

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.

Proposed AG 49 edits to reflect 1) multipliers illustrating the same as non-multipliers and 2) subject cap buy-ups and index return enhancements to constraints reasonably similar to the constraints applied to multipliers

## 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 *{Need to address this at a later 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.

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 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. 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. 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.

E.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 the 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 rate total 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.

	Multiplier	Cap Buy-Up	Cap Buy-Up w/Multiplier	Included bonus	Smaller Included Bonus	1% floor	1% floor & Included Bonus	
	Example 1/BIA*	Example 2	Example 3	Example 4	Example 5	Example 6	Example 7	Example 8
<i>Annual Net Investment Earnings Rate</i>	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
<i>Cap</i>	10%	10%	18%	18%	8%	8%	9% / 1% Floor	7% / 1% Floor
<i>Index Bonus (Multiplier)</i>	0%	50%	0%	50%	25%	20%	0%	30%
<i>Index Charges</i>	0%	3%	2%	5%	0%	0%	0%	0%
<i>Historical Credited Rate for Benchmark Index Account (A)</i>	6.2% = Min( 6.2% , 145% * NIER)	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
<i>Historical Credited Rate for Index Account</i>	6.2%	6.2%	9.0%	9.0%	5.15%	5.15%	5.96%	4.88%
<i>Total Indexed Credits @ Index Account Lookback Rate (B)</i>	6.2%	9.3%	9.0%	13.5%	6.44%	6.18%	5.96%	6.34%
<i>Maximum Indexed Credit = min ( A + Index Charges , B )</i>	6.2% = Min ( 6.2% + 0% , 6.2%)	9.2% = Min ( 6.2% + 3% , 9.3%)	8.2% = Min ( 6.2% + 2% , 9%)	11.2% = Min ( 6.2% + 5% , 13.5%)	6.2% = Min ( 6.2% + 0% , 6.44%)	6.18% = Min ( 6.2% + 0% , 6.18%)	5.96% = Min ( 6.2% + 0% , 5.96%)	6.2% = Min ( 6.2% + 0% , 6.34%)
<i>Illustrated Indexed Credits less Index Charges</i>	6.2% = 6.2% - 0%	6.2% = 9.2% - 3%	6.2% = 8.2% - 2%	6.2% = 11.2% - 5%	6.2% = 6.2% - 0%	6.18% = 6.18% - 0%	5.96% = 5.96% - 0%	6.2% = 6.2% - 0%
<i>Implied Max Illustrated Rate</i>	6.20%	6.13%	8.20%	7.47%	4.96%	5.15%	5.96%	4.77%
<b>Policy Loans</b>								
<i>Loan Charge Rate</i>	5%	5%	5%	5%	5%	5%	5%	5%
<i>Maximum Amount Credited on Loan Balance, including all policy features</i>	6% = 5% + 0% + 1%	9% = 5% + 3% + 1%	8% = 5% + 2% + 1%	11% = 5% + 5% + 1%	6% = 5% + 0% + 1%	6% = 5% + 0% + 1%	6% = 5% + 0% + 1%	6% = 5% + 0% + 1%
<i>Illustrated Loan Credits less Charges</i>	1% = 6% - 5% - 0%	1% = 9% - 5% - 3%	1% = 8% - 5% - 2%	1% = 11% - 5% - 5%	1% = 6% - 5% - 0%	1% = 6% - 5% - 0%	1% = 6% - 5% - 0%	1% = 6% - 5% - 0%