Seller notified Buyer in writing that payment is past due and that it intends to terminate the Purchase Order.

5. **Warranty of Services.** Seller represents and warrants that all Services shall be completed in a professional, workmanlike manner, with the degree of skill and care that is required by current, good, and sound professional procedures. Further, Seller warrants that the Services shall be completed in accordance with applicable specifications. Seller represents and warrants that the performance of Services hereunder will not conflict with, or be prohibited in any way by any other agreement or statutory restriction to which Seller is bound.

6. **Seller’s Indemnification.** Seller shall indemnify, hold harmless, and at Buyer’s request, defend Buyer, its officers, directors, agents and employees, against all claims,
liabilities, damages, losses and expenses, including attorneys’ fees and costs of suit arising out of or in any way connected with any claim by a third party against Buyer alleging that the Services infringe a patent, copyright, trademark, trade secret or other proprietary right of third party. Seller shall not settle any such suit or claim without Buyer’s prior written consent. Seller shall also indemnify and hold harmless Buyer from any injury to person or property arising out of or caused by Seller’s performance of the Purchase Order. Seller agrees to pay or reimburse all costs that may be incurred by Buyer in enforcing this indemnity provision, including attorneys’ fees.

7. **Compliance with Laws.** Seller shall comply with all laws and regulations of federal, state and local governments, including without limitation, laws and regulations dealing with fair labor standards, civil rights, and public contracts. Seller further warrants that all Services performed pursuant to the Purchase Order have been produced or performed in compliance with such laws and regulations and Seller agrees to indemnify Buyer for any liability resulting from such noncompliance by the Seller.

8. **Price.** The price to be paid by the Buyer shall be the price contained in Seller’s bid and/or the price stated on the face of the Purchase Order whichever is less. Seller represents the price contained in Seller’s bid is no higher than Seller’s current prices on orders by others for similar products or services under similar or like conditions and methods of purchase.

9. **Invoices.** Seller shall submit invoices on each Purchase Order after each delivery. Buyer shall not be charged sales tax and shall furnish a tax exemption certificate upon request. Discounts will be taken from the date of acceptance of services or date the invoice is received by Buyer whichever is later. Buyer shall retain the right of offset.

10. **Force Majeure.** Buyer shall not be liable for any failure to perform including failure to: (1) accept performance of Services, or (2) take delivery of the Goods as provided if caused by circumstances beyond Buyer’s control which make such performance commercially impractical including, but not limited to, acts of God, fire, flood, acts of war, government action, accident, labor difficulties or shortage, or the inability to obtain materials, equipment or transportation. Seller shall not be liable for any failure to perform including failure to: (1) provide Services, or (2) deliver Goods as provided if caused by circumstances beyond Seller’s control which make such performance commercially impractical including, but not limited to, acts of God, fire, flood, acts of war, government action, accident, labor difficulties or shortage, or the inability to obtain materials, equipment or transportation.

11. **Insurance.** Seller shall be solely responsible for maintaining adequate auto, workers’ compensation, unemployment compensation, disability, liability and other applicable insurance, as is required by law or as is the common practice in Seller’s trade or business, whichever affords greater coverage. Seller shall carry Comprehensive General Liability coverage and Umbrella or Excess Liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 in the aggregate for property damage and bodily injury. Upon request, Seller shall provide Buyer with certificates of
insurance evidencing adequate coverage naming the Buyer as additional insured.

12. **Limitation of Liability.** IN NO EVENT SHALL BUYER BE LIABLE TO SELLER OR SELLER’S AGENTS, OR ANY THIRD PARTY FOR ANY INCIDENTAL, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR IN CONNECTION WITH, THIS AGREEMENT, WHETHER OR NOT BUYER WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

13. **Confidentiality.** In the event Seller gains written or oral confidential information of or from the Buyer, Seller agrees not to reveal to anyone or make use of such knowledge and information at any time for any purposes except as necessary in the course and scope of provision of Goods or performance of Services specified hereunder. Upon termination of the Purchase Order, Seller agrees to deliver to Buyer all such confidential information or work product belonging to Buyer.

14. **Assignability.** Seller shall not assign or subcontract this Purchase Order or any of its rights or obligations hereunder without the prior written consent of Buyer. Any assignment or transfer without such written consent shall be null and void.

15. **Publicity.** Seller shall not use Buyer’s name in any form or attribution in connection with any solicitation, publicity, advertising, endorsement or other promotion.

16. **Survivability.** Any obligations and duties, which by their nature extend beyond the expiration or termination of this Purchase Order shall survive the expiration or termination hereof.

17. **Choice of Law.** This Purchase Order shall be construed in accordance with, and disputes shall be governed by, the laws of the State of Missouri.

18. **Severability.** If any provision of this Purchase Order shall be deemed to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

© 2020 National Association of Insurance Commissioners
Do you agree to the NAIC Terms & Conditions?

YES ________________________________ ______________

Signature                                                            Date

NO   ________________________________ ______________

Signature                                                            Date

Please Sign one.

If NO,

Please provide your Terms and Conditions of Sale if you do not agree to the NAIC Terms & Conditions attached.
To: Director Jillian Froment  
Chair, Life Insurance and Annuities (A) Committee  

From: Mike Boerner  
Chair, Life Actuarial (A) Task Force (LATF)  

Date: 3/4/20  

Re: Recommendation to NAIC Staff to Issue a Request for Proposal for an Economic Scenario Generator

The Life Actuarial (A) Task Force has made a recommendation to NAIC staff to issue a Request for Proposal (RFP) for an Economic Scenario Generator (ESG). The purpose of this memorandum is to provide information on this initiative. Funding is not being requested at this time since the cost is unknown.

Background and History

The American Academy of Actuaries (Academy) has developed ESGs over a decade ago which are currently used by the life insurance industry in calculations of life and annuity reserves and capital. An ESG is a complex mathematical model that simulates economic variables such as interest rate and equity returns under a large number of scenarios.

Beginning in early 2017, the Academy notified the Life Actuarial (A) Task Force (LATF) that it did not have the resources to maintain the ESGs, except in their current form until a suitable replacement can be found. Since the NAIC does not currently have the resources or expertise to develop and maintain an ESG, a third-party ESG vendor is needed for these functions. In an open meeting held on 7/16/19, LATF and the Life RBC Working Group (LRBC WG) requested that NAIC staff begin the RFP process. A group consisting of regulators, NAIC staff, Academy and ACLI representatives, and other industry subject matter experts was then formed to draft the Scope of Work section of the RFP.

RFP Deliverables

The RFP will solicit proposals from vendors to provide, maintain, and support an ESG producing real-world interest and equity scenarios to be prescribed for use in calculations of life and annuity Statutory reserves according to the Valuation Manual (e.g. VM-20, VM-21) and capital under the NAIC RBC requirements (e.g. C3 Phase 1, C3 Phase 2).

The chosen vendor will deliver an ESG and supporting tools that meet requirements set by regulators, along with robust documentation and training materials. On an ongoing basis, the vendor will produce the scenarios, support end users of the ESG, research changes considered by LATF and the LRBC WG and implement those that are adopted. Initially, the vendor will need to meet with LATF and the LRBC WG to discuss existing ESG features and parameters, as well as potential modifications desired by regulators. The vendor will customize the ESG with these modifications, and then support a field test (by providing scenarios) to determine potential industry reserve and capital impacts.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

1. Identify yourself, your affiliation and a very brief description (title) of the issue.
   American Academy of Actuaries’ Life Reserves Work Group.

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:
   January 1, 2020, edition of the Valuation Manual with NAIC adoptions through August 6, 2019
   Locations with proposed changes : VM-20 and VM-31

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 attached.

4. State the reason for the proposed amendment? (You may do this through an attachment.)
   The Valuation Manual already requires that if there is additional risk arising from the conversion of term
   life insurance, whether group or individual, it must be reserved for. The purpose of this APF is to
   emphasize this requirement and to provide guidance on what must be included in the Life PBR Actuarial
   Report with respect to conversions.

* 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:

<table>
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<tr>
<th>Dates:</th>
<th>Received</th>
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Notes: VM APF 2019-62, rev.02-10-20; 14-day re-exposure through 2/26/20

W:/National Meetings/2010.../TF/LHA.
c. The mortality rates from the resulting anticipated experience assumptions must be no lower than the mortality rates that are actually expected to emerge and that the company can justify.

d. In satisfying Section 9.C.4.c, the company must ensure that any excess mortality is appropriately reflected in the anticipated experience mortality rates. This includes but is not limited to excess mortality associated with policies issued via conversion from term policies or from group life contracts.

Exposure of the proposed section 9.C.4.c includes the following changes which have been reviewed and accepted by the Task Force:

VM-31 Section 3.B.3 [Executive Summary – policy overview]

3. Policies – A summary of the base policies within each VM-20 reserving category. Include information necessary to fully describe the company’s distribution of business. For direct business, use PBR Actuarial Report Template A located on the NAIC website (https://www.naic.org/pbr_data.htm?tab_3) to provide descriptions of each base policy product type and underwriting process (including a description of the process, the time period in which it was used, and the level of any additional margin), with a breakdown of policy count and face amount by base policy product type and underwriting process. Also include the target market, primary distribution system, and key product features that affect risk, including conversion privileges.


d. Assumption and Margin Development – The following information for each risk factor: description of the methods used to determine anticipated experience assumptions and margins, including the sources of experience (e.g., company experience, industry experience, or other data); how changes in such experience are monitored; any adjustments made to increase mortality margins above the prescribed margin (such as to reflect increased uncertainty with due to newer underwriting approaches; and any other considerations, such as conversion features, helpful in or necessary to understanding the rationale behind the development of assumptions and margins, even if such considerations are not explicitly mentioned in the Valuation Manual.

VM-31 Section 3.D.3.x (new section) [Life Report – Mortality]

(We suggest placing after Adjustments for Mortality Improvement and before Mortality for Impaired Lives)
j. Mortality for Converted Policies – Description of the treatment of mortality for
Mortality policies issued under group or term conversion privileges including:
   i. A description of the method(s) by which any excess conversion mortality
      was taken into account in the development of company experience
      mortality rates (e.g., through the use of separate mortality segments for
      policies issued upon conversion, through aggregation of claim experience,
      or through use of other methods), the rationale for the method(s) used,
      and any changes in the method(s) from those used in previous years.
   ii. The source(s) of the data used in the method(s) employed.

jk. Mortality for Impaired Lives or Policyholder Behavior – Disclosure of:
   i. the percentage of business that is on impaired lives;
   ii. whether impaired lives were included or excluded from the mortality study
       upon which company experience mortality was based; and
   iii. whether any adjustments to mortality assumptions for impaired lives or
       policyholder behavior were found to be necessary and, if so, the rationale
       for the adjustments that were used.

Item (iii) above is a required disclosure for post-level term mortality assumptions even if
the company uses a 100% shock lapse assumption, since it pertains to the analysis
demonstrating whether there are post-level term profits.

k. Post-Level Term Testing – For products with a level term period:
   i. Summary results of the seriatim comparison of the present value of
      postlevel term cash inflows and outflows for the DR as required by VM-20
   ii. If this comparison showed that there were post-level term profits, describe
       how anti-selection was handled in the post-level term period, including the
       prudent estimate premium, mortality and lapse assumptions used.
   iii. If the comparison showed that there were post-level term losses, confirm
       that the prudent estimate premium, mortality and lapse assumptions for
       the post-level period were addressed in Section 3.D.1.a and were used in
       the reserve calculation.
l. Term Conversions – Description of how the company reflects the impact of any term conversions privilege contained in the policy when setting reserves.

m. Lapse Rates for Converted Policies – Description of and rationale for lapse rates used for policies issued under any group or term conversion privilege.


a. Agreements – For those reinsurance agreements included in the calculation of the minimum reserve as per VM-20 Section 8.A, a description of each reinsurance agreement, including, but not limited to, the type of agreement, the counterparty, the risks reinsured, any provisions related to converted policies, the portion of business reinsured, identification of both affiliated and non-affiliated, as well as captive and non-captive, or similar relationships, and whether the agreement complies with the requirements of the credit for reinsurance under the terms of the AP&P Manual.
EXPOSURE OF APF 2020-03

Commenters are asked to consider whether having the revised language proposed for VM-20 Section 3.B.3.a might necessitate an additional requirement (possibly 3.B.3.c) to cover calculations utilizing an unearned premium reserve approach.

Please send comments to RMazyck@naic.org by close of business on March 19, 2020.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Identification:
Rachel Hemphill, Texas Department of Insurance

Title of the Issue:
Clarify NPR calculation requirements.

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

VM-20 Section 3.B.1 – 3.B.3, and VM-20 Section 3.B.6.d.i
January 1, 2020 NAIC Valuation Manual

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 attached.

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

Clarify any confusion on whether more direct calculations of the NPR to reflect non-annual premium modes, etc., are allowed. The current guidance note in Section 3.B.3 states that these may be reflected either “directly or through adjusting accounting entries”. However, due to some confusion on this point, I suggest emphasizing that more direct calculation methods are not prohibited.

Since the guidance note at the end of Section 3.B.3 contains requirements and not just guidance, it should be taken out of a guidance note. This requires moving the four terms to Section 3.B.1 and updating two cross references in VM-20 Section 3.B.6.d.i.

* 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.

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Attachment Eight-A4
Life Actuarial (A) Task Force
3/19-20/20

W:\National Meetings\2010...\TFLHA;
VM-20 Section 3.B.1 – 3.B.3

B. NPR Calculation

1. For the purposes of Section 3, the following terms apply:
   a. For purposes of this section, a policy with “multiple secondary guarantees” is one that: a) simultaneously has more than one shadow account; b) simultaneously has more than one cumulative premium type of guarantee; or c) simultaneously has at least one of each. A single shadow account with a variety of possible end dates to the secondary guarantee, depending on the policyholder’s choice of funding level, constitutes a single—not multiple—secondary guarantee.

   Guidance Note: Policy designs that are created simply to disguise guarantees or exploit a perceived loophole must be treated in a manner similar to more typical product designs with similar guarantees. If a policy contains multiple secondary guarantees, such that a subset of those secondary guarantees in combination represent an implicit guarantee that would produce a higher NPR if that implicit guarantee were treated as an explicit secondary guarantee of the policy, then the policy should be treated as if that implicit guarantee were an explicit guarantee. For example, if there were a policy with a “sequential secondary guarantee” where only one secondary guarantee applied at any given point in time but with a series of secondary guarantees strung together with one period ending when the next one began, the combined terms of the secondary guarantees would be regarded as a single secondary guarantee.

For the purposes of Section 3, the following terms apply:
   a. The “fully funded secondary guarantee” at any time is: * 
      i. For a shadow account secondary guarantee, the minimum shadow account fund value necessary to fully fund the secondary guarantee for the policy at that time. For any policy for which the secondary guarantee contractually cannot be fully funded in advance, this shall be the present value of the contractually permitted premium stream that would fully fund the guarantee at the earliest possible date (using the valuation interest rate and mortality standard specified in Section 3.C).
      ii. For a cumulative premium secondary guarantee, the amount of cumulative premiums required to have been paid to that time that would result in no future premium requirements to fully fund the guarantee, accumulated with any interest or accumulation factors per the contract provisions for the secondary guarantee. For any policy for which the secondary guarantee contractually cannot be fully funded in advance, this shall be the present value of the contractually permitted premium stream that would fully fund the guarantee at the earliest possible date (using the valuation interest rate and mortality standard specified in Section 3.C).

   b. The “actual secondary guarantee” at any time is: * 
      i. For a shadow account secondary guarantee, the actual shadow account fund value at that time.
      ii. For a cumulative premium secondary guarantee, the actual premiums paid to that point in time, accumulated with any interest or accumulation factors per the contract provisions for the secondary guarantee.

   c. The “level secondary guarantee” at any time is: * 
      i. For a shadow account secondary guarantee, the shadow account fund value that would have existed at that time assuming payment of the level gross premium determined according to Section 3.B.6.c.i.
b.ii. For a cumulative premium secondary guarantee, the amount of cumulative level gross premiums determined according to Section 3.B.6.c.i, accumulated with any interest or accumulation factors per the contract provisions for the secondary guarantee.

2. The definition of the NPR in Section 3.B.4, Section 3.B.5 and Section 3.B.6 is intended to result in the calculation of a terminal NPR under the assumption of an annual mode gross premium. In Section 3.B.4, Section 3.B.5 and Section 3.B.6, the gross premium referenced should be the gross premium for the policy assuming an annual premium mode.

3. The reported reserve as of any valuation date should reflect the actual premium mode for the policy and the actual valuation date relative to the policy issue date, either directly or through adjusting accounting entries.
   b. Through adjusting accounting entries (such as due and deferred premium asset).

Guidance Note: The definition of the NPR in Section 3.B.4, Section 3.B.5 and Section 3.B.6 is intended to result in a terminal NPR under the assumption of an annual mode gross premium. The gross premium referenced should be the gross premium for the policy assuming an annual premium mode. The reported reserve as of any valuation date should reflect the actual premium mode for the policy and the actual valuation date relative to the policy issue date, either directly or through adjusting accounting entries.

VM-20 Section 3.B.6.d.i

As of the valuation date for the policy being valued, determine the actual secondary guarantee, denoted ASGx+t, as outlined in Section 3.B.6.c and the fully funded secondary guarantee, denoted FFSGx+t, as outlined in Section 3.B.1.d.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force Amendment Proposal Form

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

Staff of Office of Principle-Based Reserving, California Department of Insurance – Address the topic of prescribed templates.

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:

Valuation Manual (January 1, 2019 edition), Introduction, Section I, A.1

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 attached Appendix.

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

See attached Appendix.

NAIC Staff Comments:

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Appendix

ISSUE:
Now that the concept of a prescribed template has been introduced into VM-31, it should be made clear what the rules are surrounding making changes to such templates.

SECTIONS:
Introduction, Section I, Process for Updating the *Valuation Manual*, Section A.1

REDLINE:

1. Substantive Items

Substantive changes to the *Valuation Manual* are proposed amendments to the *Valuation Manual* that would change or alter the meaning, application or interpretation of a provision. All changes to the *Valuation Manual* – or to templates prescribed for use by the *Valuation Manual* – will be considered substantive, unless specifically identified as either a nonsubstantive item or an update to a table by simple majority vote of the Life Actuarial (A) Task Force/Health Actuarial (B) Task Force. Any item placed on the Active List as substantive will be exposed by the Life Actuarial (A) Task Force/Health Actuarial (B) Task Force for a public comment period commensurate with the length of the draft and the complexities of the issue, but for no less than 21 days. The comment period will be deemed to have begun when the draft has been placed on the appropriate public NAIC web page. The Life Actuarial (A) Task Force/Health Actuarial (B) Task Force will hold at least one open meeting (in person or via conference call) to consider comments before holding a final vote on any substantive items. Subsequent exposures of substantive items will be for a minimum of seven days. Meeting notices for Life Actuarial (A) Task Force/Health Actuarial (B) Task Force meetings will indicate if a vote is anticipated on any substantive items. Adoption of all changes at the Life Actuarial (A) Task Force/Health Actuarial (B) Task Force will be by simple majority.

REASONING:

Help assure readers that there no back doors through which to create new requirements.
TERM AND UNIVERSAL LIFE INSURANCE RESERVE FINANCING MODEL REGULATION

TABLE OF CONTENTS:

Section 1. Authority
Section 2. Purpose and Intent
Section 3. Applicability
Section 4. Exemptions from this Regulation
Section 5. Definitions
Section 6. The Actuarial Method
Section 7. Requirements Applicable to Covered Policies to Obtain Credit for Reinsurance; Opportunity for Remediation
Section 8. Severability
Section 9. Prohibition against Avoidance
Section 10. Effective Date

Section 1. Authority

This regulation is adopted and promulgated by [title of supervisory authority] pursuant to [insert provision of state law equivalent to section 5B of the Credit for Reinsurance Model Law] of the [name of state] Insurance Code.

Section 2. Purpose and Intent

The purpose and intent of this regulation is to establish uniform, national standards governing reserve financing arrangements pertaining to life insurance policies containing guaranteed nonlevel gross premiums, guaranteed nonlevel benefits and universal life insurance policies with secondary guarantees; and to ensure that, with respect to each such financing arrangement, funds consisting of Primary Security and Other Security, as defined in Section 5, are held by or on behalf of ceding insurers in the forms and amounts required herein. In general, reinsurance ceded for reserve financing purposes has one or more of the following characteristics: some or all of the assets used to secure the reinsurance treaty or to capitalize the reinsurer (1) are issued by the ceding insurer or its affiliates; or (2) are not unconditionally available to satisfy the general account obligations of the ceding insurer; or (3) create a reimbursement, indemnification or other similar obligation on the part of the ceding insurer or any of its affiliates (other than a payment obligation under a derivative contract acquired in the normal course and used to support and hedge liabilities pertaining to the actual risks in the policies ceded pursuant to the reinsurance treaty).

Section 3. Applicability

This regulation shall apply to reinsurance treaties that cede liabilities pertaining to Covered Policies, as that term is defined in Section 5B, issued by any life insurance company domiciled in this state. This regulation and [insert provision of state law equivalent to the Credit for Reinsurance Model Regulation] shall both apply to such reinsurance treaties; provided, that in the event of a direct conflict between the provisions of this regulation and [insert provision of state law equivalent to the Credit for Reinsurance Model Regulation], the provisions of this regulation shall apply, but only to the extent of the conflict.

Section 4. Exemptions from this Regulation

This regulation does not apply to the situations described in Subsections A through F.

A. Reinsurance of:

   (1) Policies that satisfy the criteria for exemption set forth in [insert provision of state law equivalent to Section 6F of the Valuation of Life Insurance Policies Model Regulation] or [insert provision of state law equivalent to Section 6G of the Valuation of Life Insurance Policies Model Regulation]; and which are issued before the later of:

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(a) The effective date of this regulation, and
(b) The date on which the ceding insurer begins to apply the provisions of VM-20 to
establish the ceded policies' statutory reserves, but in no event later than Jan 1, 2020;

(2) Portions of policies that satisfy the criteria for exemption set forth in [insert provision of state law
equivalent to Section 6E of the Valuation of Life Insurance Policies Model Regulation] and which
are issued before the later of:
(a) The effective date of this regulation, and
(b) The date on which the ceding insurer begins to apply the provisions of VM-20 to
establish the ceded policies' statutory reserves, but in no event later than Jan. 1, 2020;

(3) Any universal life policy that meets all of the following requirements:
(a) Secondary guarantee period, if any, is five (5) years or less;
(b) Specified premium for the secondary guarantee period is not less than the net level
reserve premium for the secondary guarantee period based on the Commissioners
Standard Ordinary (CSO) valuation tables and valuation interest rate applicable to the
issue year of the policy; and
(c) The initial surrender charge is not less than one hundred percent (100%) of the first year
annualized specified premium for the secondary guarantee period;

(4) Credit life insurance;

(5) Any variable life insurance policy that provides for life insurance, the amount or duration of which
varies according to the investment experience of any separate account or accounts; nor

(6) Any group life insurance certificate unless the certificate provides for a stated or implied schedule
of maximum gross premiums required in order to continue coverage in force for a period in excess
of one year.

B. Reinsurance ceded to an assuming insurer that meets the applicable requirements of [insert provision of
state law equivalent to Section 2D of the Credit for Reinsurance Model Law]; or

C. Reinsurance ceded to an assuming insurer that meets the applicable requirements of [insert provisions of
state law equivalent to Sections 2A, 2B or 2C, of the Credit for Reinsurance Model Law], and that, in
addition:

(1) Prepares statutory financial statements in compliance with the NAIC Accounting Practices and
Procedures Manual, without any departures from NAIC statutory accounting practices and
procedures pertaining to the admissibility or valuation of assets or liabilities that increase the
assuming insurer’s reported surplus and are material enough that they need to be disclosed in the
financial statement of the assuming insurer pursuant to Statement of Statutory Accounting
Principles No. 1 (“SSAP 1”); and

(2) Is not in a Company Action Level Event, Regulatory Action Level Event, Authorized Control
Level Event, or Mandatory Control Level Event as those terms are defined in [insert provision of
state law equivalent to the Risk-Based Capital (RBC) for Insurers Model Act] when its RBC is
calculated in accordance with the life risk-based capital report including overview and instructions
for companies, as the same may be amended by the NAIC from time to time, without deviation; or

D. Reinsurance ceded to an assuming insurer that meets the applicable requirements of [insert provisions of
state law equivalent to Sections 2A, 2B or 2C, of the Credit for Reinsurance Model Law], and that, in
addition:

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(1) Is not an affiliate, as that term is defined in [insert provision of state law equivalent to Section 1A of the Insurance Holding Company System Regulatory Model Act], of:
   (a) The insurer ceding the business to the assuming insurer; or
   (b) Any insurer that directly or indirectly ceded the business to that ceding insurer;

(2) Prepares statutory financial statements in compliance with the NAIC Accounting Practices and Procedures Manual;

(3) Is both:
   (a) Licensed or accredited in at least 10 states (including its state of domicile), and
   (b) Not licensed in any state as a captive, special purpose vehicle, special purpose financial captive, special purpose life reinsurance company, limited purpose subsidiary, or any other similar licensing regime; and

(4) Is not, or would not be, below 500% of the Authorized Control Level RBC as that term is defined in [insert provision of state law equivalent to the Risk-Based Capital (RBC) for Insurers Model Act] when its Risk-Based Capital (RBC) is calculated in accordance with the life risk-based capital report including overview and instructions for companies, as the same may be amended by the NAIC from time to time, without deviation, and without recognition of any departures from NAIC statutory accounting practices and procedures pertaining to the admission or valuation of assets or liabilities that increase the assuming insurer’s reported surplus; or

Reinsurance ceded to an assuming insurer that meets the requirements of either [insert provision of state law equivalent to Section 5B(4)(a) of the Credit for Reinsurance Model Law, pertaining to certain certified reinsurers] or [insert provision of state law equivalent to Section 5B(4)(b) of the Credit for Reinsurance Model Law, pertaining to reinsurers meeting certain threshold size and licensing requirements]; or

Reinsurance not otherwise exempt under Subsections A through E if the commissioner, after consulting with the NAIC Financial Analysis Working Group (FAWG) or other group of regulators designated by the NAIC, as applicable, determines under all the facts and circumstances that all of the following apply:

(1) The risks are clearly outside of the intent and purpose of this regulation (as described in Section 2 above);

(2) The risks are included within the scope of this regulation only as a technicality; and

(3) The application of this regulation to those risks is not necessary to provide appropriate protection to policyholders. The commissioner shall publicly disclose any decision made pursuant to this Section 4F to exempt a reinsurance treaty from this regulation, as well as the general basis therefor (including a summary description of the treaty).

Drafting Note: The exemption set forth in Section 4F was added to address the possibility of unforeseen or unique transactions. This exemption exists because the NAIC recognizes that foreseeing every conceivable type of reinsurance transaction is impossible; that in rare instances unanticipated transactions might get caught up in this regulation purely as a technicality; and that regulatory relief in those instances may be appropriate. The example that was given at the time this exemption was developed pertained to bulk reinsurance treaties where the ceding insurer was exiting the type of business ceded. The exemption should not be used with respect to so-called “normal course” reinsurance transactions; rather, such transactions should either fit within one of the standard exemptions set forth in Sections 4A, B, C, D, or E or meet the substantive requirements of this regulation.
Section 5. Definitions

A. “Actuarial Method” means the methodology used to determine the Required Level of Primary Security, as described in Section 6.

B. “Covered Policies” means the following: Subject to the exemptions described in Section 4, Covered Policies are those policies, other than Grandfathered Policies, of the following policy types:

1. Life insurance policies with guaranteed nonlevel gross premiums and/or guaranteed nonlevel benefits, except for flexible premium universal life insurance policies; or,

2. Flexible premium universal life insurance policies with provisions resulting in the ability of a policyholder to keep a policy in force over a secondary guarantee period.

C. “Grandfathered Policies” means policies of the types described in Subsections B1 and B2 above that were:

1. Issued prior to January 1, 2015; and

2. Ceded, as of December 31, 2014, as part of a reinsurance treaty that would not have met one of the exemptions set forth in Section 4 had that section then been in effect.

D. “Non-Covered Policies” means any policy that does not meet the definition of Covered Policies, including Grandfathered Policies.

E. “Required Level of Primary Security” means the dollar amount determined by applying the Actuarial Method to the risks ceded with respect to Covered Policies, but not more than the total reserve ceded.

F. “Primary Security” means the following forms of security:

1. Cash meeting the requirements of [insert provision of state law equivalent to Section 3A of the Credit for Reinsurance Model Law];

2. Securities listed by the Securities Valuation Office meeting the requirements of [insert provision of state law equivalent to Section 3B of the Credit for Reinsurance Model Law], but excluding any synthetic letter of credit, contingent note, credit-linked note or other similar security that operates in a manner similar to a letter of credit, and excluding any securities issued by the ceding insurer or any of its affiliates; and

3. For security held in connection with funds-withheld and modified coinsurance reinsurance treaties:

   a. Commercial loans in good standing of CM3 quality and higher;

   b. Policy Loans; and

   c. Derivatives acquired in the normal course and used to support and hedge liabilities pertaining to the actual risks in the policies ceded pursuant to the reinsurance treaty.

G. “Other Security” means any security acceptable to the commissioner other than security meeting the definition of Primary Security.

H. “Valuation Manual” means the valuation manual adopted by the NAIC as described in Section 11B(1) of the Standard Valuation Law, with all amendments adopted by the NAIC that are effective for the financial statement date on which credit for reinsurance is claimed.

Drafting Note: Section 5H presumes that each state is permitted under its state laws to directly reference the Valuation Manual adopted by the NAIC. If a state is required by its state laws to reference a state law or regulation, it should modify Section 5H as appropriate to do so.

Drafting Note: Sections 5H and I presume that each state is permitted under its state laws to “adopt” the Valuation Manual in a manner similar to how the Accounting Practices and Procedures Manual becomes effective in many states, without a separate regulatory process such as adoption by regulation. It is desirable that all states adopt the Valuation Manual requirements and that such adoption be achieved without a separate state regulatory process in order to achieve uniformity of reserve standards in all states. However, to the extent that a state may need to adopt the valuation manual through a formal state regulatory process, these sections may be amended to reflect any state’s need to adopt the Valuation Manual through regulation or otherwise.

Section 6. The Actuarial Method

A. Actuarial Method

The Actuarial Method to establish the Required Level of Primary Security for each reinsurance treaty subject to this regulation shall be VM-20, applied on a treaty-by-treaty basis, including all relevant definitions, from the Valuation Manual as then in effect, applied as follows:

1. For Covered Policies described in Section 5B(1) above, the Actuarial Method is the greater of the Deterministic Reserve or the Net Premium Reserve (NPR) regardless of whether the criteria for exemption testing can be met. However, if the Covered Policies do not meet the requirements of the Stochastic Reserve exclusion test in the Valuation Manual, then the Actuarial Method is the greatest of the Deterministic Reserve, the Stochastic Reserve, or the NPR. In addition, if such Covered Policies are reinsured in a reinsurance treaty that also contains Covered Policies described in Section 5B(2) above, the ceding insurer may elect to instead use paragraph 2 below as the Actuarial Method for the entire reinsurance agreement. Whether Paragraph 1 or 2 are used, the Actuarial Method must comply with any requirements or restrictions that the Valuation Manual imposes when aggregating these policy types for purposes of principle-based reserve calculations.

2. For Covered Policies described in Section 5B(2) above, the Actuarial Method is the greatest of the Deterministic Reserve, the Stochastic Reserve, or the NPR regardless of whether the criteria for exemption testing can be met.

3. Except as provided in Paragraph (4) below, the Actuarial Method is to be applied on a gross basis to all risks with respect to the Covered Policies as originally issued or assumed by the ceding insurer.

4. If the reinsurance treaty cedes less than one hundred percent (100%) of the risk with respect to the Covered Policies then the Required Level of Primary Security may be reduced as follows:

   a. If a reinsurance treaty cedes only a quota share of some or all of the risks pertaining to the Covered Policies, the Required Level of Primary Security, as well as any adjustment under Subparagraph (c) below, may be reduced to a pro rata portion in accordance with the percentage of the risk ceded;

   b. If the reinsurance treaty in a non-exempt arrangement cedes only the risks pertaining to a secondary guarantee, the Required Level of Primary Security may be reduced by an amount determined by applying the Actuarial Method on a gross basis to all risks, other than risks related to the secondary guarantee, pertaining to the Covered Policies, except that for Covered Policies for which the ceding insurer did not elect to apply the provisions of VM-20 to establish statutory reserves, the Required Level of Primary Security may be reduced by the statutory reserve retained by the ceding insurer on those Covered Policies, where the retained reserve of those Covered Policies should be reflective of any reduction pursuant to the cession of mortality risk on a yearly renewable term basis in an exempt arrangement;

   c. If a portion of the Covered Policy risk is ceded to another reinsurer on a yearly renewable term basis in an exempt arrangement, the Required Level of Primary Security may be
reduced by the amount resulting by applying the Actuarial Method including the reinsurance section of VM-20 to the portion of the Covered Policy risks ceded in the exempt arrangement, except that for Covered Policies issued prior to Jan 1, 2017, this adjustment is not to exceed \(\frac{c_x}{2 \times \text{number of reinsurance premiums per year}}\) where \(c_x\) is calculated using the same mortality table used in calculating the Net Premium Reserve; and

(d) For any other treaty ceding a portion of risk to a different reinsurer, including but not limited to stop loss, excess of loss and other non-proportional reinsurance treaties, there will be no reduction in the Required Level of Primary Security.

It is possible for any combination of Subparagraphs (a), (b), (c), and (d) above to apply. Such adjustments to the Required Level of Primary Security will be done in the sequence that accurately reflects the portion of the risk ceded via the treaty. The ceding insurer should document the rationale and steps taken to accomplish the adjustments to the Required Level of Primary Security due to the cession of less than one hundred percent (100%) of the risk.

The Adjustments for other reinsurance will be made only with respect to reinsurance treaties entered into directly by the ceding insurer. The ceding insurer will make no adjustment as a result of a retrocession treaty entered into by the assuming insurers.

(5) In no event will the Required Level of Primary Security resulting from application of the Actuarial Method exceed the amount of statutory reserves ceded.

(6) If the ceding insurer cedes risks with respect to Covered Policies, including any riders, in more than one reinsurance treaty subject to this Regulation, in no event will the aggregate Required Level of Primary Security for those reinsurance treaties be less than the Required Level of Primary Security calculated using the Actuarial Method as if all risks ceded in those treaties were ceded in a single treaty subject to this Regulation;

(7) If a reinsurance treaty subject to this Regulation cedes risk on both Covered and Non-Covered Policies, credit for the ceded reserves shall be determined as follows:

(a) The Actuarial Method shall be used to determine the Required Level of Primary Security for the Covered Policies, and Section 7 shall be used to determine the reinsurance credit for the Covered Policy reserves; and

(b) Credit for the Non-Covered Policy reserves shall be granted only to the extent that security, in addition to the security held to satisfy the requirements of Subparagraph (a), is held by or on behalf of the ceding insurer in accordance with [cite the state’s version of Sections 2 and 3 of the Credit for Reinsurance Model Law]. Any Primary Security used to meet the requirements of this Subparagraph may not be used to satisfy the Required Level of Primary Security for the Covered Policies.

B. Valuation used for Purposes of Calculations

For the purposes of both calculating the Required Level of Primary Security pursuant to the Actuarial Method and determining the amount of Primary Security and Other Security, as applicable, held by or on behalf of the ceding insurer, the following shall apply:

(1) For assets, including any such assets held in trust, that would be admitted under the NAIC Accounting Practices and Procedures Manual if they were held by the ceding insurer, the valuations are to be determined according to statutory accounting procedures as if such assets were held in the ceding insurer’s general account and without taking into consideration the effect of any prescribed or permitted practices; and

(2) For all other assets, the valuations are to be those that were assigned to the assets for the purpose of determining the amount of reserve credit taken. In addition, the asset spread tables and asset default cost tables required by VM-20 shall be included in the Actuarial Method if adopted by the
Section 7. Requirements Applicable to Covered Policies to Obtain Credit for Reinsurance; Opportunity for Remediation

A. Requirements

Subject to the exemptions described in Section 4 and the provisions of Section 7B, credit for reinsurance shall be allowed with respect to ceded liabilities pertaining to Covered Policies pursuant to [insert provisions of state law equivalent to Sections 2 or 3 of the Credit for Reinsurance Model Law] if, and only if, in addition to all other requirements imposed by law or regulation, the following requirements are met on a treaty-by-treaty basis:

1. The ceding insurer’s statutory policy reserves with respect to the Covered Policies are established in full and in accordance with the applicable requirements of [insert provisions of state law equivalent to the Standard Valuation Law] and related regulations and actuarial guidelines, and credit claimed for any reinsurance treaty subject to this regulation does not exceed the proportionate share of those reserves ceded under the contract; and

2. The ceding insurer determines the Required Level of Primary Security with respect to each reinsurance treaty subject to this regulation and provides support for its calculation as determined to be acceptable to the commissioner; and

3. Funds consisting of Primary Security, in an amount at least equal to the Required Level of Primary Security, are held by or on behalf of the ceding insurer, as security under the reinsurance treaty within the meaning of [insert provision of state law equivalent to Section 3 of the Credit for Reinsurance Model Law], on a funds withheld, trust, or modified coinsurance basis; and

4. Funds consisting of Other Security, in an amount at least equal to any portion of the statutory reserves as to which Primary Security is not held pursuant to Paragraph (3) above, are held by or on behalf of the ceding insurer as security under the reinsurance treaty within the meaning of [insert provision of state law equivalent to Section 3 of the Credit for Reinsurance Model Law]; and

5. Any trust used to satisfy the requirements of this Section 7 shall comply with all of the conditions and qualifications of [insert provision of state law equivalent to Section 124 of the Credit for Reinsurance Model Regulation], except that:

   a. Funds consisting of Primary Security or Other Security held in trust, shall for the purposes identified in Section 6B, be valued according to the valuation rules set forth in Section 6B, as applicable; and

   b. There are no affiliate investment limitations with respect to any security held in such trust if such security is not needed to satisfy the requirements of Section 7A(3); and

   c. The reinsurance treaty must prohibit withdrawals or substitutions of trust assets that would leave the fair market value of the Primary Security within the trust (when aggregated with Primary Security outside the trust that is held by or on behalf of the ceding insurer in the manner required by Section 7A(3)) below 102% of the level required by Section 7A(3) at the time of the withdrawal or substitution; and

   d. The determination of reserve credit under [insert provision of state law equivalent to Section 124E of the Credit for Reinsurance Model Regulation] shall be determined according to the valuation rules set forth in Section 6B, as applicable; and
The reinsurance treaty has been approved by the commissioner.

B. Requirements at Inception Date and on an On-going Basis; Remediation

1. The requirements of Section 7A must be satisfied as of the date that risks under Covered Policies are ceded (if such date is on or after the effective date of this regulation) and on an ongoing basis thereafter. Under no circumstances shall a ceding insurer take or consent to any action or series of actions that would result in a deficiency under Section 7A(3) or 7A(4) with respect to any reinsurance treaty under which Covered Policies have been ceded, and in the event that a ceding insurer becomes aware at any time that such a deficiency exists, it shall use its best efforts to arrange for the deficiency to be eliminated as expeditiously as possible.

2. Prior to the due date of each Quarterly or Annual Statement, each life insurance company that has ceded reinsurance within the scope of Section 3 shall perform an analysis, on a treaty-by-treaty basis, to determine, as to each reinsurance treaty under which Covered Policies have been ceded, whether as of the end of the immediately preceding calendar quarter (the valuation date) the requirements of Sections 7A(3) and 7A(4) were satisfied. The ceding insurer shall establish a liability equal to the excess of the credit for reinsurance taken over the amount of Primary Security actually held pursuant to Section 7A(3), unless either:

   a. The requirements of Section 7A(3) and 7A(4) were fully satisfied as of the valuation date as to such reinsurance treaty; or

   b. Any deficiency has been eliminated before the due date of the Quarterly or Annual Statement to which the valuation date relates through the addition of Primary Security and/or Other Security, as the case may be, in such amount and in such form as would have caused the requirements of Section 7A(3) and 7A(4) to be fully satisfied as of the valuation date.

3. Nothing in Section 7B(2) shall be construed to allow a ceding company to maintain any deficiency under Section 7A(3) or 7A(4) for any period of time longer than is reasonably necessary to eliminate it.

Section 8. Severability

If any provision of this regulation is held invalid, the remainder shall not be affected.

Section 9. Prohibition against Avoidance

No insurer that has Covered Policies as to which this regulation applies (as set forth in Section 3) shall take any action or series of actions, or enter into any transaction or arrangement or series of transactions or arrangements if the purpose of such action, transaction or arrangement or series thereof is to avoid the requirements of this regulation, or to circumvent its purpose and intent, as set forth in Section 2.

Section 10. Effective Date

This regulation shall become effective [insert date] and shall pertain to all Covered Policies in force as of and after that date.
Actuarial Guideline XLVIII
(Applies to 2017 and Subsequent Year Valuations)

ACTUARIAL OPINION AND MEMORANDUM REQUIREMENTS FOR THE REINSURANCE OF POLICIES REQUIRED TO BE VALUED UNDER SECTIONS 6 AND 7 OF THE NAIC VALUATION OF LIFE INSURANCE POLICIES MODEL REGULATION (MODEL #830)

Background

The NAIC Principle-Based Reserving Implementation (EX) Task Force (“PBRI Task Force”) serves as the coordinating body for all NAIC technical groups involved with projects related to the Principle-Based Reserves (PBR) initiative for life and health policies. The PBRI Task Force was also charged with further assessing, and making recommendations regarding, the solvency implications of life insurance reserve financing mechanisms addressed in the June 6, 2013 NAIC White Paper of the Captives and Special Purpose Vehicle Use (E) Subgroup of the Financial Condition (E) Committee. Some of these reinsurance arrangements have been referred to as “XXX/AXXX Captive arrangements,” although not all such arrangements actually involve reinsurers organized as captives. In this connotation, XXX denotes the reserves prescribed by Section 6 of the NAIC Valuation of Life Insurance Policies Model Regulation (Model #830) while AXXX denotes the reserves prescribed by Section 7 of Model #830, and by Actuarial Guideline XXXVIII—The Application of the Valuation of Life Insurance Policies Model Regulation (AG 38). On June 30, 2014, the PBRI Task Force adopted a framework as found in Exhibits 1 and 2 of the June 4, 2014 report from Rector & Associates, Inc. (the “June 2014 Rector Report”). Exhibit 2 of the report included a charge to the Life Actuarial (A) Task Force (LATF) to develop a level of reserves (the “Required Level of Primary Security”) that must be supported by certain defined assets (“Primary Security”). The level of reserves is to be calculated by a method referred to as the “Actuarial Method.” Another charge to LATF was to promulgate an actuarial guideline specifying that, in order to comply with the NAIC Actuarial Opinion and Memorandum Regulation, Model 822 (“AOMR”) as it relates to XXX/AXXX reinsurance arrangements, the opining actuary must issue a qualified opinion as to the ceding insurer’s reserves if the ceding insurer or any insurer in its holding company system has engaged in a XXX/AXXX reserve financing arrangement that does not adhere to the Actuarial Method and Primary Security forms adopted by the NAIC. The initial version of Actuarial Guideline XLVIII—Actuarial Opinion and Memorandum Requirements for the Reinsurance of Policies Required to be Valued under Sections 6 and 7 of the NAIC Valuation of Life Insurance Policies Model Regulation (AG 48) was developed in response to that charge, with an effective date of January 1, 2015.

Coordination between this Actuarial Guideline and the NAIC Term and Universal Life Insurance Reserve Financing Model Regulation (Model #787)

Subsequently, on January 8, 2016, the NAIC adopted revisions to the Credit for Reinsurance Model Law (Model #785). Among other things, the revisions to Model #785 provide commissioners with the authority to enact, by regulation, additional requirements for ceding insurers to claim credit for reinsurance with respect to certain XXX/AXXX financing arrangements. On December 13, 2016, the NAIC adopted the Term and Universal Life Insurance Reserve Financing Model Regulation (Model #787) as the regulation permitted by Model #785. LATF subsequently received a charge to redraft AG 48 to make it as consistent as possible with the provisions of Model #787. The current version of this actuarial guideline is the result.

The following is an overview of the interrelationship between this actuarial guideline and Model #787, and the regulatory strategy that led to the adoption of each:

1. The initial version of this actuarial guideline immediately established national standards for the use of XXX/AXXX financing arrangements in an attempt to quickly set minimum standards based on the framework adopted by the PBRI Task Force on June 30, 2014. This initial version applied to such reinsurance arrangements entered into on or after 1/1/2015.
2. The revised statute (the NAIC Credit for Reinsurance Model Law (Model #785)) and a new regulation (the NAIC Term and Universal Life Insurance Reserve Financing Model Regulation (Model #787)) were then developed and adopted by the NAIC.

3. Except as noted in #4 below, this actuarial guideline will cease to be effective, on a state by state basis, as individual states enact Model #785 and adopt Model #787 to replace it.

4. Notwithstanding, it is anticipated that in a small number of states, Model #787 will need to be adopted on a “prospective” basis only (that is, it will only apply to ceded policies issued on or after the effective date thereof). In those cases, this actuarial guideline will remain as the authority for ceded policies subject to this actuarial guideline but to which Model #787, as adopted in a given state, does not apply. So although its role might diminish, this actuarial guideline will remain an essential part of the regulatory framework for a small number of states for many years to come.

5. To ensure uniformity of treatment between states, companies, and ceded policies (whether governed by this actuarial guideline or by Model #787) and to avoid confusion, this actuarial guideline is being updated, effective as of January 1, 2017, to make it as substantively identical to Model #787 as possible.

Authority, Avoidance, and Purpose

The requirements in this actuarial guideline derive authority from Section 3 of the AOMR, or, after the Operative Date of the Valuation Manual, from Section 1 of VM-30 of the Valuation Manual. Both Section 3 of the AOMR and Section 1 of VM-30 provide that the commissioner has the authority to specify specific methods of actuarial analysis and actuarial assumptions when, in the commissioner's judgment, these specifications are necessary for an acceptable opinion to be rendered relative to the adequacy of reserves and related items. As contained in the framework adopted by the PBRI Task Force on June 30, 2014, this actuarial guideline defines new terms, such as Primary Security and Required Level of Primary Security, specifies the Actuarial Method used to calculate the Required Level of Primary Security, and specifies other requirements that must be followed when reinsurance is involved in order for the appointed actuary to render an actuarial opinion that is not qualified.

No statute, regulation or guideline can anticipate every potential XXX/AXXX captive arrangement. Common sense and professional responsibility are needed to assure not only that the text of this actuarial guideline is strictly observed, but also that its purpose and intent are honored scrupulously. To that end, and to provide documentation to the appointed actuary as to the arrangements that are subject to review under this actuarial guideline, the appointed actuary may request from each ceding insurer, and may rely upon, the certification by the Chief Financial Officer or other responsible officer of each ceding insurer filed with the insurer’s domiciliary regulator that the insurer has not engaged in any arrangement or series of arrangements involving XXX or AXXX reserves that are designed to exploit a perceived ambiguity in, or to violate the purpose and intent of, this actuarial guideline.

The purpose and intent of this actuarial guideline is to establish uniform, national standards governing XXX or AXXX reserve financing arrangements1 in conformity with the PBRI Task Force framework.

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1 In general, reserve financing arrangements are those where the security/assets backing part or all of the reserves have one or more of the following characteristics: such security/assets (1) are issued by the ceding insurer or its affiliates; and/or (2) are not unconditionally available to satisfy the general account obligations of the ceding insurer; and/or (3) create a reimbursement, indemnification or other similar obligation on the part of the ceding insurer or any if its affiliates (other than a payment obligation under a derivative contract acquired in the normal course and

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and, in connection with such arrangements, to ensure that Primary Security, in an amount at least equal to the Required Level of Primary Security, is held by or on behalf of the ceding insurer. As described further in Section 4.B., the provisions of this actuarial guideline are not intended to apply to policies that were issued prior to 1/1/2015 if those policies were included in a captive reserve financing arrangement as of 12/31/2014. Further, the requirements of this actuarial guideline should be viewed as minimum standards and are not a substitute for the diligent analysis of reserve financing arrangements by regulators. A regulator should impose requirements in addition to those set out in this actuarial guideline if the facts and circumstances warrant such action.

Text

1. Authority

Pursuant to Section 3 of the AOMR or, after the Operative Date of the Valuation Manual, to Section 1 of VM-30 of the Valuation Manual, the commissioner shall have the authority to specify specific methods of actuarial analysis and actuarial assumptions when, in the commissioner’s judgment, these specifications are necessary for an acceptable opinion to be rendered relative to the adequacy of reserves and related items.

2. Scope

This actuarial guideline applies to reinsurance contracts that cede liabilities pertaining to Covered Policies as that term is defined in Section 4.

3. Exemptions

This actuarial guideline does not apply to the situations described in Subsections A through F.

A. Reinsurance of:

(1) Policies that satisfy the criteria for exemption set forth in Section 6F or Section 6G of Model #830; and which are issued before the later of:

   (a) The effective date of Model #787 in the state of domicile of the ceding insurer, and

   (b) The date on which the ceding insurer begins to apply the provisions of VM-20 to establish the ceded policies’ statutory reserves, but in no event later than January 1, 2020;

(2) Portions of policies that satisfy the criteria for exemption set forth in Section 6E of Model #830 and which are issued before the later of:

   (a) The effective date of Model #787 in the state of domicile of the ceding insurer, and

used to support and hedge liabilities pertaining to the actual risks in the policies ceded pursuant to the reinsurance arrangement).
(b) The date on which the ceding insurer begins to apply the provisions of VM-20 to establish the ceded policies’ statutory reserves, but in no event later than January 1, 2020;

(3) Any universal life policy that meets all of the following requirements:
   (a) Secondary guarantee period, if any, is five (5) years or less;
   (b) Specified premium for the secondary guarantee period is not less than the net level reserve premium for the secondary guarantee period based on the CSO valuation tables and valuation interest rate applicable to the issue year of the policy; and
   (c) The initial surrender charge is not less than one hundred percent (100%) of the first year annualized specified premium for the secondary guarantee period;

(4) Credit life insurance;

(5) Any variable life insurance policy that provides for life insurance, the amount or duration of which varies according to the investment experience of any separate account or accounts; or

(6) Any group life insurance certificate unless the certificate provides for a stated or implied schedule of maximum gross premiums required in order to continue coverage in force for a period in excess of one year; or

B. Reinsurance ceded to an assuming insurer that meets the applicable requirements of Section 2D of Model #785; or

C. Reinsurance ceded to an assuming insurer that meets the applicable requirements of Sections 2A, 2B or 2C, of Model #785, and that, in addition:
   (1) Prepares statutory financial statements in compliance with the NAIC Accounting Practices and Procedures Manual, without any departures from NAIC statutory accounting practices and procedures pertaining to the admissibility or valuation of assets or liabilities that increase the assuming insurer’s reported surplus and are material enough that they need to be disclosed in the financial statement of the assuming insurer pursuant to Statement of Statutory Accounting Principles No. 1—Accounting Policies, Risks & Uncertainties and Other Disclosures (“SSAP No. 1”), and

   (2) Is not in a Company Action Level Event, Regulatory Action Level Event, Authorized Control Level Event, or Mandatory Control Level Event as those terms are defined in the NAIC Risk-Based Capital (RBC) for Insurers Model Act (Model #312) when its RBC is calculated in accordance with the life risk-based capital report including overview and instructions for companies, as the same may be amended by the NAIC from time to time, without deviation; or

D. Reinsurance ceded to an assuming insurer that meets the applicable requirements of Sections 2A, 2B or 2C, of Model #785, and that, in addition:
   (1) Is not an affiliate, as that term is defined in Section 1A of the NAIC Insurance Holding Company System Regulatory Model Act (Model #440), of:
Appendix C

(a) The insurer ceding the business to the assuming insurer; or

(b) Any insurer that directly or indirectly ceded the business to that ceding insurer;

(2) Prepares statutory financial statements in compliance with the NAIC Accounting Practices and Procedures Manual;

(3) Is both:

(a) Licensed or accredited in at least 10 states (including its state of domicile), and

(b) Not licensed in any state as a captive, special purpose vehicle, special purpose financial captive, special purpose life reinsurance company, limited purpose subsidiary, or any other similar licensing regime; and

(4) Is not, or would not be, below 500% of the Authorized Control Level RBC as that term is defined in Model #312 when its risk-based capital (RBC) is calculated in accordance with the life risk-based capital report including overview and instructions for companies, as the same may be amended by the NAIC from time to time, without deviation, and without recognition of any departures from NAIC statutory accounting practices and procedures pertaining to the admission or valuation of assets or liabilities that increase the assuming insurer’s reported surplus; or

E. Reinsurance ceded to an assuming insurer that meets the requirements of either Section 5B(4)(a) of Model #785, pertaining to certain certified reinsurers or Section 5B(4)(b) of Model #785, pertaining to reinsurers meeting certain threshold size and licensing requirements; or

F. Reinsurance not otherwise exempt under Subsections A through E if the commissioner, after consulting with the NAIC Financial Analysis Working Group (FAWG) or other group of regulators designated by the NAIC, as applicable, determines under all the facts and circumstances that all of the following apply:

(1) The risks are clearly outside of the intent and purpose of this actuarial guideline (as described in the Authority, Avoidance and Purpose section above);

(2) The risks are included within the scope of this actuarial guideline only as a technicality; and

(3) The application of this actuarial guideline to those risks is not necessary to provide appropriate protection to policyholders. The commissioner shall publicly disclose any decision made pursuant to this Section 3F to exempt a reinsurance treaty from this actuarial guideline, as well as the general basis therefor (including a summary description of the treaty).

Drafting Note: The exemption set forth in Section 3F was added to address the possibility of unforeseen or unique transactions. This exemption exists because the NAIC recognizes that foreseeing every conceivable type of reinsurance transaction is impossible; that in rare instances unanticipated transactions might get caught up in this actuarial guideline purely as a technicality; and that regulatory
relief in those instances may be appropriate. The example that was given at the time this exemption was
developed pertained to bulk reinsurance treaties where the ceding insurer was exiting the type of business
ceded. The exemption should not be used with respect to so-called “normal course” reinsurance
transactions; rather, such transactions should either fit within one of the standard exemptions set forth in
Sections 3A, B, C, D, or E or meet the substantive requirements of this actuarial guideline.

4. Definitions

A. “Actuarial Method” means the methodology used to determine the Required Level of
   Primary Security, as described in Section 5.

B. “Covered Policies” means the following: Subject to the exemptions described in Section
   3, Covered Policies are those policies, other than Grandfathered Policies, of the following
   policy types:

   (1) Life insurance policies with guaranteed nonlevel gross premiums and/or
       guaranteed nonlevel benefits, except for flexible premium universal life
       insurance policies; or,

   (2) Flexible premium universal life insurance policies with provisions resulting in
       the ability of a policyholder to keep a policy in force over a secondary guarantee
       period.

Note: Although “Covered Policies” is defined to include all the policies described in Subsections
B1 and B2 above, it is noted that whether a given “Covered Policy” is subject to this actuarial
guideline or, instead, to Model #787 should be determined under Section 8 (Sunset).

C. “Grandfathered Policies” means policies of the types described in Subsections B1 and B2
   above that were:

   (1) Issued prior to January 1, 2015; and

   (2) Ceded, as of December 31, 2014, as part of a reinsurance treaty that would not
       have met one of the exemptions set forth in Section 3 had that section then been
       in effect.

D. “Non-Covered Policies” means any policy that does not meet the definition of Covered
   Policies, including Grandfathered Policies.

E. “Required Level of Primary Security” means the dollar amount determined by applying
   the Actuarial Method to the risks ceded with respect to Covered Policies, but not more
   than the total reserve ceded.

F. “Primary Security” means the following forms of security:

   (1) Cash meeting the requirements of Section 3A of Model #785;

   (2) Securities listed by the Securities Valuation Office meeting the requirements of
       Section 3B of Model #785, but excluding any synthetic letter of credit, contingent
       note, credit-linked note or other similar security that operates in a
       manner similar to a letter of credit, and excluding any securities issued by the
       ceding insurer or any of its affiliates; and
For security held in connection with funds-withheld and modified coinsurance reinsurance treaties:

(a) Commercial loans in good standing of CM3 quality and higher;
(b) Policy Loans; and
(c) Derivatives acquired in the normal course and used to support and hedge liabilities pertaining to the actual risks in the policies ceded pursuant to the reinsurance treaty.

G. “Other Security” means any security acceptable to the commissioner other than security meeting the definition of Primary Security.

H. “Valuation Manual” means the valuation manual adopted by the NAIC as described in Section 11B(1) of the Standard Valuation Law, with all amendments adopted by the NAIC that are effective for the financial statement date on which credit for reinsurance is claimed.


5. The Actuarial Method

A. Description of Actuarial Method

The Actuarial Method to establish the Required Level of Primary Security for each reinsurance treaty subject to this actuarial guideline shall be VM-20, applied on a treaty-by-treaty basis, including all relevant definitions, from the Valuation Manual as then in effect, applied as follows:

1. For Covered Policies described in Section 4B(1) above, the Actuarial Method is the greater of the Deterministic Reserve or the Net Premium Reserve (NPR) regardless of whether the criteria for exemption testing can be met. However, if the Covered Policies do not meet the requirements of the Stochastic Reserve exclusion test in the Valuation Manual, then the Actuarial Method is the greatest of the Deterministic Reserve, the Stochastic Reserve, or the NPR. In addition, if such Covered Policies are reinsured in a reinsurance treaty that also contains Covered Policies described in Section 4B(2) above, the ceding insurer may elect to instead use paragraph 2 below as the Actuarial Method for the entire reinsurance agreement. Whether Paragraph 1 or 2 are used, the Actuarial Method must comply with any requirements or restrictions that the Valuation Manual imposes when aggregating these policy types for purposes of principle-based reserve calculations. The mortality basis for the NPR shall be the 2017 CSO Mortality Table.

2. For Covered Policies described in Section 4B(2) above, the Actuarial Method is the greatest of the Deterministic Reserve, the Stochastic Reserve, or the NPR regardless of whether the criteria for exemption testing can be met. The mortality basis for the NPR shall be the 2017 CSO Mortality Table.
(3) Except as provided in Paragraph (4) below, the Actuarial Method is to be applied on a gross basis to all risks with respect to the Covered Policies as originally issued or assumed by the ceding insurer.

(4) If the reinsurance treaty cedes less than one hundred percent (100%) of the risk with respect to the Covered Policies then the Required Level of Primary Security may be reduced as follows:

(a) If a reinsurance treaty cedes only a quota share of some or all of the risks pertaining to the Covered Policies, the Required Level of Primary Security, as well as any adjustment under Subparagraph (c) below, may be reduced to a pro rata portion in accordance with the percentage of the risk ceded;

(b) If the reinsurance treaty in a non-exempt arrangement cedes only the risks pertaining to a secondary guarantee, the Required Level of Primary Security may be reduced by an amount determined by applying the Actuarial Method on a gross basis to all risks, other than risks related to the secondary guarantee, pertaining to the Covered Policies, except that for Covered Policies for which the ceding insurer did not elect to apply the provisions of VM-20 to establish statutory reserves, the Required Level of Primary Security may be reduced by the statutory reserve retained by the ceding insurer on those Covered Policies, where the retained reserve of those Covered Policies should be reflective of any reduction pursuant to the cession of mortality risk on a yearly renewable term basis in an exempt arrangement;

(c) If a portion of the Covered Policy risk is ceded to another reinsurer on a yearly renewable term basis in an exempt arrangement, the Required Level of Primary Security may be reduced by the amount resulting by applying the Actuarial Method including the reinsurance section of VM-20 to the portion of the Covered Policy risks ceded in the exempt arrangement, except that for Covered Policies issued prior to Jan 1, 2017, this adjustment is not to exceed \([c/(2 \times \text{number of reinsurance premiums per year})]\) where \(c\) is calculated using the same mortality table used in calculating the Net Premium Reserve; and

(d) For any other treaty ceding a portion of risk to a different reinsurer, including but not limited to stop loss, excess of loss and other non-proportional reinsurance treaties, there will be no reduction in the Required Level of Primary Security.

It is possible for any combination of Subparagraphs (a), (b), (c), and (d) above to apply. Such adjustments to the Required Level of Primary Security will be done in the sequence that accurately reflects the portion of the risk ceded via the treaty. The ceding insurer should document the rationale and steps taken to accomplish the adjustments to the Required Level of Primary Security due to the cession of less than one hundred percent (100%) of the risk.

The Adjustments for other reinsurance will be made only with respect to reinsurance treaties entered into directly by the ceding insurer. The ceding insurer will make no adjustment as a result of a retrocession treaty entered into by the assuming insurers.
(5) In no event will the Required Level of Primary Security resulting from application of the Actuarial Method exceed the amount of statutory reserves ceded.

(6) If the ceding insurer cedes risks with respect to Covered Policies, including any riders, in more than one reinsurance treaty subject to this actuarial guideline, in no event will the aggregate Required Level of Primary Security for those reinsurance treaties be less than the Required Level of Primary Security calculated using the Actuarial Method as if all risks ceded in those treaties were ceded in a single treaty subject to this actuarial guideline.

(7) If a reinsurance treaty subject to this actuarial guideline cedes risk on both Covered and Non-Covered Policies:

(a) The Actuarial Method shall be used to determine the Required Level of Primary Security for the Covered Policies; and

(b) Any Primary Security and/or Other Security used to meet any requirements pertaining to the Non-Covered Policies may not be used to satisfy any requirements related to the Required Level of Primary Security and/or Other Security for the Covered Policies.

B. Valuation Used for Purposes of Calculations

For the purposes of both calculating the Required Level of Primary Security pursuant to the Actuarial Method and determining the amount of Primary Security and Other Security, as applicable, held by or on behalf of the ceding insurer, the following shall apply:

(1) For assets, including any such assets held in trust, that would be admitted under the NAIC Accounting Practices and Procedures Manual if they were held by the ceding insurer, the valuations are to be determined according to statutory accounting procedures as if such assets were held in the ceding insurer’s general account and without taking into consideration the effect of any prescribed or permitted practices; and

(2) For all other assets, the valuations are to be those that were assigned to the assets for the purpose of determining the amount of reserve credit taken. In addition, the asset spread tables and asset default cost tables required by VM-20 shall be included in the Actuarial Method if adopted by the NAIC’s Life Actuarial (A) Task Force no later than the December 31 on or immediately preceding the valuation date for which the Required Level of Primary Security is being calculated. The tables of asset spreads and asset default costs shall be incorporated into the Actuarial Method in the manner specified in VM-20.

6. Required Actuarial Analysis and Actuarial Opinion and Memorandum Requirements

A. Required Actuarial Analysis

Before the due date of each actuarial opinion, as to each reinsurance treaty in which Covered Policies have been ceded, the appointed actuary of each ceding insurer must
perform an analysis on a treaty by treaty basis, of such Covered Policies to determine whether, as of the immediately preceding December 31 (the valuation date):

(1) Funds consisting of Primary Security, in an amount at least equal to the Required Level of Primary Security, are held by or on behalf of the ceding insurer, as security under the reinsurance treaty within the meaning of Section 3 of Model #785, on a funds withheld, trust, or modified coinsurance basis; and

(2) Funds consisting of Other Security, in an amount at least equal to any portion of the statutory reserves as to which Primary Security is not held pursuant to Paragraph (1) above, are held by or on behalf of the ceding insurer as security under the reinsurance treaty within the meaning of Section 3 of Model #785; and

Note: For the sake of clarity, funds consisting of Primary Security pursuant to Paragraphs (1) may exceed the Required Level of Primary Security, and Other Security is only required under Paragraph (2) to the extent that there is any portion of the statutory reserves as to which Primary Security is not so held. For example, if a ceding insurer’s statutory reserves equal $1 Billion, its Required Level of Primary Security is $600 Million, and it holds $1 Billion in Primary Security pursuant to Paragraph (1), no Other Security is required under Paragraph (2).

(3) Any trust used to satisfy the requirements of this Section 6 complies with all of the conditions and qualifications of Section 1244 of the NAIC Credit for Reinsurance Model Regulation (Model #786), except that:

(a) Funds consisting of Primary Security or Other Security held in trust, shall for the purposes identified in Section 5B, be valued according to the valuation rules set forth in Section 5B, as applicable; and

(b) There are no affiliate investment limitations with respect to any security held in such trust if such security is not needed to satisfy the requirements of Section 6A(1); and

(c) The reinsurance treaty must prohibit withdrawals or substitutions of trust assets that would leave the fair market value of the Primary Security within the trust (when aggregated with Primary Security outside the trust that is held by or on behalf of the ceding insurer in the manner required by Section 6A(1)) below 102% of the level required by Section 6A(1) at the time of the withdrawal or substitution.

B. Qualified Actuarial Opinion; Remediation

(1) The appointed actuary of the ceding insurer performing the analysis required by Section 6A above must issue a qualified actuarial opinion as described in Section 6.D. of the AOMR or Section 3A(10) of VM-30 of the Valuation Manual, as applicable, unless:

(a) The requirements of Section 6A(1) and 6(A)(2) were fully satisfied as of the valuation date as to such reinsurance treaty; or

(b) Any deficiency has been eliminated before the due date of the Annual Statement to which the valuation date relates through the addition of Primary Security and/or Other Security, as the case may be, in such amount and in such form as would have caused the requirements of Section 6A(1) and 6A(2) to be fully satisfied as of the valuation date; or
(c) The ceding insurer has established a liability equal to the excess of the credit for reinsurance taken over the amount of Primary Security actually held pursuant to Section 6A(1).

(2) In addition to the requirement set forth in Section 6B(1) above, the appointed actuary of the ceding insurer performing the analysis required by Section 6A above must issue a qualified actuarial option as described in Section 6.D. of the AOMR or Section 3A(10) of VM-30 of the Valuation Manual, as applicable, if the appointed actuary for any affiliated reinsurer of the ceding insurer issues a qualified actuarial opinion with respect to such affiliated reinsurer where (a) the affiliate reinsures Covered Policies of the ceding insurer and (b) the qualified actuarial opinion pertaining to the affiliated reinsurer results, in whole or in part, from the analysis required by this actuarial guideline.

Note: The remediation option set forth in Section 6B(1)(c) mirrors that set forth in Model #787. Under this option, a ceding company may choose to avoid the consequence (a qualified opinion under this actuarial guideline) by establishing a liability equal to the excess of the credit for reinsurance taken over the amount of Primary Security actually held. For example, suppose a ceding insurer has established statutory reserves of $1 Billion and has Primary Security of $550 Million and Other Security of $450 Million. Suppose further that the actuary determines that the insurer’s Required Level of Primary Security is $600 Million. Under Section 6B(1)(c), the insurer may avoid a qualified opinion by establishing a liability equal to $450 Million (the difference between the statutory reserve of $1 Billion and the $550 Million amount of Primary Security actually held).

C. Additional Requirements for the Actuarial Opinion and Memorandum for Companies that have Covered Policies Requiring the Analysis Pursuant to this actuarial guideline

(1) In the statement of actuarial opinion, the appointed actuary of the ceding insurer must state whether (i) he has performed an analysis, as to each reinsurance arrangement under which Covered Policies have been ceded, of the security supporting the Covered Policies and whether funds consisting of Primary Security in an amount at least equal to the Required Level of Primary Security are held by or on behalf of the ceding insurer, as security under the reinsurance contract, on a funds withheld, trust, or modified coinsurance basis and (ii) funds consisting of Primary Security or Other Security in an amount equal to the statutory reserves are held by or on behalf of the ceding insurer as security under the reinsurance arrangement.

(2) In the actuarial memorandum as described by Section 7 of the AOMR or Section 3B of VM-30 of the Valuation Manual, as applicable, the appointed actuary of the ceding insurer must document the analysis and requirements applied by this actuarial guideline as to each reinsurance arrangement under which Covered Policies are ceded.

(3) In the event that a reinsurance treaty contains both (1) Covered Policies subject to this actuarial guideline rather than to Model #787, and (2) Covered Policies subject to Model #787 rather than to this actuarial guideline, the treaty shall be tested as a whole for purposes of a ceding insurer’s compliance with both (a) the requirements of Section 6A(1) and Section 6A(2) of this actuarial guideline and (b) the requirements of Section 7A(3) and Section 7A(4) of Model #787; provided further, that:
AG XLVIII

Appendix C

(a) If funds consisting of Primary Security are held in amounts less than the Required Level of Primary Security, such funds consisting of Primary Security shall be allocated first to fulfill the Required Level of Primary Security for the Covered Policies subject to this actuarial guideline, with any remainder allocated to those Covered Policies subject to Model #787; and

(b) If funds consisting of Other Security are held in amounts less than the requirements of Section 6A(2), such funds consisting of Other Security shall be allocated first to fulfill the Other Security requirements for the Covered Policies subject to this actuarial guideline, and any remainder shall be allocated to those Covered Policies subject to Model #787.

7. Effective Date

This actuarial guideline shall become effective as of January 1, 2017 with respect to all Covered Policies. This actuarial guideline supersedes and replaces all previous versions thereof with respect to actuarial opinions rendered as to valuation periods ending on or after January 1, 2017.

Note: For the avoidance of doubt, actuarial opinions issued with respect to the year ended December 31, 2016, shall be governed by the version of AG 48 in effect on December 31, 2016, as included in the Accounting Practices and Procedures Manual.

8. Sunset Provision

This actuarial guideline shall cease to apply as to Covered Policies that are both (a) issued by ceding insurers domiciled in a jurisdiction that has in effect, as of December 31st of the calendar year immediately preceding the year in which the actuarial opinion is to be filed, a regulation substantially similar to Model #787 adopted by the NAIC on December 13, 2016; and (b) subject to Model #787 as so adopted by the ceding insurer’s jurisdiction of domicile. This Actuarial Guideline shall continue to apply, without interruption, to any and all Covered Policies not included in both (a) and (b) of the immediate preceding sentence.

Note: It is anticipated that, for most states, this actuarial guideline will sunset pursuant to (a) and (b) of Section 8 and will continue only with respect to the limited number of states in which their version of Model #787 applies prospectively only, i.e., applies only to Covered Policies issued on or after the effective date of their version of Model #787. It is anticipated, however, that most states will be able to adopt a version of Model #787 that, like the Model itself, applies to all Covered Policies (subject to the applicable exemptions and grandfathering provisions) that are “in force” on or after the effective date, even if the policies were originally issued prior to that effective date. The goal of Section 8 is to ensure that all Covered Policies ceded in reinsurance transactions within the scope of this actuarial guideline continue to be subject to this actuarial guideline unless and until they become subject to Model #787.
NAIC BLANKS (E) WORKING GROUP

Blanks Agenda Item Submission Form

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<td>New Reporting Requirement [  ]</td>
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Anticipated Effective Date: Annual 2020

IDENTIFICATION OF ITEM(S) TO CHANGE

See next page for details of changes to the VM-20 Reserves Supplement.

REASON, JUSTIFICATION FOR AND/OR BENEFIT OF CHANGE**

Changing the reporting units for reserves to attain consistency with other annual statement blanks. Clarifying the instructions to attain consistency in company reporting. Changes are based on findings from the 2018 review of company filings.

NAIC STAFF COMMENTS

Comment on Effective Reporting Date: ____________________________

Other Comments: _____________________________________________

** This section must be completed on all forms.
IDENTIFICATION OF ITEM(S) TO CHANGE

VM-20 Reserves Supplement Blank:

- Splitting Part 1 into Part 1A and Part 1B.

- For Part 1A:
  - Changing the description header for Column 3 to be “Due and Deferred Premium Asset” so that it matches the instructions.
  - Adding “XXX” in two places to indicate that a Due and Deferred Premium Asset does not need to be reported in the lines shown for Total Reserves.
  - Changing the reporting units for all columns to be in dollars rather than in thousands.
  - Expanding all columns to allow room for a number as large as $999,999,999,999.
  - Changing the product labels for clarity.

- For Part 1B:
  - Changing the reporting units for the Reserve columns to be in dollars rather than in thousands.
  - Expanding the Reserve columns to allow room for a number as large as $999,999,999,999.
  - Expanding the Face Amount columns to allow room for a number as large as $9,999,999,999.
  - Changing the product labels for clarity.

- Removing Part 2 and re-numbering the remaining Parts.

VM-20 Reserves Supplement Instructions:

- Adjusting the instructions according to the changes made to the blanks.

- Clarifying instructions and adding examples for Parts 1A and 1B.
ANNUAL STATEMENT INSTRUCTIONS – LIFE/FRATERNAL

VM-20 RESERVES SUPPLEMENT – PART 1

Life Insurance Reserves Valued According to VM-20 by Product Type

($000 Omitted Except for Number of Policies)

This Supplement provides information on the reserves required to be calculated by Section VM-20 of the Valuation Manual. This includes the Net Premium Reserve and, as applicable, the Deterministic Reserve and the Stochastic Reserve. This Supplement also provides information regarding business where VM-20 of the Valuation Manual is not required to be applied—only business issued on or after Jan. 1, 2017, valued by the requirements of VM-20 should be reported in Part 1. Part 1 is intended to aid regulators in the analysis of reserves as determined under Section VM-20 of the Valuation Manual for both the prior and current year. Companies that elect the three-year transition for some of their policies should not report those policies in this part.

This Supplement also provides information regarding business where VM-20 of the Valuation Manual is not required to be applied. Companies that elect the three-year transition period for all of their business or are otherwise exempted from the requirements of Section VM-20 are not required to complete Part 1 of this Supplement pursuant to the instructions in Part 2 of this Supplement but must complete Part 2 or Part 3 as applicable.

VM-20 RESERVES SUPPLEMENT – PART 1A

Life Insurance Reserves Valued According to VM-20 by Product Type

Part 1A of this Supplement breaks out, by product type, the prior year and current year reported reserves on a Post-Reinsurance-Ceded and Pre-Reinsurance-Ceded basis as defined in Section 8.D of Section VM-20 of the Valuation Manual. The Due and Deferred Premium Asset for the current year is also shown. In addition, Part 1 of this Supplement shows, by product type for the current year, the Due and Deferred Premium Asset, the Net Premium Reserve (NPR), the Deterministic Reserve (DR) and the Stochastic Reserve (SR), where the NPR, DR, and SR are as defined in Section VM-20 of the Valuation Manual. This Supplement is intended to aid regulators in the analysis of reserves as determined under Section VM-20 of the Valuation Manual for both the prior and current year.

Section VM-20 of the Valuation Manual requires that the Post-Reinsurance-Ceded Reserve be determined by three product groups—VM-20 Reserving Categories: Term Insurance, Universal Life with Secondary Guarantees (ULSG) and all other. Term Insurance should be reported on line 1.1. ULSG, including Variable Universal Life with a secondary guarantee, Indexed life insurance with a secondary guarantee, regular Universal Life with a secondary guarantee, and ULSG policies with a non-material secondary guarantee as defined in Section VM-01 of the Valuation Manual, should be reported on line 1.2. Each of the other products reported in lines 1.3 – 1.8 should be determined as the sum of the policy reserves using the policy reserves determined following the allocation process of VM-20 Section 2. A similar process should be used for each of the pre-reinsurance-ceded reserves.

Section A: Columns 4 through 8 are to be completed if each of the reserves in Columns 4 through 6 (NPR, DR, SR) is calculated according to the requirements of Section VM-20 of the Valuation Manual.

Section B: Columns 9 through 12 are to be completed only if the reserves in Columns 9 and 10 (NPR, DR) are calculated according to the requirements of Section VM-20 of the Valuation Manual.

Section C: Columns 13 through 15 are to be completed only if the reserve in Column 13 (NPR) is calculated according to the requirements of Section VM-20 of the Valuation Manual.
<table>
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<tr>
<th>Columns 1 &amp; 2 – Reported Reserve</th>
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</thead>
<tbody>
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<td>Provide the reported reserve, in <strong>thousands whole dollars</strong>, for the prior year and current year for each line item. Post-Reinsurance-Ceded is net of reinsurance ceded, and Pre-Reinsurance-Ceded includes reinsurance assumed and excludes any reinsurance ceded. The reported reserve for the current year should reflect all policies in force as of the end of the current year. The reported reserve for the prior year should reflect all policies in force as of the end of the prior year. Sections 2 and 8 in the <em>Valuation Manual</em> further describe the required reserve and treatment of reinsurance.</td>
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<table>
<thead>
<tr>
<th>Column 3 – Due and Deferred Premium Asset</th>
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<tbody>
<tr>
<td>Provide the due and deferred premium asset amount, in <strong>thousands whole dollars</strong>, associated with the current year Reported Reserve from Column 2 and calculated in a manner consistent with lines 15.1 and 15.2 of the Annual Statement Assets page.</td>
</tr>
</tbody>
</table>

**Example 1:**
A company reinsures a ULSG product using YRT reinsurance.
- The ceding company reports their reserve on lines 1.2 and 3.2 for ULSG.
- The assuming company reports their reserve on lines 1.1 and 3.1 for Term.

**Example 2:**
A company reinsures a Term product using YRT reinsurance.
- The ceding company reports their reserve on lines 1.1 and 3.1 for Term.
- The assuming company reports their reserve on lines 1.1 and 3.1 for Term.
## VM-20 RESERVES SUPPLEMENT – PART 1B

**Life Insurance Reserves Valued According to VM-20 by Product Type**

$(000 Omitted for Face Amount)$

Part 1B of this Supplement provides details underlying the amounts shown in Part 1A.

### Section A: Columns 41 through 85
are to be completed if each of the reserves in Columns 41 through 63 (NPR, DR, SR) is calculated according to the requirements of Section VM-20 of the *Valuation Manual*.

### Section B: Columns 96 through 129
are to be completed only if the reserves in Columns 96 and 107 (NPR, DR) are calculated according to the requirements of Section VM-20 of the *Valuation Manual*.

### Section C: Columns 1310 through 1812
are to be completed only if the reserve in Column 1310 (NPR) is calculated according to the requirements of Section VM-20 of the *Valuation Manual*.

- **Column 41, 96 & 1310** – Net Premium Reserve (NPR)
  - Report the Post-Reinsurance-Ceded and Pre-Reinsurance-Ceded Net Premium Reserve for each product type, in whole dollars. Report the floored amount. The Net Premium Reserve is defined in Section 3 in VM-20 of the *Valuation Manual*.

- **Column 52 & 107** – Deterministic Reserve
  - Report the Post-Reinsurance-Ceded and Pre-Reinsurance-Ceded Deterministic Reserve for each product type, in whole dollars. Report the amount whether it is positive or negative; do not floor the amount at zero if it is negative. The Deterministic Reserve calculation is defined in Section 4 in VM-20 of the *Valuation Manual*.

- **Column 63** – Stochastic Reserve
  - Report the Post-Reinsurance-Ceded and Pre-Reinsurance-Ceded Stochastic Reserve for each product type, in whole dollars. Report the amount whether it is positive or negative; do not floor the amount at zero if it is negative. The Stochastic Reserve calculation is defined in Section 5 in VM-20 of the *Valuation Manual*.

- **Column 74, 118 & 1411** – Number of Policies
  - Report the number of individual life insurance policies by product type and by the required VM-20 methodology used as described in Section A, Section B and Section C above. The number of policies should be prior to any reinsurance ceded and include reinsurance assumed.

- **Column 85, 129 & 1512** – Face Amount
  - Report the face amount, in thousands, of individual life insurance by product type and by the required VM-20 methodology used as described in Section A, Section B and Section C above. The face amount should be prior to any reinsurance ceded and include reinsurance assumed.

**Example:**

A company has Term business subject to VM-20, and there is no reinsurance. The Stochastic Exclusion Test was passed. The Deterministic Reserve at year-end was negative:

- The company completes Section B.
- The floored Net Premium Reserve is reported in whole dollars in Column 6.
- The negative Deterministic Reserve is reported in whole dollars in Column 7.
- The Number of Policies is reported in Column 8.
- The Face Amount is reported in thousands in Column 9.

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C. Blanks Proposal_VM-20 Reserves Supplement_2020
VM-20 RESERVES SUPPLEMENT – PART 2

Three Year-Transition Period

($000 Omitted Except for Number of Policies)

This section of the Supplement should be completed when a reporting entity has elected to apply the three-year transition provided in Section II, Sub-section C under Life Insurance Products of the Valuation Manual to some or all of its business. This Part 2 should include the values requested for the business for which the three-year transition has been elected and should not include values for any policies valued based on VM-20. This Part 2 allows the company to establish minimum reserves according to applicable requirements stated in Appendix A (VM-A) and Appendix C (VM-C), in the Valuation Manual, for business otherwise subject to VM-20 requirements and issued during the first three years following the Operative Date of the Valuation Manual. If a company does not elect this three-year transition, but elects to apply VM-20 to a block of business issued on and after the Operative Date, then such company must continue to apply the requirements of VM-20 to this block of business, as well as future new issues of this type of business.

A company that elects to apply the three-year transition for all of its products within the scope of VM-20 does not have to complete Part 1 of the VM-20 Supplement. If a company applies VM-20 to a product or products, then Part 1 of this VM-20 Supplement will need to be completed.

VM-20 RESERVES SUPPLEMENT – PART 3

Life PBR Exemption

This section of the Supplement should be completed by a company that has filed and been granted a Life PBR Exemption from its state of domicile.

If a company has been granted a Life PBR Exemption, the company must indicate the source of the Life PBR Exemption, which could be defined in a state statute, a state regulation or in the NAIC-adopted Valuation Manual. If the source of the granted Life PBR Exemption is not the NAIC-adopted Valuation Manual, the company must disclose the criteria of the state’s Life PBR Exemption that the company has met, and the company must disclose the minimum reserve requirements that are required by the state of domicile. If the minimum reserve requirements of the state of domicile are the same as those specified in the NAIC-adopted Valuation Manual, the company may indicate: “Same as NAIC VM”.

Companies whose individual ordinary life business is exempted from the requirements of VM-20 pursuant to a Life PBR Exemption are not required to complete Part 1 of this VM-20 Supplement.

VM-20 RESERVES SUPPLEMENT – PART 4

Other Exclusions from Life PBR

Questions 1 and 2 of this section of the Supplement should be completed by a company that has filed and been granted a Single State Exemption from the reserve requirements of VM-20 by its state of domicile pursuant to requirements similar to the optional Section 15 of the NAIC Standard Valuation Law (# 820). The response to question 2 should be “Yes” if the company has any business assumed that relates to issues outside the state of domicile.

Question 3 of this section of the Supplement should be completed by a company if all its life business is excluded from the requirements of VM-20 pursuant to Section II.B of the Valuation Manual.

Companies responding “Yes” to question 1 are not required to complete Part 1 of this VM-20 Supplement if all of their individual ordinary life business was covered under the Single State Exemption. Companies responding “YES” to question 3 are not required to complete Part 1 of this VM-20 Supplement.
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<thead>
<tr>
<th>NAIC Group Code</th>
<th>NAIC Company Code</th>
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**ANNUAL STATEMENT BLANK – LIFE/FRATERNAL**

**VM-20 RESERVES SUPPLEMENT – PART 1A**

Life Insurance Reserves Valued According to VM-20 by Product Type

For The Year Ended December 31, 20__

(To Be Filed by March 1)

(S000 Omitted Except for Number of Policies)

**SECTION C**

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<td>1.1. Term Life Insurance</td>
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<td>1.8. Indexed Life Without Secondary Guarantee</td>
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<td>1.9. Aggregate Write-Ins for Other Products</td>
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<td>2. Total Post-Reinsurance-Ceded Reserve (Sum of Lines 1.1 through 1.9)</td>
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<td>3. Pre-Reinsurance-Ceded Reserve</td>
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**DETAILS OF WRITE-INS**

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## VM-20 RESERVES SUPPLEMENT – PART 1B

**Life Insurance Reserves Valued According to VM-20 by Product Type**

For The Year Ended December 31, 2020

(To Be Filed by March 1)

($000 Omitted for Face Amount)

### SECTION A

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<th>Line</th>
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<td>XXX</td>
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### SECTION B

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<th>Reserve</th>
<th>Net Premium Reserve</th>
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<th>Face Amount</th>
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### SECTION C

<table>
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<tr>
<th>Line</th>
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<th>Year</th>
<th>Reserve</th>
<th>Net Premium Reserve</th>
<th>Number of Policies</th>
<th>Face Amount</th>
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<th>Net Premium Reserve</th>
<th>Number of Policies</th>
<th>Face Amount</th>
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<tr>
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**Pre-Reinsurance-Ceded Reserve (Line 4 minus Line 2)**

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<th>Line</th>
<th>Product Type</th>
<th>Year</th>
<th>Reserve</th>
<th>Net Premium Reserve</th>
<th>Number of Policies</th>
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**Total Reserves Ceded (Line 4 minus Line 2)**

<table>
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<tr>
<th>Line</th>
<th>Product Type</th>
<th>Year</th>
<th>Reserve</th>
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<th>Net Premium Reserve</th>
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<tr>
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<td>XXX</td>
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<td>5.8</td>
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<tr>
<td>5.9</td>
<td>Other Products</td>
<td>2020</td>
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<td>XXX</td>
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<td>XXX</td>
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</table>
VM-20 RESERVES SUPPLEMENT – PART 2
Reserves for Policies Not Based on VM-20 as a Result of the Three-Year Transition Period
For The Year Ended December 31, 20__
(To Be Filed by March 1)
($000 Omitted Except for Number of Policies)

Three-Year Transition Period

<table>
<thead>
<tr>
<th>Prior Year</th>
<th>Current Year</th>
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<tbody>
<tr>
<td>Gross Reserve</td>
<td>Net Reserve</td>
</tr>
<tr>
<td>1. Life Insurance Reserves</td>
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</tr>
<tr>
<td>1.1 Term Life</td>
<td></td>
</tr>
<tr>
<td>1.2 Participating Life (With Secondary Guarantee)</td>
<td></td>
</tr>
<tr>
<td>1.3 Non-Participating Whole Life</td>
<td></td>
</tr>
<tr>
<td>1.4 Participating Whole Life</td>
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</tr>
<tr>
<td>1.5 Universal Life With Secondary Guarantee</td>
<td></td>
</tr>
<tr>
<td>1.6 Universal Life Without Secondary Guarantee</td>
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</tr>
<tr>
<td>1.7 Variable Life</td>
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</tr>
<tr>
<td>1.8 Variable Universal Life</td>
<td></td>
</tr>
<tr>
<td>1.9 Aggregate Write-Ins for Other Products</td>
<td></td>
</tr>
</tbody>
</table>

2. If the response to Question 1 is “Yes”, then check the source of the granted “Life PBR Exemption” definition? (Check either 2.1, 2.2 or 2.3)

   2.1 NAIC Adopted VM [ ]
   2.2 State Statute (SVL) [ ]
   2.3 State Regulation [ ]

b. If the answer to “a” above is “Yes”, provide the criteria the state has used to grant the Life PBR Exemption (e.g., Group/Legal Entity criteria) and the minimum reserve requirements that are required by the state of domicile (if the minimum reserve requirements are the same as the Adopted VM, write SAME AS NAIC VM)

VM-20 RESERVES SUPPLEMENT – PART 4-2
Life PBR Exemption
For The Year Ended December 31, 20__
(To Be Filed by March 1)

Life PBR Exemption as defined in the NAIC adopted Valuation Manual (VM)

1. Has the company filed and been granted a Life PBR Exemption from the reserve requirements of VM-20 of the Valuation Manual by their state of domicile? Yes [ ] No [ ]

2. If the response to Question 1 is “Yes”, then check the source of the granted “Life PBR Exemption” definition? (Check either 2.1, 2.2 or 2.3)

   2.1 NAIC Adopted VM [ ]
   2.2 State Statute (SVL) [ ]
   2.3 State Regulation [ ]

b. If the answer to “a” above is “Yes”, provide the criteria the state has used to grant the Life PBR Exemption (e.g., Group/Legal Entity criteria) and the minimum reserve requirements that are required by the state of domicile (if the minimum reserve requirements are the same as the Adopted VM, write SAME AS NAIC VM)
### VM-20 RESERVES SUPPLEMENT – PART 4.3
Other Exclusions from Life PBR
For The Year Ended December 31, 20__
(To Be Filed by March 1)

1A. Has the company filed and been granted a Single State Exemption from the reserve requirements of VM-20 of the Valuation Manual by their state of domicile? Yes [ ] No [ ]

1B. If the answer to question 1A is “Yes” please discuss any business not covered under the Single State Exemption.
___________________________________________________________________________________________________________________________________
___________________________________________________________________________________________________________________________________

2A. If the answer to question 1A is “Yes”, does the company have risks for policies issued outside its state of domicile? Yes [ ] No [ ]

2B. If the answer to question 2A is “Yes” please discuss the risks for policies issued outside the state of domicile, how those risks came to be a responsibility of the company, and why the company would still be considered a Single State Company with such risks.
___________________________________________________________________________________________________________________________________
___________________________________________________________________________________________________________________________________

3. Is all of the company’s individual ordinary life insurance business excluded from the requirements of VM-20 pursuant to Section II.B of the Valuation Manual? Yes [ ] No [ ]
**BLANK(S) TO WHICH PROPOSAL APPLIES**

<table>
<thead>
<tr>
<th>[ X ] ANNUAL STATEMENT</th>
<th>[ X ] INSTRUCTIONS BLANK</th>
<th>[ ] CROSSCHECKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] QUARTERLY STATEMENT</td>
<td>[ ] Separate Accounts</td>
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</tr>
<tr>
<td>[ ] Life, Accident &amp; Health/Fraternal</td>
<td>[ ] Protected Cell</td>
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<tr>
<td>[ ] Property/Casualty</td>
<td>[ ] Health (Life Supplement)</td>
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<tr>
<td>[ ] Health</td>
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</tbody>
</table>

Anticipated Effective Date: Annual 2020

**IDENTIFICATION OF ITEM(S) TO CHANGE**

Variable Annuities Supplement Blank:
- Changing the header for Column 10
- Changing Lines 1-3 and adding Line 4

Variable Annuities Supplement Instructions:
- Adjusting the instructions to correspond with changes made to the blanks as well as changes in the 2020 Valuation Manual for the new VA Framework.

**REASON, JUSTIFICATION FOR AND/OR BENEFIT OF CHANGE**

The new VA Framework is effective for 2020.

**NAIC STAFF COMMENTS**

Comment on Effective Reporting Date:

Other Comments:

---

**This section must be completed on all forms.**

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ANNUAL STATEMENT INSTRUCTIONS – LIFE/FRATERNAL

VARIABLE ANNUITIES SUPPLEMENT

PARTS 1 AND 2

This supplement is to be filed on or before April 1. Complete this supplement for contracts and certificates subject to VM-21. A separate chart shall be prepared for individual contracts and for group contracts with individual certificates.

For variable annuities (VAs) with guaranteed benefits, disclose the type(s) of guaranteed benefit(s), the number of contracts or certificates with those benefits, the amount of the benefit base related to each type of benefit, the net amount at risk for death benefits and the guaranteed annual payout for income and withdrawal benefits, the gross amount of the reserve for the guaranteed benefit(s), the portion of the contract/certificate account value related to contract/certificate funds in the General Account or the Separate Account, and the percent of the guaranteed benefit reinsured.

Column 1 & Column 2 – Type of Guaranteed Benefit

For purposes of this supplement, a Guaranteed Death Benefit is defined in accordance with the term “Guaranteed Minimum Death Benefit” in VM-21, and a Guaranteed Living Benefit (GLB) is defined in accordance with the term “Variable Annuity Guaranteed Living Benefits” in VM-01.

“Type” shall include a summary description of the type of benefit. Examples are provided in the table illustrated below. Descriptions that may apply when identifying “Type” for Column 2 include, “Guaranteed Minimum Accumulation Benefit” (GMAB), “Guaranteed Minimum Income Benefit” (GMIB), “Hybrid GMIB,” “Traditional GMIB,” “Guaranteed Minimum Withdrawal Benefit” (GMWB), “Lifetime GMWB,” “Non-Lifetime GMWB,” and “Guaranteed Payout Annuity Floor” (GPAF). These terms are defined in VM-01. For those guaranteed benefits that include waiting periods before any benefit can be realized, include the length of the original waiting period in the description.

- A separate line shall be created for each combination of Guaranteed Death Benefit and Guaranteed Living Benefit.
  - See the illustration in the table below for an example.
  - For a category with only one guarantee, show “None” in the other column.
- Each contract/certificate shall be included in one and only one line.
  - For a contract with multiple living benefits, determine the most appropriate classification.

A separate chart shall be prepared for individual contracts and for group contracts with individual certificates. In each chart, show the amount of any reinsurance reserve credit being taken separately for treaties with affiliated captive reinsurers and for other reinsurers.

For purposes of this supplement, a Guaranteed Living Benefit (GLB) is defined as a contract/certificate, agreement or rider in which the insurance entity guarantees specified payouts during a defined period, which may include the lifetime of the insured(s). For VAs, these guaranteed payouts are typically made regardless of the performance of the contractual account value that is used to determine cash surrender values and/or withdrawal benefits.

Column 3 – Number of Individual (Part 1) Contracts or Group (Part 2) Certificates
<table>
<thead>
<tr>
<th>Column 4</th>
<th>Benefit Base For Guaranteed Death Benefit (Col 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Report the Benefit Base (defined in the contract/certificate) as of the valuation date as the basis for the guaranteed value. If no guarantee exists, enter $0.</td>
</tr>
<tr>
<td>Column 5</td>
<td>Benefit Base For Guaranteed Living Benefit (GLB) (Col 2)</td>
</tr>
<tr>
<td></td>
<td>Report the Benefit Base (defined in the contract/certificate) as of the valuation date as the basis for the guaranteed value. If no guarantee exists, enter $0.</td>
</tr>
<tr>
<td>Column 6</td>
<td>Net Amount at Risk For Guaranteed Death Benefit (Col 1)</td>
</tr>
<tr>
<td></td>
<td>Death Benefit Net Amount at Risk (NAR) is defined as the greater of a) zero and b) the difference between the Guaranteed Death Benefit and the Account Value as of the valuation date. Report the sum of the NAR for all contracts/certificates.</td>
</tr>
<tr>
<td>Column 7</td>
<td>Guaranteed Annual Income Amount For Guaranteed Living Benefit (GLB) (Col 2)</td>
</tr>
<tr>
<td></td>
<td>Report the total annual income/withdrawal benefits available if the income/withdrawal guarantees were elected on the valuation date. If no GLB/GMWB is available on the valuation date for a particular contract/certificate (e.g. due to a waiting period), use $0. Note, for GLB and GMWB previously elected, show the guaranteed amount based on the prior elections. For GMAB, use $0 since this is not an income benefit. Disclosure for GMAB shall be provided in the AG 43 Memorandum.</td>
</tr>
<tr>
<td>Column 8</td>
<td>Account Value – General Account</td>
</tr>
<tr>
<td>Column 9</td>
<td>Account Value – Separate Account</td>
</tr>
<tr>
<td>Column 10</td>
<td>Reserve for Guaranteed Benefits (Total Reserve Less Base Adjusted Reserve)Contract-Level Reserves Less Cash Surrender Value</td>
</tr>
<tr>
<td></td>
<td>Total gross reserve for guarantees as defined in AG-43 or VM-21 as applicable in excess of the base contract reserve. Reserves calculated according to AG-43 and VM-21 are allocated to individual contracts or certificates following the guidance of Appendix 6 of AG-43 or Section 8 of VM-21. Report in column 10 the excess of this per policy reserve over the base contract reserve. For base contract reserve, the company may use CSV or Base Adjusted Reserve (defined in Appendix 3, A.3.2D of AG-43 or Section 5, B.4. of VM-21) for that contract or certificate. For each contract/certificate, calculate the excess amount of the pre-reinsurance ceded contract-level reserve, defined in VM-21, over the contract’s cash surrender value. For each “Type” listed under Columns 1 and 2, report the sum of the excess amounts calculated for the associated contracts/certificates. For the Subtotal, report the sum of the excess amounts calculated for all contracts/certificates. The Subtotal should equal the excess of the aggregate reserve over the aggregate cash surrender value.</td>
</tr>
<tr>
<td>Column 11 &amp; Column 12</td>
<td>Percentage of Guaranteed Benefits Reinsured</td>
</tr>
<tr>
<td></td>
<td>Show percentage of the Guaranteed Benefit ceded to all reinsurers.</td>
</tr>
<tr>
<td>Line 1</td>
<td>Aggregate Cash Surrender Value</td>
</tr>
<tr>
<td></td>
<td>Report the sum of the cash surrender values for all contracts/certificates.</td>
</tr>
</tbody>
</table>
Line 2  -  Pre-Reinsurance Ceded Aggregate Reserve (Subtotal for Column 10 plus Line 1)

Report the sum of the pre-reinsurance ceded contract-level reserves for all contracts/certificates. This should equal the Subtotal Line for Column 10 plus Line 1.

Line 3  -  Reserves Ceded (Line 2 minus Line 4)

Line 44  -  Total Net of Reinsurance

Post-Reinsurance Ceded Aggregate Reserve

Line 3 Total Net of Reinsurance should equal the Subtotal Line for Column 10 minus the sum of Line 1 Reserve Credit from Affiliated Captive Reinsurance and Line 2 Reserve Credit from Other Reinsurance.

Report the sum of the post-reinsurance ceded contract-level reserves for all contracts/certificates.

Illustration:

<table>
<thead>
<tr>
<th>Type</th>
<th>1</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Guaranteed Death Benefit</td>
<td>Guaranteed Living Benefit</td>
<td>Benefit Base</td>
<td>Number of Individual Contracts / Group Certificates</td>
<td>For Guaranteed Death Benefit (Col 1)</td>
<td>For Guaranteed Living Benefit (Col 2)</td>
<td>Net Amount at Risk For Guaranteed Death Benefit (Col 1)</td>
<td>General Account</td>
<td>Separate Account</td>
<td>Guaranteed Death Benefit</td>
<td>Guaranteed Living Benefit</td>
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<td>Max anniversary Value (MAV)</td>
<td>GMAP - 110% of premium</td>
<td>$101.4 M</td>
<td>$0</td>
<td>$1.7M</td>
<td>$0</td>
<td>$2.7M</td>
<td>$90.0M</td>
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<tr>
<td>0% Roll-up</td>
<td>GMBR from account at 3% x 10 yr starting period</td>
<td>997</td>
<td>$32.6M</td>
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<td>Greater of MAV &amp; 0% Roll-up</td>
<td>GMBR ROP, 10 yr</td>
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<td>Subtotal</td>
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<td>$174.0M</td>
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1. Reserve credit from affiliated captive
2. Reserve credit from other reinsurance
3. Pre-Reinsurance Ceded Aggregate Reserve (Subtotal for Column 10 plus Line 1)
4. Reserves Ceded (Line 2 minus Line 4)
5. Total Net of Reinsurance

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<table>
<thead>
<tr>
<th>Number of Contracts</th>
<th>Guaranteed Death Benefits</th>
<th>Guaranteed Living Benefits</th>
<th>Separate Account</th>
<th>Other</th>
<th>Total</th>
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</table>

**PART 1 – INDIVIDUAL**

1. Reserve credit from affiliated captive reinsurance
2. Reserve credit from other reinsurance
3. Total net of reinsurance
4. Post-Reinsurance Ceded Aggregate Reserve

Attachmen...
### VARIABLE ANNUITIES SUPPLEMENT

#### PART 2 – GROUP CONTRACTS WITH INDIVIDUAL CERTIFICATES

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<td>Guaranteed Death Benefit</td>
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<td>Guaranteed Living Benefit</td>
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<tr>
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<td>Guaranteed Living Benefit (GLB) (Col 2)</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Guaranteed Living Benefit</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Guaranteed Benefits Reinsured</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

#### Notes:
1. Reserve credit from affiliated captive reinsurance - Aggregate Cash Surrender Value
2. Reserve credit from other reinsurance - Pre-Reinsurance Ceded Aggregate Reserve (Subtotal for Column D, Apply Line 3)
3. Post-Reinsurance Ceded Aggregate Reserve - Subtotal
4. Post-Reinsurance Ceded Aggregate Reserve - XXX

---

W:\QA\BlanksProposals\Proposals In Progress\Variable Annuities Supplement\Blanks Proposal_VA Supplement_2020.doc

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Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Identification:
Rachel Hemphill, Texas Department of Insurance
Mary Bahna-Nolan, Pacific Life

Title of the Issue:
VM-20 restriction on using different credibility methods for significantly different blocks of business

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 Sections 9.C.5.a and 9.C.7.b.ii

January 1, 2020 NAIC Valuation Manual

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 attached.

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

Currently, a company must select a single credibility methodology, Limited Fluctuation or Bühlmann, for all business that company has that is subject to VM-20 and requires credibility percentages. The Bühlmann methodology is technically allowed for Simplified Issue business within the Valuation Manual; however, at present, it is not practically possible since there are no industry factors available for Simplified Issue. Therefore, only the Limited Fluctuation method can currently be used for determining credibility for Simplified Issue business. The factors in VM-20 for the Bühlmann were developed to only be used in conjunction with the 2015 VBT. Thus, currently, a company with any Simplified Issue business subject to VM-20 that requires credibility calculations must use the Limited Fluctuation method for all of their business subject to VM-20 that requires credibility calculations, including the fully underwritten business. We do not see this as a reasonable restriction. VM-20 already requires that companies not change their credibility method once selected unless they receive commissioner approval for the change, and we believe that that constraint is sufficient to avoid any significant gaming of the credibility method selection.

* 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:

<table>
<thead>
<tr>
<th>Dates:</th>
<th>Received</th>
<th>Reviewed by Staff</th>
<th>Distributed</th>
<th>Considered</th>
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</thead>
<tbody>
<tr>
<td>11/6/19</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Notes: APF 2019-60
VM-20 Section 9.C.5.a

5. Credibility of Company Experience

a. For valuations in which the industry basic mortality table is the 2008 VBT, determine an aggregate level of credibility over the entire exposure period using a methodology to determine the level of credibility that follows common actuarial practice as published in actuarial literature (for example, but not limited to, the Limited Fluctuation Method or Bühlmann Empirical Bayesian Method).

For valuations in which the industry basic mortality table is the 2015 VBT, determine an aggregate level of credibility following either the Limited Fluctuation Method by amount, such that the minimum probability is at least 95% with an error margin of no more than 5% or Bühlmann Empirical Bayesian Method by amount. Once chosen, the credibility method must be applied to all business subject to VM20 and requiring credibility percentages.

Not all blocks of a company’s business subject to VM-20 necessarily need to use the same credibility method. A company seeking to change the credibility methods for a given block of business must request and subsequently receive the approval of the insurance commissioner. The request must include the justification for the change and a demonstration of the rationale supporting the change.

VM-20 Section 9.C.7.b.ii

7. Process to Determine Prudent Estimate Assumptions

a. If applicable industry basic tables are used in lieu of company experience as the anticipated experience assumptions, or if the level of credibility of the data as provided in Section 9.C.5 is less than 20%, the prudent estimate assumptions for each mortality segment shall equal the respective mortality rates in the applicable industry basic tables as provided in Section 9.C.3, including any applicable improvement pursuant to Section 9.C.3.g, plus the prescribed margin as provided in Section 9.C.6.c, plus any applicable additional margin pursuant to Section 9.C.6.d.v and/or Section 9.C.6.d.vi.

b. If the company uses company experience mortality rates as the anticipated experience assumptions, the following process shall be used to develop prudent estimate assumptions:

i. Determine the values of A, B and C from the Grading Table below, based on the level of credibility of the data as provided in Section 9.C.5.

<table>
<thead>
<tr>
<th>Credibility of company data (as defined in Section 9.C.5 above) rounded to nearest %</th>
<th>A</th>
<th>B</th>
<th>C</th>
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</thead>
<tbody>
<tr>
<td>20% - 30%</td>
<td>10</td>
<td>2</td>
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<tr>
<td>31% - 32%</td>
<td>11</td>
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<tr>
<td>33% - 34%</td>
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<tr>
<td>35% - 36%</td>
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<td>39% - 40%</td>
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<tr>
<td>41% - 42%</td>
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<tr>
<td>43% - 44%</td>
<td>17</td>
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<tr>
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ii. Determine the value of D, which represents the last policy duration that has a substantial volume of claims, using the chosen data source(s) as specified in Section 9.C.2.b. D is defined as the last policy duration at which there are 50 or more claims (not the first policy duration in which there are fewer than 50 claims), not counting riders. This may be determined at either the mortality segment level or at a more aggregate level if the mortality for the individual mortality segments was determined using an aggregate level of mortality experience pursuant to Section 9.C.2.d.
Guidance Note: The same level of aggregation is used in Section 9.C.2.d for determining company experience mortality rates, Section 9.C.5.b for determining credibility, and Section 9.C.7.b.ii for determining the value of D. Thus, when determining the value of D, all claims being aggregated will have used the same credibility method in Section 9.C.5.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form

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

Joint submission by NAIC staff and Staff of Office of Principle-Based Reserving, California Department of Insurance – Clarify areas of confusion relating to the topic of materiality.

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:


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 attached Appendix.

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

See attached Appendix.

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NAIC Staff Comments:

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Appendix

ISSUE:
Skipping steps in VM-20 should not be allowed on grounds of immateriality or the latitude to use approximations.

SECTION:
VM-20 Section 2.H and new Section 2.I

REDLINE:
H. The company shall establish, for the DR and SR, a standard containing the criteria for determining whether an assumption, risk factor or other element of the principle-based valuation has a material impact on the size of the reserve. This standard shall be applied when identifying material risks under VM-20 Section 9.B.1. Such a standard shall also apply to the NPR with respect to VM-20 Section 2.G.

Guidance Note: For example, the standard may be expressed as an impact of more than X dollars or Y% of the reserve, whichever is greater, where X and Y are chosen in a manner that is meant to stand the test of time and not need periodic revision.

The standard is based on the impact relative to the size of the NPR, DR and SR as opposed to the impact relative to the overall financial statement (e.g., total company reserves or surplus). Reviewing items that may lead to a material misstatement of the financial statement in the current year is appropriate in its own context, but it is not appropriate for identifying material risks for PBR, which itself is an emerging risk.

Note that the criteria apply to the NPR, DR and SR, and not just the final reported reserve. For example, if the DR is less than the NPR, the criteria still apply to the DR.

The standard also applies to exclusion tests, as they are an element of the principle-based valuation.

I. Section 2.G and Section 2.H provide companies with a certain amount of latitude when setting assumptions and making approximations, but they should not be misconstrued to be a justification for completely skipping mandated steps.

Guidance Note: Examples of unacceptable omissions of steps would be: not computing an NPR, not computing a DR or SR without having performed and passed the relevant exclusion test(s), leaving out prescribed mortality margins, not building an asset model for the DR, using the alternative investment strategy without having first shown that it produces a higher reserve than the company investment strategy, skipping making a PIMR adjustment to the modeled reserve, and ignoring lapses or expenses or post-level term losses altogether.

REASONING:
Provide clearer guidance on the boundaries of a company’s latitude in following VM-20 steps.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Eric Pedersen FSA MAAA
Associate Actuary
National Guardian Life

To address the issue of the product types included in the “Preneed Exemption” from PBR as specified in VM-II, B and as defined in VM-02, Section 3, B.

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:

- NAIC Valuation Manual, adopted August 29, 2016 with changes through 12/31/16. VM-02, Section 3 “Definitions”

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 attached

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

We are asking that the committee consider the reason Pre-need is excluded from PBR, and consider products (specifically Final Expense) that are substantially similar to Pre-need in the context of PBR, in the sense they have the same general chassis – small “whole life” death benefit, generally older insured, little to no underwriting, little to no investment risk, etc. (I.e. in the modeling world they are handled in exactly the same way.)

My concern is that the VM-02 definition of Pre-need focuses on the qualifying language “...that is issued in combination with, in support of, with an assignment to, or as a guarantee for a prearrangement agreement for goods and services...” We sell Final Expense products that are essentially identical to a Pre-need product in every way except they do not have the “goods and services agreement” as defined in VM-02 and are marketed as “Final Expense.” The goods and services agreement is important in the context of marketing, administration, product filings, etc. But we do not think the goods and services agreement is vital in the context of PBR. (I.e. you take a Pre-need product and strip away the goods and services agreement - that should not make it subject to VM-20.)

* 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.

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Minimum reserve requirements for variable and non-variable individual life contracts, excluding preneed life contracts, final expense life contracts, industrial life contracts, credit life contracts, and policies of companies exempt pursuant to the companywide exemption in paragraph D below, are provided by VM-20 except for election of the transition period in paragraph C of this subsection.

Minimum reserve requirements of VM-20 are considered PBR requirements for purposes of the Valuation Manual and VM-31 unless VM-20 or other requirements apply only the net premium reserve method or applicable requirements in VM-A and VM-C.

Minimum reserve requirements for life contracts not subject to VM-20 are those pursuant to applicable requirements in VM-A and VM-C.

Section 3. Definitions

A. Industrial Life Insurance is that form of life insurance written under policies under which premiums are payable monthly or more often, bearing the words “industrial policy” or “weekly premium policy” or words of similar import imprinted upon the policies as part of the descriptive matter, and issued by an insurer which, as to such industrial life insurance, is operating under a system of collecting a debit by its agent.

B. Pre-Need – Any life insurance policy or certificate that is issued in combination with, in support of, with an assignment to, or as a guarantee for a prearrangement agreement for goods and services to be provided at the time of and immediately following the death of the insured. Goods and services may include, but are not limited to, embalming, cremation, body preparation, viewing or visitation, coffin or urn, memorial stone, and transportation of the deceased. The status of the policy or contract as preneed insurance is determined at the time of issue in accordance with the policy form filing. (Note: Preceding definition taken from Model 817.) The definition of pre-need shall be subject to that definition of pre-need in a particular state of issue if such definition is different in that state. [Note: To be completed.]

C. Final Expense Whole Life - Any whole life insurance policy that is issued with a generally small face amount and with simplified or guaranteed issue underwriting, is marketed to the senior market to cover funeral services and other final expenses, and bears the words, is marketed as, or is filed as “final expense” or words of similar meaning (such as, but not limited to, “burial insurance policy”, “funeral insurance policy”, or “senior life policy”). The definition of final expense whole life shall be subject to that definition of final expense in a particular state of issue if such definition is different in that state.

D. Ordinary Life [to be completed.]
1 Premiums are measured as direct plus reinsurance assumed from an unaffiliated company from the Ordinary Life line of business reported in the prior calendar year L & H annual statement, Exhibit 1 Part 1, Column 3, “Ordinary Life Insurance”, excluding premiums for pre-need and final expense life contracts and excluding amounts that represent the transfer of reserves in-force as of the effective date of a reinsurance assumed transaction and are reported in Exhibit 1 Part 1, Column 3 as Ordinary Life Insurance premium. Pre-need and final expense life contracts and are as defined in VM-02.
Date: December 12, 2019

Please allow me to submit the following comment on behalf of Virginia regarding the following exposure:

**APF 2019-33 (Clarify definition of individually underwritten life insurance and applicability of PBR for group insurance)**

**Comment:**

Subsection 1.B under Section II. “Reserve Requirements” of the VM addresses minimum reserve requirements for “individual life contracts”. Since individual life and group life are two distinct and non-overlapping categories of contracts, the new proposed Subsection 1.B.1 which address certain group life contracts should not be placed under Subsection 1.B, but should be pulled out from under Subsection 1.B and made its own Subsection 1.C. Subsections 1.B.2 and 1.B.3 should also be pulled out from under Subsection 1.B. and renumbered.

**Suggested Edits to APF 2019-33:**

**Subsection 1: Life Insurance Products**

A. This subsection establishes reserve requirements for all contracts issued on and after the operative date of the Valuation Manual that are classified as life contracts as defined in SSAP No. 50 in the AP&P Manual, with the exception of annuity contracts and credit life contracts. Minimum reserve requirements for annuity contracts and credit life contracts are provided below in subsection 2 and subsection 5, respectively.

B. Minimum reserve requirements for variable and nonvariable individual life contracts—excluding guaranteed issue life contracts, preneed life contracts, industrial life contracts, and policies of companies exempt pursuant to the life PBR exemption in paragraph D below—are provided by VM-20, Requirements for Principle-Based Reserves for Life Products, except for election of the transition period in paragraph F below. For this purpose, joint life policies are considered individual life.

C. Minimum reserve requirements for group life contracts in which the individual certificate holders were subjected to an individual risk selection process as described in VM-20 Section 1.B to obtain the insurance coverage are provided by VM-20, except for election of the transition period in paragraph F below.

D. Minimum reserve requirements of VM-20 are considered principle-based valuation requirements for purposes of the Valuation Manual.

E. Minimum reserve requirements for life contracts not subject to VM-20 are those pursuant to applicable requirements in VM-A and VM-C. For guaranteed issue life contracts issued after Dec. 31, 2018, mortality tables are defined in VM Appendix M – Mortality Tables (VM-M), and the same table shall be used for reserve requirements as is used for minimum nonforfeiture requirements as defined in VM-02, Minimum Nonforfeiture Mortality and Interest.
A company may elect to establish minimum reserves pursuant to applicable requirements in VM-A and VM-C for:

1. Business described in paragraph C above and issued on or after the operative date of the Valuation Manual and prior to 1/1/2024.
2. Business not described in paragraph C otherwise subject to VM-20 requirements and issued during the first three years following the operative date of the Valuation Manual.

A company electing to establish reserves using the requirements of VM-A and VM-C may elect to use the 2017 Commissioners' Standard Ordinary (CSO) Tables as the mortality standard following the conditions outlined in VM-20 Section 3. If a company during the three years elects to apply VM-20 to a block of such business, then a company must continue to apply the requirements of VM-20 for future issues of this business.

1. A company meeting the condition in GD.2 below may file a statement of exemption for ordinary life insurance policies and group life contracts individually underwritten life insurance policies, except for policies in GD.3 below, issued directly or assumed during the current calendar year, that would otherwise be subject to VM-20. Such a statement must be filed with the domiciliary commissioner prior to July 1 of that year certifying that condition GD.2 was met based on premiums from the prior calendar year annual statement. The statement of exemption must also be included with the NAIC filing for the second quarter of that year.

2. Condition for Exemption:
   a. The company has less than $300 million of ordinary life premiums1, and if the company is a member of an NAIC group of life insurers, the group has combined ordinary life premium1 of less than $600 million.

3. Policies Excluded from the Life PBR Exemption:
   a. Universal life with secondary guarantee (ULSG) policies with a secondary guarantee that does not meet the VM-01, Definitions for Terms in Requirements, definition of a “non-material secondary guarantee.”

4. Each exemption, or lack of an exemption, applies only to policies issued or assumed in the current year, and it applies to all future valuation dates for those policies. The minimum reserve requirements for the ordinary life policies subject to the exemption are those pursuant to applicable methods required in VM-A and VM-C using the mortality as defined in VM-20 Section 3.C.1 and VM-M Section 1.H.

Footnote change
1Premiums are measured as direct plus reinsurance assumed from an unaffiliated company from the ordinary life line of business reported in the prior calendar year life/health annual financial statement, Exhibit 1, Part 1, Column 3, “Ordinary Life Insurance”. For exemptions after 1/1/2024, premiums should also include the premiums from...
group life insurance certificates that were subject to an individual risk selection process as defined in VM-20 Section 1.B and included in the group life certificates subject to an individual risk selection process line of business reported in the prior calendar year life/health annual financial statement, VM-20 Reserves Supplement, Part 3. 
Premiums should exclude premiums for guaranteed issue policies and preneed life contracts and excluding amounts that represent the transfer of reserves in force as of the effective date of a reinsurance assumed transaction and are reported in Exhibit 1 Part 1, Column 3 as ordinary life insurance premium. Preneed and guaranteed issue life insurance policy are as defined in VM-01.

Thank you for providing me the opportunity to submit this comment.

Craig Chupp, FSA, MAAA  
Life and Health Insurance Actuary  
Virginia Bureau of Insurance  
craig.chupp@scc.virginia.gov  
Phone: (804) 371-9131
APF 2019-33 – Individually Solicited Group Contracts

Comments by John Robinson, Minnesota

January 7, 2020

The APF mentions a revision to VM-51 to incorporate these contracts. However, no modifications to the VM-51 layout are offered.

APF 2019-56 addresses a series of important changes to the VM-51 layout, which will make it a multi-table system. I have previously commented that the table structure of the system needs to be carefully designed.

Adding group contracts will also require careful design considerations. For example, it is possible that fields should be added for

(a) Certificate Number (applicable to each covered individual in the group contract); and

(b) An indicator, “I” for individual, and “G” for group, to tell whether a particular contract is individual or group.

A suggest that these considerations be included in the work currently being done for APF 2019-56.

Thank you.

John Robinson
1. Identify yourself, your affiliation and a very brief description (title) of the issue.
American Academy of Actuaries’ Life Reserves Work Group.

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:
January 1, 2020, edition of the Valuation Manual with NAIC adoptions through August 6, 2019
Locations with proposed changes: VM-20 and VM-31

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 attached.

4. State the reason for the proposed amendment? (You may do this through an attachment.)
The Valuation Manual already requires that if there is additional risk arising from the conversion of term life insurance, whether group or individual, it must be reserved for. The purpose of this APF is to emphasize this requirement and to provide guidance on what must be included in the Life PBR Actuarial Report with respect to conversions.

* 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.

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<td>Notes: VM APF 2019-62</td>
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VM-20 Section 9.C.4

Add Guidance Note related to converted policies at the end of the section.

Guidance Note: The company must ensure that excess mortality associated with policies issued via conversion from term policies or from group life contracts is appropriately reflected in the anticipated experience mortality rates. This can be accomplished through the use of a separate segment for converted policies, through inclusion of conversion experience with the experience of a group of similar directly issued policies, by adjustment of anticipated experience rates for such group of similar directly issued policies, or through other methods.

VM-31 Section 3.B.3 [Executive Summary – policy overview]

3. Policies – A summary of the base policies within each VM-20 reserving category. Include information necessary to fully describe the company’s distribution of business. For direct business, use PBR Actuarial Report Template A located on the NAIC website (https://www.naic.org/pbr_data.htm?tab_3) to provide descriptions of each base policy product type and underwriting process (including a description of the process, the time period in which it was used, and the level of any additional margin), with a breakdown of policy count and face amount by base policy product type and underwriting process. Also include the target market, primary distribution system, and key product features that affect risk, including conversion privileges.


d. Assumption and Margin Development – The following information for each risk factor: description of the methods used to determine anticipated experience assumptions and margins, including the sources of experience (e.g., company experience, industry experience, or other data); how changes in such experience are monitored; any adjustments made to increase mortality margins above the prescribed margin (such as to reflect increased uncertainty as to newer underwriting approaches; and any other considerations, such as conversion features, helpful in or necessary to understanding the rationale behind the development of assumptions and margins, even if such considerations are not explicitly mentioned in the Valuation Manual.

VM-31 Section 3.D.3.x (new section) [Life Report – Mortality]
x. Mortality for Converted Policies – Description of the treatment of mortality for
policies issued under group or term conversion privileges including:
   i. A description of the method(s) by which any excess conversion mortality
was taken into account in the development of company experience
mortality rates (e.g., through the use of separate mortality segments for
policies issued upon conversion, through aggregation of claim experience,
or through use of other method(s), the rationale for the method(s) used,
and any changes in the method(s) from those used in previous years.
   ii. The source(s) of the data used in the method(s) employed.

VM-31 Section 3.D.4.x, y (new sections) [Life Report – Policyholder Behavior]

x. Term Conversions – Description of how the company reflects the impact of any
term conversion privilege contained in the policy when setting reserves.
y. Lapse Rates for Converted Policies – Description of and rationale for lapse rates
used for policies issued under any group or term conversion privilege.


a. Agreements – For those reinsurance agreements included in the
calculation of the minimum reserve as per VM-20 Section B.8.a, a
description of each reinsurance agreement, including, but not
limited to, the type of agreement, the counterparty, the risks
reinsured, any provisions related to converted policies, the portion
of business reinsured, identification of both affiliated and non-
affiliated, as well as captive and non-captive, or similar
relationships, and whether the agreement complies with the
requirements of the credit for reinsurance under the terms of the
January 31, 2020

Mr. Mike Boerner
Chair, NAIC Life Actuarial Task Force (LATF)

Re: Amendment Proposal Forms (APFs) Exposed During NAIC Fall Meeting

Dear Mike:

The American Council of Life Insurers (ACLI)\(^1\) appreciates the opportunity to submit the following comments regarding the following APFs exposed during the NAIC 2019 Fall Meeting:

**APF 2019-33: Individually underwritten group life insurance**

ACLI has significant concerns with this amendment in its current form. We have two main areas of concern: the scope implied by the definition of “individual risk selection process” and practical implementation concerns.

Regarding scope, we believe that the wording may inadvertently loop in business not intended to be in scope. For example, something as simple as smoking status could be construed as “individual underwriting”, greatly expanding the business that would be impacted by this proposal. The use of underwriting as the criteria to define what is in scope for PBR is a simplification that could scope in traditional group life policies that are priced based on the unique claim costs of an employer group. We do not believe that is the intent of this APF. The definition of what is in scope for the APF requires additional contemplation.

Our second concern is around the practical implementation of the amendment. If individually underwritten group business becomes subject to PBR, it would have to follow the prescribed NPR requirements. However, the expected mortality and lapse rates for individually underwritten group business may be different than the prescribed mortality and lapse assumptions in VM-20. Compounding the problem, we are unaware of any experience studies that have been done on this type of business and deriving appropriate assumptions for other underwriting types, such as guaranteed issue and simplified issue, have proven difficult. Without potential adjustments to mortality and lapse rates for individually underwritten group business, companies may see excessive or nonsensical results for the NPR.

At this time, ACLI is unaware of a widespread issue associated with individually underwritten group business; we suspect this is more of a hypothetical problem. As such, we don’t see a pressing need for

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\(^1\) The American Council of Life Insurers (ACLI) is the leading trade association driving public policy and advocacy on behalf of the life insurance industry. 90 million American families rely on the life insurance industry for financial protection and retirement security. ACLI's member companies are dedicated to protecting consumers' financial wellbeing through life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, and dental, vision and other supplemental benefits. ACLI's 280 member companies represent 94 percent of industry assets in the United States.
this APF. We suggest that LATF continue to monitor this issue, and if changes are deemed necessary, LATF should request that the Academy make significant revisions to avoid excessive scope and unintended consequences.

**APF 2019-62: Considerations for term conversion reserves**

ACLI agrees with the American Academy of Actuaries’ Life Reserves Work Group on the need to understand what mortality adjustments are being made for term conversions. We support this APF’s improved disclosures associated with conversions.

**APF 2019-60: Allowance for additional credibility methods**

ACLI supports this amendment. This APF provides important flexibility around credibility methods for companies with simplified underwriting business.

**APF 2019-61: Clarification around secondary guarantee riders**

ACLI believes this APF is a straight-forward clarification around what constitutes a secondary guarantee, and supports this amendment.

We look forward to a discussion of these issues. Thank you.

Sincerely,

[Signature]

cc Reggie Mazyck, NAIC
Date: December 12, 2019

Please allow me to submit the following comment on behalf of Virginia regarding the following exposure:

APF 2019-62 (Term Conversions additional risk)

Comment:

The proposed Guidance Note to be added to Section 9.C.4 of VM-20 uses the word “must” as follows: “The company must ensure that excess mortality associated with policies issued via conversion from term policies or from group life contracts is appropriately reflected in the anticipated experience mortality rates.” Since the word “must” is used, which is mandatory, the added language in the Guidance Note should not be in a Guidance Note but rather should be made a separate subparagraph 9.C.4.d.

Thank you for providing me the opportunity to submit this comment.

Craig Chupp, FSA, MAAA
Life and Health Insurance Actuary
Virginia Bureau of Insurance
craig.chupp@scc.virginia.gov
Phone: (804) 371-9131
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

**Identification:**
Rachel Hemphill, Texas Department of Insurance

**Title of the Issue:**
The Life PBR Exemption restriction is intended to apply to ULSG with material secondary guarantees regardless of whether the secondary guarantee is an embedded guarantee or is a separate rider.

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 Section II, Subsection 1.D.3
January 1, 2020 NAIC Valuation Manual

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 attached.

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

ULSG policies with material secondary guarantees are intended to be excluded from the Life PBR Exemption, regardless of whether the secondary guarantee is embedded in the base policy or is a separate rider. The VM does say that non-ULSG base policies with secondary guarantee riders follow the reserving requirements for ULSG policies in Section II, Subsection 6.C: “ULSG and other secondary guarantee riders shall be valued with the base policy and follow the reserve requirements for ULSG policies under VM-20, VM-A and/or VM-C, as applicable.” It should be made clear that following the reserve requirements for ULSG includes exclusion from the Life PBR Exemption, when the secondary guarantee is material.

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**Notes:** APF 2019-61
3. Policies Excluded from the Life PBR Exemption:
a. Universal life with secondary guarantee (ULSG) policies with a secondary guarantee, or policies – other than ULSG – that contain a rider with a secondary guarantee, in which the secondary guarantee does not meet the VM-01, Definitions for Terms in Requirements, definition of a “non-material secondary guarantee.”
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Identification:
Rachel Hemphill, Texas Department of Insurance
Mary Bahna-Nolan, Pacific Life

Title of the Issue:
VM-20 restriction on using different credibility methods for significantly different blocks of business

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 Sections 9.C.5.a and 9.C.7.b.ii
January 1, 2020 NAIC Valuation Manual

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 attached.

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

Currently, a company must select a single credibility methodology, Limited Fluctuation or Bühlmann, for all business that company has that is subject to VM-20 and requires credibility percentages. The Bühlmann methodology is technically allowed for Simplified Issue business within the Valuation Manual; however, at present, it is not practically possible since there are no industry factors available for Simplified Issue. Therefore, only the Limited Fluctuation method can currently be used for determining credibility for Simplified Issue business. The factors in VM-20 for the Bühlmann were developed to only be used in conjunction with the 2015 VBT. Thus, currently, a company with any Simplified Issue business subject to VM-20 that requires credibility calculations must use the Limited Fluctuation method for all of their business subject to VM-20 that requires credibility calculations, including the fully underwritten business. We do not see this as a reasonable restriction. VM-20 already requires that companies not change their credibility method once selected unless they receive commissioner approval for the change, and we believe that that constraint is sufficient to avoid any significant gaming of the credibility method selection.

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Notes: APF 2019-60
VM-20 Section 9.C.5.a

5. Credibility of Company Experience

a. For valuations in which the industry basic mortality table is the 2008 VBT, determine an aggregate level of credibility over the entire exposure period using a methodology to determine the level of credibility that follows common actuarial practice as published in actuarial literature (for example, but not limited to, the Limited Fluctuation Method or Bühlmann Empirical Bayesian Method).

For valuations in which the industry basic mortality table is the 2015 VBT, determine an aggregate level of credibility following either the Limited Fluctuation Method by amount, such that the minimum probability is at least 95% with an error margin of no more than 5% or Bühlmann Empirical Bayesian Method by amount. Once chosen, the credibility method must be applied to all business subject to VM20 and requiring credibility percentages.

Not all blocks of a company’s business subject to VM-20 necessarily need to use the same credibility method. However, a company seeking to change the credibility methods for a given block of business must request and subsequently receive the approval of the insurance commissioner. The request must include the justification for the change and a demonstration of the rationale supporting the change.

VM-20 Section 9.C.7.b.ii

7. Process to Determine Prudent Estimate Assumptions

a. If applicable industry basic tables are used in lieu of company experience as the anticipated experience assumptions, or if the level of credibility of the data as provided in Section 9.C.5 is less than 20%, the prudent estimate assumptions for each mortality segment shall equal the respective mortality rates in the applicable industry basic tables as provided in Section 9.C.3, including any applicable improvement pursuant to Section 9.C.3.g, plus the prescribed margin as provided in Section 9.C.6.c, plus any applicable additional margin pursuant to Section 9.C.6.d.v and/or Section 9.C.6.d.vi.

b. If the company uses company experience mortality rates as the anticipated experience assumptions, the following process shall be used to develop prudent estimate assumptions:

i. Determine the values of A, B and C from the Grading Table below, based on the level of credibility of the data as provided in Section 9.C.5.

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© 2010 National Association of Insurance Commissioners
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</tr>
<tr>
<td>94%–100%</td>
<td>50</td>
<td>10</td>
<td>25</td>
</tr>
</tbody>
</table>

ii. Determine the value of D, which represents the last policy duration that has a substantial volume of claims, using the chosen data source(s) as specified in Section 9.C.2.b. D is defined as the last policy duration at which there are 50 or more claims (not the first policy duration in which there are fewer than 50 claims), not counting riders. This may be determined at either the mortality segment level or at a more aggregate level if the mortality for the individual mortality segments was determined using an aggregate level of mortality experience pursuant to Section 9.C.2.d.
**Guidance Note:** The same level of aggregation is used in Section 9.C.2.d for determining company experience mortality rates, Section 9.C.5.b for determining credibility, and Section 9.C.7.b.ii for determining the value of D. Thus, when determining the value of D, all claims being aggregated will have used the same credibility method in Section 9.C.5.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Identification:
Pat Allison, NAIC
Rachel Hemphill, Texas Department of Insurance

Title of the Issue:
Add guidance notes to refer the reader to Excel examples available for mortality aggregation and for assumption reporting.

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

VM-20 Section 9.C.2.d.vi and VM-31 Section 3.D.1.a
January 1, 2020 NAIC Valuation Manual

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 attached.

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

During the exposure of the presentation and Excel examples that were developed for mortality aggregation, we received feedback that it would be helpful for companies if we included a link to the examples in a guidance note in the Valuation Manual. We agree that this would be helpful for the users of the Valuation Manual.

Similarly, an example in Excel was developed for the listing of assumptions required by VM-31 Section 3.D.1.a and we propose that a reference be added to the guidance note in VM-31 Section 3.D.1.a to point the reader to this additional reference material.

* 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:
W:\National Meetings\2010\..\TF\LHA\Attachment Eight-A20

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VM-20 Section 9.C.2.d.vi

vi. If the company uses the aggregate company experience for a group of mortality segments when determining the company experience mortality rates for each of the individual mortality segments in the group, the company shall either:

a. Use techniques to further subdivide the aggregate experience into the various mortality segments (e.g., start with aggregate nonsmoker and then use the conservation of total deaths principle, normalization or other approach to divide the aggregate mortality into super preferred, preferred and residual standard non-smoker class assumptions).

b. Use techniques to adjust the experience of each mortality segment in the group to reflect the aggregate company experience for the group (e.g., by credibility weighting the individual mortality segment experience with the aggregate company experience for the group).

In doing so, the company must ensure that when the mortality segments are weighted together, the total amount of expected claims is not less than the aggregate company experience data for the group.

Guidance Note: There are several examples of the two mortality aggregation methods outlined in VM-20 Section 9.C.2.d.vi.a and VM-20 Section 9.C.2.d.vi.b in a Mortality Aggregation Excel Spreadsheet, along with a Mortality Aggregation Presentation from the 2019 Summer Meeting, located on the NAIC website (https://www.naic.org/pbr_data.htm?tab_3). These may be useful reference documents when using aggregate company experience for a group of mortality segments in determining the company experience mortality rates.

VM-31 Section 3.D.1.a

1. Assumptions and Margins – Details on the valuation assumptions and margins, including:

a. Tables – For each material risk, the anticipated experience assumptions, margins, and prudent estimate assumptions used in the model, provided in Excel format. A complete table of reinsurance premiums is not required. If applicable, provide upon request a sample calculation demonstrating the methodology used to determine future reinsurance premiums reflecting non-guaranteed reinsurance features, including margins and details of any simplifications and approximations used.

Guidance Note: See VM-20 Section 9.B.1 for a discussion on material risks.

There is a Sample Assumptions Summary for PBR Actuarial Report located on the NAIC website (https://www.naic.org/pbr_data.htm?tab_3), which may be a useful reference document when developing reporting in accordance with Section 3.D.1.a. For valuation dates prior to Dec. 31, 2022, the company’s domiciliary commissioner may permit less than full compliance with the above Section 3.D.1.a, provided that the commissioner determines that the company has made a good faith attempt to comply.
YRT Field Test Update

Timeline (workstreams/milestones) as of 1/23/2020

Jason Kehrberg, MAAA, FSA
Chairperson, YRT Field Test Project Oversight Group

Life Actuarial (A) Task Force – 1/23/2020 LATF Call

---

Milestones

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<thead>
<tr>
<th>#</th>
<th>Milestone Description</th>
<th>Target Date</th>
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<tbody>
<tr>
<td>1</td>
<td>APF Field testing/Field Test Instructions developed and begin test on model office</td>
<td>1/23/2020</td>
</tr>
<tr>
<td>2</td>
<td>List of field test participants finalized</td>
<td>1/23/2020</td>
</tr>
<tr>
<td>3</td>
<td>Model prep instructions sent to participants</td>
<td>1/23/2020</td>
</tr>
<tr>
<td>4</td>
<td>Model prep instructions sent to participants</td>
<td>1/23/2020</td>
</tr>
<tr>
<td>5</td>
<td>YRT meeting w/new presentation of consultant methodology (Apex, full meeting)</td>
<td>1/23/2020</td>
</tr>
<tr>
<td>6</td>
<td>YRT meeting w/new presentation of consultant methodology (Apex, full meeting)</td>
<td>1/23/2020</td>
</tr>
<tr>
<td>7</td>
<td>Range of interpretation survey sent to industry</td>
<td>1/23/2020</td>
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<td>Range of interpretation survey sent to industry</td>
<td>1/23/2020</td>
</tr>
<tr>
<td>10</td>
<td>YRT meeting w/new presentation of consultant methodology</td>
<td>1/23/2020</td>
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<tr>
<td>11</td>
<td>Consultant begins/consultant/field test discussions with participants</td>
<td>1/23/2020</td>
</tr>
<tr>
<td>12</td>
<td>Preliminary results shared with design group</td>
<td>1/23/2020</td>
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<td>13</td>
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<tr>
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<td>Final results shared with design group</td>
<td>1/23/2020</td>
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<tr>
<td>17</td>
<td>Consultant and/or design group agree on any suggested refinements to field test</td>
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<td>1/23/2020</td>
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<td>1/23/2020</td>
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W:\National Meetings\2020\Spring\TF\LA\LATF Calls\01-23/. YRT FT revised timeline, 200123

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LONG-TERM SOLUTION (YRT & VM-20)
OVERVIEW AND INITIAL ANALYSIS

DECEMBER 5, 2019

QUALIFICATIONS, ASSUMPTIONS AND LIMITING CONDITIONS

Oliver Wyman was requested by the American Council of Life Insurers, the American Academy of Actuaries and the National Association of Insurance Commissioners to support an industry field test being conducted to aid the NAIC Life Actuarial (A) Task Force in the selection of a long-term solution for the treatment of non-guaranteed reinsurance under PBR.

Oliver Wyman shall not have any liability to any third party in respect of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein.

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Contents

1 Executive summary
2 Background
3 Analysis design
4 Initial analysis and insights
5 Next steps

Appendix A: Supplementary results
Appendix B: Model design and assumptions
Appendix C: Analysis and validation tools
Appendix D: Project team and governance

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Executive Summary

Long-term solution for modeling non-guaranteed reinsurance

BACKGROUND

A wide range of practice was observed from early adopters of PBR in regards to the modeling of non-guaranteed reinsurance and a formulaic solution was adopted on an interim basis for the 2020 Valuation Manual.

ANALYTICAL SUPPORT

Oliver Wyman was selected to support and supplement the industry field test. The scope of our support is summarized below and further outlined in the remaining slides in this section of this presentation.

1. Analysis and insights

Using parent industry models, Oliver Wyman will perform analysis that will be provided in advance of field test results and will provide additional insights beyond those provided by field test participants, informed by a survey on broader industry practices. As needed, analysis outside the scope of the field test may be performed.

2. Field test support

Oliver Wyman will lead calls with field test participants and assist in the preparation and interpretation of results. Additionally, analysis will be performed to better understand the range of variation in participant results (e.g., company and reinsurance structure, field test interpretations, modeling simplifications and/or limitations).

The purpose of today’s presentation is to share details on the design of the analysis models as well as initial insights.

Deliverables

Deliverables for the stages of work are described on the next slide

Stage Deliverables

Analysis and insights

- AXS model, documentation and Testware which will be made available to the NAIC
- Initial analysis and associated model design, with capabilities to analyze the impact of field tested proposals across a range of product types, reinsurance structures and reinsurance reaction scenarios
- Range of interpretation survey intended to further understanding on the range of interpretations for field tested proposals across a much larger participation base than the actual field test
- Conference calls with field test participants to ensure consistent understanding of field testing instructions and provide advice in light of any model simplifications or limitations (participants will be used as needed)
- Reports summarizing results from industry field test, with additional analysis to further understanding of these results
- Analysis performed in light of responses to “range of interpretation” survey and beyond the scope of the field test (3 desired by LATF to allow an informed decision to take place)

Field test support

- Field test participants will prepare their models for the field test while Oliver Wyman performs deep analysis across a range of products and reinsurance structures for NAIC regulators with representative potential valuation impacts as an input to subsequent steps
- Field tests will be performed in-place of LATF at the NAIC meeting (December 2019) and subsequent analysis shared at the initial LATF meeting (March 2020)

- The industry field test will commence; initially the focus will be on model preparation, testing of simple solutions and point-in-time reserve impacts, with a goal of identifying next challenges and testing the integrity and range of variability in the results of Oliver Wyman’s analysis

- Field test participants will produce projected reserves for the various solutions, while Oliver Wyman assists with the interpretation and collection of results. The results of this test will give regulators additional comfort with conclusions drawn from the initial analysis by reviewing the range of results for prudential and sensitivity not previously captured

Deliverables for the stages of work are described on the next slide

Timeline

Oliver Wyman will support the stages of the field test depicted below

- The valuation scenario for the DR follows the 12/31/2018 scenario at each valuation date
- Prudent margins intended to reflect industry averages with a separate set of mortality margins to resemble a full-valet-based and large insurer (not necessary)
- Initial sufficient data period equal to 15 years and increased by one year at each future valuation date, subject to maximum years of sufficient data allowed for under VM-20 for this given level of credibility
- Projected margins intended to reflect industry averages with a separate set of mortality margins to resemble a full-valet-based and large insurer
- 60 year projection horizon (30 for Term)
- Current scale of YRT, target excess test estimate mortality
- Mortality is improved to each valuation date to reflect historic mortality improvement
- Initial sufficient data period equal to 15 years and increased by one year at each future valuation date, subject to maximum years of sufficient data allowed for under VM-20 for this given level of credibility

Analysis is intended to align with industry field test instructions and the products and assumptions are intended to be broadly representative of the industry
This section explores the relationship between mortality margin and the impact that reinsurance has on reserves under PBR.

1. Mortality and PBR prescribed margins
2. Impact of mortality margins
3. Projected reinsurance credit
4. Formulaic reserve credit

Results are presented for two sets of boundary reinsurer reactions under PBR mortality margins, and an analytical benchmark (10% mortality margin).

The mortality assumption under VM-20 contains both direct sources of margin and an indirect source of margin (lack of future mortality improvement).

The impact of reinsurance depends largely on the modeled reinsurer reaction.
The impact of the 50% reinsurance agreement is re-evaluated below after updating the PBR mortality assumption to use a level 10% margin.

The impact of reinsurance depends largely on the modeled reinsurer reaction.

Projected reinsurance credit

The reinsurance reserve credit (difference between pre- and post-reinsurance reserve) under the two sets of margins is shown below.

Key takeaways

1. Reinsurer reaction scenarios can produce reserve credits in excess of ½ Cx
   - ½ Cx represents the cost of reinsurance that corresponds to the period for which the reinsurance premium has been paid, but not yet earned by the reinsurer, with no provision for reinsurance beyond the paid to date.
   - Full reinsurer reaction scenario tested allow for:
     - Reinsurer reaction that reflects difference between evolution of mortality margin and reinsurance premium payment dates.
     - Contractual provisions around the return of future unearned reinsurance premiums on death and lapse.
     - Other mechanical differences due to VM-20 requirements (e.g., differences in starting assets and the resulting earned rate).

2. It is important to look at long-term projections of reserve when evaluating the impact of reinsurance modeling approaches.
   - The level of margin in mortality as compared to best estimate changes at future valuation dates. Hence, evaluating mortality improvement and extending the sufficient data period.
   - As the business ages, higher mortality and shorter projection horizons will change the impact of reinsurance on reserves at future valuation dates.
**Overview**

Proposed granularity for the analysis and modeling is outlined below.

<table>
<thead>
<tr>
<th>Methodology analysis dimensions</th>
<th>Granularity</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties of the reinsurance</td>
<td>High</td>
<td>Significant variability in the amounts of reinsurer and revaluing between rates and cash surrender limits required for coverage of thinly written lines and the range of company usage of YRT reinsurance</td>
</tr>
<tr>
<td>Mortality</td>
<td>High</td>
<td>Different starting levels of mortality, credibility, and years of sufficient data will provide insights into the impact for a range of company data.</td>
</tr>
<tr>
<td>Reserves</td>
<td>Medium</td>
<td>Robust re-valuation functionality is needed to provide projected long-term impacts in support of a long-term validation. Forecasts of reserves are expected to be undertaken for field test participants</td>
</tr>
<tr>
<td>Products and preparation</td>
<td>Medium</td>
<td>Popular product types with high net amount at risk were selected (Term and ULSG). In addition, CMLA was selected because it is a longer product with a diminishing net amount at risk</td>
</tr>
<tr>
<td>Assets</td>
<td>Low</td>
<td>Reduced value impact as only the discount rate for the DR and the credited rates for interest sensitive products will be impacted</td>
</tr>
</tbody>
</table>

This section contains the results of sensitivities performed to confirm this level of granularity. See Appendix B for further details on the analysis design.

---

**Reinsurer reaction scenarios**

Proposed coverage is shown below. As needed, these results will be produced for the methodology analysis dimensions (e.g., product, company size, reinsurance attributes). The following summarizes the impact reinsurance on PBR reserves for the sensitivities on model components with high granularity.

<table>
<thead>
<tr>
<th>Reinsurer reaction</th>
<th>Change to non-guaranteed YRT rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A: Allow future mortality improvement in reserves</td>
</tr>
<tr>
<td>Immediate</td>
<td>N/A: Best estimate assumptions / economic reserve</td>
</tr>
<tr>
<td>Delay 5-years</td>
<td>N/A: Interim solution (½ Cx credit)</td>
</tr>
<tr>
<td>Delay 10-years</td>
<td>N/A: No change</td>
</tr>
</tbody>
</table>

Impact analysis | High granularity

The following summarizes the impact reinsurance on PBR reserves for the sensitivities on model components with high granularity:

- Mortality: Reduce credibility and sufficient data period (50 years and 50% reserving) Mortality margin increased portion of business renewed to 70%.
- Product: Increase by 110% of prescribed mortality margin, excluding future mortality improvement.
- Product: Increase by 105% of the difference between current scale and PBR mortality.
- Product: Increase by 100% of prescribed mortality margin, including future mortality improvement.

Impact analysis | Low-medium granularity

The following summarizes the impact reinsurance on PBR reserves for the sensitivities on model components with low-medium granularity:

- Product: Increase by 115% of prescribed mortality margin, excluding future mortality improvement.
- Product: Increase by 110% of prescribed mortality margin, excluding future mortality improvement.
- Product: Increase by 100% of prescribed mortality margin, excluding future mortality improvement.
- Product: Increase by 105% of prescribed mortality margin, excluding future mortality improvement.

The product and yield curve sensitivities have a lower impact on the reinsurance reserve credit.

---

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Initial insights and analysis

The scope of the industry field test is focused on the “field test modified” APFs discussed on the September 12th LATF call and summarized below:

### APF Description | Field testing variations
---|---
2019-40 | - Actuarial judgement with clarified modeling principles/assumptions
- Prudent estimate of all counterparty actions
- Prudent estimate of rate changes only after reaching 115% reinsurer loss ratio
- Model prudent estimate of rate changes only after reaching 5% of revenue per year of reinsurer losses

2019-41 | - Reinsurance margin such that the difference between best estimate mortality and the current scale of YRT rates is maintained
- Reinsurance margin such that the difference between best estimate mortality and the current scale of YRT rates is maintained
- Best estimate mortality (for the purposes of calculating reinsurer margin) contains future mortality improvement for 15 years at a rate of 0%, 5% and 1% per year

2019-42 | - Increase reinsurability rating by reinsurability premium margin, equal to the percentage difference between FBM and best estimate mortality
- Judgment modifications are allowed (for these are less conservative, what you accept, then they require commissioner approval)
- Increase reinsurability rating by reinsurability premium margin, equal to the percentage difference between FBM and best estimate mortality
- Reinsurance credit – PBR reserve
- Future mortality improvement included in best estimate mortality (used for the purpose of calculating reinsurer margin) for 5, 10, 15 and 20 years

The field test submission calls for two baselines: the interim solution (½ Cx) and a scenario where no change from the current scale of YRT rates is assumed.

---

**Initial analysis**

The remainder of this section focuses on representative impacts for the field-tested APFs, as summarized in the table below. In addition the impact is provided for the two baselines described on the prior slide.

<table>
<thead>
<tr>
<th>APF</th>
<th>Field testing variations</th>
</tr>
</thead>
</table>
| 2019-40 | - Prudent estimate of all counterparty actions
- Prudent estimate of rate changes only after reaching 115% reinsurer loss ratio
- Model prudent estimate of rate changes only after reaching 5% of revenue per year of reinsurer losses

<table>
<thead>
<tr>
<th>Initial analysis parameters</th>
</tr>
</thead>
</table>
| - Reinsurance margin such that the difference between best estimate mortality and the current scale of YRT rates is maintained
| - Reinsurance margin such that the difference between best estimate mortality and the current scale of YRT rates is maintained
| - Best estimate mortality (for the purposes of calculating reinsurer margin) contains future mortality improvement for 15 years at a rate of 0%, 5% and 1% per year

2019-41 | - Description: Reinsurance margin such that the difference between best estimate mortality and the current scale of YRT rates is maintained
- Variations: Best estimate mortality (for the purposes of calculating reinsurer margin) contains future mortality improvement for 15 years at a rate of 0%, 5% and 1% per year
- Reinsurance margin increased by the relative difference between FBM and best estimate mortality
- Reinsurance margin increased by the relative difference between FBM and best estimate mortality
- Best estimate mortality (for the purposes of calculating reinsurer margin) contains future mortality improvement for 15 years at a rate of 0%, 5% and 1% per year

2019-42 | - Description: Reinsurance margin such that the difference between best estimate mortality and the current scale of YRT rates is maintained
- Variations: Future mortality improvement included in best estimate mortality for 5, 10, 15 and 20 years

The purpose of these results is to foster dialogue around these APFs, the format results are presented in, and any desired follow-up analysis.

---

**Impact analysis | Baseline**

½ Cx and no change to current scale of YRT rates

The purpose of these results is to foster dialogue around these APFs, the format results are presented in, and any desired follow-up analysis.

---

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Impact analysis | APF 2019-40
YRT rates are increased by 105% of the difference between the current scale and PBR mortality, until recapture in 2044

Mortality and reinsurance margins
40-year-old male, preferred non-tobacco, 2019 valuation

Reinsurance

The reinsurer reaction (5% over mortality margin) produces a reserve credit in excess of ½ Cx (See Background section for explanation) until recapture in 2044

Impact analysis | APF 2019-40
No change in YRT rates until 2024 followed by progressive increases to break even in 2044 and later

Mortality and reinsurance margins
40-year-old male, preferred non-tobacco, 2019 valuation

Reinsurance

The reserve credit is higher than the prior slide because of a slower reinsurer action. The reserve credit persists beyond 2044 because recapture is not modeled.

Impact analysis | APFs 2019-41, 2019-42
Future mortality improvement included in the best estimate component of reinsurance margin for 15 years at a rate of .75% per year

Mortality and reinsurance margins
40-year-old male, preferred non-tobacco, 2019 valuation

The impact of APFs 2019-41 and 2019-42 are equal due to the selection of mortality improvement parameters and the method used to calculate the reinsurance margin

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Attached is an updated Appendix A containing supplementary results.

Listed below are next steps for the analysis and field test:

1. **Point in time reserves**
   - Oliver Wyman to confirm and share results of industry field test for point-in-time reserves as well as additional consultant analysis at a LATF call in February.
   - Target Date: February 2020

2. **Projected reserves**
   - Oliver Wyman to share APF specific results informed by industry range of practice survey at the March LATF meeting.
   - Target Date: March 2020

3. **Draft amendment**
   - Academy working group will work with LATF to draft an amendment and expose for comment.
   - Oliver Wyman will perform additional analysis as needed.
   - Target Dates: May - June 2020

4. **Range of interpretation survey**
   - Field test submission format
   - Target Dates: May - June 2020

Impact analysis | gross reserves (1 of 2)
Pre-reinsurance reserves are shown below for the sensitivities on model components with high granularity:

- **Baseline**
  Results from Section 1

- **Mortality sensitivity**
  Reduced credibility and years of sufficient data

Impact analysis | gross reserves (2 of 2)
Pre-reinsurance reserves are shown below for the sensitivities on model components with low-medium granularity:

- **Baseline**
  Results from Section 1

- **Assets sensitivity**
  100bps increase to outer loop yield curve

- **Product sensitivity**
  5% decrease in premium loads (and retail premiums)
Impact analysis | net reserves (1 of 2)
Post-reinsurance reserves are shown below for the sensitivities on model components with high granularity

Baseline
Results from Section 1

Reinsurance sensitivity
Reduce portion of business reinsured

Mortality sensitivity
Reduced credibility and years of sufficient data

Product sensitivity
5% increase in premium loads (and retail premiums)

Assets sensitivity
100bps increase to outer loop yield curve

Impact analysis | net reserves (2 of 2)
Post-reinsurance reserves are shown below for the sensitivities on model components with low-medium granularity

Baseline
Results from Section 1

Methodology analysis dimensions
The proposed coverage for the analysis is summarized below

Component Coverage
Reinsurance
- Amount of reinsurance (None, 10% and 50%)
- Attachment point (First-dollar and excess of retention)
- Relationship between the current scale of YRT rates and best-estimate mortality (i.e., equal to, less than, and greater than)
- Default/company recapture and various reinsurer reaction scenarios (See next section)

Mortality
- Different best-estimate mortality improvement rates (0%, 5%, 7.5%, 1% per year) and levels of credibility & years of sufficient data

Reserves
- Projected reserves will be calculated based on the 2020 Valuation Manual and set to the Max(NPR, DR) with the SR enabled for select runs
- Reserves will be re-valued annually

Products and population
- Mix of business by issue age, risk class, gender and band for Term (T10 and T20), ULSG (Shadow account, lifetime guarantee) and CAUL (5-year specified premium guarantee, general account only), products issued on June 30, 2019

Assets
- Reinvestments only, level yield curve
- S&L (15) mix of AAa assets with 15-year duration in both inner and outer loop (Note: Credit spread and default will vary by inner and outer loop)
Liability assumptions (ULSG)
The assumptions used in the analysis are below, including assumed PBR margins

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Anticipated experience assumption</th>
<th>Prudent estimate assumption (e.g. margins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>• 2015 VBT (gender distinct), smoker distinct ANB</td>
<td>• Prescribed margins applied to category mortality</td>
</tr>
<tr>
<td></td>
<td>• Relative risk varies by risk class</td>
<td>• Industry table: 2015 VBT with prescribed margins and mortality improvement scale</td>
</tr>
<tr>
<td></td>
<td>• A/E factors vary by high/low band</td>
<td>• Grading and margins assumes 150% LF credibility</td>
</tr>
<tr>
<td></td>
<td>• .75% annual future mortality improvement</td>
<td></td>
</tr>
<tr>
<td>Lapse</td>
<td>• 3% annual lapse rate</td>
<td>• 2% annual lapse rate</td>
</tr>
<tr>
<td>Expenses</td>
<td>• $50 per policy (annual)</td>
<td>• 105% margin on expenses</td>
</tr>
<tr>
<td></td>
<td>• 2.5% premium tax</td>
<td>• 2.5% inflation</td>
</tr>
</tbody>
</table>

Appendix C Analysis and validation tools

Suite of modeling tools
Overview (1 of 2)

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>AXIS Dataset</td>
<td>• AXIS pricing/new business model equipped with ALM and PBR functionality, representative policies from generic product types and the flexibility to run various reinsurance reaction and PBR revaluation scenarios</td>
</tr>
<tr>
<td></td>
<td>• DataLink functionality allowing for automated updates to product features and assumptions</td>
</tr>
<tr>
<td>Model documentation</td>
<td>• Self-contained documentation of model requirements, design, and testing</td>
</tr>
<tr>
<td>Detailed user guide</td>
<td>• Comprehensive guide showing the model setup for product features, assumptions and features</td>
</tr>
<tr>
<td></td>
<td>• Instructions on how to use the Testware and perform updates to the model</td>
</tr>
</tbody>
</table>

Suite of modeling tools
Overview (2 of 2)

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testware</td>
<td>• Comprehensive testing workbook which validates all calculations (scenario information, investment gain/loss on hedge and interpolated reserves taken as a given)</td>
</tr>
<tr>
<td>Analysis tool</td>
<td>• Summarize, confirm, and provide meaningful metrics for the model office results</td>
</tr>
<tr>
<td></td>
<td>• Graphs of reserve balances, distributable earnings, and the earned rate on general account assets</td>
</tr>
<tr>
<td></td>
<td>• Provides high level check on outer and inner loop decrements and other implied values</td>
</tr>
<tr>
<td>Input builders</td>
<td>• User-friendly Excel tools in which assumptions and other required model values are translated from user-friendly &quot;source information&quot; into AXIS formatted tables</td>
</tr>
<tr>
<td></td>
<td>• These tools are embedded in the Dataset in order to enhance controls and governance</td>
</tr>
</tbody>
</table>
Documentation
Details the requirements, design, documentation, and testing of the model in a modular and expandable structure

Documentation is centralized into a single, all-inclusive report to facilitate future maintenance. Appendices summarize future improvements and other key project deliverables.

User guide
Supplements the model documentation and provides additional detail on the AXIS model structure

Testware
Replicates model calculations while supporting version management, increasing transparency, and augmenting documentation

Analysis tool
Aggregates results under pre-PBR and PBR setups and provides financial metrics and implied rate analysis
Appendix D | Project team and governance

The consultant analysis will be overseen by NAIC Staff, the Academy, and the ACLI, as depicted in the following chart.

The report and the findings herein are subject to the reliances and limitations outlined at the beginning of this report. This report is considered a statement of actuarial opinion under the guidelines promulgated by the American Academy of Actuaries. Chris Whitney, Dylan Strother and Katie van Ryn of Oliver Wyman developed this report and meet the qualification requirements of the American Academy of Actuaries to render the opinion contained herein.
Oliver Wyman was requested by the American Council of Life Insurers, the American Academy of Actuaries and the National Association of Insurance Commissioners to support an industry field test being conducted to aid the NAIC Life Actuarial (A) Task Force in the selection of a long-term solution for the treatment of non-guaranteed reinsurance under PBR.

Oliver Wyman shall not have any liability to any third party in respect of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein.

This report does not represent investment advice or provide an opinion regarding the fairness of any transaction to any and all parties. This report does not represent legal advice, which can only be provided by legal counsel and for which you should seek advice of counsel. The opinions expressed herein are valid only for the purpose stated herein and as of the date hereof.

Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been verified. No warranty is given as to the accuracy of such information. Public information and industry and statistical data are from sources Oliver Wyman deems to be reliable; however, Oliver Wyman makes no representation as to the accuracy or completeness of such information and has accepted the information without further verification. No responsibility is taken for changes in market conditions or laws or regulations and no obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof.

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The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call Feb. 26, 2020. The following Subgroup members participated: Bruce Sartain, Chair and Vincent Tsang (IL); Jim Jakielo (CT); William Leung (MO); Bill Carmello (NY); Tomasz Serbinowski (UT); and Craig Chupp (VA). Also participating was: Elaine Lam (CA).

1. Discussed the Potential Revisions to VM-22

Mr. Sartain discussed the Subgroup priorities for revising VM-22, Maximum Valuation Interest Rates for Income Annuities to incorporate principle-based reserving (PBR). He acknowledged monitoring the American Academy of Actuaries (Academy) Annuity Reserves Work Group conference calls during which they work on the details of PBR for non-variable annuities. He said the target date for implementation of the Work Group’s PBR version of VM-22 is Jan. 1, 2023. Mr. Sartain said there are six items on which the Work Group needs state insurance regulator feedback. He anticipates that the Subgroup will provide that feedback via making recommendations to the Life Actuarial (A) Task Force.

He said current thinking is that all non-variable annuities will be subject to an exclusion test. Deferred annuity contracts passing the exclusion test will be valued according to the requirements of Actuarial Guideline XXXIII—Determining CARVM Reserves for Annuity Contracts with Elective Benefits (AG 33). The requirements for determining valuation interest rates for an immediate annuity that passes the exclusion test will default to the current version of VM-22.

Mr. Chupp questioned whether it is necessary to have a PBR approach for immediate annuities that fail the exclusion test. Mr. Sartain said that one aspect of a PBR approach would be a robust approach for handling reinvestment risk. Ben Slutsker (Academy Annuity Reserves Work Group) said the exclusion tests can be calibrated to consider the characteristics of the various annuity designs, including the duration, longevity risk and reinvestment risk. Ms. Lam said the Subgroup should consider that scoping immediate annuities out of the PBR approach would preclude them from being subject to VM-G, Appendix G – Corporate Governance Guidance for Principle-Based Reserves. She said having immediate annuities opt out by passing an exclusion test does not offer the same opportunity.

Mr. Leung asked if VM-22, which currently considers only valuation rates, should be expanded to include the valuation methods. Mr. Sartain said that the Subgroup charges include the potential for changes to valuation methodology, but it has not been determined whether a methodology change would reside in VM-22 or be placed elsewhere in the Valuation Manual. Mr. Serbinowski said having separate regimes for different subclasses of annuities encourages companies to search for regulatory arbitrage opportunities. Mr. Slutsker said the ARWG’s preference is to have all non-variable annuity requirements contained in a single Valuation Manual chapter. Mr. Sartain stated it was his intent to vote on these issues during the Subgroup’s next conference call.

Mr. Sartain said about three years ago, the Academy Standard Valuation Law (SVL) Interest Rate Modernization Work Group was asked by the Life Actuarial (A) Task Force to consider whether a new methodology for determining interest rates for the Commissioners Annuity Reserve Valuation Method (CARVM) would make sense. He said, given the move toward a PBR methodology for non-variable annuities, including the use of exclusion tests, it is questionable whether the Work Group’s work should continue. Chris Conrad (Academy SVL Interest Rate Modernization Work Group) said that because single premium immediate annuities (SPIAs) have little policyholder optionality, valuation of SPIAs will not require the same level of modeling sophistication required for non-SPIAs. He recommended pausing the Work Group’s work on SPIAs until the work on exclusion tests and other aspects of non-variable annuities valuation are farther along. Mr. Sartain said the group could quickly resume its work when the time arises.

Mr. Leung made a motion, seconded by Mr. Chupp, to request the Academy SVL Interest Rate Modernization Work Group to delay work until further notice on modernizing the process for determining valuation rates for non-SPIA non-variable annuities, as referenced in Mike Boerner’s letter of Jan. 25, 2017. The motion passed unanimously.

Having no further business, the VM-22 (A) Subgroup adjourned.
Update on Life Insurance Mortality Experience Reporting

Pat Allison, MAAA, FSA
5/7/2020

Planned Communication with Companies Selected for Experience Reporting

<table>
<thead>
<tr>
<th>Month</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2020</td>
<td>Reminder of available training materials and VM-51 file layout</td>
</tr>
<tr>
<td>June 2020</td>
<td>Answers to frequently asked questions</td>
</tr>
<tr>
<td>July 2020</td>
<td>VM-51 data dictionary</td>
</tr>
<tr>
<td>August 2020</td>
<td>Details on all RDC form and format validations</td>
</tr>
<tr>
<td>September 2020</td>
<td>Control Totals template*</td>
</tr>
<tr>
<td>October 2020</td>
<td>Reconciliation template**</td>
</tr>
<tr>
<td>TBD</td>
<td>Process for reporting business administered by a reinsurer or third-party administrator</td>
</tr>
</tbody>
</table>

* VM-50 Section 4.B.2 requires control totals for each data submission

** VM-50 Section 4.B.3 requires a reconciliation between submitted data and the company’s statistical and financial data

5/7/2020
To: Life Actuarial (A) Task Force  
From: NAIC Support Staff  
Date: April 15, 2020  
Re: Recommendation to Delay 2020 Collection of Company Mortality Experience Data

Background

VM-50 Section 2.B.2 designates the NAIC as the Experience Reporting Agent for the Statistical Plan for Mortality beginning Jan. 1, 2020. At a June 25, 2019 LATF meeting, NAIC life actuarial support staff presented information on the selection of companies required to submit mortality experience data in 2020. A total of 176 companies were selected, representing 31 states of domicile. Since then, all selected companies were notified, and the data call was planned to begin during Q2, 2020.

Recommendation to Delay 2020 Data Collection

Due to the disruption being experienced by life insurance companies from the COVID-19 pandemic and the significant resources required to provide mortality experience data, the American Council of Life Insurers (ACLI) has requested a delay in the 2020 data collection. NAIC support staff recommends a one-year delay. This means that mortality data for the 2018 observation year would not be collected in 2020. Instead, data for both the 2018 and 2019 observation years would be collected in 2021. The 2021 data call would occur during the second quarter of 2021, and would require data for both the 2018 and 2019 observation years. Data submissions for both observation years would be due by Sept. 30, 2021. Corrections of data submissions for both observation years would be required by Dec. 31, 2021.

VM-51 Section 2.D states that data shall be submitted on an annual basis, and defines the reporting year (the calendar year the company submits experience data) and observation year (two years prior to the reporting calendar year). This language is not in sync with a 2021 reporting year for two observation years (2018 and 2019). However, VM-50 Section 5.A.3 states that the Experience Reporting Agent may modify or enlarge the requirements of the Valuation Manual, through recommendation to the Life Actuarial (A) Task Force and in accordance with the Valuation Manual governance process for information to accommodate changing needs and environments. Therefore, NAIC staff recommends the collection of mortality experience data for the 2018 and 2019 observation years in 2021 under the timeline noted above.

The collection of company mortality experience data under the Valuation Manual remains a high priority regulatory issue for the NAIC, and the proposed one-year delay in the collection of this data should not be interpreted as diminishing the importance of this issue to the NAIC. This accommodation does not reflect on diminishment of the role of experience reporting as the foundation for principle-based reserving. Because successful life experience reporting traditionally has relied on year-to-year continuity of processes and staff, it is expected that life insurers taking advantage of this accommodation will take care to ensure this continuity takes place and future experience reporting submissions will be of high quality, even with the one-year delay and potential temporary disruption of continuity. Lack of quality data submissions could create uncertainty which could lead to additional margins in reserve assumptions being required.
April 30, 2020

Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force

Re: ACLI Comments on Proposed Delay of PBR Experience Reporting

Dear Mike:

The American Council of Life Insurers (ACLI)\(^1\) appreciates the opportunity to comment on the proposed delay of PBR Experience Reporting.

ACLI is supportive of the temporary deferral of the mortality experience reporting requirement. We are appreciative of the NAIC responsiveness to the pandemic and current economic environment.

We look forward to a discussion of this issue. Thank you.

Sincerely,

cc Reggie Mazyck, NAIC

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1 The American Council of Life Insurers (ACLI) advocates on behalf of 280 member companies dedicated to providing products and services that promote consumers’ financial and retirement security. 90 million American families depend on our members for life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, dental and vision and other supplemental benefits. ACLI represents member companies in state, federal and international forums for public policy that supports the industry marketplace and the families that rely on life insurers’ products for peace of mind. ACLI members represent 95 percent of industry assets in the United States. Learn more at www.acli.com.
Update on the Request for Proposal for the Economic Scenario Generator (ESG)

Pat Allison, MAAA, FSA
5/7/2020

RFP for a New ESG

- An RFP has been issued to select a vendor to provide a new ESG to be prescribed for life and annuity reserves and capital (e.g., VM-20, VM-21, C-3 Phase I, and C-3 Phase II)

- RFP Timeline:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/04/2020</td>
<td>Release of RFP</td>
</tr>
<tr>
<td>03/13/2020</td>
<td>Notification of intent to bid</td>
</tr>
<tr>
<td>03/25/2020</td>
<td>Submission of questions</td>
</tr>
<tr>
<td>04/08/2020</td>
<td>Responses to questions provided via email and the NAIC website</td>
</tr>
<tr>
<td>05/01/2020</td>
<td>Proposal due to NAIC</td>
</tr>
<tr>
<td>May 2020</td>
<td>Vendor Selection and Award of RFP</td>
</tr>
</tbody>
</table>

- The new ESG is expected to be implemented no earlier than 2022
Cessation of the
London Interbank Offered Rate
(LIBOR)

Pat Allison, MAAA, FSA
5/7/2020

Agenda

- Background
- Actions Needed
  - Company Preparation
  - Valuation Manual Amendment

Background

- The UK’s Financial Conduct Authority is responsible for regulating LIBOR and has indicated that publication of LIBOR is not guaranteed beyond 2021
- The Alternative Reference Rates Committee (AARC) was formed in 2014 by the Federal Reserve Board and the NY Fed
- In 2017, the AARC identified the Secured Overnight Financing Rate (SOFR) as the rate that represents best practice for use in certain new USD derivatives and other financial contracts
- The AARC has 10 working groups to help ensure a successful transition from USD LIBOR to SOFR, e.g.:
  - Outreach/Communications Working Group
  - Regulatory Issues Working Group
  - Accounting/Tax Working Group

Actions Needed

- Insurance companies will need to take inventory of existing products and processes that use LIBOR, which may include:
  - Investments (e.g., floating rate debt, where the interest rate is reset periodically based on LIBOR; derivatives linked to LIBOR)
  - Contracts with policyholders (e.g., annuities with credited rate equal to LIBOR plus a margin)
  - Reinsurance treaties
  - IT feeds
- Take action where required to move toward SOFR or another rate (e.g. for annuity contracts with policyholders, file for approval with the IIPRC and notify owner)
**Actions Needed**

  
  Interest rate swap spreads over Treasuries shall be prescribed by the NAIC for use throughout the cash-flow model wherever appropriate for transactions and operations including, but not limited to, purchase, sale, settlement, cash flows of derivative positions and reset of floating rate investments. A current and long-term swap spread curve shall be prescribed for year one and years four and after, respectively, with yearly grading in between. The three-month and six-month points on the swap spread curves represent the corresponding London Interbank Offered Rate (LIBOR) spreads over Treasuries.

- VM-20 Spreads Drafting Group was formed to consider the changes needed to this language.
Interest Rate Swap Spreads in the Valuation Manual

NAIC Life Actuarial (A) Task Force Call
May 7, 2020

Background

- The NAIC Valuation Manual prescribes interest rate swap spreads for VM-20 and VM-21 modeling (VM-20 Section 9.F.8.d and Appendix 2). The NAIC publishes these rates monthly.

- VM-20 Section 9.F.8.d states in part:
  Interest rate swap spreads over Treasuries shall be prescribed by the NAIC for use throughout the cash-flow model whenever appropriate for transactions and operations including, but not limited to, purchase, sale, settlement, cash flows of derivative positions and reset of floating rate investments.

- Use of the NAIC published Swap Spreads increased substantially when writers began implementing the new VM-21 requirements for inforce variable annuity business effective 1/1/2020.

- The swap spreads are currently linked to LIBOR, which will be likely be phased out by 2021. While it is anticipated LIBOR will be replaced by SOFR, no market consensus has been reached yet.

- Current spreads are market-observable values, and not assumptions.

- The NAIC is currently receiving current spread data from Bank of America and JP Morgan daily.

- Data published by the NAIC has not consistently been tracking market-observable values in the derivatives market. These differences are most notable at the 3-month and 6-month tenors.

- Absolute differences between the NAIC Table J Spread and market-observable spreads have been as large as 19bps.

Issue Raised by Industry

- Charts showing differences in recent spreads1:

1 Market observed swap spreads source is Bloomberg data
Issues Raised by Industry

- Review current calculated rates and verify data sources
- Address elimination of LIBOR: includes both direct replacement for LIBOR as well as potential LIBOR fallback rates
- Request increased clarity in VM-20/VM-21 as company observed spreads will differ from published spreads:
  - Swap contract specifics – Plain Vanilla Swap terms are not uniformly defined. For example, which LIBOR rate, 3-month or 6-month? Other terms such rate reset frequency and payment dates should also be disclosed. Also, assume these are exchange cleared contracts.
  - How the swap rates are determined (short, intermediate, and long end).
  - How the Treasury rates are determined/source.
- Importance of other uses of swap spreads
  - Market value determination (e.g. buying/selling of assets impact)
  - Hedging

Actions to Address this concern

- LATF formed an informal VM-20 Spreads Drafting Group to review industry concerns.
- The Drafting Group and industry/ACLI had a call on 2/3/2020 to discuss the identified issue and possible path forward.
- Industry favors finding a solution as soon as possible. We would seek an APF for the 2021 Valuation Manual, and if possible, data source modification for 2020 reporting.
- ACLI will work on a proposal to LATF to modify the Valuation Manual so that any guidance around Swap Spreads allows for a data source that:
  - (1) aligns with use in the actuarial models and reflects the market economics appropriately;
  - (2) is accessible for Industry to use independent of NAIC;
  - (3) is flexible to address the expected end of LIBOR in 2021.

Questions?
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

Brian Bayerle, ACLI – Interest Rate Swap Spread Determination

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:


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 attached.

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

Interest Rate Swap Spreads are currently being calculated by the NAIC under methodology outlined in the Valuation Manual. With the forthcoming termination of LIBOR, the requirements of the Valuation Manual will need to change. This APF provides broad guidance allowing for one or more currently unnamed rate to replace LIBOR in these calculations. Additionally, it allows the company to calculate its own current rates only using market observable values. The spread requirements are currently included in VM-20, with VM-21 referencing the applicable sections. With the potential of VM-22 likely having similar references, LATF may want to consider moving these and other asset requirements to their own section.

* 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:

<table>
<thead>
<tr>
<th>Dates:</th>
<th>Received</th>
<th>Reviewed by Staff</th>
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<tr>
<td>05/4/20</td>
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Notes: VM APF 2020-06
VM-20 Section 9.F.8.d

Interest rate swap spreads over Treasuries shall be prescribed calculated by the NAIC for use throughout the cash-flow model wherever appropriate for transactions and operations including, but not limited to, purchase, sale, settlement, cash flows of derivative positions and reset of floating rate investments. A current and long-term swap spread curve shall be prescribed for year one and years four and after, respectively, with yearly grading in between. The three-month and six-month points on the swap spread curves represent the corresponding London Interbank Offered Rate (LIBOR) spreads over Treasuries.

The company may elect to produce their own current swap spread curves based on current observable rates. The company will document the data source(s) of the observable rates in the VM-31 report.

**Guidance Note:** The swap curves should be determined by the NAIC using appropriate market-observable rate or rates. The London Interbank Offered Rate (LIBOR) spreads over Treasuries was the defined spread curves up to and including the 2020 NAIC Valuation Manual, however with the expectation that this rate will be terminated, the rate or rates used in the calculations should be replaced with the most appropriate rate or rates that replace LIBOR for the specified purpose.

VM-31 Section 3.D.6.v (additional bullet):

v. Current Swap Spreads Data Source: If the company used something other than the NAIC produced current swap spreads as permitted by VM-20 Section 9.F.8.d, documentation of the data source(s) used in the determination of the swap spreads.

VM-31 Section 3.F.4.h (additional bullet):

v. Current Swap Spreads Data Source: If the company used something other than the NAIC produced current swap spreads as permitted by VM-20 Section 9.F.8.d, documentation of the data source(s) used in the determination of the swap spreads.
STANDARD NONFORFEITURE LAW FOR INDIVIDUAL DEFERRED ANNUITIES
ACLI DRAFT EDIT APRIL 30, 2020

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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.

Section 3. Nonforfeiture Requirements

A. In the case of contracts issued on or after the operative date of this Act as defined in Section 13, no contract of annuity, except as stated in Section 2, shall be delivered or issued for delivery in this state unless it contains in substance the following provisions, or corresponding provisions which in the opinion of the commissioner are at least as favorable to the contract holder, upon cessation of payment of considerations under the contract:

(1) That upon cessation of payment of considerations under a contract, or upon the written request of the contract owner, the company shall grant a paid-up annuity benefit on a plan stipulated in the contract of such value as is specified in Sections 5, 6, 7, 8 and 10;

(2) If a contract provides for a lump sum settlement at maturity, or at any other time, that upon surrender of the contract at or prior to the commencement of any annuity payments, the company shall pay in lieu of a paid-up annuity benefit a cash surrender benefit of such amount as is
specified in Sections 5, 6, 8 and 10. The company may reserve the right to defer the payment of the cash surrender benefit for a period not to exceed six (6) months after demand therefor with surrender of the contract after making written request and receiving written approval of the commissioner. The request shall address the necessity and equitability to all policyholders of the deferral;

(3) A statement of the mortality table, if any, and interest rates used in calculating any minimum paid-up annuity, cash surrender or death benefits that are guaranteed under the contract, together with sufficient information to determine the amounts of the benefits; and

(4) A statement that any paid-up annuity, cash surrender or death benefits that may be available under the contract are not less than the minimum benefits required by any statute of the state in which the contract is delivered and an explanation of the manner in which the benefits are altered by the existence of any additional amounts credited by the company to the contract, any indebtedness to the company on the contract or any prior withdrawals from or partial surrenders of the contract.

B. Notwithstanding the requirements of this section, a deferred annuity contract may provide that if no considerations have been received under a contract for a period of two (2) full years and the portion of the paid-up annuity benefit at maturity on the plan stipulated in the contract arising from prior considerations paid would be less than $20 monthly, the company may at its option terminate the contract by payment in cash of the then present value of the portion of the paid-up annuity benefit, calculated on the basis on the mortality table, if any, and interest rate specified in the contract for determining the paid-up annuity benefit, and by this payment shall be relieved of any further obligation under the contract.

Section 4. Minimum Values

The minimum values as specified in Sections 5, 6, 7, 8 and 10 of any paid-up annuity, cash surrender or death benefits available under an annuity contract shall be based upon minimum nonforfeiture amounts as defined in this section.

A. (1) The minimum nonforfeiture amount at any time at or prior to the commencement of any annuity payments shall be equal to an accumulation up to such time at rates of interest as indicated in Subsection B of the net considerations (as hereinafter defined) paid prior to such time, decreased by the sum of Paragraphs (a) through (d) below:

(a) Any prior withdrawals from or partial surrenders of the contract accumulated at rates of interest as indicated in Subsection B;

(b) An annual contract charge of $50, accumulated at rates of interest as indicated in Subsection B;

(c) Any premium tax paid by the company for the contract, accumulated at rates of interest as indicated in Subsection B; and

(d) The amount of any indebtedness to the company on the contract, including interest due and accrued.

(2) The net considerations for a given contract year used to define the minimum nonforfeiture amount shall be an amount equal to eighty-seven and one-half percent (87.5%) of the gross considerations credited to the contract during that contract year.

B. The interest rate used in determining minimum nonforfeiture amounts shall be an annual rate of interest determined as the lesser of three percent (3%) per annum and the following, which shall be specified in the contract if the interest rate will be reset:
(1) The five-year Constant Maturity Treasury Rate reported by the Federal Reserve as of a date, or average over a period, rounded to the nearest 1/20th of one percent, specified in the contract no longer than fifteen (15) months prior to the contract issue date or redetermination date under Section 4B(4);

(2) Reduced by 125 basis points;

(3) Where the resulting interest rate is not less than one zero percent (10%); and

(4) The interest rate shall apply for an initial period and may be redetermined for additional periods. The redetermination date, basis and period, if any, shall be stated in the contract. The basis is the date or average over a specified period that produces the value of the five-year Constant Maturity Treasury Rate to be used at each redetermination date.

C. During the period or term that a contract provides substantive participation in an equity indexed benefit, it may increase the reduction described in Subsection B(2) above by up to an additional 100 basis points to reflect the value of the equity index benefit. The present value at the contract issue date, and at each redetermination date thereafter, of the additional reduction shall not exceed the market value of the benefit. The commissioner may require a demonstration that the present value of the additional reduction does not exceed the market value of the benefit. Lacking such a demonstration that is acceptable to the commissioner, the commissioner may disallow or limit the additional reduction.

D. The commissioner may adopt rules to implement the provisions of Section 4C and to provide for further adjustments to the calculation of minimum nonforfeiture amounts for contracts that provide substantive participation in an equity index benefit and for other contracts that the commissioner determines adjustments are justified.

Section 5. Computation of Present Value

Any paid-up annuity benefit available under a contract shall be such that its present value on the date annuity payments are to commence is at least equal to the minimum nonforfeiture amount on that date. Present value shall be computed using the mortality table, if any, and the interest rates specified in the contract for determining the minimum paid-up annuity benefits guaranteed in the contract.

Section 6. Calculation of Cash Surrender Value

For contracts that provide cash surrender benefits, the cash surrender benefits available prior to maturity shall not be less than the present value as of the date of surrender of that portion of the maturity value of the paid-up annuity benefit that would be provided under the contract at maturity arising from considerations paid prior to the time of cash surrender reduced by the amount appropriate to reflect any prior withdrawals from or partial surrenders of the contract, such present value being calculated on the basis of an interest rate not more than one percent (1%) higher than the interest rate specified in the contract for accumulating the net considerations to determine maturity value, decreased by the amount of any indebtedness to the company on the contract, including interest due and accrued, and increased by any existing additional amounts credited by the company to the contract. In no event shall any cash surrender benefit be less than the minimum nonforfeiture amount at that time. The death benefit under such contracts shall be at least equal to the cash surrender benefit.

Section 7. Calculation of Paid-up Annuity Benefits

For contracts that do not provide cash surrender benefits, the present value of any paid-up annuity benefit available as a nonforfeiture option at any time prior to maturity shall not be less than the present value of that portion of the maturity value of the paid-up annuity benefit provided under the contract arising from considerations paid prior to the time the contract is surrendered in exchange for, or changed to, a deferred paid-up annuity, such present value being calculated for the period prior to the maturity date on the basis of the interest rate specified in the contract for accumulating the net considerations to determine maturity value, and increased by any additional amounts credited by the company to the contract. For contracts that do not provide any death benefits prior to the commencement of any annuity payments, present values shall be calculated on the basis of such interest rate and the mortality table specified in the contract for determining the maturity value of the paid-up annuity benefit. However, in no event shall the present value of a paid-up annuity benefit be less than the minimum nonforfeiture amount at that time.
Section 8. Maturity Date

For the purpose of determining the benefits calculated under Sections 6 and 7, in the case of annuity contracts under which an election may be made to have annuity payments commence at optional maturity dates, the maturity date shall be deemed to be the latest date for which election shall be permitted by the contract, but shall not be deemed to be later than the anniversary of the contract next following the annuitant's seventieth birthday or the tenth anniversary of the contract, whichever is later.

Section 9. Disclosure of Limited Death Benefits

A contract that does not provide cash surrender benefits or does not provide death benefits at least equal to the minimum nonforfeiture amount prior to the commencement of any annuity payments shall include a statement in a prominent place in the contract that such benefits are not provided.

Section 10. Inclusion of Lapse of Time Considerations

Any paid-up annuity, cash surrender or death benefits available at any time, other than on the contract anniversary under any contract with fixed scheduled considerations, shall be calculated with allowance for the lapse of time and the payment of any scheduled considerations beyond the beginning of the contract year in which cessation of payment of considerations under the contract occurs.

Section 11. Proration of Values; Additional Benefits

For a contract which provides, within the same contract by rider or supplemental contract provision, both annuity benefits and life insurance benefits that are in excess of the greater of cash surrender benefits or a return of the gross considerations with interest, the minimum nonforfeiture benefits shall be equal to the sum of the minimum nonforfeiture benefits for the annuity portion and the minimum nonforfeiture benefits, if any, for the life insurance portion computed as if each portion were a separate contract. Notwithstanding the provisions of Sections 5, 6, 7, 8 and 10, additional benefits payable in the event of total and permanent disability, as reversionary annuity or deferred reversionary annuity benefits, or as other policy benefits additional to life insurance, endowment and annuity benefits, and considerations for all such additional benefits, shall be disregarded in ascertaining the minimum nonforfeiture amounts, paid-up annuity, cash surrender and death benefits that may be required by this Act. The inclusion of such benefits shall not be required in any paid-up benefits, unless the additional benefits separately would require minimum nonforfeiture amounts, paid-up annuity, cash surrender and death benefits.

Section 12. Rules

The commissioner may adopt rules to implement the provisions of this Act.

Section 13. Effective Date

After the effective date of this Act, a company may elect to apply its provisions to annuity contracts on a contract form-by-contract form basis before the second anniversary of the effective date of this Act. In all other instances, this Act shall become operative with respect to annuity contracts issued by the company after the second anniversary of this Act.

Chronological Summary of Actions (all references are to the Proceedings of the NAIC).

2017 3rd Quarter (amended).
QUALIFICATIONS, ASSUMPTIONS, AND LIMITING CONDITIONS

Oliver Wyman was engaged by the American Council of Life Insurers, the American Academy of Actuaries and the National Association of Insurance Commissioners to support an industry field test being conducted to aid the NAIC Life Actuarial (A) Task Force in the selection of a long-term solution for the treatment of non-guaranteed reinsurance under PBR.

Oliver Wyman shall not have any liability to any third party in respect of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein.

This report does not represent investment advice or provide an opinion regarding the fairness of any transaction to any and all parties. This report does not represent legal advice, which can only be provided by legal counsel and for which you should seek advice of counsel. The opinions expressed herein are valid only for the purpose stated herein and as of the date hereof. Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been verified. No warranty is given as to the accuracy of such information. Public information and industry and statistical data are from sources Oliver Wyman deems to be reliable but has not been verified. No responsibility is taken for changes in market conditions or laws or regulations and no obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof.

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EXECUTIVE SUMMARY
OVERVIEW
This report contains results and additional analysis for the industry field test and interpretation survey which will aid the NAIC Life Actuarial (A) Task Force ("LATF") in the selection of a longer-term solution for the treatment of non-guaranteed reinsurance under PBR.

REPORT OBJECTIVES
Section | Contents and objectives
--- | ---
02 | Review of proposed solutions
- Contains a description and representative language from the three amendment proposal forms ("APFs") evaluated in the field test and interpretation survey (APF 2019-40, 41 and 42)
- Objective is to review the key details of the solutions under consideration
03 | Field test results and analysis
- Contains results of industry field test and additional analysis performed using representative PBR model to confirm the integrity of submissions and understand the range of variation in results
- Objectives are to build understanding of field test scenarios and detail the refinements made to the representative PBR model informed by field test responses
04 | Interpretation survey results and additional analysis
- Contains results of interpretation survey and additional analysis performed using representative PBR model in light of the range of responses received
- Objectives are to provide a broader view of long-term solutions on a consistent basis (e.g., using the representative PBR model) from both a direct writer and assuming reinsurers perspective

KEY TAKEAWAYS
Key takeaways from analysis of field test and interpretation survey results are highlighted below in addition to those previously established:

<table>
<thead>
<tr>
<th>Takeaway</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reinsurer reaction scenarios can produce reserve credits in excess of ½ Cx</td>
</tr>
<tr>
<td>2</td>
<td>It is important to look at long-term projections of reserves when evaluating the impact of reinsurance modeling approaches</td>
</tr>
<tr>
<td>3</td>
<td>Differences in reserve credits and assumed reserves under PBR are likely to occur for multiple reasons</td>
</tr>
<tr>
<td>4</td>
<td>Differences in modeled reserves are primarily driven by the relationship between the current scale of YRT premiums and PBR mortality (anticipated experience and the level of margin)</td>
</tr>
<tr>
<td>5</td>
<td>Variation in surveyed approaches points to several considerations including level of prescription, modeling complexity, variation in results and others in a long-term solution</td>
</tr>
<tr>
<td>6</td>
<td>Differences in ceded &quot;reserve credits&quot; and assumed reserves are minimized when a mechanical approach to reinsurance is used by both parties</td>
</tr>
</tbody>
</table>

COMPARISON OF PROPOSED SOLUTIONS
This comparison is informed by results and analysis contained in this report

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Level of prescription</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modeling complexity</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Variation in results</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Potential for asymmetry between assumed and ceded interpretation</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Defined level of risk sharing</td>
<td></td>
<td></td>
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<tr>
<td>Potential APF revisions</td>
<td></td>
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</tbody>
</table>

**Notes:**
1. Multiple mortality improvement scenarios were included with APF 2019-41 and 42

Additional details for each key takeaway can be found in this report in the sections listed.
**REVIEW OF PROPOSED SOLUTIONS**

**APF 2019-40**

### VRT premiums

- **Model YRT premiums using anticipated experience with margins based on clarified modeling principles/guidance and actuarial judgment**

**Representative language**

The company shall base its company and counterparty action assumptions relating to YRT reinsurance consistent with the moderately adverse environment as applicable to the valuation of all life policyholders (APF 2019-40, Section 8.5).

The company shall not be assumed to incur indefinite losses if treaty terms allow adjustment of the underlying economics (APF 2019-40, Section 8.7).

The company shall base its company and counterparty action assumptions relating to YRT reinsurance treaty changes reflecting that, in general, there is no relevant company or industry experience currently available upon which to base the anticipated experience assumption (APF 2019-40, Section 8.6).

Companies are responsible for developing their own margin used in the projection of future non-guaranteed reinsurance premiums.

**APF 2019-41**

### VRT premiums and claims

- **Premiums determined using current YRT premium scale with projected adjustments based on what the company actually expects will occur**
- **Claims determined using the company’s anticipated experience mortality assumptions including mortality improvement**

**Representative language** (APF 2019-41 section 8.C.8)

The company shall use best estimate assumptions with no implicit or explicit margins, except margins pursuant to Section 8.C.16 through Section 8.C.18, as the prudent estimate assumptions for YRT reinsurance premiums paid and YRT reinsurance claim settlements received, using the following procedure:

a. Use the reinsurance rates and provisions from the relevant reinsurance agreement as the initial prudent estimate assumption for YRT reinsurance premiums paid, and project future reinsurance rate increases and recaptures using what the company actually expects will occur, based on treaty provisions, past reinsurance rate increase experience, and ongoing relationship with the reinsurer.

b. The mortality rates used to determine the prudent estimate assumptions for YRT reinsurance claim settlements shall equal the company’s anticipated experience assumptions adjusted to reflect the company’s best estimate of mortality improvement.

**APF 2019-42**

### VRT premiums

- **Use current YRT premium rates, plus a prescribed margin for non-guaranteed rates based on the difference between “baseline credibility” prudent estimate mortality and company experience mortality**
- **Baseline credibility assumes a minimum level of credibility** and sufficient data period to avoid bias against small companies.

**Reinsurance premium margin development**

The formula for the prescribed margin (additive to current rates) from APF 2019-42 is summarized below:

\[
\text{Prescribed Margin} = \lambda \cdot \left( \text{anticipated experience assumption for YRT premium rates} \right)
\]

- \( \lambda \): prudent estimate mortality rate
- \( \text{anticipated experience assumption for YRT premium rates} \):
  - \( 0.5 \) for prudent estimate mortality rate calculated using a minimum of 10 years of data
  - \( 0.8 \) for company experience mortality reflecting industry mortality improvement beyond the data set

Non-guaranteed reinsurance premiums are modeled as the current scale plus a margin, which is developed based on prescribed inputs, with some flexibility to make adjustments to reflect contract provisions.

---

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OVERVIEW
Sophisticated modeling, extensive analysis and resource constraints led to low participation in the field test. However, participating companies are broadly distributed as highlighted below.

Field test scenarios

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Field test submissions</th>
<th>Detailed refinements to representative PBR model</th>
</tr>
</thead>
</table>
| Reinsurance (Current YRT scale) | Utilized own company YRT rate scales | Developed three separate rate scales for each product based on analysis of field test submissions; the following relationships between the current scale of YRT rates and anticipated mortality experience were developed:  
  - Baseline YRT scale: Current scale of YRT rates is in line with anticipated mortality experience without FMI (i.e. utilizes declining durational multiples applied to "Baseline YRT scale")  
  - Lower YRT scale: Current scale of YRT rates is below anticipated mortality experience, resulting in lower interest on reserves  
  - Higher YRT scale: Current scale of YRT rates is greater than anticipated mortality experience without FMI |
| Mortality (Credibility) | Credibility of underlying mortality assumption ranged between 40–100% (See table on page 12 for further details) | Developed two credibility scenarios based on analysis of field test responses:  
  - High Credibility: 100% credibility (Limited Fluctuation method)  
  - Low Credibility: 50% credibility (Limited Fluctuation method) |
| Reserves (Unlocking) | Only one participant included unlocking of mortality assumption (sufficient date period, credibility and improvement) up to future valuation dates | Turned off dynamic assumption unlocking |

Observation:
• Model refinements:
  - Turn off mortality assumption unlocking

Properties of reinsurance:
Observation: Submissions reflected a range of underlying mortality assumption credibility grades, in particular the portion of business reinsured and the relationship between the current scale of rates and anticipated mortality experience.

Model refinements:
• Normalize reinsurance reserve credits per 1,000 of ceded business
• Model refinements:
  - Adjust YRT rate scales to reflect key relationships observed in field test submissions
  - Normalize reinsurance reserve credits per 1,000 of ceded business

Observation:
• Utilize own company YRT rate scales
• Model refinements:
  - Adjust YRT rate scales to reflect key relationships observed in field test submissions

Model refinements:
• Normalized reinsurance reserve credits per 1,000 of ceded business
• Model refinements:
  - Adjust YRT rate scales to reflect key relationships observed in field test submissions

Observation:
• Model refinements:
  - Turn off mortality assumption unlocking

<table>
<thead>
<tr>
<th>Field test scenarios</th>
<th>Baseline</th>
<th>2019-61</th>
<th>2019-40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensified solution (i.e. no change in YRT rates and counterparty actions)</td>
<td>• • •</td>
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<tr>
<td>Action A – No change in YRT rates and counterparty actions</td>
<td>• • •</td>
<td>• • •</td>
<td>• • •</td>
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<tr>
<td>Action B – Prudent estimate YRT rates and counterparty actions</td>
<td>• • •</td>
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<tr>
<td>Action C – Prudently estimate YRT rates after reaching a Loss Trigger</td>
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<tr>
<td>Action D – Prudently estimate YRT rates after conservative use of Loss Trigger</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Field test scenarios</th>
<th>Baseline</th>
<th>2019-41</th>
<th>2019-42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensified solution (i.e. no change in YRT rates and counterparty actions)</td>
<td>• • •</td>
<td>• • •</td>
<td>• • •</td>
</tr>
<tr>
<td>Action A – No change in YRT rates and counterparty actions</td>
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</tbody>
</table>

Observation:
• Model refinements:
  - Turn off mortality assumption unlocking

REFINEMENTS TO REPRESENTATIVE PBR MODEL
Field test submissions were used to refine the granularity of certain methodology analysis dimensions in the representative PBR model. The refined model was used to confirm the integrity of submissions and provide insights into the variability in results.
**BASELINE | ULSG RESULTS**

The representative PBR model explains the variance in impacts of reinsurance on modeled reserves observed in field test submissions.

**Commentary**
- Shaded blue range represents the range combinations of rate scales and levels of credibility (all else equal).
- Upper bound of results (blue "reserve credit") from representative PBR model is "Lower YRT scale" with low credibility; lower bound is "Higher YRT scale" with high credibility (negative "reserve credit").
- Mid point of results from representative PBR model is "Baseline YRT scale" with high credibility (dark blue line).

**Field test results legend**
- 25th percentile (Field test)
- 75th percentile (Field test)
- Coverage range (Representative PBR model)
- "Baseline YRT scale" with high credibility

Derivations of the unitized reduction to DR can be found in Appendix A.

---

**APF 2019-40 (ACTION A) | ULSG RESULTS**

Action A produces only a slight shift in the impact of reinsurance on modeled reserves relative to the baseline, as it is limited to the inclusion of anticipated counterparty actions such as default, recapture and other terminations.

**Commentary**
- Action A is to model current YRT rates for all projection years; apply the APF only with regards to other counterparty actions such as default, recapture or other terminations.
- Range of results is wider compared to other field test scenarios, as there are no adjustments to YRT rates.
- Representative PBR model results ("Baseline YRT scale" line and analysis coverage range) assumes no counterparty reactions for Action A and therefore results are the same as the baseline.
- Some field test results reflected recapture in later years which reduced reserve credits in later durations.

**Field test results and analysis**

<table>
<thead>
<tr>
<th>Gross DR – Net DR (per 1000 of projected ceded NAAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25th percentile (Field test)</td>
</tr>
<tr>
<td>75th percentile (Field test)</td>
</tr>
<tr>
<td>Coverage range (Representative PBR model)</td>
</tr>
<tr>
<td>&quot;Baseline YRT scale&quot; with high credibility</td>
</tr>
</tbody>
</table>

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**APF 2019-40 (ACTION B) | ULSG RESULTS**

The impact of reinsurance on modeled reserves is dependent on the range of participant prudent estimates used in modeling counterparty actions.

**Commentary**
- Action B is to model a prudent estimate of all counterparty actions (which includes changes to YRT rates); apply the APF with no additional restrictions or guidance.
- The representative PBR model includes a range to reinsurance premiums equal to the difference between best estimate mortality (including future mortality improvements) and valuation mortality.
- Various approaches in field test submissions to incorporate margin to YRT premiums were observed, resulting in higher DR "reserve credits" compared to the representative PBR model. Approaches included grading to an increased premium over time, increasing premiums after a certain duration, and increasing premiums after a loss ratio is triggered.

**Field test results and analysis**

<table>
<thead>
<tr>
<th>Gross DR – Net DR (per 1000 of projected ceded NAAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25th percentile (Field test)</td>
</tr>
<tr>
<td>75th percentile (Field test)</td>
</tr>
<tr>
<td>Coverage range (Representative PBR model)</td>
</tr>
<tr>
<td>&quot;Baseline YRT scale&quot; with high credibility</td>
</tr>
</tbody>
</table>

---

**APF 2019-40 (ACTION C) | ULSG RESULTS**

Applying a “loss ratio” trigger to determine the timing of reinsurer reaction leads to a narrower range of DR reserve credits relative to the baseline but may be inconsistent with contractual terms.

**Commentary**
- Action C is to model prudent estimate of rate changes only after reaching a “loss ratio” trigger equal to 115%. The loss ratio is calculated by reviewing cumulative projected reinsurance cash flows from the assuming company perspective.
- In the representative PBR model, margins were applied based on the difference between the valuation mortality and best estimate mortality after reaching the loss ratio trigger.
- The "loss ratio" trigger is reached earlier in the projection for "Lower YRT scale" [lower bound] compared to "Baseline YRT scale" and the trigger is never reached for the "Higher YRT scale" [upper bound].
- The lower bound of the coverage range is similar compared to the baseline, but upper bound is substantially reduced.

**Field test results and analysis**

<table>
<thead>
<tr>
<th>Gross DR – Net DR (per 1000 of projected ceded NAAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25th percentile (Field test)</td>
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</tr>
<tr>
<td>Coverage range (Representative PBR model)</td>
</tr>
<tr>
<td>&quot;Baseline YRT scale&quot; with high credibility</td>
</tr>
</tbody>
</table>
Field test results and analysis

**APF 2019-40 (ACTION D) | ULSG RESULTS**

Applying a “consecutive losses” approach to determine the timing of reinsurer reaction reduces variability in the impact that reinsurance has on modeled reserves relative to the baseline, albeit to a lesser extent than the application of a “loss ratio” trigger.

3.12 Gross DR – Net DR (per 1000 of projected ceded NAAR) (20% FMI)

**Commentary**

- Action D is to model prudent estimate of rate changes only after reaching “consecutive years of loss” trigger equal to 5 years. The losses are calculated by reviewing annual projected reinsurance cash flows from the assuming company perspective.
- Similar to Action C, application of prudent estimates are driven by the relationship between VRT rates and valuation mortality during the projection.
- Prudent estimate margins are not applied abruptly, therefore the results are less dependent on the relationship of current VRT rates and valuation mortality compared to other solutions.

Field test results and analysis

**APF 2019-41 | ULSG RESULTS**

Introducing future mortality improvement to the projected claims reduces reinsurance gains, given the current scale of reinsurance premiums is held constant.

3.15 Gross DR – Net DR (per 1000 of projected ceded NAAR) (20% FMI)

**Commentary**

- Differences in modeled reserves are primarily driven by the relationship between the actual experience and the level of mortality margin.
- When a margin is defined as the relationship between the current VRT rate scale and the neutral rate scale (e.g., differences in starting assets and resulting earned rate).
- Prudent estimate margins are not applied ubiquitously, therefore the results are less dependent on the relationship of current VRT rates and valuation mortality compared to other solutions.

Field test results and analysis

**APF 2019-42 | ULSG RESULTS**

Similar to APF 2019-41, increasing the level of future mortality improvement decreases reserve credits.

3.15 Gross DR – Net DR (per 1000 of projected ceded NAAR) (25% FMI)

**Commentary**

- Differences in modeled reserves are primarily driven by the relationship between the actual experience and the level of mortality margin.
- When a margin is defined as the relationship between the current VRT rate scale and the neutral rate scale (e.g., differences in starting assets and resulting earned rate).
- Prudent estimate margins are not applied ubiquitously, therefore the results are less dependent on the relationship of current VRT rates and valuation mortality compared to other solutions.

**KEY TAKEAWAYS**

Additional key takeaways from analysis of field test results are highlighted below in addition to those previously established.

1. **Field test results and analysis**

   - Differences in modeled reserves are primarily driven by the relationship between the actual experience and the level of mortality margin.
   - When a margin is defined as the relationship between the current VRT rate scale and the neutral rate scale (e.g., differences in starting assets and resulting earned rate).

2. **Additional key takeaways**

   - Differences in modeled reserves are primarily driven by the relationship between the actual experience and the level of mortality margin.
   - When a margin is defined as the relationship between the current VRT rate scale and the neutral rate scale (e.g., differences in starting assets and resulting earned rate).

3. **Field test results and analysis**

   - Differences in modeled reserves are primarily driven by the relationship between the actual experience and the level of mortality margin.
   - When a margin is defined as the relationship between the current VRT rate scale and the neutral rate scale (e.g., differences in starting assets and resulting earned rate).

4. **Additional key takeaways**

   - Differences in modeled reserves are primarily driven by the relationship between the actual experience and the level of mortality margin.
   - When a margin is defined as the relationship between the current VRT rate scale and the neutral rate scale (e.g., differences in starting assets and resulting earned rate).
survey purpose

• Poll companies on the modeling approach they would use to implement APFs 2019-40, 2019-41, and 2019-42
• Supplement and broaden range of practice outside of the participation of field test responses

high-level description of questions

• Several options were provided for projecting changes to YRT rates. Participants were asked to select the option that best fits their intended approach. Options included:
  – No change to YRT premiums
  – Increasing rates by a specified amount of the prescribed mortality margin after a specified period of time and every X years thereafter, with and without future mortality improvement
  – Increasing rates by the difference between current scale and prudent estimate rate (i.e. PBR) mortality, with specified parameters
• Collected separate responses for different treatment by treaty type

survey usage

• We used the results of the survey to develop criteria to compare the APFs
  – Refer to slide 41 for additional detail on comparison criteria

background and purpose

The interpretation survey asked participants to detail how they would implement each of the proposed solutions.

summary of options

For each group of reinsurance agreements, participants were asked to provide standardized responses on how YRT premium rates would be adjusted based on language presented in each proposal.

<table>
<thead>
<tr>
<th>Survey option</th>
<th>Reinsurer reaction</th>
<th>Assumption for projected YRT premium rate increases</th>
<th>Parameters requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 None</td>
<td>Maintain current scale throughout the projection</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
| 2 Reactive    | Increase by percent of prescribed mortality margin where the prescribed mortality margin is defined as:  
  – Prescribed margins on company and industry mortality  
  – Future mortality improvement (FMI), incorporated as follows:  
    – Including implicit FMI margin by assuming no improvement (option 1)  
    – Excluding implicit FMI margin by applying improvement throughout projection (option 2)  
    – Including implicit FMI margin after a specified number of years by applying improvement for an initial period and then no improvement beyond (option 3) | Frequency of rate changes  
  Initial trigger  
  Mortality improvement |
| 3 Break-even  | Increase by percent of difference between FMI mortality and current scale of YRT rates | Frequency of rate changes  
  Initial trigger |
| 4 Other       | Modeling approach not adequately captured by other choices | Open-ended response |

survey covered approximately 55% of the industry measured by total face amount on new business

interpretation survey results and additional analysis

afp 2019-40 | survey results

<table>
<thead>
<tr>
<th>Reinsurer reaction</th>
<th>Responses</th>
<th>Modeling approach illustrated</th>
</tr>
</thead>
</table>
| None               | 19%       | 0% of prescribed mortality margin after 1 year and every year thereafter  
  Include implicit future mortality improvement margin |
| Reactive           | 40%       | Increase YRT premiums by  
  100% of the difference between current YRT premium and prescribed mortality immediately and every year thereafter |
| Break-even         | 25%       | Increase YRT premiums by  
  100% of prescribed mortality margin after 1 year and every year thereafter  
  Include implicit future mortality improvement margin |
| Other              | 16%       | 0% of the difference between current YRT premium and prescribed mortality immediately and every year thereafter |

survey commentary

range of responses

AFP with largest variance across survey options  
Longest percentage selecting “Other”  
Examples: recapture at certain periods, utilise a loss trigger to determine when rates are raised, grading into a prudent estimate rate over a period of time

complexity

Responses ranged from straightforward (reactive or break-even) to complex  
Complex responses were often associated with None and Other and tended to reflect modeling solutions used for other applications or adjustments to cash flows other than YRT premium

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**APF 2019-40 | ULSG**

A fully reactive reinsurance margin produces the largest post-reinsurance DR relative to other option

**APF 2019-40 | TERM**

No change in rates scenario produces the highest modeled “reserve credit” for Term but is smaller than ½ cx for most valuation dates due to a higher baseline YRT scale than ULSG

---

**Reinsurer reaction**

- **None** 55%
- **Reactive** 17%
- **Break-even** 18%
- **Other** 10%

**Survey Commentary**

- Most responses were either None or Break-even.
- These responses generally included a comment regarding intent to adjust claims in lieu of premiums.

**Complexity**

- Many responses indicated the need for multiple models or model runs to apply this APF to reflect best estimate mortality for reinsurance cash flows and VM-20 mortality for all other cash flows.
- Some respondents expressed concern with consistency between using one projection using best estimate assumptions and a separate one using best estimate assumptions.

---

**Modeling approach/Restrictions**

- Reinsurance cash flows (premiums and claims) projected separately using best estimate mortality including future mortality improvement.
- Increase YRT premiums by:
  - 100% of the difference between current YRT premium and prescribed mortality immediately and each year thereafter.

---

**APF 2019-41 | SURVEY RESULTS**

The relationship between YRT rates and anticipated mortality minimizes the impact of interpretation differences. This is because Option 1 uses anticipated experience assumptions, and reinsurance premiums are closely aligned with benefits (nearly break-even) and reinsurance is break-even under Option 5.

**APF 2019-41 | ULSG**

The current scale of YRT rates is in line with anticipated mortality experience in the "Baseline YRT scale".
### APF 2019-41 | TERM

Similar to ULSG, the no change in rate scenario produces the largest “reserve credit”, but it is considerably smaller than for ULSG and ½ Cx

4.10 Pre-reinsurance DR (projected reserve amount)
- High credibility

4.11 Post-reinsurance DR (projected reserve amount)
- “Baseline YRT scale” and high credibility

4.12 Pre-reinsurance DR – Post-reinsurance DR (projected reserve amount)
- “Baseline YRT scale” and high credibility

---

### APF 2019-42 | SURVEY RESULTS

#### Reinsurer reaction
- None: 1%
- Reactive: 64%
- Break-even: 29%
- Other: 6%

#### Modeling approaches illustrated
- Increase YRT premiums by 100% of the difference between current YRT premium and prescribed mortality immediately and each year thereafter
- Increase YRT premiums by 100% of prescribed mortality margin after 1 year and every year thereafter
- Including 10 years of future mortality improvement in implicit margin

#### Range of responses
- Most responses were reactive and incorporate 100% of the prescribed margin
- Variation in reactive responses was the number of years of mortality improvement included in the margin

#### Complexity
- Some responses pointed out that the prescribed solution will require a company to develop multiple sets of mortality assumptions to determine the prescribed margin
- Given that over 35% of responses were something other than a reactive margin, the prescribed margin formula may be difficult to interpret and understand

---

### APF 2019-42 | ULSG

Reducing the amount of implicit margin due to future mortality improvement in the development of the prescribed mortality margin decreases the net DR and increases the “reserve credit”

4.40 Pre-reinsurance DR (projected reserve amount)
- High credibility

4.44 Post-reinsurance DR (projected reserve amount)
- “Baseline YRT scale” and high credibility

4.45 Pre-reinsurance DR – Post-reinsurance DR (projected reserve amount)
- “Baseline YRT scale” and high credibility

---

### APF 2019-42 | TERM

Reducing the amount of implicit margin due to future mortality improvement in the development of the prescribed mortality margin decreases the net DR and increases the “reserve credit”

4.50 Pre-reinsurance DR (projected reserve amount)
- High credibility

4.52 Post-reinsurance DR (projected reserve amount)
- “Baseline YRT scale” and high credibility

4.53 Pre-reinsurance DR – Post-reinsurance DR (projected reserve amount)
- “Baseline YRT scale” and high credibility

---

### SURVEY COMMENTARY

- Most responses were reactive and incorporate 100% of the prescribed margin
- Variation in reactive responses was the number of years of mortality improvement included in the margin
- Some responses pointed out that the prescribed solution will require a company to develop multiple sets of mortality assumptions to determine the prescribed margin
- Given that over 35% of responses were something other than a reactive margin, the prescribed margin formula may be difficult to interpret and understand
**Impact on DR Relative to Interim Solution (ULSG)**

DR “reserve credit” from preceding slides with all APFs displayed on the same page.

**Impact on DR Relative to Interim Solution (TERM)**

DR “reserve credit” from preceding slides with all APFs displayed on the same page.

**Evaluation of Total Impact on DR (Ceded and Assumed)**

Most common responses and responses resulting in the largest reduction in aggregate DR from reinsurers and direct writers were compared, removing influence of differing differences between reserve credits and assumed reserves due to assumptions for modeled reserves and PBR methodology.

**Key Takeaways**

Additional key takeaways from analysis of range of interpretation survey results are highlighted below in addition to those previously established.

<table>
<thead>
<tr>
<th>References</th>
<th>Details</th>
</tr>
</thead>
</table>
| 1          | Reinsurer reserve variance are prior reserve credits in reserve of 15%.
| 2          | It is important to look at long-term perspective of reserves where evaluating the impact of reinsurance mortgage opportunities.
| 3          | Differences in reserve credits and assumed reserves under PBR are likely to occur for multiple reasons.
| 4          | Differences in modeled reserves are primarily driven by the relationship between the current scale of YRT premiums, and reinsurance perspectives to isolate the impact of interpretation in regards to the treatment of non-guaranteed reinsurance.
| 5          | Valuation of mortality assumptions to several considerations including level of reinsurance, reinsurance, variance in results and others in a long-term solution.

**Impact on DR Relative to Interim Solution (ULSG)**

No change in rates (option 1). Fully reactive after 1 year, including 10 yr MI (option 4). Break even after 1 year (option 5).

**Impact on DR Relative to Interim Solution (TERM)**

No change in rates (option 1). Fully reactive after 1 year (option 2). Fully reactive after 1 year, including 10 yr MI (option 4). Break even after 1 year (option 5).

**Evaluation of Total Impact on DR (Ceded and Assumed)**

Assumed reserves in the following slides are developed using the ceded pre and post reinsurance DR, an approach which captures reinsurance cash flows in determining the assumed reserve with some simplification (i.e., excludes reinsurance expenses and uses ceding company asset assumptions).

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Interpretation survey results and additional analysis

**APF 2019-40 | CEDED AND ASSUMED**

Combined impact to DR from both ceding and assuming companies for the most common surveyed reactions is positive; combinations of other surveyed reactions could lead to a reduction in total DR

![Diagram](https://example.com/diagram.png)

**Commentary**

- Differences in modeling approach result in differences between reserve credit and assumed reserve
- Some assuming companies noted that they may raise their rates to more than 30% of the difference between current VMT premiums and VM-20 mortality to cover expenses and contribute to profit margins, which decreases the assuming reserves displayed in 4.19 and increases the likelihood that the NMR will deteriorate (4.4-5.4).
- Largest reduction to reserve aggregates based on responses is driven by direct writers applying no prudence to VMT premium

**APF 2019-41 | CEDED AND ASSUMED**

Impact of reinsurance to combined DR based on most common responses is smaller than APF 2019-40

![Diagram](https://example.com/diagram.png)

**Commentary**

- "None" reaction refers to no adjustments to premium, underlying claims are adjusted to reflect anticipated experience
- Reinsurers had similar comments as direct companies regarding the need to model reinsurance cash flows separately to properly reflect the guidance in the APF
- Largest reduction to DR is smaller than APF 2019-40 since responses did not reflect "no adjustment"
- Differences in modeling approach result in differences between reserve credit and assumed reserve

**KEY TAKEAWAYS**

Additional key takeaways from evaluation of total impact on DR (ceded and assumed) are highlighted below in addition to those previously established

**Takeaway**

**Details**

- **Reinsurer reactions are strongly correlated and produce reserve reductions in range of 10%**
  - A reactive approach was the most common for both ceding and assuming companies
  - "Reserve credits" are exactly opposite assumed reserves in this scenario, resulting in offsetting impacts
  - Largest reduction to DR is shown as fully reactive with 10 years of mortality improvement included in the margin, versus fully reactive excluding future mortality improvement for the assuming company

**Attachment Nine**

Life Actuarial (A) Task Force
8/3-6/20
### FIELD TEST SOLUTIONS

Dimensions for comparison were established over the course of the project.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description and comments</th>
<th>Key supporting analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of prescription</td>
<td>• Judgement allowed by the potential solution</td>
<td>• Proposed solutions</td>
</tr>
<tr>
<td></td>
<td>• Prescribed solutions provide more uniformity but may not fully account for the unique contract provisions, relationships, and risks associated with the underlying reinsurance agreements</td>
<td></td>
</tr>
<tr>
<td>Modeling complexity</td>
<td>• Complexity of implementing solution in valuation system and process</td>
<td>• Field test</td>
</tr>
<tr>
<td></td>
<td>• Interpreted survey and representative analysis</td>
<td></td>
</tr>
<tr>
<td>Variation in results</td>
<td>• Potential for variability in results given interpretation of requirements</td>
<td>• Field test</td>
</tr>
<tr>
<td></td>
<td>• Controlled by other drivers of variation (e.g., variation in reinsurance rates and credibility)</td>
<td>• Interpretation survey and representative analysis</td>
</tr>
<tr>
<td>Potential for asymmetry between assumed and ceded interpretation</td>
<td>• Propensity for variance between reserve credits and assumed reserves</td>
<td>• Field test</td>
</tr>
<tr>
<td></td>
<td>• Asymmetries could result in increases or decreases to total reserves</td>
<td>• Interpretation survey and representative analysis</td>
</tr>
<tr>
<td>Defined level of risk sharing</td>
<td>• Well defined amount of excess mortality experience that is shared with the assuming reinsurer (e.g., prescribed reserve/credit, mortality improvement, “loss ratio” trigger, etc.)</td>
<td>• Interpretation survey and representative analysis</td>
</tr>
<tr>
<td></td>
<td>• Prescribing a single level of risk sharing between all ceding companies and reinsurers may not be accounted for in individual treaty provisions, reinsurer rate increase practices, etc.</td>
<td></td>
</tr>
</tbody>
</table>

Some dimensions have clear ideal outcomes (e.g., modeling complexity) while other dimensions will need to be weighed.

### APPENDIX A

Supporting reports and presentations

### APPENDIX A.1

ACADEMY REPORTS
FIELD TEST RESULTS
Compiled and documented by the American Academy of Actuaries

FIELD TEST RESULTS
Detailed reports published by the Academy are posted to the NAIC website with this report.

INTERPRETATION SURVEY RESULTS
Compiled and documented by the American Academy of Actuaries

INTERPRETATION SURVEY RESULTS
Detailed reports published by the Academy are posted to the NAIC website with this report.

APPENDIX A.2
PRIOR REPORTS

APPENDIX A.2
Prior reports:

2019 NAIC FALL MEETING LATF PRESENTATION (DECEMBER 2019)
Initial presentation focused on education of modeling reinsurance under PBR, initial representative PBR model design and analysis of the APFs.

Prior presentations are posted to the NAIC website along with Academy reports and this report.
Prior presentations are posted to the NAIC website along with Academy reports and this report.

**APPENDIX B**

Model design and assumptions

### LIABILITY ASSUMPTIONS (ULSG)

The assumptions used in the analysis are below, including assumed PBR margins.

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Anticipated experience assumption</th>
<th>Prudent estimate assumption (e.g. margin)</th>
</tr>
</thead>
</table>
| **Mortality** | • 2015 VBT gender distinct, smoker distinct AMB  
• Relative Risk varies by risk class  
• A/E factors vary by high/low band  
• Future mortality improvement of .50%  
° Prescribed margins applied to company mortality  
° Industry table: 2015 VBT with prescribed margins and mortality improvement scale  
° Grading and margins assumes 100% Limited Fluctuation method credibility | |
| **Lapse** | • 3% annual lapse rate  
° 0% lapse rate when the secondary guarantee is in-the-money (i.e. CSV < 0) | |
| **Expenses** | • $100 per policy (annual)  
• 2.5% premium tax  
• 2% inflation | • 100% margin on expenses  
• 2.5% inflation |

### LIABILITY ASSUMPTIONS (TERM)

The assumptions used in the analysis are below, including assumed PBR margins.

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Anticipated experience assumption</th>
<th>Prudent estimate assumption (e.g. margin)</th>
</tr>
</thead>
</table>
| **Mortality** | • 2015 VBT gender distinct, smoker distinct AMB  
• Relative Risk varies by risk class  
• A/E factors vary by high/low band  
• Future mortality improvement of .50%  
° Prescribed margins applied to company mortality  
° Industry table: 2015 VBT with prescribed margins and mortality improvement scale  
° Grading and margins assumes 100% Limited Fluctuation method credibility | |
| **Lapse** | • 6.5% during level term period  
° 100% shock lapse after level term period | |
| **Expenses** | • $85 per policy (annual)  
• Additional yr 1 expense $200 per policy and $0.40 per $1000 face  
• 2.5% premium tax  
• 2% inflation | • 100% margin on expenses  
• 2.5% inflation |
APPENDIX C
Supplemental results

FIELD TEST RESULTS AND ANALYSIS

APPENDIX C.1

Similar to ULG, the representative PBR model explains the variance in impacts of reinsurance on modeled reserves observed in field test submissions.

BASELINE | TERM RESULTS

C.1 – Gross DR – Net DR (per 1000 of projected ceded NAAR)
No change to YRT rates

C.2 – Gross DR – Net DR (per 1000 of projected ceded NAAR)
1/2 Cx

APF 2019-40 | TERM RESULTS

Application of prudent estimate margins in Action B lowers the impact to DR and including additional parameters to determine the application of margins (Action C and Action D) reduces the variation in field test results.

C.4 – Gross DR – Net DR (per 1000 of projected ceded NAAR)
Action D

Field test results and analysis

Field test results and analysis

Coverage range (Representative PBR model)
"Baseline YRT scale" with high credibility

Lower bound = 1/2 Cx
Upper bound = 1/24 Cx

Coverage range (Field test)
Neutral YRT rate scale (OW)

25th percentile (Field test)
75th percentile (Field test)

Similar to ULG, the representative PBR model explains the variance in impacts of reinsurance on modeled reserves observed in field test submissions.

APF 2019-40 | TERM RESULTS

Application of prudent estimate margins in Action B lowers the impact to DR and including additional parameters to determine the application of margins (Action C and Action D) reduces the variation in field test results.

C.4 – Gross DR – Net DR (per 1000 of projected ceded NAAR)
Action D

Field test results and analysis

Field test results and analysis

Coverage range (Representative PBR model)
"Baseline YRT scale" with high credibility

Lower bound = 1/2 Cx
Upper bound = 1/24 Cx

Coverage range (Field test)
Neutral YRT rate scale (OW)

25th percentile (Field test)
75th percentile (Field test)
### APF 2019-41 | TERM RESULTS

Similar to ULSG, introducing future mortality improvement to the projected claims reduces reinsurance gains, given the current scale of reinsurance premiums is held constant.

- **C.7** – Gross DR – Net DR (per 1000 of projected ceded NAAR) 1 year FMI
- **C.8** – Gross DR – Net DR (per 1000 of projected ceded NAAR) 3 years FMI
- **C.9** – Gross DR – Net DR (per 1000 of projected ceded NAAR) 5 years FMI

### Field test results legend
- **25th percentile (Field test)**
- **75th percentile (Field test)**
- Coverage range (Representative PBR model)
- "Baseline YRT scale" with high credibility

### APF 2019-42 | TERM RESULTS

Similar to ULSG, increasing the level of future mortality improvement has a similar impact on both APF 2019-41 and 2019-42.
**AFP 2019-41 | ULSG RESULTS**

**Development of unitized impact to DR for baseline YRT Rate scale and high credibility**

**C.20 – 1.5% FMI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-reinsurance (a)</th>
<th>Post-reinsurance (b)</th>
<th>Ceded NAAR (c)</th>
<th>Unitized impact to DR (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>18,530</td>
<td>1,978</td>
<td>1,978</td>
<td>0.79</td>
</tr>
<tr>
<td>2020</td>
<td>17,752</td>
<td>2,368</td>
<td>2,161</td>
<td>0.83</td>
</tr>
<tr>
<td>2021</td>
<td>14,914</td>
<td>4,031</td>
<td>4,200</td>
<td>1.11</td>
</tr>
<tr>
<td>2022</td>
<td>11,956</td>
<td>5,652</td>
<td>5,827</td>
<td>1.22</td>
</tr>
<tr>
<td>2023</td>
<td>7,890</td>
<td>6,313</td>
<td>6,460</td>
<td>0.36</td>
</tr>
<tr>
<td>2024</td>
<td>5,058</td>
<td>4,811</td>
<td>4,949</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Notes:
- [C] reflects the outer-loop ceded NAAR used in each scenario which is adjusted to as a modeling technique for reinsurance margins.
- (a) is adjusted to be consistent with each post reinsurance run.
- Impact to DR is unitized as per 1000 of Ceded NAAR.
- Unitized impact to DR = \[(a) – (b)\] / (c) * 1000

**C.21 – 5-years FMI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-reinsurance (a)</th>
<th>Post-reinsurance (b)</th>
<th>Ceded NAAR (c)</th>
<th>Unitized impact to DR (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>18,530</td>
<td>1,978</td>
<td>1,978</td>
<td>0.79</td>
</tr>
<tr>
<td>2019</td>
<td>17,752</td>
<td>2,368</td>
<td>2,161</td>
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<td>1.22</td>
</tr>
<tr>
<td>2022</td>
<td>7,865</td>
<td>6,322</td>
<td>6,490</td>
<td>0.36</td>
</tr>
<tr>
<td>2023</td>
<td>5,105</td>
<td>4,788</td>
<td>4,980</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Notes:
- [C] reflects the outer-loop ceded NAAR used in each scenario which is adjusted to as a modeling technique for reinsurance margins.
- (a) is adjusted to be consistent with each post reinsurance run.
- Impact to DR is unitized as per 1000 of Ceded NAAR.
- Unitized impact to DR = \[(a) – (b)\] / (c) * 1000

**C.22 – 10-years FMI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-reinsurance (a)</th>
<th>Post-reinsurance (b)</th>
<th>Ceded NAAR (c)</th>
<th>Unitized impact to DR (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>18,530</td>
<td>1,978</td>
<td>1,978</td>
<td>0.79</td>
</tr>
<tr>
<td>2019</td>
<td>17,752</td>
<td>2,368</td>
<td>2,161</td>
<td>0.83</td>
</tr>
<tr>
<td>2020</td>
<td>14,914</td>
<td>4,031</td>
<td>4,200</td>
<td>1.11</td>
</tr>
<tr>
<td>2021</td>
<td>11,961</td>
<td>5,659</td>
<td>5,827</td>
<td>1.22</td>
</tr>
<tr>
<td>2022</td>
<td>7,890</td>
<td>6,379</td>
<td>6,490</td>
<td>0.36</td>
</tr>
<tr>
<td>2023</td>
<td>5,058</td>
<td>4,855</td>
<td>4,980</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Notes:
- [C] reflects the outer-loop ceded NAAR used in each scenario which is adjusted to as a modeling technique for reinsurance margins.
- (a) is adjusted to be consistent with each post reinsurance run.
- Impact to DR is unitized as per 1000 of Ceded NAAR.
- Unitized impact to DR = \[(a) – (b)\] / (c) * 1000

**C.23 – 20-years FMI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-reinsurance (a)</th>
<th>Post-reinsurance (b)</th>
<th>Ceded NAAR (c)</th>
<th>Unitized impact to DR (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>18,530</td>
<td>1,978</td>
<td>1,978</td>
<td>0.79</td>
</tr>
<tr>
<td>2019</td>
<td>17,752</td>
<td>2,368</td>
<td>2,161</td>
<td>0.83</td>
</tr>
<tr>
<td>2020</td>
<td>14,914</td>
<td>4,031</td>
<td>4,200</td>
<td>1.11</td>
</tr>
<tr>
<td>2021</td>
<td>11,961</td>
<td>5,659</td>
<td>5,827</td>
<td>1.22</td>
</tr>
<tr>
<td>2022</td>
<td>7,890</td>
<td>6,379</td>
<td>6,490</td>
<td>0.36</td>
</tr>
<tr>
<td>2023</td>
<td>5,058</td>
<td>4,855</td>
<td>4,980</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Notes:
- [C] reflects the outer-loop ceded NAAR used in each scenario which is adjusted to as a modeling technique for reinsurance margins.
- (a) is adjusted to be consistent with each post reinsurance run.
- Impact to DR is unitized as per 1000 of Ceded NAAR.
- Unitized impact to DR = \[(a) – (b)\] / (c) * 1000

**AFP 2019-42 | ULSG RESULTS**

**Development of unitized impact to DR for baseline YRT Rate scale and high credibility**

**C.24 – Action A**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-reinsurance (a)</th>
<th>Post-reinsurance (b)</th>
<th>Ceded NAAR (c)</th>
<th>Unitized impact to DR (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
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<tr>
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<td>2020</td>
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<td>2.73</td>
</tr>
<tr>
<td>2021</td>
<td>26,644</td>
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<td>5,827</td>
<td>5.41</td>
</tr>
<tr>
<td>2022</td>
<td>9,406</td>
<td>5,058</td>
<td>6,460</td>
<td>3.27</td>
</tr>
</tbody>
</table>

Notes:
- Impact to DR is unitized as per 1000 of Ceded NAAR.
- Unitized impact to DR = \[(a) – (b)\] / (c) * 1000

**C.25 – Action B**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-reinsurance (a)</th>
<th>Post-reinsurance (b)</th>
<th>Ceded NAAR (c)</th>
<th>Unitized impact to DR (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>-39</td>
<td>11</td>
<td>37</td>
<td>-0.87</td>
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<tr>
<td>2019</td>
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<td>2021</td>
<td>301</td>
<td>500</td>
<td>564</td>
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</tr>
<tr>
<td>2022</td>
<td>324</td>
<td>725</td>
<td>774</td>
<td>3.27</td>
</tr>
</tbody>
</table>

Notes:
- Impact to DR is unitized as per 1000 of Ceded NAAR.
- Unitized impact to DR = \[(a) – (b)\] / (c) * 1000

**AFP 2019-40 | TERM RESULTS**

**Development of unitized impact to DR for baseline YRT Rate scale and high credibility**

**C.26 – Action C**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-reinsurance (a)</th>
<th>Post-reinsurance (b)</th>
<th>Ceded NAAR (c)</th>
<th>Unitized impact to DR (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>4,450</td>
<td>1,978</td>
<td>1,978</td>
<td>0.79</td>
</tr>
<tr>
<td>2019</td>
<td>5,220</td>
<td>2,368</td>
<td>2,161</td>
<td>0.83</td>
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<tr>
<td>2020</td>
<td>7,660</td>
<td>4,031</td>
<td>4,200</td>
<td>1.11</td>
</tr>
<tr>
<td>2021</td>
<td>12,644</td>
<td>5,652</td>
<td>5,827</td>
<td>1.22</td>
</tr>
<tr>
<td>2022</td>
<td>28,616</td>
<td>6,379</td>
<td>6,490</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Notes:
- Impact to DR is unitized as per 1000 of Ceded NAAR.
- Unitized impact to DR = \[(a) – (b)\] / (c) * 1000

**C.27 – Action D**

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-reinsurance (a)</th>
<th>Post-reinsurance (b)</th>
<th>Ceded NAAR (c)</th>
<th>Unitized impact to DR (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>21,350</td>
<td>17,752</td>
<td>2,115</td>
<td>-0.29</td>
</tr>
<tr>
<td>2019</td>
<td>19,712</td>
<td>14,914</td>
<td>2,530</td>
<td>1.52</td>
</tr>
<tr>
<td>2020</td>
<td>16,914</td>
<td>11,956</td>
<td>4,200</td>
<td>2.73</td>
</tr>
<tr>
<td>2021</td>
<td>11,961</td>
<td>7,890</td>
<td>5,827</td>
<td>5.41</td>
</tr>
<tr>
<td>2022</td>
<td>7,901</td>
<td>5,058</td>
<td>6,460</td>
<td>3.27</td>
</tr>
</tbody>
</table>

Notes:
- Impact to DR is unitized as per 1000 of Ceded NAAR.
- Unitized impact to DR = \[(a) – (b)\] / (c) * 1000
### Field test results and analysis

**Notes**
- Impact to DR is (a) – (b)
- Unitized impact to DR = [(a) – (b)] / (c) * 1000

#### Interpretation survey results and additional analysis

**Notes**
- Impact to DR is (a) – (b)
- Unitized impact to DR = [(a) – (b)] / (c) * 1000

---

**APPENDIX C.2**

**INTERPRETATION SURVEY RESULTS AND ADDITIONAL ANALYSIS**
### APF 2019-40 | TERM RESULTS
Development of Net DR for illustrated interpretation scenarios

<table>
<thead>
<tr>
<th>C.40</th>
<th>Impact to DR (c)</th>
<th>Pre-reinsurance DR (a)</th>
<th>Post-reinsurance DR (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre-reinsurance DR (a)</td>
<td>Post-reinsurance DR (b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-reinsurance DR (a)</td>
<td>Post-reinsurance DR (b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 150 100 50 0 -50</td>
<td>150 100 50 0 -50</td>
</tr>
<tr>
<td></td>
<td>Impact to DR (c)</td>
<td>200 150 100 50 0 -50</td>
<td>150 100 50 0 -50</td>
</tr>
</tbody>
</table>

**Notes**
- Impact to DR is (a) – (b)

### APF 2019-41 | ULSG RESULTS
Development of Net DR for illustrated interpretation scenarios

<table>
<thead>
<tr>
<th>C.41</th>
<th>Impact to DR (c)</th>
<th>Pre-reinsurance DR (a)</th>
<th>Post-reinsurance DR (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre-reinsurance DR (a)</td>
<td>Post-reinsurance DR (b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-reinsurance DR (a)</td>
<td>Post-reinsurance DR (b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 150 100 50 0 -50</td>
<td>150 100 50 0 -50</td>
</tr>
<tr>
<td></td>
<td>Impact to DR (c)</td>
<td>200 150 100 50 0 -50</td>
<td>150 100 50 0 -50</td>
</tr>
</tbody>
</table>

**Notes**
- Impact to DR is (a) – (b)

### APF 2019-42 | ULSG RESULTS
Development of Net DR for illustrated interpretation scenarios

<table>
<thead>
<tr>
<th>C.42</th>
<th>Impact to DR (c)</th>
<th>Pre-reinsurance DR (a)</th>
<th>Post-reinsurance DR (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre-reinsurance DR (a)</td>
<td>Post-reinsurance DR (b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-reinsurance DR (a)</td>
<td>Post-reinsurance DR (b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 150 100 50 0 -50</td>
<td>150 100 50 0 -50</td>
</tr>
<tr>
<td></td>
<td>Impact to DR (c)</td>
<td>200 150 100 50 0 -50</td>
<td>150 100 50 0 -50</td>
</tr>
</tbody>
</table>

**Notes**
- Impact to DR is (a) – (b)
### Project team

#### PROJECT TEAM AND GOVERNANCE

The consultant analysis will be overseen by NAIC Staff, the Academy, and the ACLI, as depicted in the following chart.

#### APPENDIX D

**Project team**

The report and the findings herein are subject to the reliances and limitations outlined at the beginning of this report. This report is considered a statement of actuarial opinion under the guidelines promulgated by the American Academy of Actuaries. Chris Whitney, Dylan Strother and Katie van Ryn of Oliver Wyman developed this report and meet the qualification requirements of the American Academy of Actuaries to render the opinion contained herein.
QUALIFICATIONS, ASSUMPTIONS, AND LIMITING CONDITIONS

Oliver Wyman was engaged by the American Council of Life Insurers, the American Academy of Actuaries and the National Association of Insurance Commissioners to support an Industry Field Test being conducted to aid the NAIC Life Actuarial (A) Task Force in the selection of a long-term solution for the treatment of non-guaranteed reinsurance under PBR.

Oliver Wyman shall not have any liability to any third party in respect of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein.

This report does not represent investment advice or provide an opinion regarding the fairness of any transaction to any and all parties. The report does not represent legal advice, which can only be provided by legal counsel and for which you should seek a solicitor of counsel. The opinions expressed herein are valid only for the purpose stated herein and as of the date hereof. Information furnished by others, upon which all or portions of this report are based, is believed to be reliable but has not been verified. No warranty is given as to the accuracy or completeness of such information. Public information and industry and statistical data are from sources Oliver Wyman deems to be reliable; however, Oliver Wyman makes no representation as to the accuracy or completeness of such information and has accepted the information without further verification. No responsibility is taken for changes in market conditions or laws or regulations and no obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof.
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- Section 3. Nonforfeiture Requirements
- Section 4. Minimum Values
- Section 5. Computation of Present Value
- Section 6. Calculation of Cash Surrender Values
- Section 7. Calculation of Paid-Up Annuity Benefits
- Section 8. Maturity Date
- Section 9. Disclosure of Limited Death Benefits
- Section 10. Inclusion of Lapse of Time Considerations
- Section 11. Proration of Values; Additional Benefits
- Section 12. Rules
- Section 13. Effective Date

#### 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.

#### Section 3. Nonforfeiture Requirements

A. In the case of contracts issued on or after the operative date of this Act as defined in Section 13, no contract of annuity, except as stated in Section 2, shall be delivered or issued for delivery in this state unless it contains in substance the following provisions, or corresponding provisions which in the opinion of the commissioner are at least as favorable to the contract holder, upon cessation of payment of considerations under the contract:

1. That upon cessation of payment of considerations under a contract, or upon the written request of the contract owner, the company shall grant a paid-up annuity benefit on a plan stipulated in the contract of such value as is specified in Sections 5, 6, 7, 8 and 10;

2. If a contract provides for a lump sum settlement at maturity, or at any other time, that upon surrender of the contract at or prior to the commencement of any annuity payments, the company shall pay in lieu of a paid-up annuity benefit a cash surrender benefit of such amount as is
specified in Sections 5, 6, 8 and 10. The company may reserve the right to defer the payment of the cash surrender benefit for a period not to exceed six (6) months after demand therefor with surrender of the contract after making written request and receiving written approval of the commissioner. The request shall address the necessity and equitability to all policyholders of the deferral;

(3) A statement of the mortality table, if any, and interest rates used in calculating any minimum paid-up annuity, cash surrender or death benefits that are guaranteed under the contract, together with sufficient information to determine the amounts of the benefits; and

(4) A statement that any paid-up annuity, cash surrender or death benefits that may be available under the contract are not less than the minimum benefits required by any statute of the state in which the contract is delivered and an explanation of the manner in which the benefits are altered by the existence of any additional amounts credited by the company to the contract, any indebtedness to the company on the contract or any prior withdrawals from or partial surrenders of the contract.

B. Notwithstanding the requirements of this section, a deferred annuity contract may provide that if no considerations have been received under a contract for a period of two (2) full years and the portion of the paid-up annuity benefit at maturity on the plan stipulated in the contract arising from prior considerations paid would be less than $20 monthly, the company may at its option terminate the contract by payment in cash of the then present value of the portion of the paid-up annuity benefit, calculated on the basis on the mortality table, if any, and interest rate specified in the contract for determining the paid-up annuity benefit, and by this payment shall be relieved of any further obligation under the contract.

Section 4. Minimum Values

The minimum values as specified in Sections 5, 6, 7, 8 and 10 of any paid-up annuity, cash surrender or death benefits available under an annuity contract shall be based upon minimum nonforfeiture amounts as defined in this section.

A. (1) The minimum nonforfeiture amount at any time at or prior to the commencement of any annuity payments shall be equal to an accumulation up to such time at rates of interest as indicated in Subsection B of the net considerations (as hereinafter defined) paid prior to such time, decreased by the sum of Paragraphs (a) through (d) below:

(a) Any prior withdrawals from or partial surrenders of the contract accumulated at rates of interest as indicated in Subsection B;

(b) An annual contract charge of $50, accumulated at rates of interest as indicated in Subsection B;

(c) Any premium tax paid by the company for the contract, accumulated at rates of interest as indicated in Subsection B; and

(d) The amount of any indebtedness to the company on the contract, including interest due and accrued.

(2) The net considerations for a given contract year used to define the minimum nonforfeiture amount shall be an amount equal to eighty-seven and one-half percent (87.5%) of the gross considerations credited to the contract during that contract year.

B. The interest rate used in determining minimum nonforfeiture amounts shall be an annual rate of interest determined as the lesser of three percent (3%) per annum and the following, which shall be specified in the contract if the interest rate will be reset:
(1) The five-year Constant Maturity Treasury Rate reported by the Federal Reserve as of a date, or average over a period, rounded to the nearest 1/20" of one percent, specified in the contract no longer than fifteen (15) months prior to the contract issue date or redetermination date under Section 4B(4);

(2) Reduced by 125 basis points;

(3) Where the resulting interest rate is not less than one zero percent (10%); and

(4) The interest rate shall apply for an initial period and may be redetermined for additional periods. The redetermination date, basis and period, if any, shall be stated in the contract. The basis is the date or average over a specified period that produces the value of the five-year Constant Maturity Treasury Rate to be used at each redetermination date.

C. During the period or term that a contract provides substantive participation in an equity indexed benefit, it may increase the reduction described in Subsection B(2) above by up to an additional 100 basis points to reflect the value of the equity index benefit. The present value at the contract issue date, and at each redetermination date thereafter, of the additional reduction shall not exceed the market value of the benefit. The commissioner may require a demonstration that the present value of the additional reduction does not exceed the market value of the benefit. Lacking such a demonstration that is acceptable to the commissioner, the commissioner may disallow or limit the additional reduction.

D. The commissioner may adopt rules to implement the provisions of Section 4C and to provide for further adjustments to the calculation of minimum nonforfeiture amounts for contracts that provide substantive participation in an equity index benefit and for other contracts that the commissioner determines adjustments are justified.

Section 5. Computation of Present Value

Any paid-up annuity benefit available under a contract shall be such that its present value on the date annuity payments are to commence is at least equal to the minimum nonforfeiture amount on that date. Present value shall be computed using the mortality table, if any, and the interest rates specified in the contract for determining the minimum paid-up annuity benefits guaranteed in the contract.

Section 6. Calculation of Cash Surrender Value

For contracts that provide cash surrender benefits, the cash surrender benefits available prior to maturity shall not be less than the present value as of the date of surrender of that portion of the maturity value of the paid-up annuity benefit that would be provided under the contract at maturity arising from considerations paid prior to the time of cash surrender reduced by the amount appropriate to reflect any prior withdrawals from or partial surrenders of the contract, such present value being calculated on the basis of an interest rate not more than one percent (1%) higher than the interest rate specified in the contract for accumulating the net considerations to determine maturity value, decreased by the amount of any indebtedness to the company on the contract, including interest due and accrued, and increased by any existing additional amounts credited by the company to the contract. In no event shall any cash surrender benefit be less than the minimum nonforfeiture amount at that time. The death benefit under such contracts shall be at least equal to the cash surrender benefit.

Section 7. Calculation of Paid-up Annuity Benefits

For contracts that do not provide cash surrender benefits, the present value of any paid-up annuity benefit available as a nonforfeiture option at any time prior to maturity shall not be less than the present value of that portion of the maturity value of the paid-up annuity benefit provided under the contract arising from considerations paid prior to the time the contract is surrendered in exchange for, or changed to, a deferred paid-up annuity, such present value being calculated for the period prior to the maturity date on the basis of the interest rate specified in the contract for accumulating the net considerations to determine maturity value, and increased by any additional amounts credited by the company to the contract. For contracts that do not provide any death benefits prior to the commencement of any annuity payments, present values shall be calculated on the basis of such interest rate and the mortality table specified in the contract for determining the maturity value of the paid-up annuity benefit. However, in no event shall the present value of a paid-up annuity benefit be less than the minimum nonforfeiture amount at that time.
Section 8. Maturity Date

For the purpose of determining the benefits calculated under Sections 6 and 7, in the case of annuity contracts under which an election may be made to have annuity payments commence at optional maturity dates, the maturity date shall be deemed to be the latest date for which election shall be permitted by the contract, but shall not be deemed to be later than the anniversary of the contract next following the annuitant's seventieth birthday or the tenth anniversary of the contract, whichever is later.

Section 9. Disclosure of Limited Death Benefits

A contract that does not provide cash surrender benefits or does not provide death benefits at least equal to the minimum nonforfeiture amount prior to the commencement of any annuity payments shall include a statement in a prominent place in the contract that such benefits are not provided.

Section 10. Inclusion of Lapse of Time Considerations

Any paid-up annuity, cash surrender or death benefits available at any time, other than on the contract anniversary under any contract with fixed scheduled considerations, shall be calculated with allowance for the lapse of time and the payment of any scheduled considerations beyond the beginning of the contract year in which cessation of payment of considerations under the contract occurs.

Section 11. Proration of Values; Additional Benefits

For a contract which provides, within the same contract by rider or supplemental contract provision, both annuity benefits and life insurance benefits that are in excess of the greater of cash surrender benefits or a return of the gross considerations with interest, the minimum nonforfeiture benefits shall be equal to the sum of the minimum nonforfeiture benefits for the annuity portion and the minimum nonforfeiture benefits, if any, for the life insurance portion computed as if each portion were a separate contract. Notwithstanding the provisions of Sections 5, 6, 7, 8 and 10, additional benefits payable in the event of total and permanent disability, as reversionary annuity or deferred reversionary annuity benefits, or as other policy benefits additional to life insurance, endowment and annuity benefits, and considerations for all such additional benefits, shall be disregarded in ascertaining the minimum nonforfeiture amounts, paid-up annuity, cash surrender and death benefits that may be required by this Act. The inclusion of such benefits shall not be required in any paid-up benefits, unless the additional benefits separately would require minimum nonforfeiture amounts, paid-up annuity, cash surrender and death benefits.

Section 12. Rules

The commissioner may adopt rules to implement the provisions of this Act.

Section 13. Effective Date

After the effective date of this Act, a company may elect to apply its provisions to annuity contracts on a contract form-by-contract form basis before the second anniversary of the effective date of this Act. In all other instances, this Act shall become operative with respect to annuity contracts issued by the company after the second anniversary of this Act.
Brian Bayerle  
Senior Actuary  

July 20, 2020  

Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force (LATF)  

Re: ACLI Comments on Opening of NAIC Model #805  

Dear Mr. Boerner:

The American Council of Life Insurers (ACLI) appreciates the opportunity to provide comments on the opening of NAIC Model #805 on Standard Nonforfeiture Law for Individual Deferred Annuities. We appreciate the leadership of LATF and the Life Insurance and Annuities (A) Committee to address this critical issue for consumers.

ACLI believes regulators should make quick, tactical revisions to Model #805 in light of the current economic environment. Specifically, we believe the appropriate course of action is to reduce the minimum nonforfeiture interest rate in Section 4 (B) (3) from 1% to 0%.

The current interest rate environment creates unique challenges on crediting rates. As of June 30th, the yields for the US 5-year and 10-year Treasuries were 0.29% and 0.66%, respectively. It is difficult to support the current 1.00% minimum guaranteed rate given these historically low interest rates. An annuity contract is a long-term commitment and requires that insurers maintain a long time horizon with respect to managing contract liabilities. Many companies are contemplating or have begun to limit their product offerings in response to the current situation and would appreciate greater flexibility to address the current environment. Greater flexibility will help promote expanded product availability to consumers.

We note that the 0% is a floor only; and the current formula will continue to be used to determine the minimum rates companies are permitted to guarantee on newly-issued contracts. The 0% floor will only be triggered in low interest rate environments, such as the one we are currently experiencing. Companies will continue to use non-guaranteed crediting rates, bonuses, and other features in order to maintain market competitiveness and product differentiation. If, and when, market conditions improve, competitive pressures will necessitate that insurers increase both their current and guaranteed crediting rates regardless of the regulatory floor.

We look forward to a discussion on this important issue.
Sincerely,

[Signature]

cc: Reggie Mazyck, NAIC
May 29, 2020

Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force (LATF)  

Mr. Reggie Mazyck  
Life Actuary, NAIC  

Re: Model 805 Exposure, Standard Nonforfeiture Law for Individual Deferred Annuities  

Dear Mr. Boerner and Mr. Mazyck:  

On behalf of our members, the Insured Retirement Institute ("IRI")\(^1\) appreciates the opportunity to comment on the proposed change to Model 805 Exposure. For the reasons set forth below, we support the proposal and respectfully urge the NAIC to move expeditiously to adopt the proposal.  

The current financial environment is challenging institutional and individual investors and product offerings. The proposed change from 1% to 0% will give companies more flexibility to provide the value and benefits wanted and needed by consumers. If companies are required to offer 1% crediting rates, and interest rates remain low or decrease further, certain products will no longer be feasible to offer. The products most at risk are often those in greatest demand by consumers. For example, products with short surrender charge periods may not be able to find investments that have a high enough yield to support a 1% rate. At the same time, many consumers will be understandably hesitant to purchase long term products in a low yield environment. Additional guarantees in contracts such as a return of premium benefit may become unaffordable if the asset yield available is exhausted by the 1% guarantee.  

IRI is committed to responding to the country’s economic condition with policy recommendations that support individual investment. Companies must have a diverse product portfolio to respond to the

\(^1\) IRI is the leading association for the entire supply chain of insured retirement strategies, including life insurers, asset managers, and distributors such as broker-dealers, banks and marketing organizations. IRI members account for more than 95 percent of annuity assets in the U.S., include the top 10 distributors of annuities ranked by assets under management, and are represented by financial professionals serving millions of Americans. IRI champions retirement security for all through leadership in advocacy, awareness, research, and the advancement of digital solutions within a collaborative industry community.
changing economic and individual situation. IRI supports the responsive approach of Model 805 and encourages the Life Actuarial Task Force to adopt as proposed.

Thank you again for the opportunity to share our views on this important subject. Please contact the undersigned if you have questions about anything in this letter, or if we can be of any further assistance in connection with this important regulatory effort.

Sincerely,

Jason Berkowitz
Chief Legal & Regulatory Affairs Officer
Insured Retirement Institute

Liz Pujolas
Director, State Affairs
Insured Retirement Institute
The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call July 15, 2020. The following Subgroup members participated: Bruce Sartain, Chair (IL); Jim Jakielo (CT); Mike Yanacheak (IA); Nicole Boyd (KS); William Leung (MO); Rhonda Ahrens (NE); Bill Carmello (NY); Tomasz Serbinowski (UT); and Craig Chupp (VA). Also participating was: Russell Toal (NM); and Rachel Hemphill (TX).

1. Discussed the Revisions to VM-22

Mr. Sartain said the aggregation discussion will be deferred until the American Academy of Actuaries (Academy) Annuity Reserve Work Group (ARWG) finalizes its development of aggregation principles. He presented a list of Subgroup decisions that could be presented to the Life Actuarial (A) Task Force for its consideration. The first item on the list was the inclusion of payout annuities in the principle-based reserving (PBR) framework. He noted that the decision on the location of the PBR requirements for payout annuities will be decided later. The second item was the decision to continue development of an exclusion test for less risky annuities. The third item was the deferral of discussions on whether the PBR requirements for payout annuities are to be applied retroactively. He said that the decision on retroactivity will be tabled until the Subgroup gets closer to a final product. Mr. Carmello said the New York Department of Financial Services (NYDFS) prefers retaining Actuarial Guideline XXXIII, Determining CARVM Reserves for Annuity Contracts with Elective Benefits (AG 33) and Actuarial Guideline XXXV, The Application of the Commissioners Annuity Reserve Method to Equity Indexed Annuities (AG 35). He said those requirements are sufficient and the PBR payout annuities project is not necessary. The Subgroup agreed to forward the three decisions to the Task Force for its review. Mr. Carmello did not agree with moving the decisions forward. Although not a member of the Subgroup, Commissioner Toal also voiced opposition sending the items to the Task Force.

Mr. Sartain said two issues related to the standard projection amount (SPA) are whether to develop an SPA and, if an SPA is developed, whether it should be a reserve floor or a disclosure item. He said the benefits of having an SPA in the PBR payout annuity framework that would be analogous to the SPA in VM-21, Requirements for Principle-Based Reserves for Variable Annuities, have been discussed. He said there is a thought that having consistency between VM-21 and the PBR payout annuities framework would be a positive step to keep companies from cherry picking requirements for products that straddle the line of variable and fixed identification. He said there is also thinking that supports waiting until field testing has been completed to decide whether the SPA would be a floor or disclosure item. He noted that the Task Force has been charged with reviewing the VM-21 SPA by the end of 2023. He said it may make sense to have the floor/disclosure decision coincide with the VM-21 SPA review. He asked subgroup members if there were any objections to proceeding with the development SPA. Ms. Ahrens said that during the VM-21 deliberations, the Nebraska Department of Insurance spoke against using the SPA as a floor. She said her current stance on the PBR payout annuity framework SPA is that it should be a disclosure item, but she is willing to await completion of the ARWG work before making a final decision. Ms. Ahrens suggested that there could be a set of multiple standard scenarios. Mr. Sartain asked if VM-21 assumptions for the CTE with Prescribed Assumptions (CTEPA) will be periodically revisited. Ms. Hemphill said the intent was to revisit the prescribed assumptions, but no set period for revisiting was determined. She said she finds the VM-21 SPA helpful when doing company reviews and at minimum would like to have the PBR payout annuity SPA as a disclosure item. Ms. Ahrens said her preference would be to only have the PBR stochastic calculations with the cash value as the floor. She said she is not opposed to continuing the work on the SPA but is concerned that there is a presupposition that the SPA will be used as a floor. Ben Slutsker (Academy ARWG) said the Academy does not support using the SPA as a floor. He said they would rather have the SPA as a disclosure item. Mr. Sartain asked if subgroup members would like to add the discussion of the SPA to the list of items for Task Force consideration or to continue SPA discussions within the subgroup. The Subgroup voted, 5-4, to keep the SPA discussions at the subgroup level.

Having no further business, the VM-22 (A) Subgroup adjourned.
VM-22 (A) Subgroup Conference Call July 1, 2020

The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call July 1, 2020. The following Subgroup members participated: Bruce Sartain, Chair and Vincent Tsang (IL); Jim Jakielo (CT); William Leung (MO); Bill Carmello (NY); Tomasz Serbinowski (UT); and Craig Chupp (VA). Also participating were: Pete Weber (OH); John Robinson (MN); and Rachel Hemphill and Karen Jiang (TX).

1. Discussed the Revisions to VM-22

Mr. Sartain said his thought is to move forward with developing a standard projection amount (SPA) for VM-22, Statutory Maximum Valuation Interest Rate for Income Annuities, and wait to decide whether it should be a floor amount or a disclosure item until the SPA development process is nearly complete. He said another decision is whether the VM-22 SPA will use the CTE with Prescribed Assumptions (CTEPA) method or the Company-Specific Market Path (CSMP) method, the two VM-21, Requirements for Principle-Based Reserves for Variable Annuities, methods for determining the SPA. Mr. Sartain said using the SPA would be consistent with the decision to use VM-21 as a model for VM-22, making changes wherever necessary. He noted that a field test, using an initial set of prescribed assumptions which will allow for comparisons of the stochastic reserve, SPA, cash surrender value, and the CARVM reserve, will be conducted in 2021. He said it is premature to make decisions on the SPA before completion of the field test. He said the Life Actuarial (A) Task Force has received a charge requiring review of the VM-21 SPA by the end of 2023. He said the VM-22 SPA could also be reviewed at that time. Also, an SPA floor would be stochastically based, and if it were decided to be a disclosure item that would also be helpful in regulatory reviews. John Robinson asked if a different SPA would be considered for deferred annuities (DAs) and single premium immediate annuities (SPIAs). Mr. Sartain said prescribed assumptions would be developed by product line and modeled according to the aggregation rules.

Ms. Jiang asked whether the prescribed assumptions would be best estimates or margins added to industry averages. Mr. Sartain said his simplistic view is to use best estimate assumptions with a margin. Ben Slutsker (American Academy of Actuaries Annuity Reserves Work Group—ARWG) said the ARWG approach has been to focus on the principle-based reserve (PBR). He said a floor reserve may impede the PBR objective. He said the prescribed assumptions should align with the objectives of the adopted approach. Mr. Sartain asked if VM-21 used a best estimate or a best estimate plus a margin. Ms. Hemphill said VM-21 does not use an explicit margin but adds conservatism when encountering uncertainty. She questioned whether there is double buffering if prescribed assumptions have explicit margins. Mr. Weber said, Oliver-Wyman stated that, while it does not have an explicit margin, the VM-21 reserve requirements are sufficiently conservative. Mr. Sartain asked if VM-22 should use the VM-21 margin approach. Ms. Hemphill suggested considering ways to quantify the size of the margin. She said having the margin quantified is helpful when conducting reviews. Cindy Barnard (Pacific Life) said developing assumptions for areas in which there are no experience will be challenging.

Mr. Robinson asked for the reasons why the SPA is being considered for VM-22. Mr. Sartain said it is reasonable to consider the SPA as a floor reserve. He said even if it is not used as a floor, disclosing the SPA provides valuable information. Mr. Weber said having a floor for VM-21 and no floor for VM-22 would require clear differentiation of the variable and non-variable annuity products. Mr. Sartain said discussion of the issue will continue on the next subgroup call.

Mr. Sartain said the concept of aggregation is discussed in section 5A of VM-20, Requirements for Principle-Based Reserves for Life Products. Mr. Slutsker said aggregation refers to the grouping of policies with off-setting risks. He said aggregation interacts with lots of elements within the PBR framework, primarily appearing in the CTE-70 calculation, the comparing of reserve components and in exclusion testing. He detailed the uses of aggregation within VM-20 and VM-21. He said the ARWG believes an approach which outlines principles will be best for VM-22. He suggested one principle might be aggregating in a manner consistent with the company’s risk management process. Mr. Slutsker noted that exclusion testing may require prescribed prudent requirements that may utilize knockout criteria, such as not excluding future hedging strategies supporting guaranteed living benefits. He said the ARWG is drafting principles for aggregation for elements other than exclusion testing.

Having no further business, the VM-22 (A) Subgroup adjourned.
The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call June 11, 2020. The following Subgroup members participated: Bruce Sartain, Chair and Vincent Tsang (IL); Jim Jakielo (CT); Nicole Boyd (KS); William Leung (MO); Rhonda Ahrens (NE); Bill Carmello (NY); Tomasz Serbinowski (UT) and Craig Chupp (VA). Also participating were: John Robinson (MN); Pete Weber (OH); and Rachel Hemphill (TX).

1. Discussed the Potential Revisions to VM-22

Mr. Sartain said the American Academy of Actuaries (Academy) Annuity Reserve Work Group (ARWG) has been working on principle-based reserve (PBR) developments for non-variable annuities, including possibly using the VM-20, *Requirements for Principle-Based Reserves for Life Products*, exclusion test concept. John Miller (ARWG) said the ARWG has long thought that an exclusion test was needed for annuities that do not have material risk. He reiterated that the current ARWG thinking is to use the VM-20 concept. Products that pass the exclusion test will use Actuarial Guideline XXXIII, *Determining CARVM Reserves for Annuity Contracts with Elective Benefits* (AG 33).

Ben Slutsker (ARWG) provided an overview of the three options for the VM-20 exclusion test. He said the first option, the stochastic ratio test, compares the greatest scenario reserve resulting from the 16 prescribed scenarios from the Academy test scenario generator to the baseline scenario reserve to determine if the ratio meets the criteria to pass the test. He said the second option is to compare the PBR results to the reserve amount that would otherwise be held, to determine if the pre-PBR reserve is sufficient. He said the third option for an exclusion test is the certification option. Rachel Hemphill said consideration should be given to having absolute dollar amount criteria in addition to applying the VM-20 stochastic ratio test thresholds for non-variable annuities. She expressed concern about whether contracts with different risk profiles should be aggregated for the stochastic ratio test. Mr. Slutsker said the concerns will be considered as discussions progress. No subgroup members voiced objection to the overall direction of the ARWG VM-22 development efforts.

Mr. Weber provided an overview of the standard projection amount (SPA) used in VM-21, *Requirements for Principle-Based Reserves for Variable Annuities*. He said the Variable Annuity Issues (E) Working Group considered whether VM-21 needed a floor reserve. He said working group members thought it unwise to remove the guardrail provided by the SPA. He said the working group charged the Life Actuarial (A) Task Force with revisiting the SPA issue within five years to determine whether the hard floor could be replaced by a disclosure requirement.

Mr. Weber said there are two methods for determining the SPA, the company-specific market path (CSMP) and the CTE with prescribed assumptions (CTEPA). He said, once a company chooses a method, domestic commissioner approval is required to change. Mr. Jakielo asked if the VM-21 prescribed assumptions would be a good starting point for development of prescribed assumptions for non-variable annuities. Mr. Weber responded that, while VM-21 might provide a good starting point, the characteristics of variable annuity buyers and non-variable annuity buyer are different. He said the prescribed assumptions must be changed to reflect the differences. Mr. Robinson asked if development of an SPA for VM-22 is within the scope of the ARWG work. Mr. Slutsker said the ARWG is focused on developing the modeled reserve and would prefer the SPA be a disclosure item. Mr. Sartain said it has not been determined if the ARWG would be tasked with development of the SPA. Mr. Carmello said he would like to retain the AG 33 as the floor for non-variable annuities. He said AG 33 works well for products with guaranteed living benefits.

Having no further business, the VM-22 (A) Subgroup adjourned.
The VM-22 (A) Subgroup of the Life Actuarial (A) Task Force met via conference call May 20, 2020. The following Subgroup members participated: Bruce Sartain, Chair and Vincent Tsang (IL); Jim Jakielo (CT); Mike Yanacheak (IA); Nicole Boyd (KS); Rhonda Ahrens (NE); Bill Carmello (NY); and Tomasz Serbinowski (UT).

1. Discussed the Potential Revisions to VM-22

Mr. Sartain said the Subgroup has two options to consider: 1) to go farther out on the principle-based reserve (PBR) curve by eliminating guardrails present in VM-20, Requirements for Principle-Based Reserves for Life Insurance and VM-21, Requirements for Principle-Based Reserves for Variable Annuities; or 2) to keep the guardrails currently in VM-20 and VM-21 for the moment, followed by a measured approach using a determined timeline to open and revise the guidance. He said an example of the first option would be to allow companies to use more of their own asset experience than they can use in VM-20 and VM-21. Ms. Ahrens said there are some areas in which there should be less prescription and more application of principles. She suggested that policyholder behavior experience is an area where using company specific experience might be feasible. She said she would be less comfortable with allowing a company to use its own asset experience. Mr. Carmello asked if contracts that fail the exclusion test will be subject to a formulaic floor. Mr. Sartain said that is yet to be determined. Mr. Carmello said that in absence of a formulaic floor he favors option 1.

Ben Slutsker (American Academy of Actuaries Annuity Reserves Work Group—ARWG) gave a presentation on the work of the ARWG. He said the ARWG is working to develop a PBR framework for fixed annuities, with a focus on the stochastic reserve. He expects that once the framework is completed a full presentation will be provided to the Subgroup. The presentation will include assumptions for assets and liabilities, as well as exclusion tests. Mr. Slutsker said the framework design will follow VM-21 and will result in a revised VM-22, Statutory Maximum Valuation Interest Rate for Income Annuities. He said the target effective date for the revised VM-22 is Jan. 2023. He said because products are becoming increasingly similar, the plan is to apply the PBR methodology to fixed deferred annuities, fixed indexed annuities and fixed payout annuities. He said initially the scope will not include guaranteed investment contracts (GICs), funding agreements and stable value contracts, which tend to have more specific windows for optionality, have less longevity risks and are subject to different regulations. Mr. Sartain asked if any Subgroup members are against applying PBR to payout annuities. Mr. Carmello said he supports applying PBR to payout annuities if the current reserve is retained as a floor. Ms. Ahrens said the PBR methodology is designed to prepare for product innovation without requiring regulatory changes. She said, with the increasing demand for longevity risk products possibly leading to greater longevity product innovations, she prefers keeping payout annuities in scope. She said a PBR reserving standard for pension risk transfer business should be considered. Mr. Sartain said pension risk transfer business is expected to be in scope. Mr. Jakielo asked whether the PBR requirements for fixed annuities will reside in VM-22. Mr. Sartain said he envisions the requirements residing in VM-22, but the geography issue is still a matter for discussion.

Ms. Ahrens commented that there should be separate chapters for deferred annuities and payout annuities. Mr. Sartain said the major issue seems to be aggregation. He suggested that the products could reside in the same chapter if there are clear guidelines on how to aggregate the contracts.

Mr. Sartain said the question of whether the PBR requirements for fixed annuities will be retrospective is to be resolved by the Life Actuarial (A) Task Force.

Having no further business, the VM-22 (A) Subgroup adjourned.
Preliminary Framework Elements for Fixed Annuity PBR

American Academy of Actuaries Annuity Reserves Work Group (ARWG)

Ben Slutsker, MAAA, FSA
Chairperson, Annuity Reserves Work Group
John R. Miller, MAAA, FSA
Vice Chairperson, Annuity Reserves Work Group
Chris Conrad, MAAA, FSA
Vice Chairperson, Annuity Reserves Work Group

NAIC VM-22 (A) Subgroup Meetings – Summer 2020

ARWG Objective

Objective: Propose a new statutory reserve methodology for fixed annuities that uses an actuarial framework to determine reserves based on the level and type of risk inherent in the contract.

ARWG Pillars of Objective

1) Appropriate Reflection of Risk—All else equal, greater risk in moderately adverse conditions requires greater statutory reserves, and vice-versa.

2) Comprehensive—The statutory reserve accounts for all material risks covered in the Valuation Manual and inherent in product features and potential management actions associated with the policies or contracts being valued.

3) Consistency Across Products—Statutory reserves between two contracts with similar features and risks are consistent given the same anticipated experience, regardless of product type.

4) Practicality and Appropriateness—Balance principles above with an approach that is practical, auditable, and able to be implemented.

(i) These objectives are specific to the ARWG and intentionally condensed; Refer to VM-21, Section 1.B for a formal list of PBR principles

ARWG Vision and Need

Vision: Provide Academy framework on principle-based reserve (PBR) methodology for fixed annuity products and promote consistency with existing PBR frameworks.

How ARWG Plans to Accomplish Vision

a) Propose a PBR Approach—The ARWG plans to propose a CTE70 stochastic reserve calculation.

b) Develop a Framework Deck—Develop a set of slides laying out various elements of methodology.

c) Recommend Consistency With VM-21 Where Appropriate—Start with VM-21 methodology.

Why Fixed Annuity PBR now?

Flexible Methodology—As new products emerge introducing greater optionality and reinvestment risk, there is greater need for a reserve methodology that appropriately captures the risks in these products.

Extend Existing PBR Framework—Seek consistency between fixed annuities and life/variable annuities (VM-20/VM-21).

Preliminary Timeline

Fall 2019–Spring 2020

• Develop proposed fixed annuity PBR framework deck
• Begin initial modeling sensitivities for generic FIA w/guarantee

Summer 2020

• ARWG to present framework deck proposal to LATF

Fall 2020

• Seek LATF endorsement of PBR framework deck (w/feedback addressed)
• Valuation Manual language drafting efforts

Spring 2021

• Begin industry field testing using draft (specifics TBD)

Spring 2022

• Target adoption of fixed annuity PBR (potentially VM-22)
• Target 1/1/2023 effective date (monitor as progress develops)
ARWG Key Topics

1) Product Scope
   - **Question**: Apply PBR to both deferred annuity and payout annuity contracts?
   - **ARWG Perspective**: Recommend applying the PBR framework to both deferred and payout contracts. Not applying to immediate annuities allows companies to avoid principle-based reserves and creates possible advantages for some products over others, even if they share the same risks. That said, the recommendation is to hold off applying to Guaranteed Investment Contracts (GICs), funding agreements, and stable value contracts for the first round of fixed annuity PBR and revisit these at a later point in time.
   - **Question**: Apply PBR to all variable annuity products?
   - **ARWG Perspective**: Recommend applying the PBR framework to both deferred and payout contracts. Not applying to immediate annuities allows companies to avoid principle-based reserves and creates possible advantages for some products over others, even if they share the same risks. That said, the recommendation is to hold off applying to Guaranteed Investment Contracts (GICs), funding agreements, and stable value contracts for the first round of fixed annuity PBR and revisit these at a later point in time.

2) Exclusion Test Methodology
   - **Question**: Allow for exclusion test on new business that follows a similar framework to the VM-20?
   - **ARWG Perspective**: Recommend following an exclusion test similar to the framework outlined in VM-20, which includes following a stochastic exclusion ratio test or certification method test. Products that pass the exclusion test are deemed to have lower levels of market risk and policyholder optionality risk and, therefore, may elect to use the pre-PBR Commissioners’ Annuity Reserve Valuation Method (CARVM) reserve test. VM-20/VM-21 Treatment: VM-20 applies an exclusion test and VM-21 uses an Alternative Methodology.
   - **Question**: What assumptions should be used for reinvestment strategy?
   - **ARWG Perspective**: Propose same default/reinvestment spread assumptions as VM-21 but instead use a reinvestment consistent with other risks, whereas this may not necessarily be the case to the same extent for variable annuities and life insurance (mortality-dependent).

3) Asset Reinvestment Assumptions
   - **Question**: What assumptions should be used for reinvestment strategy?
   - **ARWG Perspective**: Propose same default/reinvestment spread assumptions as VM-21 but instead use a reinvestment consistent with other risks, whereas this may not necessarily be the case to the same extent for variable annuities and life insurance (mortality-dependent).
   - **Question**: What assumptions should be used for reinvestment strategy?
   - **ARWG Perspective**: Propose same default/reinvestment spread assumptions as VM-21 but instead use a reinvestment consistent with other risks, whereas this may not necessarily be the case to the same extent for variable annuities and life insurance (mortality-dependent).

Questions?

- Questions or comments may be directed to:
- Ian Trepanier
  Life Policy Analyst
  American Academy of Actuaries
  Trepanier@actuary.org

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The IUL Illustration (A) Subgroup of the Life Actuarial (A) Task Force met via conference call June 2, 2020. The following Subgroup members participated: Fred Andersen, Chair (MN); Ted Chang (CA); Andrew Greenhalgh (CT); Mike Yanacheak (IA); Vincent Tsang (IL); Rhonda Ahrens (NE); Bill Carmello (NY); Peter Weber (OH); Mike Boerner and John Carter (TX); Tomasz Serbinowski (UT); and Craig Chupp (VA).

1. Discussed Technical Edits to the ACLI AG 49 Proposal

Mr. Andersen discussed the redline version of AG 49-A, the proposed revisions to *Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest* (AG 49) (Attachment Eighteen-A). He said the revisions include technical edits to replace the term “annual percentage rate” with “annual rate” because the former term is commonly used in places other than AG 49. Birny Birnbaum (Center for Economic Justice—CEJ) recommended revising the proposed definition of “annual rate of index credits” because the definition seemed circular.

Brian Bayerle (American Council of Life Insurers—ACLI) discussed the remaining revisions. Upon Mr. Andersen’s request, Mr. Bayerle agreed to provide an updated version of AG 49-A for submission to the Life Actuarial (A) Task Force. Mr. Andersen said the Task Force will address the question of retroactivity.

Graham Summerlee (Lincoln Financial Group) said the IUL Coalition comment letter (Attachment Eighteen-B) is seeking to add a sentence to Section 5A to ensure that the assumed earned rate from the hedge will not exceed the amount of index credits being illustrated. Mr. Bayerle said the suggested sentence has already been incorporated into the AG 49-A revision.

Mr. Chupp said his comment letter (Attachment Eighteen-C) recommends several changes, including a change to correct the language in Section 5A to be consistent with the examples that the ACLI provided. He agreed to work with Mr. Bayerle to correct the issues in advance of the Task Force conference call.

Having no further business, the IUL Illustration (A) Subgroup adjourned.
THE APPLICATION OF THE LIFE ILLUSTRATIONS MODEL REGULATION TO POLICIES WITH INDEX-BASED INTEREST SOLD AFTER [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption*]

Background

The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

In 2019, the NAIC decided that illustrations of products with multipliers, cap buy-ups, and other enhancements should not illustrate better than products without such features. This new requirement is intended to apply to illustrations on policies sold on or after the effective date of this guideline while the existing requirements continue to apply for inforce illustrations on policies sold before the effective date of this guideline.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.
2. Limits the policy loan leverage shown in an illustration.
3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective for all new business and in force illustrations on policies sold on or after [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption].

2. Scope

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

i. The policy is subject to Model #582.

ii. The policy offers Indexed Credits.

3. Definitions

A. Alternate Scale: A scale of non-guaranteed elements currently being illustrated such that:

i. The total annual percentage rate Annual Rate of Indexed Credits for each Index Account does not exceed the lesser of the maximum total percentage rate Annual Rate of Indexed Credits for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the total annual percentage rate Annual Rate of Indexed Credits for each Index Account shall not exceed the average of the maximum total percentage rate Annual Rate of Indexed Credits for the illustrated scale and the guaranteed total percentage rate Annual Rate of Indexed Credits.
Credits for that account. However, the total annual percentage rate of Indexed Credits for each Index Account shall never be less than the guaranteed total annual percentage rate of Indexed Credits for that account.

ii. If the illustration includes a loan, the illustrated Policy Loan Interest Credited Rate shall not exceed the illustrated Policy Loan Interest Rate. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 4%.

iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. Annual Net Investment Earnings Rate: Gross portfolio annual earnings rate of the general account assets (excluding hedges for Indexed Credits), less provisions for investment expenses and default cost, allocated to support the policy. Charges of any kind are not included in the Annual Net Investment Earnings Rate.

C. Annual Rate of Indexed Credits: The annualized total Indexed Credits divided by the account value used to determine index credits according to the policy features.

C.D. Benchmark Index Account: An Index Account with the following features:

i. The interest calculation is based on the percent change in S&P 500® Index value only, over a one-year period using only the beginning and ending index values. (S&P 500® Index ticker: SPX)

ii. An annual cap is used in the interest calculation.

iii. The annual floor used in the interest calculation shall be 0%.

iv. The participation rate used in the interest calculation shall be 100%.

v. Interest is credited once per year.

vi. The Hedge Budget used to determine the cap in 3 (C) (ii) does not exceed the Annual Net Investment Earnings Rate. Charges of any kind are not included in the applicable annual cap rate.

vii. There are no additional amounts credited that are linked to an index or indices in excess of the interest calculation provided by the annual cap, including but not limited to experience refunds, multipliers, and bonuses.

viii. There are no limitations on the portion of account value allocated to the account.

ix. A single Benchmark Index Account will be determined for each policy. This can be either an Index Account offered with the illustrated policy or determined according to Section 4(A)(ii) for purposes of complying with this regulation. A policy shall have no more than one Benchmark Index Account.

D.F. Fixed Account: An account where the amounts credited here are not tied to an index or indices no Indexed Credits.

E.F. Index Account: An account where some or all of the amounts credited are tied to an index or indices Indexed Credits.

F.G. Indexed Credits: Any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy values that is linked to an index or indices. Amounts credited to the policy resulting from a floor greater than zero on an Index Account are included.

G.H. Hedge Budget: For each Index Account, the total annualized amount assumed to be used to generate the Indexed Credits of the account, expressed as a percent of the account value in the Index Account. This total annualized amount should be consistent with the hedging program of the company.
H.I. **Loan Balance**: Any outstanding policy loan and loan interest, as defined in the policy.

J.I. **Policy Loan Interest Rate**: The current annual interest rate, as defined in the policy, that is charged on any Loan Balance. This does not include any other policy charges.

J.K. **Policy Loan Interest Credited Rate**: The annual interest rate credited that applies to the portion of the account value backing the Loan Balance, as defined in the policy.

i. For the portion of the account value in the Fixed Account that is backing the Loan Balance, the Policy Loan Interest Credited Rate is the applicable annual interest crediting rate, as defined in the policy.

[j.option for consideration: Please see commentary on these approaches in the ACLI Comment Letter; language for Option 1 and Option 2 may need to be tightened up:

Option 1: ii. For the portion of the account value in an Index Account that is backing the Loan Balance, the Policy Loan Interest Credited Rate is the total percentage rate of Indexed Credits, net of any applicable Supplemental Hedge Budget, for that account, as defined in the policy.

Option 2: ii. For any portion of the account value in an Index Account that is backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage rate of the Annual Rate of Indexed Credits and all illustrated bonuses, charge reductions or other enhancements that impact the portion of the account value backing the Loan Balances, as defined in the policy, net of any applicable Supplemental Hedge Budget for that account, as defined in the policy.

K.L. **Supplemental Hedge Budget**: For each Index Account, the Hedge Budget minus the minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that determines used in the determination of the Benchmark Index Account. The Supplemental Hedge Budget will never be less than zero. This amount should be consistent with the hedging program of the company.

4. **Illustrated Scale**

The **total annual percentage rate** of Indexed Credits for the illustrated scale for each Index Account shall be limited as follows:

A. Calculate the geometric average annual credited rate for the Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

i. If the insurer offers a Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the Benchmark Index Account in 4 (A).

ii. If the insurer does not offer a Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of the Benchmark Index Account, and shall use that cap in 4 (A).

B. For the Benchmark Index Account the **total Annual Rate** of Indexed Credits, illustrated as a percentage of the account value in the Index Account, shall not exceed the minimum of (i) and (ii):

i. the arithmetic mean of the geometric average annual credited rates calculated in 4 (A).

ii. 145% of the Annual Net Investment Earnings Rate.

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C. For any other Index Account that is not the Benchmark Index Account in 3 (C), the total Annual Rate of Indexed Credits illustrated as a percentage of the account value in the Index Account prior to the deduction of any charges used to fund a Supplemental Hedge Budget shall not exceed the minimum of (i) and (ii):

i. The maximum Annual Rate of Indexed Credits for the Benchmark Index Account calculated in 4 (B) plus the Supplemental Hedge Budget for the Index Account.

ii. The total Annual Rate of Indexed Credits should reflect the fundamental characteristics of the Index Account and the appropriate relationship to the expected risk and return of the Benchmark Index Account. The illustration actuary shall use actuarial judgment to determine this value using lookback methodology consistent with 4 (A) and 4 (B) (i) where appropriate.

D. For purposes of compliance with Section 6 (C) of Model #582, the Supplemental Hedge Budget may cause is subtracted from the illustrated rate before comparing to exceed the earned interest rate underlying the Disciplined Current Scale, as it is supported by policy charges and not the earned interest rate.

At the beginning of each calendar year, the insurer shall be allowed up to three (3) months to update the credited rate for each Index Account in accordance with 4 (B) and 4 (C).

5. Disciplined Current Scale

The earned interest rate for the disciplined current scale shall be limited as follows:

A. If an insurer engages in a hedging program for Indexed Credits, the assumed earned interest rate underlying the disciplined current scale for the policy, inclusive of all general account assets, both hedge and non-hedge assets, that support the policy, net of default costs and investment expenses (including the amount spent to generate the Indexed Credits of the policy) shall not exceed:

i. the Annual Net Investment Earnings Rate, plus

ii. 45% of the lesser of (1) and (2):

1. Hedge Budget minus any annual floor.

2. The minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that determines used in the determination of the Benchmark Index Account.

These amounts should be adjusted for timing differences to ensure that fixed interest is not earned on the hedge cost. The assumed return on hedges shall only be used in the disciplined current scale testing to support the illustrated Index Credits in the policy.

Guidance Note: The above approach does not stipulate any required methodology as long as it produces a consistent limit on the assumed earned interest rate underlying the disciplined current scale.

For a product with multiple Index Accounts with different Hedge Budgets that are less than or equal to the Annual Net Investment Earnings Rate, a maximum rate in 5.A. should be calculated for each set of accounts with different Hedge Budgets.

B. If an insurer does not engage in a hedging program for Indexed Credits, the assumed earned interest rate underlying the disciplined current scale shall not exceed the Annual Net Investment Earnings Rate.

C. These experience limitations shall be included when testing for self-support and lapse-support under Model #582, accounting for all illustrated benefits including any illustrated benefits and bonuses that impact the policy’s account value.

6. Policy Loans
If the illustration includes a loan, the illustrated Policy Loan Interest Credited Rate shall not exceed the illustrated Policy Loan Interest Rate by more than 100 basis points. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 5%.

7. Additional Standards

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. For each Index Account illustrated, a table showing actual historical index changes and corresponding hypothetical Indexed Credits using current index parameters for the most recent 20-year period.
April 30, 2020

Fred Andersen
Deputy Commissioner of Insurance
Minnesota Department of Commerce
Chair, NAIC IUL Illustration (A) Subgroup

Re: ACLI Proposed Draft of Actuarial Guideline 49-A and clarity on earned rate in the DCS and the percentage rate of Indexed Credits

Fred:

This letter is submitted on behalf of John Hancock, Lincoln Financial Group, Pacific Life Insurance Company and Sammons Financial Group. The purpose of this letter is to ask regulators to consider clarifying language on the relationship between the earned rate underlying the DCS in Section 5 and the percentage rate of Indexed Credits in Section 4 of the ACLI draft. The above noted companies have also submitted a separate letter that supports the direction of the ACLI’s proposed AG49-A including prospective-only application and Option #1 regarding the treatment of policy loans. This letter is meant to supplement that letter.

We believe that having clarity regarding the DCS and the rate of Indexed Credits is a minor but necessary change for the industry to have a common understanding of how to apply AG49-A. Different interpretations for this relationship were identified during discussions among carriers regarding potential changes to AG49.

**Interpretation 1:** The earned rate underlying the DCS in Section 5A is not restricted by the percentage rate of Indexed Credits in an illustration.

**Interpretation 2:** The earned rate underlying the DCS in Section 5A should be restricted by the percentage rate of the Indexed Credits in an illustration.

The ACLI examples represent the first interpretation. Example 1 on the tab with the hedge budget equal to the net investment earnings rate shows Indexed Credits at a level of 6.20%, while the Section 5A rate is calculated at 6.53%. In the illustration testing calculations for this example, Interpretation 1 could allow the earned rate underlying the DCS to be 0.33% more than the illustrated rate of Indexed Credits.

However, in a typical IUL design, the contract will state that the index-linked credits will equal the increase in the underlying index and if a carrier has perfectly hedged the amount of index credits, these amounts would be the same and there would be no additional return on the hedge. The hedge return would match the amount credited to the policy values.
Therefore, we believe that the correct interpretation is number 2, that the earned rate underlying the DCS should be limited by the illustrated Indexed Credits. Otherwise, the illustration tests could include margins that are not contractually realizable. For this reason, the IUL Coalition proposal dated February 21 contained the following in Section 5A:

The assumed return on hedges shall only be used in the disciplined current scale testing to support the illustrated Index Credits in the policy.

If regulators are comfortable with Interpretation 1, that the earned rate underlying the DCS need not be restricted by the level of Indexed Credits, it would be valuable to have AG49-A directly state this or include a drafting note that clearly allows an illustration actuary to use this interpretation. This will ensure there is consistent interpretation on this issue and clarity for actuaries certifying illustrations for these products.

Thank you for consideration of our comments and we are happy to answer any questions or concerns you may have.

Respectfully Submitted,

Scott R. Harrison
High Point Strategies, LLC
scott@highpointstrategies.llc

cc: Reggie Mazyck, NAIC
Date: April 20, 2020

Please allow me to submit the following comments on behalf of Virginia regarding the following exposure:

ACLI Comments and Draft of AG 49 Dated 4-14-20

1. **Benchmark Index Account.** Section 3(C)(vi). “The hedge budget used to determine the cap” is confusing. Since the floor is zero and we are not allowing multipliers or bonuses, would not all the hedge budget be used for the cap? Why not just say “The Supplemental Hedge Budget shall be zero”? 

2. **Policy Loan Interest Rate.** Section 3(I). Other policy charges are not included in the loan charges. I would just like to point out that on the 10/17/19 LATF call, asset-based charges were included with loan charges in the 100 bps limit. It would seem that not including asset-based charges is more restrictive and therefore may be acceptable?

3. **Interest Credits.** Section 3(F). The second sentence of the definition is not consistent with the first sentence. The first sentence requires the interest credit to be linked to an index. The second sentence seems to include any credit whether or not it is linked to an index. If the intention is to include guaranteed interest credited due to a floor, then would not any guaranteed interest credits fall under this definition, including guaranteed interest credits on a non-indexed UL policy? This would potentially bring non-indexed UL policies into the scope of AG 49. Also, by including guaranteed interest credits in the definition of Interest Credits, they also get included in the definition of Hedge Budget, which does not seem right, since these amounts are not used for hedging.

4. **Supplemental Hedge Budget.** Section 3(K). Should not “hedge budget” be capitalized? “The hedge budget that determines the Benchmark Index Account” is somewhat confusing. Would it be clearer to say “The Hedge Budget that is used in the determination of the Benchmark Index Account”? This also applies to Section 5(A)(ii)(2).

5. **Illustrated Scale.** Section 4(A)(ii). This subsection states that it is possible for an insurer to “not offer a Benchmark Index Account with the illustrated policy.” However, Section 3(C)(ix) states a “Benchmark Index Account will be determined for each policy.” Does this mean that an insurer is required to determine a single Benchmark Index Account for each policy for purposes of Section 4(B) but does not have to offer this Benchmark Index Account as an option to the policyholder? If so, this should be made more clear in Section 4(A)(ii) or elsewhere in AG 49. If this is not the case, then language in Sections 3(K) and 4(C)(i) which assumes that each policy will have a Benchmark Index Account will need to be changed.

6. **Disciplined Current Scale.** Section 5(A). In the last sentence of Section 5(A), “NIER” is not defined. Also, the language is not clear. Does it mean one maximum rate that applies for all Index Accounts or a separate maximum rate for each Index Account? Also, there may be other situations where a maximum rate in 5(A) should be calculated for each set of Index Accounts. What if there is an Index Account with a floor and a Hedge Budget greater than the Annual Net Investment Earnings Rate (see Examples 8 and 9 in the mechanics worksheet)? What if the
Hedge Budget is the same for two different Index Accounts which have different floors? Also, the formula in the worksheet examples does not match the language. Should not the Earned Rate in Examples 8 and 9 be 6.12% and 6.20%, respectively? For Example 8: .045 + .45*min(.0461 - .01, .045) = 6.12%.

Thank you for providing me the opportunity to submit this comment.

Craig Chupp, FSA, MAAA
Life and Health Insurance Actuary
Virginia Bureau of Insurance
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IUL Illustration (A) Subgroup
Conference Call
May 26, 2020

The IUL Illustration (A) Subgroup of the Life Actuarial (A) Task Force met via conference call May 26, 2020. The following Subgroup members participated: Fred Andersen, Chair (MN); Ted Chang (CA); Andrew Greenhalgh (CT); Mike Yanacheak (IA); Vincent Tsang (IL); Rhonda Ahrens (NE); Bill Carmello (NY); Peter Weber (OH); Mike Boerner and John Carter (TX); Tomasz Serbinowski (UT); and Craig Chupp (VA).

1. Discussed Technical Edits to the ACLI AG 49 Proposal

Brian Bayerle (American Council of Life Insurers—ACLI) discussed the changes made to the ACLI proposal for edits to Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest (AG 49) (Attachment Nineteen-A) resulting from comments provided on the May 21 Life Actuarial (A) Task Force conference call. The Subgroup agreed with the revisions being proposed, except for a few minor edits. Mr. Bayerle said he would create a redline version by applying the agreed upon edits to the current version of AG 49. He noted that the Task Force will be called upon to decide on the desired approach for determining the crediting rate for policy loans.

Having no further business, the IUL Illustration (A) Subgroup adjourned.
THE APPLICATION OF THE LIFE ILLUSTRATIONS MODEL REGULATION TO POLICIES WITH INDEX-BASED INTEREST SOLD AFTER [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption]

Background

The Life Insurance Illustrations Model Regulation (#582) was adopted by the NAIC in 1995. Since that time there has been continued evolution in product design, including the introduction of benefits that are tied to an index or indices. Although these policies are subject to Model #582, not all of their features are explicitly referenced in the model, resulting in a lack of uniform practice in its implementation. In the absence of uniform guidance, two illustrations that use the same index and crediting method often illustrated different credited rates. The lack of uniformity can be confusing to potential buyers and can cause uncertainty among illustration actuaries when certifying compliance with Model #582.

In 2019, the NAIC decided that illustrations of products with multipliers, cap buy-ups, and other enhancements should not illustrate better than products without such features. This new requirement is intended to apply to illustrations on policies sold on or after the effective date of this guideline while the existing requirements continue to apply for inforce illustrations on policies sold before the effective date of this guideline.

This guideline provides uniform guidance for policies with index-based interest. In particular, this guideline:

1. Provides guidance in determining the maximum crediting rate for the illustrated scale and the earned interest rate for the disciplined current scale.
2. Limits the policy loan leverage shown in an illustration.
3. Requires additional consumer information (side-by-side illustration and additional disclosures) that will aid in consumer understanding.

Text

1. Effective Date

This Actuarial Guideline shall be effective as follows for all new business and in force illustrations on policies sold on or after [greater of 5 months after LATF adoption and 3 months after EX/Plenary Adoption]:

i. 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.

ii. Effective March 1, 2017, Section 1 and Section 5 shall be effective for all in force life insurance illustrations on policies within the scope of this actuarial guideline, regardless of the date the policy was sold.

iii. Sections 6 and 7 shall be effective for all new business and in force life insurance illustrations on policies sold on or after March 1, 2016.

2. Scope

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

i. The policy is subject to Model #582.
3. Definitions

A. Alternate Scale: A scale of non-guaranteed elements currently being illustrated such that:

i. The credited annual total annual percentage rate of Indexed Credits for each Index Account does not exceed the lesser of the maximum credited annual total annual percentage rate of Indexed Credits for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the credited annual total annual percentage rate of Indexed Credits for each Index Account shall not exceed the average of the maximum credited annual total annual percentage rate of Indexed Credits for the illustrated scale and the guaranteed credited annual total annual percentage rate of Indexed Credits for that account. However, the credited annual total annual percentage rate of Indexed Credits for each Index Account shall never be less than the guaranteed credited annual total annual percentage rate of Indexed Credits for that account.

ii. If the illustration includes a loan, the illustrated rate credited to the loan balance does not exceed the illustrated loan charge, Policy Loan Interest Rate. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 4%.

iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. Annual Net Investment Earnings Rate: Gross portfolio annual earnings rate of the general account assets (excluding hedges for Indexed Credits), less provisions for investment expenses and default cost, allocated to support the policy. Charges of any kind are not included when determining the Annual Net Investment Earnings Rate.

i. The credited annual total annual percentage rate of Indexed Credits for each Index Account does not exceed the lesser of the maximum credited annual total annual percentage rate of Indexed Credits for the illustrated scale less 100 basis points and the credited rate for the Fixed Account. If the insurer does not offer a Fixed Account with the illustrated policy, the credited annual total annual percentage rate of Indexed Credits for each Index Account shall not exceed the average of the maximum credited annual total annual percentage rate of Indexed Credits for the illustrated scale and the guaranteed credited annual total annual percentage rate of Indexed Credits for that account. However, the credited annual total annual percentage rate of Indexed Credits for each Index Account shall never be less than the guaranteed credited annual total annual percentage rate of Indexed Credits for that account.

ii. If the illustration includes a loan, the illustrated rate credited to the loan balance does not exceed the illustrated loan charge, Policy Loan Interest Rate. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credited Rate shall not exceed 4%.

iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B.C. Benchmark Index Account: An Index Account with the following features:

i. The interest calculation is based on the percent change in S&P 500 Index value only, over a one-year period using only the beginning and ending index values. (S&P 500 Index ticker: SPX)

ii. An annual cap is used in the interest calculation.

iii. The annual floor used in the interest calculation shall be 0%.

iv. The participation rate used in the interest calculation shall be 100%.

v. Interest is credited once per year.

vi. Account charges do not exceed the account charges for any corresponding Index Account within the policy in any policy year. If Index Accounts with different levels of account charges are offered with the illustrated policy, more than one Benchmark Index Account may be used in determining the maximum illustrated crediting rates for the policy. Index Accounts, subject to the requirements of 5.D., however, for each Index Account within the policy, only one Benchmark Index Account shall apply. Any rate calculated in 4 (B) shall not apply for an Index Account if the account charges for the applicable Benchmark Index Account exceed the account charges for that Index Account in any policy year. Account charges include all charges applicable to an Index Account, whether deducted from policy values or from premiums or other amounts transferred into such Index Account.

vi. Additional amounts credited: The Hedged Budget used to determine the cap in 3 (C) (iii) does not exceed the Annual Net Investment Earnings Rate. Charges of any kind are not included when determining the applicable cap rate.
vii. There are not less than no additional amounts credited for any corresponding Index Accounts within the policy in any policy year. Any rate calculated in 4 (B) shall not apply for an Index Account if the additional amounts credited for the applicable Benchmark Index Account that are less than the additional amounts credited for that Index Account in any policy year. Additional amounts include all credits that increase policy values linked to an index or indices in excess of the interest calculation, including but not limited to experience refunds, multipliers and bonuses.

viii. There are no limitations on the portion of account value allocated to the account.

ix. A single Benchmark Index Account will be determined for each policy. A policy shall have no more than one Benchmark Index Account.

C-D. Fixed Account: An account where the amounts credited rate are not tied to an external index or indices.

D-E. Index Account: An account where the amounts credited rate are tied to an external index or indices.

F. Indexed Credits: Any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy values that is linked to an index or indices. Credits to the policy resulting from a floor are included.

G. Hedge Budget: For each Index Account, the total annualized amount assumed to be used to generate the Indexed Credits of the account, expressed as a percent of the account value in the Index Account. This amount should be consistent with the hedging program of the company.

H. Loan Balance: Any outstanding policy loan and loan interest, as defined in the policy.
Policy Loan Interest Rate: The annual interest rate that is charged on any Loan Balance. This does not include any other policy charges.

Policy Loan Interest Credited Rate: The annual interest rate credited that applies to the portion of the account value backing the Loan Balance, as defined in the policy.

For the portion of the account value backing the Loan Balance that is in a Fixed Account, the Policy Loan Interest Credited Rate is the applicable annual interest crediting rate, as defined in the policy.

OPTION FOR CONSIDERATION: Please see commentary on these approaches in the ACLI Comment Letter. Language for Option 1 and Option 2 may need to be tightened up:

Option 1: ii. For any portion of the account value backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage rate of Indexed Credits, net of any applicable Supplemental Hedge Budget, for that account, as defined in the policy.

Option 2: ii. For any portion of the account value backing the Loan Balance that is in an Index Account, the Policy Loan Interest Credited Rate is the total percentage rate of Indexed Credits and all illustrated bonuses, charge reductions or other enhancements that impact the portion of the account value backing the Loan Balance, net of any applicable Supplemental Hedge Budget for that account, as defined in the policy.

Commented [A18]: Academy #10: Suggests “The current annual interest rate as defined in the policy that is charged”

Commented [A19]: VA #2: Other policy charges are not included in the loan charges.

Commented [A20]: ACLI: Charges are consistently excluded from interest rate and interest credited rate.

Commented [A21]: Academy #11: For the portion of the account value in the Fixed Account that is backing the Loan Balance.

Commented [A22]: Academy #12: For the portion of the account value in the Fixed Account that is backing the Loan Balance.

Commented [A23]: Academy #13: We note that it is difficult to understand the phrase “as defined in the policy” in Option 2 due to sentence structure.

Commented [A24]: ACLI: Suggest moving “as defined in the policy” to before “net of any applicable Supplemental Hedge Budget for that account.”
K. Supplemental Hedge Budget: For each Index Account, the Hedge Budget minus the minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that determines the Benchmark Index Account. The Supplemental Hedge Budget will never be less than zero. This amount should be consistent with the hedging program of the company.

4. Illustrated Scale

The credited rate, total annual percentage rate of Indexed Credits for the illustrated scale for each Index Account shall be limited as follows:

A. Calculate the geometric average annual credited rate for each applicable Benchmark Index Account for the 25-year period starting on 12/31 of the calendar year that is 66 years prior to the current calendar year (e.g., 12/31/1949 for 2015 illustrations) and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31 of the prior calendar year.

i. If the insurer offers an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use the current annual cap for the applicable Benchmark Index Account in 4(A).

ii. If the insurer does not offer an applicable Benchmark Index Account with the illustrated policy, the illustration actuary shall use actuarial judgment to determine a hypothetical, supportable current annual cap for a hypothetical, supportable Index Account that meets the definition of the Benchmark Index Account, and shall use that cap in 4(A).

B. For each applicable Benchmark Index Account, the total Indexed Credits illustrated as a percentage of the account value in the Index Account shall not exceed the minimum of (i) and (ii):

iii. the arithmetic mean of the geometric average annual credited rates calculated in 4 (A), shall be the maximum credited rate(s) for the illustrated scale.

ii. 145% of the Annual Net Investment Earnings Rate.

C. For any 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 maximum credited rate Account that is not the Benchmark Index Account in 3(C), the total Indexed Credits illustrated as a percentage of the account value in the Index Account prior to the deduction of any charges used to fund a Supplemental Hedge Budget shall not exceed the minimum of (i) and (ii):

i. The maximum Indexed Credits for the Benchmark Index Account calculated in 4 (B) plus the Supplemental Hedge Budget for the illustrated scale. The determination shall Index Account.

ii. The total Indexed Credits that reflect the fundamental characteristics of the Index Account and the parameters shall have the appropriate relationship to the expected risk and return of the applicable Benchmark Index Account. The illustration actuary shall use actuarial judgment to determine this value using lookback methodology consistent with 4(A) and 4(B) (i) where appropriate.

B. D. For purposes of compliance with Section 6 (C) of Model #582, the credited rate for Supplemental Hedge Budget may cause the illustrated rate to exceed the earned interest rate underlying the Disciplined Current Scale, applicable rate calculated in 4(B).
5. Disciplined Current Scale

The earned interest rate for the disciplined current scale shall be limited as follows:

A. If an insurer engages in a hedging program for index-based interest Indexed Credits, the assumed earned interest rate underlying the disciplined current scale shall not exceed 145% for the policy, inclusive of the annual net investment earnings rate (gross portfolio earnings less provisions for investment expenses and default costs) of all general account assets (including hedges for index-based credits) allocated to support the policy and hedge assets that support the policy, net of default costs and investment expenses (including the amount spent to generate the Indexed Credits of the policy) shall not exceed:

   i. the Annual Net Investment Earnings Rate plus

   ii. 45% of the lesser of (1) and (2):

      1. Hedge Budget minus any annual floor

      2. The minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that determines the Benchmark Index Account

These amounts should be adjusted for timing differences to ensure that fixed interest is not earned on the hedge cost.

The above approach does not stipulate any required methodology as long as it produces a consistent limit on the assumed earned interest rate.

For a product with multiple Index Accounts with different Hedge Budgets that are less than or equal to the Annual Net Investment Earnings Rate a maximum rate in 5.A. should be calculated for each set of accounts with different Hedge Budgets.

B. If an insurer does not engage in a hedging program for index-based interest Indexed 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, both hedge and non-hedge assets, that support the policy, net of default costs and investment expenses (including the amount spent to generate the Indexed Credits of the policy) shall not exceed:

   i. the Annual Net Investment Earnings Rate, plus

   ii. 45% of the lesser of (1) and (2):

      1. Hedge Budget minus any annual floor

      2. The minimum of the Annual Net Investment Earnings Rate and the Hedge Budget that determines the Benchmark Index Account

C. These experience limitations shall be included when testing for self-support and lapse-support under Model #52, accounting for all illustrated benefits including any illustrated benefits and bonuses that impact the policy’s account value.

D. If more than one Benchmark Index Account is used for an illustrated policy, each set of Index Accounts that correspond to each Benchmark Index Account must independently pass the self-support and lapse-support test under Model #52, subject to the limitations in 5(A), (B), and (C). All experience assumptions that do not directly relate to the Index Accounts or to expenses, mortality, investment earnings rate of the general account assets, lapses, and election of any Fixed Account shall equal the assumptions used in the testing for the entire policy.

2.6 Policy Loans

If the illustration includes a loan, the illustrated rate credited to the loan balance Policy Loan Interest Credit Rate shall not exceed the illustrated loan charge Policy Loan Interest Rate by more than 100 basis points. For example, if the illustrated Policy Loan Interest Rate is 4%, the Policy Loan Interest Credit Rate shall not exceed 5%.

8.7 Additional Standards

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. For each Index Account illustrated, a table showing actual historical index changes and corresponding hypothetical interest rates Indexed Credits using current index parameters for the most recent 20-year period.
January 31, 2020

Mr. Mike Boerner  
Chair, NAIC Life Actuarial Task Force (LATF)  

Re: Amendment Proposal Forms (APFs) Exposed During NAIC Fall Meeting

Dear Mike:

The American Council of Life Insurers (ACLI)\(^1\) appreciates the opportunity to submit the following comments regarding the following APFs exposed during the NAIC 2019 Fall Meeting:

**APF 2019-33: Individually underwritten group life insurance**

ACLI has significant concerns with this amendment in its current form. We have two main areas of concern: the scope implied by the definition of “individual risk selection process” and practical implementation concerns.

Regarding scope, we believe that the wording may inadvertently loop in business not intended to be in scope. For example, something as simple as smoking status could be construed as “individual underwriting”, greatly expanding the business that would be impacted by this proposal. The use of underwriting as the criteria to define what is in scope for PBR is a simplification that could scope in traditional group life policies that are priced based on the unique claim costs of an employer group. We do not believe that is the intent of this APF. The definition of what is in scope for the APF requires additional contemplation.

Our second concern is around the practical implementation of the amendment. If individually underwritten group business becomes subject to PBR, it would have to follow the prescribed NPR requirements. However, the expected mortality and lapse rates for individually underwritten group business may be different than the prescribed mortality and lapse assumptions in VM-20. Compounding the problem, we are unaware of any experience studies that have been done on this type of business and deriving appropriate assumptions for other underwriting types, such as guaranteed issue and simplified issue, have proven difficult. Without potential adjustments to mortality and lapse rates for individually underwritten group business, companies may see excessive or nonsensical results for the NPR.

At this time, ACLI is unaware of a wide-spread issue associated with individually underwritten group business; we suspect this is more of a hypothetical problem. As such, we don’t see a pressing need for

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\(^1\) The American Council of Life Insurers (ACLI) is the leading trade association driving public policy and advocacy on behalf of the life insurance industry. 90 million American families rely on the life insurance industry for financial protection and retirement security. ACLI’s member companies are dedicated to protecting consumers’ financial wellbeing through life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, and dental, vision and other supplemental benefits. ACLI’s 280 member companies represent 94 percent of industry assets in the United States.
this APF. We suggest that LATF continue to monitor this issue, and if changes are deemed necessary, LATF should request that the Academy make significant revisions to avoid excessive scope and unintended consequences.

APF 2019-62: Considerations for term conversion reserves
ACLI agrees with the American Academy of Actuaries’ Life Reserves Work Group on the need to understand what mortality adjustments are being made for term conversions. We support this APF’s improved disclosures associated with conversions.

APF 2019-60: Allowance for additional credibility methods
ACLI supports this amendment. This APF provides important flexibility around credibility methods for companies with simplified underwriting business.

APF 2019-61: Clarification around secondary guarantee riders
ACLI believes this APF is a straight-forward clarification around what constitutes a secondary guarantee, and supports this amendment.

We look forward to a discussion of these issues. Thank you.

Sincerely,

[Signature]

cc Reggie Mazyck, NAIC
Date: December 12, 2019

Please allow me to submit the following comment on behalf of Virginia regarding the following exposure:

**APF 2019-33 (Clarify definition of individually underwritten life insurance and applicability of PBR for group insurance)**

**Comment:**

Subsection 1.B under Section II. “Reserve Requirements” of the VM addresses minimum reserve requirements for “individual life contracts”. Since individual life and group life are two distinct and non-overlapping categories of contracts, the new proposed Subsection 1.B.1 which address certain group life contracts should not be placed under Subsection 1.B, but should be pulled out from under Subsection 1.B and made its own Subsection 1.C. Subsections 1.B.2 and 1.B.3 should also be pulled out from under Subsection 1.B. and renumbered.

**Suggested Edits to APF 2019-33:**

**Subsection 1: Life Insurance Products**

A. This subsection establishes reserve requirements for all contracts issued on and after the operative date of the *Valuation Manual* that are classified as life contracts as defined in SSAP No. 50 in the AP&P Manual, with the exception of annuity contracts and credit life contracts. Minimum reserve requirements for annuity contracts and credit life contracts are provided below in subsection 2 and subsection 5, respectively.

B. Minimum reserve requirements for variable and nonvariable individual life contracts—excluding guaranteed issue life contracts, preneed life contracts, industrial life contracts, and policies of companies exempt pursuant to the life PBR exemption in paragraph D below—are provided by VM-20, Requirements for Principle-Based Reserves for Life Products, except for election of the transition period in paragraph FC below. For this purpose, joint life policies are considered individual life.

C. Minimum reserve requirements for group life contracts in which the individual certificate holders were subjected to an individual risk selection process as described in VM-20 Section 1.B to obtain the insurance coverage are provided by VM-20, except for election of the transition period in paragraph F below.

D. Minimum reserve requirements of VM-20 are considered principle-based valuation requirements for purposes of the *Valuation Manual*.

E. Minimum reserve requirements for life contracts not subject to VM-20 are those pursuant to applicable requirements in VM-A and VM-C. For guaranteed issue life contracts issued after Dec. 31, 2018, mortality tables are defined in VM Appendix M – Mortality Tables (VM-M), and the same table shall be used for reserve requirements as is used for minimum nonforfeiture requirements as defined in VM-02, Minimum Nonforfeiture Mortality and Interest.
F.C. A company may elect to establish minimum reserves pursuant to applicable requirements in VM-A and VM-C for:

1. Business described in paragraph C above and issued on or after the operative date of the Valuation Manual and prior to 1/1/2024.

2. Business not described in paragraph C otherwise subject to VM-20 requirements and issued during the first three years following the operative date of the Valuation Manual.

A company electing to establish reserves using the requirements of VM-A and VM-C may elect to use the 2017 Commissioners’ Standard Ordinary (CSO) Tables as the mortality standard following the conditions outlined in VM-20 Section 3. If a company during the three years elects to apply VM-20 to a block of such business, then a company must continue to apply the requirements of VM-20 for future issues of this business.

G.D. Life PBR Exemption

1. A company meeting the condition in G.D.2 below may file a statement of exemption for ordinary life insurance policies and group life contracts individually underwritten life insurance policies, except for policies in G.D.3 below, issued directly or assumed during the current calendar year, that would otherwise be subject to VM-20. Such a statement must be filed with the domiciliary commissioner prior to July 1 of that year certifying that condition G.D.2 was met based on premiums from the prior calendar year annual statement. The statement of exemption must also be included with the NAIC filing for the second quarter of that year. The domiciliary commissioner may reject such statement prior to Sept. 1 and require the company to follow the requirements of VM-20 for the ordinary life policies covered by the statement.

2. Condition for Exemption:
   a. The company has less than $300 million of ordinary life premiums\(^1\), and if the company is a member of an NAIC group of life insurers, the group has combined ordinary life premiums\(^1\) of less than $600 million.

3. Policies Excluded from the Life PBR Exemption:
   a. Universal life with secondary guarantee (ULSG) policies with a secondary guarantee that does not meet the VM-01, Definitions for Terms in Requirements, definition of a “non-material secondary guarantee.”

4. Each exemption, or lack of an exemption, applies only to policies issued or assumed in the current year, and it applies to all future valuation dates for those policies. The minimum reserve requirements for the ordinary life policies subject to the exemption are those pursuant to applicable methods required in VM-A and VM-C using the mortality as defined in VM-20 Section 3.C.1 and VM-M Section 1.H.

Footnote change
\(^1\)Premiums are measured as direct plus reinsurance assumed from an unaffiliated company from the ordinary life line of business reported in the prior calendar year life/health annual financial statement, Exhibit 1, Part 1, Column 3, “Ordinary Life Insurance”. For exemptions after 1/1/2024, premiums should also include the premiums from...
group life insurance certificates that were subject to an individual risk selection process as defined in VM-20 Section 1.B and included in the group life certificates subject to an individual risk selection process line of business reported in the prior calendar year life/health annual financial statement, VM-20 Reserves Supplement, Part 3. 
Premiums should exclude premiums for guaranteed issue policies and preneed life contracts and excluding amounts that represent the transfer of reserves in force as of the effective date of a reinsurance assumed transaction and are reported in Exhibit 1 Part 1, Column 3 as ordinary life insurance premium. Preneed and guaranteed issue life insurance policy are as defined in VM-01.

Thank you for providing me the opportunity to submit this comment.

Craig Chupp, FSA, MAAA
Life and Health Insurance Actuary
Virginia Bureau of Insurance
craig.chupp@scc.virginia.gov
Phone: (804) 371-9131

Commented [A1]: This will need to be added to the PBR Supplement by the NAIC Blanks (E) Working Group.
APF 2019-33 – Individually Solicited Group Contracts

Comments by John Robinson, Minnesota

January 7, 2020

The APF mentions a revision to VM-51 to incorporate these contracts. However, no modifications to the VM-51 layout are offered.

APF 2019-56 addresses a series of important changes to the VM-51 layout, which will make it a multi-table system. I have previously commented that the table structure of the system needs to be carefully designed.

Adding group contracts will also require careful design considerations. For example, it is possible that fields should be added for

(a) Certificate Number (applicable to each covered individual in the group contract); and

(b) An indicator, “I” for individual”, and “G” for group, to tell whether a particular contract is individual or group.

I suggest that these considerations be included in the work currently being done for APF 2019-56.

Thank you.

John Robinson
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

American Academy of Actuaries, Life Reserves Work Group

Addition of language to clarify the definition of individually underwritten life insurance and the applicability of Principle-Based Reserve (PBR) requirements for group insurance contracts with individual risk selection issued under insurance certificates.

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:

January 1, 2020 version of the Valuation Manual used.

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

See Appendix

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

Individual insurance certificates issued under a group contract which utilize an individual risk selection process, pricing, premium rate structures and product features are similar to individual life insurance policies. They are currently excluded from VM-20 because they are filed under a group contract, but they should be subject to VM-20 due to this similarity. See Appendix.

* 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: APF 2019-33
Appendix

Issue

Certain contracts issued under a master group contract require individual risk selection in order to qualify for issuance of the group insurance certificate and do not require continued membership in the group in order to maintain coverage. The certificates have similar acquisition approaches, provisions, certificate-holder rights, pricing and risk classification, and are managed in a similar manner as individual ordinary life insurance contracts. These individual certificates should follow the same reserve requirements as other individual life contracts of the same product type. Therefore, a change is needed within the Valuation Manual to bring these individual certificates into scope of VM-20.

Eight changes are recommended:

1) Within the Reserve Requirements section (Section II), change the minimum reserve requirements to also apply to group life contracts which, other than the difference between issuing a policy and issuing a group certificate, have the same or mostly similar contract provisions, risk selection process and underwriting as individual ordinary life contracts;

2) Within the Reserve Requirements section (Section II), add a transition period for individual group certificates issued on or before 1/1/2024;

3) Within the Reserve Requirements section (Section II), add language to Subsection 1.D and the corresponding footnote to include premiums from group life contracts which have individual certificates that were issued using individual risk selection processes;

4) Add new paragraph, VM-20 Section 1.B (and reformat to make current paragraph Section 1.A) to clarify group life certificates issued using individual risk selection processes, including a definition and requirements to be met, are subject to the requirements of VM-20;

5) Add guidance note after first sentence in VM-20 Section 2.A.1 that group life certificates that meet the definition for individual risk selection process use the same VM-20 Reserving Categories as defined in Section 2;

6) Modify VM-51 Section 2.B to no longer exempt individually solicited group life which meet the requirements and definitions under items (1) and (2) above; and

7) Modify VM-51, Appendix 4, Item 17 to no longer exempt individually solicited group life contracts which meet the requirements under items (1) and (2) above.

8) Draft referral to the NAIC Blanks (E) Working Group, to revise the VM-20 Reserves Supplement, Part 2 to report premiums for total Group Life and Group Life with certificates subjected to an individual risk selection process and which meet all of the conditions as defined in VM-20 Section 1.B separately.
VM Changes 1, 2 and 3 – II. Reserve Requirements

II. Reserve Requirements

This section provides the minimum reserve requirements by type of product, as set forth in the seven subsections below, as follows:

(1) Life Insurance Products
(2) Annuity Products
(3) Deposit-Type Contracts
(4) Health Insurance Products
(5) Credit Life and Disability Products
(6) Riders and Supplemental Benefits
(7) Claim Reserves

All reserve requirements provided by this section relate to business issued on or after the operative date of the Valuation Manual. All reserves must be developed in a manner consistent with the requirements and concepts stated in the Overview of Reserve Concepts in Section I of the Valuation Manual.

Guidance Note: The terms “policies” and “contracts” are used interchangeably.

Subsection 1: Life Insurance Products

A. This subsection establishes reserve requirements for all contracts issued on and after the operative date of the Valuation Manual that are classified as life contracts as defined in SSAP No. 50 in the AP&P Manual, with the exception of annuity contracts and credit life contracts. Minimum reserve requirements for annuity contracts and credit life contracts are provided below in subsection 2 and subsection 5, respectively.

B. Minimum reserve requirements for variable and nonvariable individual life contracts—excluding guaranteed issue life contracts, preneed life contracts, industrial life contracts, and policies of companies exempt pursuant to the life PBR exemption in paragraph D below—are provided by VM-20, Requirements for Principle-Based Reserves for Life Products, except for election of the transition period in subsection 1.F below. For this purpose, joint life policies are considered individual life.

C. Minimum reserve requirements for group life contracts with individual certificates which meet all the requirements in VM-20 Section 1.B are provided by VM-20, except for election of the transition period in subsection 1.F below.

D. Minimum reserve requirements of VM-20 are considered principle-based valuation requirements for purposes of the Valuation Manual.

E. Minimum reserve requirements for life contracts not subject to VM-20 are those pursuant to applicable requirements in VM-A and VM-C. For guaranteed issue life contracts issued after Dec. 31, 2018, mortality tables are defined in VM Appendix M – Mortality Tables (VM-M), and the same table shall be used for reserve requirements as is used for minimum nonforfeiture requirements as defined in VM-02, Minimum Nonforfeiture Mortality and Interest.

F. A company may elect to establish minimum reserves pursuant to applicable requirements in VM-A and VM-C for:
1. Business described in subsection 1.C above and issued on or after the operative date of the Valuation Manual and prior to 1/1/2024.

2. Business not described in subsection 1.C otherwise subject to VM-20 requirements and issued during the first three years following the operative date of the Valuation Manual.

A company electing to establish reserves using the requirements of VM-A and VM-C may elect to use the 2017 Commissioners’ Standard Ordinary (CSO) Tables as the mortality standard following the conditions outlined in VM-20 Section 3. If a company during the three years elects to apply VM-20 to a block of such business, then a company must continue to apply the requirements of VM-20 for future issues of this business.

---

**E.G. Life PBR Exemption**

1. A company meeting the condition in subsection D.G.2 below may file a statement of exemption for ordinary life insurance policies including group life insurance certificates subject to an individual risk selection process and meeting all the conditions in VM-20 Section 1.B, except for policies in subsection D.G.3 below, issued directly or assumed during the current calendar year, that would otherwise be subject to VM-20. Such a statement must be filed with the domiciliary commissioner prior to July 1 of that year certifying that condition subsection D.G.2 was met based on premiums from the prior calendar year annual statement. The statement of exemption must also be included with the NAIC filing for the second quarter of that year.

The domiciliary commissioner may reject such statement prior to Sept. 1 and require the company to follow the requirements of VM-20 for the ordinary life policies covered by the statement.

2. Condition for Exemption:
   a. The company has less than $300 million of ordinary life premiums1, and if the company is a member of an NAIC group of life insurers, the group has combined ordinary life premiums of less than $600 million.

3. Policies Excluded from the Life PBR Exemption:
   a. Universal life with secondary guarantee (ULSG) policies with a secondary guarantee that does not meet the VM-01, Definitions for Terms in Requirements, definition of a “non-material secondary guarantee.”

4. Each exemption, or lack of an exemption, applies only to policies issued or assumed in the current year, and it applies to all future valuation dates for those policies. The minimum reserve requirements for the ordinary life policies subject to the exemption are those pursuant to applicable methods required in VM-A and VM-C using the mortality as defined in VM-20 Section 3.C.1 and VM-M Section 1.H.

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*Footnote change*

‘Premiums are measured as direct plus reinsurance assumed from an unaffiliated company from the ordinary life line of business reported in the prior calendar year life/health annual financial statement, Exhibit 1, Part 1, Column 3, “Ordinary Life Insurance”. Premiums should also include the premiums from group life insurance certificates that were subject to an individual risk selection process and meet all the conditions as defined in VM-20 Section 1.B and for a statement of exemptions filed for calendar year 2022 and beyond, the premiums for these group life certificates were reported in the prior calendar year life/health annual financial statement, VM-20 Reserves Supplement, Part 2, if applicable. Premiums should exclude guaranteed issue policies and preneed life contracts and excluding amounts that represent the transfer of reserves in force as of the effective date of a reinsurance assumed transaction and are reported in Exhibit 1 Part 1, Column 3 as ordinary life insurance premium. Preneed and guaranteed issue life insurance policies are as defined in VM-01.

© 2018 National Association of Insurance Commissioners51-4
VM-20: Requirements for Principles-Based Reserves for Life Products

Section 1: Purpose

A. These requirements establish the minimum reserve valuation standard for individual life insurance policies issued on or after the operative date of the *Valuation Manual* and subject to a principle-based valuation with an NPR floor under Model #820. These requirements constitute the Commissioners Reserve Valuation Method (CRVM) for policies of individual life insurance.

B. If all of the following requirements are met, individual life certificates under a group contract are included in the requirements of VM-20.

   (i) An individual risk selection process, defined below, is used to obtain group life insurance coverage;

   (ii) The individual certificates utilize premiums or cost of insurance schedules and charges based on the individual applicant’s issue age, duration from underwriting, coverage amount and risk classification and there is a stated or implied schedule of maximum gross premiums or net cash surrender value required in order to continue coverage in force for a period in excess of one year;

   (iii) The group master contract is designed, priced, solicited, and managed similar to individual ordinary life insurance policies rather than specific to the group as a whole;

   (iv) The individual certificates have similar acquisition approaches, provisions, certificate-holder rights, pricing, and risk classification as individual ordinary life insurance contracts.

   (v) The group master contract and individual certificates are issued on or after the operative date of the *Valuation Manual* and subject to a principle-based valuation with an NPR floor under Model #820.

An individual risk selection process is based on characteristics of the insured(s) beyond sex, gender, age, tobacco usage, and membership in a particular group. This may include, but is not limited to, completion of an application (beyond acknowledgement of membership to the group, sex, gender and age), questionnaire(s), on-line health history or tele-interview to obtain non-medical and medical or health history information, prescription history information, avocations, usage of tobacco, family history, or submission of fluids such as blood, Home Office Specimens (HOS), or oral fluid. The resulting risk classification is determined based on the characteristics of the individual insured(s) rather than the group, if any, of which it is a member (e.g., employer, affinity, etc.). The individual certificate holder is charged a premium rate based solely on the individual risk selection process and not on membership in a specific group.
Guidance Note: The use of evidence of insurability does not by itself constitute an individual risk selection process. Use of information obtained from a census or question(s) regarding gender, occupation, age, income and/or tobacco usage solely for purposes of determining a rate classification does not by itself qualify a group as having used an individual risk selection process. Group insurance where the underwriting based on the characteristics of the group and census data but where some individuals are subjected to individual risk selection as a result of compensation level, age, an existing medical condition or impairment, late entry into the group, failure of the group to meet minimum participation requirements or voluntary buy-up of increased coverage does not meet the definition of an individual risk selection process.
Section 2: Minimum Reserve

A. All policies subject to these requirements shall be included in one of the VM-20 Reserving Categories, as specified in Section 2.A.1, Section 2.A.2 and Section 2.A.3 below.

Guidance Note: Since Group Insurance subject to an individual risk selection process and meeting all the requirements, as defined by Section 1.B is subject to VM-20 requirements, Section 2.A shall apply; meaning that any such contracts will be included in one of the VM-20 Reserving Categories defined by Section 2.A.1, Section 2.A.2, and 2.A.3. All requirements in VM-31 which apply to a VM-20 Reserving Category shall apply to any group insurance subject to Individual Underwriting Selection that has been included in that VM-20 Reserving Category.

The company may elect to exclude one or more groups of policies from the stochastic reserve calculation and/or the deterministic reserve calculation. When excluding a group of policies from a reserve calculation, the company must document that the applicable exclusion test defined in Section 6 is passed for that group of policies. The minimum reserve for each VM-20 Reserving Category is defined by Section 2.A.1, Section 2.A.2 and Section 2.A.3, and the total minimum reserve equals the sum of the Section 2.A.1, Section 2.A.2 and Section 2.A.3 results below, defined as:
VM Change 6—VM-51: Experience Reporting Formats, Section 1.B.2

VM-51: Experience Reporting Formats

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Section 2: Statistical Plan for Mortality

A. Type of Experience Collected Under This Statistical Plan

The type of experience to be collected under this statistical plan is mortality experience.

B. Scope of Business Collected Under This Statistical Plan

The data for this statistical plan is the individual ordinary life line of business. Such business is to include direct written business issued in the U.S., and all values should be prior to any reinsurance ceded. Therefore, reinsurance assumed from a ceding company shall be excluded from data collection to avoid double-counting of experience submitted by an issuer and by its reinsurers; however, assumption reinsurance of an individual ordinary life line of business, where the assuming company is legally responsible for all benefits and claims paid, shall be included within the scope of this statistical plan. The ordinary life line of business does not include separate lines of business, such as SI/GI, worksite, individually solicited group life that does not meet all the requirements as defined in VM-20 Section 1.B, direct response, final expense, pre-need, home service, credit life and COLI/BOLI/charity-owned life insurance (CHOLI).

C. Criteria to Determine Companies That Are Required to Submit Experience Data

Companies with less than $50 million of direct individual life premium shall be exempted from reporting experience data required under this statistical plan. This threshold for exemption shall be measured based on aggregate premium volume of all affiliated companies and shall be reviewed annually and be subject to change by the Experience Reporting Agent. At its option, a group of nonexempt affiliated companies may exclude from these requirements affiliated companies with less than $10 million direct individual life premium provided that the affiliated group remains nonexempt.

Additional exemptions may be granted by the Experience Reporting Agent where appropriate, following consultation with the domestic insurance regulator, based on achieving a target level of approximately 85% of industry experience for the type of experience data being collected under this statistical plan.
**VM Change 7 – VM-51: Experience Reporting Formats, Appendix 4: Mortality Data Elements and Format**

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**Data Element Description**

1. **NAIC Company Code**
   - Your NAIC Company Code

2. **Observation Year**
   - Enter Calendar Year of Observation

3. **Policy or Certificate Number**
   - Enter Policy Number. For Policy Numbers with length less than 20, left justify the number, and blank fill the empty columns. Any other unique identifying number can be used instead of a Policy Number for privacy reasons.

4. **Individual Contract or Group Certificate**
   - Enter I if for an Individual Contract or G for Group Contract, even if issued using an individual risk selection process and meets all the requirements as defined in VM-20 Section 1.B.

45. **Segment Number**
   - If only one policy segment exists, enter segment number ‘1.’ For a single life policy, the base policy is to be put in the record with segment number ‘1.’ Subsequent policy segments are in separate records with information about that coverage and differing segment numbers.

   - For joint life policies, the base policy of the first life is to be put in a record with segment number ‘1,’ and the base policy of the second life is to be put in a separate record with segment number ‘2.’ Joint life policies with more than two lives are not to be submitted. Subsequent policy segments are in separate records with information about that coverage and differing segment numbers.

   - Policy segments with the same policy number are to be submitted for:
     a) Single life policies;
     b) Joint life policies;
     c) Term/paid up riders; or
     d) Additional amounts of insurance including purchase through dividend options.

67. **Gender**
   - 0 = Unknown or unable to subdivide
     - 1 = Male
     - 2 = Female
     - 3 = Unisex – Unknown or unable to identify
     - 4 = Unisex – Male
     - 5 = Unisex – Female

28. **Date of Birth**
   - Enter the numeric date of birth in YYYYMMDD format

89. **Age Basis**
   - 0 = Age Nearest Birthday
     - 1 = Age Last Birthday
     - 2 = Age Next birthday

**Drafting Note:**
Professional actuarial organization will need to develop either age next birthday mortality tables.
An or procedure to adapt existing mortality tables to age next birthday basis.

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### ITEM COLUMN L DATA ELEMENT DESCRIPTION

| 4112 | 4657 | 1 | Smoker Status (at issue) | Smoker status should be submitted where reliable.  
0 = Unknown  
1 = No tobacco usage  
2 = Nonsmoker  
3 = Cigarette smoker  
4 = Tobacco user |

| 4113 | 4758 | 1 | Preferred Class Structure Indicator | 0 = If no reliable information on multiple preferred and standard classes is available or if the policy segment was issued substandard or if there were no multiple preferred and standard classes available for this policy segment or if preferred information is unknown.  
1 = If this policy was issued in one of the available multiple preferred and standard classes for this policy segment.  
Note: If Preferred Class Structure Indicator is 0, or if preferred information is unknown, leave next four items blank. |

| 4114 | 4859 | 1 | Number of Classes in Nonsmoker Preferred Class Structure | If Preferred Class Structure Indicator is 0 or if Smoker Status is 0, 3 or 4, or if preferred information is unknown, leave blank. For nonsmoker or no tobacco usage policies that could have been issued as one of multiple preferred and standard classes, enter the number of nonsmoker preferred and standard classes available at time of issue. |

| 4115 | 4960 | 1 | Nonsmoker Preferred Class | If Preferred Class Structure Indicator is 0 or if Smoker Status is 0, 3 or 4, or if preferred information is unknown, leave blank.  
For nonsmoker policy segments that could have been issued as one of multiple preferred and standard classes:  
1 = Best preferred class  
2 = Next Best preferred class after 1  
3 = Next Best preferred class after 2  
4 = Next Best preferred class after 3  
5 = Next Best preferred class after 4  
6 = Next Best preferred class after 5  
7 = Next Best preferred class after 6  
8 = Next Best preferred class after 7  
9 = Next Best preferred class after 8  
Note: The policy segment with the highest nonsmoker Preferred Class number should have that number equal to the Number of Classes in Nonsmoker Preferred Class Structure. |
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<td>64 65</td>
<td>1</td>
<td>Smoker Preferred Class</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If Preferred Class Structure Indicator is 0 or if Smoker Status is 0, 1 or 2, or if preferred information is unknown, leave blank.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>For smoker policy segments that could have been issued as one of multiple preferred and standard classes:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Best preferred class</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Next Best preferred class after 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = Next Best preferred class after 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = Next Best preferred class after 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 = Next Best preferred class after 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 = Next Best preferred class after 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 = Next Best preferred class after 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 = Next Best preferred class after 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 = Next Best preferred class after 8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Note: The policy segment with the highest Smoker Preferred Class number should have that number equal to the Number of Classes in Smoker Preferred Class Structure.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COLUMN</th>
<th>L</th>
<th>DATA ELEMENT DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1718</td>
<td>62-63 64</td>
<td>2</td>
<td>Type of Underwriting Requirements</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If underwriting requirement of ordinary business is reliably known, use code other than “99.” Ordinary business does not include separate lines of business, such as simplified issue/guaranteed issue, worksite, individually solicited group life that does not meet all the requirements as defined in VM-20 Section 1.B, direct response, final expense, pre-need, home service and COLI/BOLI/CHOLI.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01 = Underwritten, but unknown whether fluid was collected</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02 = Underwritten with no fluid collection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>03 = Underwritten with fluid collected</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>06 = Term Conversion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>07 = Group Conversion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>09 = Not Underwritten</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>99 = For issues where underwriting requirement unknown or unable to subdivide</td>
</tr>
</tbody>
</table>
1 Substandard Indicator
0 = Policy segment is not substandard
1 = Policy segment is substandard
2 = Policy segment is uninsurable

Note:
   a. All policy segments that are substandard need to be identified as substandard or uninsurable.
   b. Submission of substandard policies is optional.
   c. If feasible, identify substandard policy segments where temporary flat extra has ceased as substandard.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COLUMN</th>
<th>L</th>
<th>DATA ELEMENT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>
| 1419 | 53.5   | 1 | Substandard Indicator | 0 = Policy segment is not substandard
1 = Policy segment is substandard
2 = Policy segment is uninsurable

Plan Exclude from contribution: spouse and children under family policies or riders. If Form for Additional Plan Codes was submitted for this policy, enter unique three-digit plan number(s) that differ from the plan numbers below:
000 = If unable to distinguish among plan types listed below
100 = Joint life plan unable to distinguish among joint life plan types listed below

Permanent Plans:
010 = Traditional fixed premium fixed benefit permanent plan
011 = Permanent life (traditional) with term
012 = Single premium whole life
013 = Econolife (permanent life with lower premiums in the early durations)
014 = Excess interest whole life 015 = First to die whole life plan (submit separate records for each life)
016 = Second to die whole life plan (submit separate records for each life)
017 = Joint whole life plan – unknown whether 015 or 016 (submit separate records for each life)
018 = Permanent products with non-level death benefits
019 = Permanent plans 010, 011, 012, 013, 014, 015, 016, 017, 018 combined (i.e. unable to separate)

Term Insurance Plans:
020 = Term (traditional level benefit and attained age premium)
021 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for five years)
022 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 10 years)
023 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 15 years)
024 = Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 20 years)
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>214</td>
<td>Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 25 years)</td>
</tr>
<tr>
<td>215</td>
<td>Term (level death benefit with guaranteed level premium for five years and anticipated level term period for 30 years)</td>
</tr>
<tr>
<td>022</td>
<td>Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 10 years)</td>
</tr>
<tr>
<td>221</td>
<td>Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 15 years)</td>
</tr>
<tr>
<td>222</td>
<td>Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 20 years)</td>
</tr>
<tr>
<td>223</td>
<td>Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 25 years)</td>
</tr>
<tr>
<td>224</td>
<td>Term (level death benefit with guaranteed level premium for 10 years and anticipated level term period for 30 years)</td>
</tr>
<tr>
<td>023</td>
<td>Term (level death benefit with guaranteed level premium for 15 years and anticipated level term period for 15 years)</td>
</tr>
<tr>
<td>231</td>
<td>Term (level death benefit with guaranteed level premium for 15 years and anticipated level term period for 20 years)</td>
</tr>
<tr>
<td>232</td>
<td>Term (level death benefit with guaranteed level premium for 15 years and anticipated level term period for 25 years)</td>
</tr>
<tr>
<td>233</td>
<td>Term (level death benefit with guaranteed level premium for 15 years and anticipated level term period for 30 years)</td>
</tr>
<tr>
<td>024</td>
<td>Term (level death benefit with guaranteed level premium for 20 years and anticipated level term period for 20 years)</td>
</tr>
<tr>
<td>241</td>
<td>Term (level death benefit with guaranteed level premium for 20 years and anticipated level term period for 25 years)</td>
</tr>
<tr>
<td>242</td>
<td>Term (level death benefit with guaranteed level premium for 20 years and anticipated level term period for 30 years)</td>
</tr>
<tr>
<td>025</td>
<td>Term (level death benefit with guaranteed level premium for 25 years and anticipated level term period for 25 years)</td>
</tr>
<tr>
<td>251</td>
<td>Term (level death benefit with guaranteed level premium for 25 years and anticipated level term period for 30 years)</td>
</tr>
<tr>
<td>026</td>
<td>Term (level death benefit with guaranteed level premium for 30 years and anticipated level term period for 30 years)</td>
</tr>
<tr>
<td>027</td>
<td>Term (level death benefit with guaranteed level premium period equal to anticipated level term period where the period is other than five, 10, 15, 20, 25 or 30 years)</td>
</tr>
<tr>
<td>271</td>
<td>Term (level death benefit with guaranteed level premium period not equal to anticipated level term period, where the periods are other than five, 10, 15, 20, 25 or 30 years)</td>
</tr>
<tr>
<td>028</td>
<td>Term (decreasing benefit)</td>
</tr>
</tbody>
</table>
040 = Select ultimate term (premium depends on issue age and duration)
041 = Return of Premium Term (level death benefit with guaranteed level premium for 15 years)
042 = Return of Premium Term (level death benefit with guaranteed level premium for 20 years)
043 = Return of Premium Term (level death benefit with guaranteed level premium for 25 years)
044 = Return of Premium Term (level death benefit with guaranteed level premium for 30 years)
045 = Return of Premium Term (level death benefit with guaranteed level premium for period other than 15, 20, 25 or 30 years)
046 = Economatic term
059 = Term plan, unable to classify
101 = First to die term plan (submit separate records for each life)
102 = Second to die term plan (submit separate records for each life)
103 = Joint term plan – unknown whether 101 or 102 (submit separate records for each life)

Universal Life Plans (Other than Variable), issued without a Secondary Guarantee:
061 = Single premium universal life
062 = Universal life (decreasing risk amount)
063 = Universal life (level risk amount)
064 = Universal life – unknown whether code 062 or 063
065 = First to die universal life plan (submit separate records for each life)
066 = Second to die universal life plan (submit separate records for each life)
067 = Joint life universal life plan – unknown whether code 065 or 066 (submit separate records for each life)
068 = Indexed universal life

Universal Life Plans (Other than Variable) with Secondary Guarantees:
071 = Single premium universal life with secondary guarantees
072 = Universal life with secondary guarantees (decreasing risk amount)
073 = Universal life with secondary guarantees (level risk amount)
074 = Universal life with secondary guarantees – unknown whether code 072 or 073
075 = First to die universal life plan with secondary guarantees (submit separate records for each life)
076 = Second to die universal life plan with secondary guarantees (submit separate records for each life)
077 = Joint life universal life plan with secondary guarantees (submit separate records for each life)
078 = Indexed universal life with secondary guarantees

Variable Life Plans issued without a Secondary Guarantee:
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>080</td>
<td>Variable life</td>
</tr>
<tr>
<td>081</td>
<td>Variable universal life (decreasing risk amount)</td>
</tr>
<tr>
<td>082</td>
<td>Variable universal life (level risk amount)</td>
</tr>
<tr>
<td>083</td>
<td>Variable universal life – unknown whether code 081 or 082</td>
</tr>
<tr>
<td>084</td>
<td>First to die variable universal life plan (submit separate records for each life)</td>
</tr>
<tr>
<td>085</td>
<td>Second to die variable universal life plan (submit separate records for each life)</td>
</tr>
<tr>
<td>086</td>
<td>Joint life variable universal life plan – unknown whether 084 or 085 (submit separate records for each life)</td>
</tr>
<tr>
<td>090</td>
<td>Variable life with secondary guarantees</td>
</tr>
<tr>
<td>091</td>
<td>Variable universal life with secondary guarantees (decreasing risk amount)</td>
</tr>
<tr>
<td>092</td>
<td>Variable universal life with secondary guarantees (level risk amount)</td>
</tr>
<tr>
<td>093</td>
<td>Variable universal life with secondary guarantees – unknown whether code 091 or 092</td>
</tr>
<tr>
<td>094</td>
<td>First to die variable universal life plan with secondary guarantees (submit separate records for each life)</td>
</tr>
<tr>
<td>095</td>
<td>Second to die variable universal life plan with secondary guarantees (submit separate records for each life)</td>
</tr>
<tr>
<td>096</td>
<td>Joint life variable universal life plan with secondary guarantees – unknown whether code 094 or 095 (submit separate records for each life)</td>
</tr>
<tr>
<td>098</td>
<td>Extended term</td>
</tr>
<tr>
<td>099</td>
<td>Reduced paid-up</td>
</tr>
<tr>
<td>198</td>
<td>Extended term for joint life (submit separate records for each life)</td>
</tr>
<tr>
<td>199</td>
<td>Reduced paid-up for joint life (submit separate records for each life)</td>
</tr>
</tbody>
</table>
VM Change 8 – VM-20 Reserves Supplement, Part 2: Life PBR Exemption

Refer to NAIC Blanks (E) Working Group, request for modification to the supplemental report for the Life PBR Exemption, to show the premiums for the group life that utilized an individual risk selection process and meets all of the requirements in VM-20 Section 1.B. as these premiums are currently grouped together with other Group Insurance in Exhibit 1. As there are other instances where the ordinary life premiums are not included in the determination of the Life PBR Exemption (e.g., for guaranteed issue policies), it may be useful to request addition of the breakdown of premiums used to determine the exemption.

Possible insertion between questions 1 and 2 for disclosure of premiums used in the determination of eligibility for the Life PBR exemption, split by ordinary life and group subject to an individual risk selection process and meeting all of the requirements in VM-20 Section 1.B.
### Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force

#### Amendment Proposal Form*

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

**Identification:**
Rachel Hemphill, Texas Department of Insurance

**Title of the Issue:**
Clarify NPR calculation requirements.

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

VM-20 Section 3.B.1 – 3.B.3, and VM-20 Section 3.B.6.d.i

January 1, 2020 NAIC *Valuation Manual*

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 attached.

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

Clarify any confusion on whether more direct calculations of the NPR to reflect non-annual premium modes, etc., are allowed. The current guidance note in Section 3.B.3 states that these may be reflected either “directly or through adjusting accounting entries”. However, due to some confusion on this point, I suggest emphasizing that more direct calculation methods are not prohibited. This is consistent with SSAP 51R, Paragraph 24:

> 24. Since terminal reserves are computed as of the end of a policy year and not the reporting date, the terminal reserve as of policy anniversaries immediately prior and subsequent to the reporting date are adjusted to reflect that portion of the net premium that is unearned at the reporting date.
This is generally accomplished using either the mean reserve method or the mid-terminal method as discussed in paragraphs 25-28. Other appropriate methods, including an exact reserve valuation, may also be used.

For re-exposure, to address both the question posed in the initial exposure of clearly reflecting both mean and mid-terminal adjustments, as well as to address comments received, I recommend language consistent with SSAP 51R, paragraph 24. SSAP 51R paragraphs 25-28 are referenced by paragraph 24. They are provided below for completeness, and specific references for policies subject to the Valuation Manual are highlighted.

**Mean Reserve Method**

25. Under the mean reserve method, the policy reserve equals the average of the terminal reserve at the end of the policy year and the initial reserve (the initial reserve is equal to the previous year’s terminal reserve plus the net annual valuation premium for the current policy year). When reserves are calculated on the mean reserve basis, it is assumed that the net premium for a policy is collected annually at the beginning of the policy year and that policies are issued ratably over the calendar year.

26. However, as premiums are often received in installments more frequently than annually and since the calculation of mean reserves assumes payment of the current policy year’s entire net annual premium, the policy reserve is overstated by the amount of net modal premiums not yet received for the current policy year as of the valuation date. As a result, it is necessary to compute and report a special asset to offset the overstatement of the policy reserve.

27. This special asset is termed “deferred premiums.” Deferred premiums are computed by taking the gross premium (or premiums) extending from (and including) the modal (monthly, quarterly, semiannual) premium due date or dates following the valuation date to the next policy anniversary date and subtracting any such deferred premiums that have actually been collected. Deferred premium assets shall also be reduced by loading. Since the calculation of mean reserves assumes payment of the current policy year’s entire net annual premium, deferred premium assets are considered admitted assets to compensate for the overstatement of the policy reserve. For policies subject to the Valuation Manual requirements, the deferred premium asset will continue to be calculated for the net premium reserve component of the total principle-based reserve.

**Mid-Terminal Method**

28. Under the mid-terminal method, the policy reserves are calculated as the average of the terminal reserves on the previous and the next policy anniversaries. These reserves shall be accompanied by an unearned premium reserve consisting of the portion of valuation premiums paid or due covering the period from the valuation date to the next policy anniversary date. For policies subject to the Valuation Manual requirements, the adjustment to the unearned premium reserve will continue to be calculated for the net premium reserve component of the total principle-based reserve.

Since the guidance note at the end of Section 3.B.3 contains requirements and not just guidance, it should be taken out of a guidance note. This requires moving the four terms to Section 3.B.1 and updating two cross references in VM-20 Section 3.B.6.d.i.

* 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:

W:/National Meetings/2010/...TF/LHA/
B. NPR Calculation

1. For the purposes of Section 3, the following terms apply:
   a. For purposes of this section, a policy with “multiple secondary guarantees” is one that: a) simultaneously has more than one shadow account; b) simultaneously has more than one cumulative premium type of guarantee; or c) simultaneously has at least one of each. A single shadow account with a variety of possible end dates to the secondary guarantee, depending on the policyholder’s choice of funding level, constitutes a single—not multiple—secondary guarantee.

Guidance Note:
Policy designs that are created simply to disguise guarantees or exploit a perceived loophole must be treated in a manner similar to more typical product designs with similar guarantees. If a policy contains multiple secondary guarantees, such that a subset of those secondary guarantees in combination represent an implicit guarantee that would produce a higher NPR if that implicit guarantee were treated as an explicit secondary guarantee of the policy, then the policy should be treated as if that implicit guarantee were an explicit guarantee. For example, if there were a policy with a “sequential secondary guarantee” where only one secondary guarantee applied at any given point in time but with a series of secondary guarantees strung together with one period ending when the next one began, the combined terms of the secondary guarantees would be regarded as a single secondary guarantee.

For the purposes of Section 3, the following terms apply:
   a. The “fully funded secondary guarantee” at any time is:
      i. For a shadow account secondary guarantee, the minimum shadow account fund value necessary to fully fund the secondary guarantee for the policy at that time. For any policy for which the secondary guarantee contractually cannot be fully funded in advance, this shall be the present value of the contractually permitted premium stream that would fully fund the guarantee at the earliest possible date (using the valuation interest rate and mortality standard specified in Section 3.C).
      ii. For a cumulative premium secondary guarantee, the amount of cumulative premiums required to have been paid to that time that would result in no future premium requirements to fully fund the guarantee, accumulated with any interest or accumulation factors per the contract provisions for the secondary guarantee. For any policy for which the secondary guarantee contractually cannot be fully funded in advance, this shall be the present value of the contractually permitted premium stream that would fully fund the guarantee at the earliest possible date (using the valuation interest rate and mortality standard specified in Section 3.C).

   b. The “actual secondary guarantee” at any time is:
      a.i. For a shadow account secondary guarantee, the actual shadow account fund value at that time.
      b.ii. For a cumulative premium secondary guarantee, the actual premiums paid to that point in time, accumulated with any interest or accumulation factors per the contract provisions for the secondary guarantee.

   c. The “level secondary guarantee” at any time is:
      a.i. For a shadow account secondary guarantee, the shadow account fund value that would have existed at that time assuming payment of the level gross premium determined according to Section 3.B.6.c.i.
b.ii. For a cumulative premium secondary guarantee, the amount of cumulative level gross premiums determined according to Section 3.B.6.c.i, accumulated with any interest or accumulation factors per the contract provisions for the secondary guarantee.

2. The definition of the NPR in Section 3.B.4, Section 3.B.5 and Section 3.B.6 is intended to result in the calculation of a terminal NPR under the assumption of an annual mode gross premium. In Section 3.B.4, Section 3.B.5 and Section 3.B.6, the gross premium referenced should be the gross premium for the policy assuming an annual premium mode.

3. Since terminal NPRs are computed as of the end of a policy year and not the reporting date, the terminal NPR as of policy anniversaries immediately prior and subsequent to the reporting date are adjusted to reflect that portion of the net premium that is unearned at the reporting date. This is generally accomplished using either the mean reserve method or the mid-terminal method as discussed in SSAP 51R. Other appropriate methods, including an exact reserve valuation, may also be used.

Guidance Note: The definition of the NPR in Section 3.B.4, Section 3.B.5 and Section 3.B.6 is intended to result in a terminal NPR under the assumption of an annual mode gross premium. The gross premium referenced should be the gross premium for the policy assuming an annual premium mode. The reported reserve as of any valuation date should reflect the actual premium mode for the policy and the actual valuation date relative to the policy issue date either directly or through adjusting accounting entries.

VM-20 Section 3.B.6.d.i

As of the valuation date for the policy being valued, determine the actual secondary guarantee, denoted ASGx+t, as outlined in Section 3.B.2-1.c and the fully funded secondary guarantee, denoted FFSGx+t, as outlined in Section 3.B.1.b.
Life Actuarial (A) Task Force/ Health Actuarial (B) Task Force
Amendment Proposal Form*

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

   John Robinson, Director PBR – Valuation Actuary, MN

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:


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.)

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

   The purposes of this APF are to
   (a) Affirm that if a block of business is subject to SVL before being reinsured on a modco basis, it remains subject to SVL when reinsured on a modco basis.
   (b) Clarify the responsibilities of the appointed actuaries of both the ceding and assuming companies, relative to both the SAO and asset adequacy analysis.
   (c) Make a minor modification to the table headings in VM-30, Section 3.A.5.

   The proposed text is in the Appendix below.

* 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:

<table>
<thead>
<tr>
<th>Dates: Received</th>
<th>Reviewed by Staff</th>
<th>Distributed</th>
<th>Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: VM Maintenance Agenda 2019-34
APPENDIX

1. It is proposed to add the following text as VM-30, Section 4:

   **Section 4: Modified Coinsurance Reserves**

   1. A block of business that would be subject to Model #820 were it not reinsured under a modified coinsurance agreement remains subject to Model #820 if it is reinsured under a modified coinsurance agreement.

   2. Reserves for a block of business that is subject to Model #820 and is reinsured under a modified coinsurance agreement, are subject to
      a. the statement of actuarial opinion of the ceding company’s appointed actuary (Section 3.A); and
      b. asset adequacy analysis (Section 3.B).

   **Guidance Note:** The asset adequacy analysis may be performed by either the ceding or assuming company. The result of the asset adequacy analysis must be reported in the ceding company’s actuarial memorandum.

   In accordance with Section 3.A.6, the ceding company’s appointed actuary may rely on the assuming company for data, assumptions and more, but may not simply rely on their actuarial opinion. Similarly, in accordance with Section 3.B.2, ceding company’s appointed actuary may rely on the assuming company’s actuarial memorandum, but may not simply rely on their actuarial opinion.

   3. In the event that the assuming company is required, either by law or under the reinsurance agreement, to ensure the adequacy of such reserves, the assuming company shall perform an asset adequacy analysis (Section 3.B).

2. Revision to Section 3.A.5, Table Headings:

   | Asset Adequacy Tested And Not Tested Amounts—Reserves and Related Actuarial Items |
   |------------------------------------|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
   | Statement Item                     | Formula Reserves (1)            | Principle-Based Reserves (2) | Additional Reserves * (3) | Analysis Method * | Other Amount Not Tested (4) | Total Amount = (1)+(2)+(3)+(4)+(5) |

   * Formatted Table
2021 GRET Recommendation

LEON LANGLITZ, CHAIR SOA COMMITTEE ON LIFE INSURANCE COMPANY EXPENSES
R. DALE HALL, MANAGING DIRECTOR OF RESEARCH, SOCIETY OF ACTUARIES
NAIC LATF – August 4, 2020

GRET Agenda
• Methodology
• Recommendation
• Comparison to Prior Years
• Information on Companies in Study

Methodology
• Select data points provided by NAIC from company Annual Statement submissions
• SOA surveyed companies to determine Distribution Channels
• SOA analyzed data to derive unit expense factors by those Distribution Channels

Presentation Disclaimer
The material and information contained in this presentation is for general information only. It does not replace independent professional judgment and should not be used as the basis for making any business, legal or other decisions. The Society of Actuaries assumes no responsibility for the content, accuracy or completeness of the information presented.
### Additional Comments on Methodology

- Allocated expenses to acquisition and maintenance categories using the same seeds as has been previously used
  - Acquisition/Policy: $200.00
  - Acquisition/Face Amount: $1.10
  - Acquisition/Premium: 50%
  - Maintenance/Policy: $60.00

### Recommendation

#### Current 2021 Cost Factors Based on Average of 2018/2019 Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Acquisition per Policy</th>
<th>Acquisition per Unit</th>
<th>Acquisition per Premium</th>
<th>Maintenance per Policy</th>
<th>Company Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career</td>
<td>230.00</td>
<td>1.20</td>
<td>50%</td>
<td>60.00</td>
<td>121</td>
</tr>
<tr>
<td>Direct Marketing</td>
<td>179.00</td>
<td>1.10</td>
<td>50%</td>
<td>50.00</td>
<td>25</td>
</tr>
<tr>
<td>Other*</td>
<td>139.00</td>
<td>0.70</td>
<td>50%</td>
<td>30.00</td>
<td>87</td>
</tr>
</tbody>
</table>

* Includes companies that did not respond to this or prior year surveys

#### Current 2020 Cost Factors Based on Average of 2017/2018 Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Acquisition per Policy</th>
<th>Acquisition per Unit</th>
<th>Acquisition per Premium</th>
<th>Maintenance per Policy</th>
<th>Company Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career</td>
<td>233.00</td>
<td>1.30</td>
<td>50%</td>
<td>60.00</td>
<td>121</td>
</tr>
<tr>
<td>Direct Marketing</td>
<td>179.00</td>
<td>1.10</td>
<td>50%</td>
<td>50.00</td>
<td>25</td>
</tr>
<tr>
<td>Other*</td>
<td>127.00</td>
<td>0.70</td>
<td>50%</td>
<td>30.00</td>
<td>87</td>
</tr>
</tbody>
</table>

* Includes companies that did not respond to this or prior year surveys

### Comparison to Prior Years

#### Acquisition per Policy

<table>
<thead>
<tr>
<th>Description</th>
<th>2021 Percentage Change</th>
<th>2020 Percentage Change</th>
<th>2019 Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career</td>
<td>-1%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Direct Marketing</td>
<td>-9%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Other*</td>
<td>-10%</td>
<td>2%</td>
<td>3%</td>
</tr>
</tbody>
</table>

* Includes companies that did not respond to this or prior year surveys

#### Acquisition per Unit

<table>
<thead>
<tr>
<th>Description</th>
<th>2021 Percentage Change</th>
<th>2020 Percentage Change</th>
<th>2019 Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Direct Marketing</td>
<td>-8%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other*</td>
<td>-13%</td>
<td>14%</td>
<td>10%</td>
</tr>
</tbody>
</table>

* Includes companies that did not respond to this or prior year surveys

#### Acquisition per Premium

<table>
<thead>
<tr>
<th>Description</th>
<th>2021 Percentage Change</th>
<th>2020 Percentage Change</th>
<th>2019 Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Direct Marketing</td>
<td>-9%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other*</td>
<td>-13%</td>
<td>14%</td>
<td>10%</td>
</tr>
</tbody>
</table>

* Includes companies that did not respond to this or prior year surveys

#### Maintenance per Policy

<table>
<thead>
<tr>
<th>Description</th>
<th>2021 Percentage Change</th>
<th>2020 Percentage Change</th>
<th>2019 Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Direct Marketing</td>
<td>-2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other*</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

* Includes companies that did not respond to this or prior year surveys
Information on Companies in Study

- The following percentages of companies responded that GRET factors are used for individual life sales illustration purposes:
  - 2020 Survey: 29%
  - 2019 Survey: 26%
  - 2018 Survey: 28%
  - 2017 Survey: 30%
  - 2016 Survey: 26%
- We believe variation is a result of the mix of respondents and the limited number of responses

Information on Companies in Study

- Included 292 companies in this year’s study
  - Decrease of 34 companies from last year’s study.
  - This is due to companies that are new outliers or have large premiums which fall outside the preset range.
- There were a total of 776 companies originally in the data received from the NAIC in this year’s data extraction versus 722 in last year
- However, total ordinary policies issued for these 776 companies remained essentially flat (14,000 more policies out of a total of 9.9M) over the prior year
- Face amount issued increased by 6.1% over the prior year

Questions?
TO: Reggie Mazyck, NAIC
FROM: Dale Hall, Managing Director of Research, Society of Actuaries (SOA)
Leon Langlitz, Chair, SOA Committee on Life Insurance Company Expenses
DATE: July 23, 2020
RE: 2021 Generally Recognized Expense Table (GRET) – SOA Analysis

Dear Mr. Mazyck:

As in previous years, the Society of Actuaries expresses its thanks to NAIC staff for their assistance and responsiveness in providing Annual Statement expense and unit data for the 2021 GRET analysis for use with individual life insurance sales illustrations. The analysis is based on expense and expense related information reported on companies’ 2018 and 2019 Annual Statements. This project has been completed to assist the Life Actuarial Task Force (LATF) in its consideration of potential revisions to the GRET that could become effective for calendar year 2021. This memo describes the analysis and resultant findings.

NAIC staff provided Annual Statement data for life insurance companies for calendar years 2018 and 2019. This included data from 722 companies in 2018 and 776 companies in 2019. This increase breaks the trend of small decreases over the previous few years. Of the total companies, 292 were in both years and passed the outlier exclusion tests and were included as a base for the GRET factors (326 companies passed similar tests last year).

APPROACH USED
The methodology for calculating the recommended GRET factors based on this data is similar to that followed the last several years. The methodology was last altered in 2015. The changes made at that time can be found in the recommendation letter sent to LATF on July 30, 2015.

To calculate updated GRET factors, the average of the factors from the two most recent years (2018 and 2019 for those companies with data available for both years) of Annual Statement data was used. For each company an actual-to-expected ratio was calculated. Companies with ratios that fell outside predetermined parameters were excluded. This process was completed three times to stabilize the average rates. The boundaries of the exclusions have been modified from time to time; however, there were no adjustments made this year. Unit expense seed factors (the seeds for all distribution channel categories are the same), as shown in Appendix B, were used to compute total expected expenses. Thus, these seed factors were used to implicitly allocate expenses between acquisition and maintenance expenses, as well as among the three acquisition expense factors (on a direct of ceded reinsurance basis).

Companies were categorized by their reported distribution channel (four categories were used as described in Appendix A included below). There remain a significant number of companies for which no distribution channel was provided, as no responses to the annual surveys have been received from those companies. The characteristics of these companies vary significantly, including companies not currently writing new business or whose major line of business is not individual life insurance. Any advice or assistance from LATF

https://www.soa.org/Files/Research/Projects/research-2016-gret-recommendation.pdf
in future years to increase the response rate to the surveys of companies that submit Annual Statements in order to reduce the number of companies in the “Other” category would be most welcomed. The intention is to continue surveying the companies in future years to enable enhancement of this multiple distribution channel information.

Companies were excluded from the analysis if (1) their actual to expected ratios were considered outliers, often due to low business volume, (2) the average first year and single premium per policy were more than $40,000, (3) they are known reinsurance companies or (4) their data were not included in both years of the data supplied by the NAIC. To derive the overall GRET factors, the unweighted average of the remaining companies’ actual-to-expected ratios for each respective category was calculated. The resulting factors were rounded, as shown in Table 1.

THE RECOMMENDATION

The above methodology results in the proposed 2021 GRET values shown in Table 1. To facilitate comparisons, the current 2020 GRET factors are shown in Table 2. Further characteristics of the type of companies represented in each category are included in the last two columns in Table 1, including the average premium per policy issued and the average face amount ($000s) per policy issued.

To facilitate comparisons, the current 2020 GRET factors are shown in Table 2. Further characteristics of the type of companies represented in each category are included in the last two columns in Table 1, including the average premium per policy issued and the average face amount ($000s) per policy issued.

### TABLE 1
PROPOSED 2021 GRET FACTORS, BASED ON AVERAGE OF 2018/2019 DATA

<table>
<thead>
<tr>
<th>Description</th>
<th>Acquisition per Policy</th>
<th>Acquisition per Unit</th>
<th>Acquisition per Premium</th>
<th>Maintenance per Policy</th>
<th>Companies Included</th>
<th>Average Premium Per Policy Issued During Year</th>
<th>Average Face Amt (000) Per Policy Issued During Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>$166</td>
<td>$0.90</td>
<td>42%</td>
<td>$50</td>
<td>121</td>
<td>2,916</td>
<td>194</td>
</tr>
<tr>
<td>Career</td>
<td>214</td>
<td>1.20</td>
<td>54%</td>
<td>64</td>
<td>63</td>
<td>2,517</td>
<td>195</td>
</tr>
<tr>
<td>Direct Marketing</td>
<td>195</td>
<td>1.10</td>
<td>49%</td>
<td>59</td>
<td>15</td>
<td>2,933</td>
<td>119</td>
</tr>
<tr>
<td>Niche Marketing</td>
<td>137</td>
<td>0.80</td>
<td>34%</td>
<td>41</td>
<td>26</td>
<td>590</td>
<td>11</td>
</tr>
<tr>
<td>Other*</td>
<td>126</td>
<td>0.70</td>
<td>32%</td>
<td>38</td>
<td>67</td>
<td>836</td>
<td>29</td>
</tr>
</tbody>
</table>

* Includes companies that did not respond to this or prior year surveys 292

### TABLE 2
CURRENT 2020 GRET FACTORS, BASED ON AVERAGE OF 2017/2018 DATA

<table>
<thead>
<tr>
<th>Description</th>
<th>Acquisition per Policy</th>
<th>Acquisition per Unit</th>
<th>Acquisition per Premium</th>
<th>Maintenance per Policy</th>
<th>Companies Included</th>
<th>Average Premium Per Policy Issued During Year</th>
<th>Average Face Amt (000) Per Policy Issued During Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>$168</td>
<td>$0.90</td>
<td>42%</td>
<td>$50</td>
<td>118</td>
<td>3,263</td>
<td>200</td>
</tr>
<tr>
<td>Career</td>
<td>214</td>
<td>1.20</td>
<td>54%</td>
<td>64</td>
<td>63</td>
<td>2,661</td>
<td>217</td>
</tr>
<tr>
<td>Direct Marketing</td>
<td>217</td>
<td>1.20</td>
<td>54%</td>
<td>65</td>
<td>20</td>
<td>2,489</td>
<td>213</td>
</tr>
<tr>
<td>Niche Marketing</td>
<td>125</td>
<td>0.70</td>
<td>32%</td>
<td>38</td>
<td>21</td>
<td>757</td>
<td>13</td>
</tr>
<tr>
<td>Other*</td>
<td>140</td>
<td>0.80</td>
<td>35%</td>
<td>42</td>
<td>104</td>
<td>876</td>
<td>34</td>
</tr>
</tbody>
</table>

* Includes companies that did not respond to this or prior year surveys 326
In previous recommendations, an effort was made to reduce volatility in the GRET factors from year-to-year by limiting the change in GRET factors between years to about ten percent of the prior value. The changes from the 2020 GRET were reviewed to ensure that a significant change was not made in this year’s GRET recommendation. The Direct Marketing and Other distribution channel categories experienced a change greater than ten percent so the factors for this line were capped at the ten percent level (the Acquisition per unit factor changed somewhat more than 10% because of rounding) from the corresponding 2020 GRET values. The volatility occurred due to the change in the composition of the companies in this category where a small number of companies were included.

**USAGE OF THE GRET**

This year’s survey, responded to by companies’ Annual Statement correspondent, included a question regarding whether the 2020 GRET table was used in its illustrations by the company. Last year, 26% of the responders indicated their company used the GRET for sales illustration purposes, with similar percentage results by size of company; this contrasted with about 28% in 2018. This year, 29% of responding companies indicated that they used the GRET in 2019 for sales illustration purposes. The range was from 22% for Direct Marketing to 48% for career carriers. Based on the information received over the last several years, the variation in GRET usage appears to be in large part due to the relatively small sample size and different responders to the surveys.

We hope LATF finds this information helpful and sufficient for consideration of a potential update to the GRET. If you require further analysis or have questions, please contact Dale Hall at 847-273-8835.

Kindest personal regards,

Dale Hall, FSA, MAAA, CERA, CFA
Managing Director of Research
Society of Actuaries

Leon Langlitz, FSA, MAAA
Chair, SOA Committee on
Life Insurance Company Expenses
APPENDIX A — DISTRIBUTION CHANNELS

The following is a description of distribution channels used in the development of recommended 2021 GRET values:

1. **Independent** – Business written by a company that markets its insurance policies through an independent insurance agent or insurance broker not primarily affiliated with any one insurance company. These agencies or agents are not employed by the company and operate without an exclusive distribution contract with the company. These include most PPGA arrangements.

2. **Career** – Business written by a company that markets insurance and investment products through a sales force primarily affiliated with one insurance company. These companies recruit, finance, train, and often house financial professionals who are typically referred to as career agents or multi-line exclusive agents.

3. **Direct Marketing** – Business written by a company that markets its own insurance policies direct to the consumer through methods such as direct mail, print media, broadcast media, telemarketing, retail centers and kiosks, internet or other media. No direct field compensation is involved.

4. **Niche Marketers** – Business written by home service, pre-need, or final expense insurance companies as well as niche-market companies selling small face amount life products through a variety of distribution channels.

5. **Other** – Companies surveyed were only provided with the four options described above. Nonetheless since there were many companies for which we did not receive a response (or whose response in past years’ surveys confirmed an “other” categorization (see below), values for the “other” category are given in the tables in this memo. It was also included to indicate how many life insurance companies with no response (to this survey and prior surveys) and to indicate whether their exclusion has introduced a bias into the resulting values.
APPENDIX B – UNIT EXPENSE SEEDS

The expense seeds used in the 2014 and prior GRETs were differentiated between branch office and all other categories, due to the results of a relatively old study that had indicated that branch office acquisition cost expressed on a per Face Amount basis was about double that of other distribution channels. Due to the elimination of the branch office category in the 2015 GRET, non-differentiated unit expense seeds have been used in the current and immediately prior studies.

The unit expense seeds used in the 2021 GRET and the 2020 GRET recommendations were based on the average of the 2006 through 2010 Annual SOA expense studies. These studies differentiated unit expenses by type of individual life insurance policy (term and permanent coverages). As neither the GRET nor the Annual Statement data provided differentiates between these two types of coverage, the unit expense seed was derived by judgment based this information. The following shows the averages derived from the Annual SOA studies and the seeds used in this study. Beginning with the 2019 Annual Statement submission this information will become more readily available.

### 2006-2010 (AVERAGE) CLICE STUDIES:

<table>
<thead>
<tr>
<th></th>
<th>Acquisition/ Policy</th>
<th>Acquisition/ Face Amount (000)</th>
<th>Acquisition/ Premium</th>
<th>Maintenance/ Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Term</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted Average</td>
<td>$149</td>
<td>$0.62</td>
<td>38%</td>
<td>$58</td>
</tr>
<tr>
<td>Unweighted Average</td>
<td>$237</td>
<td>$0.80</td>
<td>57%</td>
<td>$76</td>
</tr>
<tr>
<td>Median</td>
<td>$196</td>
<td>$0.59</td>
<td>38%</td>
<td>$64</td>
</tr>
<tr>
<td><strong>Permanent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted Average</td>
<td>$167</td>
<td>$1.43</td>
<td>42%</td>
<td>$56</td>
</tr>
<tr>
<td>Unweighted Average</td>
<td>$303</td>
<td>$1.57</td>
<td>49%</td>
<td>$70</td>
</tr>
<tr>
<td>Median</td>
<td>$158</td>
<td>$1.30</td>
<td>41%</td>
<td>$67</td>
</tr>
</tbody>
</table>

### CURRENT UNIT EXPENSE SEEDS:

<table>
<thead>
<tr>
<th></th>
<th>Acquisition/ Policy</th>
<th>Acquisition/ Face Amount (000)</th>
<th>Acquisition/ Premium</th>
<th>Maintenance/ Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>All distribution channels</td>
<td>$200</td>
<td>$1.10</td>
<td>50%</td>
<td>$60</td>
</tr>
</tbody>
</table>
SOA COVID-19 Research

- COVID-19 Key Statistics Update
- 2021 Health Care Cost Model
- Defined Benefit Plans and COVID-19
- Tabulation tool for John Hopkins University Data
- COVID-19 Research Briefs
- COVID-19 Pulse Surveys
- Impact of COVID-19 on Aging & Retirement – Essays
- Podcasts
  - ...and more

COVID-19 Impact on Group Life Insurance

- Group Life COVID-19 Survey
  - Requested monthly mortality claims & exposure, starting with 5/2020
  - Use 2018-2019 as baseline for comparing 2020 emerging experience
  - Optional segment information also requested: state, industry, age/gender, cause of death
- Results
  - Monthly reports to contributors
  - Industry report and updates to public
COVID-19 Impact on Individual Life Insurance

- Individual Life COVID-19 Study
  - Designing a data request for periodic (monthly?) submission mortality claims & exposure
  - Use 2018-2019 as baseline for comparing 2020 emerging experience
  - Include age/gender, duration, product type, cause of death (if available)
- Results
  - Summary reports to contributors
  - Industry report and updates to public

SOA Experience Studies

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Objective</th>
<th>Expected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

SOA Practice Research & DDR

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Objective</th>
<th>Expected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Agenda for Discussion

1. Objective for the annual mortality improvement (MI) scale updates
3. Considerations for 2020
4. LMISG 2020 recommendation
5. Future issues

Objective of Annual MI Scale Updates
Addresses VM20 Incorporation of MI: Section 9C3g

Objective of Annual MI Scale Updates
Level of Event Covered – Reserve vs Capital: VM Introduction
Objective for Annual MI Scale Updates

Our annual update exercise seeks to apply judgment to historical mortality improvement (or deterioration) data to arrive at a set of mortality rates that can be used to calculate reserves for future events.


- **Historical Data**: Most recent relevant historical MI data (10-year moving average)
  - Age- and gender-based
  - Use of a long-term consistent source of population data, Social Security Administration (SSA)
- **Forecasted Expectations**: Most recent forecast of future improvements over future period (20 years)
  - Age- and gender-based data
  - Consistent with historical data and projections (Alt. II) available from SSA Trustees’ Annual Report
- **Unsmoothed MI Scale**: Weighted average of historical data and forecasted expectations
- **Smoothed MI Scale**: Unsmoothed MI scale with smoothing process applied

Considerations for 2020 & beyond

- **Data**: we don’t have sufficient data to fully understand the impact of the COVID-19-related mortality shock on the insured population (anecdotal reports from companies indicate they are seeing a smaller shock).
  - MI scale updates - reflecting a shock in 2020 does not seem in line with the goals for the MI scale updates
    - Are shock events more appropriately reflected in capital planning rather than reserves?
    - An effective vaccine may make COVID-19’s impact on MI much shorter than the long-term impact arising from the opioid epidemic.
    - However, COVID-19 may have potential longer-term impacts that may arise from survivor impaired health, health impacts from delays in health care, and/or testing for early detection of dread disease, etc.
    - Conversely, some experts and models indicate the 2020/2021 COVID-19 shock is mainly a moving forward of deaths that would have occurred due to other causes and/or comorbidities. Might that improve future mortality improvement?
  - Precedent for other excess mortality events
    - First group to consider the impact of a short-term shock event – setting a precedent for other future MI scale work
    - The current methodology uses a moving average to “smooth out” the impact of any one year or event
    - 2008/2009 influenza season and the effect of the opioid epidemic – the methodology was not adjusted for those events
**LMISG 2020 Recommendation**

Apply the historical methodology for 2020 consistent with the past scale updates (2013–2019).

**Implications:**
- There will be no specific impact included for the 2020 scale for the pandemic shock effect.
- The 10-year historical average in the 2022 scale update will include a “smoothed” impact of the shock as part of the usual methodology.

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**Future Issues**

- Insured vs. general population impacts
  - Some evidence that impact on insured population will be less
  - SOA “socioeconomic decile” study will provide some guidance here
  - Consideration of consistent framework and changes to the current methodology (ex., averaging periods)

- Will COVID-19 have a long-term impact on mortality improvement rates, and what will the impact be?
  - Lower due to survivor impaired health as well as the indirect effect arising from the virus delaying the early condition diagnosis of dread diseases and preventive treatments?
  - Higher due to greater application of good hygienic habits (e.g., social distancing and washing hands) and/or higher utilization of other vaccines (such as the annual flu shot)?
  - Need to understand the impact in terms of potential effects on future slope and size of MI
  - Impact in light of a COVID-19 vaccine availability and effectiveness
General Population:  
Pattern of excess deaths vs general mortality

A/E Ratios – COVID-19 vs 2015 VBT
- Actual deaths = COVID-19  
- Expected deaths = 2015 Unismoke, ANB 2015 VBT rates, weighted by 7/2019 estimated U.S. population  
- Slope of VBT matches COVID-19 female rates better than male rates  
- Small ratios >>> only 1 cause of death (COD) in numerator; all CODs in denominator

U.S. Male

2013-2019 MI Scale Update Reports

- 2016 Scale: [https://www.soa.org/resources/experience-studies/2016/research-mortality-improvement-2016/](https://www.soa.org/resources/experience-studies/2016/research-mortality-improvement-2016/)
**Principle-Based Reserves (PBR)**

**Resources From the Life Practice Council of the American Academy of Actuaries**

Donna Claire, MAAA, FSA, CERA
Chairperson, PBR Governance Work Group

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**PBR Page on Academy Website**

- Go to actuary.org and click on Principle-based Reserving (navigation bar on right or bottom)

OR

- [www.actuary.org/content/pbr-practice](http://www.actuary.org/content/pbr-practice)

- Page includes a PBR Toolkit

---

**Academy PBR Toolkit**

- **PBR Overview**: Resources that provide the mechanics of PBR, as well as industry practices and guidance in performing a principle-based valuation.
  - **PBR Checklist**
  - **The Details Behind PBR Implementation**
  - **Model Governance Checklist**
  - **Model Governance Practice Note**

- **Implementation Tools**: Resources that provide tools and frameworks to assist actuaries in implementing principle-based valuations.
  - **Principle-Based Approach Projections Practice Note**
  - **VM-20 Practice Note**
  - **ASOP No. 52: Principle-Based Reserves for Life Products**
  - **Economic Scenario Generators**
  - **Life PBR Assumptions Resource Manual**

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**NAIC Resources**

- **Valuation Manual 2019-2020 Comparison**
- **Valuation Manual**, published January 2020
- **Valuation Manual Versions and Amendments**
- **SVL Model Law**
- **VM-20 / VM-22 Tables**
- **NAIC Impact Study of VM-20 on PBR for Life Insurance**
- **Life Actuarial (A) Task Force of the NAIC**
  - **2018 PBR Review Report**
  - **2017 PBR Review Report**
Academy’s PBR Page

ACADEMY COMMENTS ON PBR
- Life Insurance Issues (VM-20)
- Variable Annuity Issues (VM-21)
- Fixed Annuity Issues (VM-22)
- Long Term Care Issues (VM-25)
- RBC Requirements Under PBR
- Read reports from Life Practice Council groups to the NAIC on the principle-based project.

ACADEMY PUBLICATIONS ON PBR
- SVL Legislation in Brief
- Life Perspectives

PBR PRACTICE NOTES
- Life Principle-Based Reserves Under VM-20 (April 2020)
- Principle-Based Approach Projections (December 2019)
- Model Governance (April 2017)
- Common Practices of Examining Actuaries Involved in Statutory Financial Solvency Examinations of Life and Health Insurers

PBR PRACTICE NOTES
- SVL Legislation in Brief
- Life Perspectives

ACADEMY PRESENTATIONS AND STATEMENTS ON PBR
- PBR Presentation Archive
  - Read all Academy public statements related to PBR

PBR QUALIFICATION STANDARDS
- Qualification Standards Response on PBR
  - ASOP No. 52, Principle-Based Reserves for Life Products under the NAIC Valuation Manual

More ASOPs
- Qualification Standards Response on PBR
  - Frequently asked questions for actuaries.
PBR Analysis Template

- Academy group under Pat Allison is developing ways to display PBR (and other) data:
  - Such as: waterfalls, trend analysis graphs
  - Advantages: one picture is worth a 1,000 words
- Goal is to have this done in 2020

Questions/Suggestions

- Anything else the Academy can do to assist you with PBR implementation and/or education?

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