

STANDARD NONFORFEITURE LAW FOR INDIVIDUAL DEFERRED ANNUITIES

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Section 1. Title

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

Section 2. Applicability

- A. This Act shall not apply to any reinsurance, group annuity purchased under a retirement plan or plan of deferred compensation established or maintained by an employer (including a partnership or sole proprietorship) or by an employee organization, or by both, other than a plan providing individual retirement accounts or individual retirement annuities under Section 408 of the Internal Revenue Code, as now or hereafter amended, premium deposit fund, variable annuity, investment annuity, immediate annuity, any deferred annuity contract after annuity payments have commenced, or reversionary annuity, nor to any contract which shall be delivered outside this state through an agent or other representative of the company issuing the contract.
- B. Sections 3 through 8 shall not apply to contingent deferred annuities.
- C. Notwithstanding Subsection B, the commissioner shall have the authority to prescribe, by regulation, nonforfeiture benefits for contingent deferred annuities that are, in the opinion of the commissioner, equitable to the policyholder, appropriate given the risks insured, and to the extent possible, consistent with general intent of this law.

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

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 contractholder, 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

Drafting Note: The premium tax credit is only permitted if the tax is actually paid by the company. If the tax is paid and subsequently credited back to the company, such as upon early termination of the contract, the tax credit may not be taken.

- (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 percent~~ 15 basis points (40.15%); 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).

1977 Proc. I 26, 28, 317, 479, 484-487 (adopted).

1977 Proc. II 555-557 (corrected).

2003 Proc. 1st Quarter 15-17, 113-114, 965, 970-973 (amended and reprinted).

2017 3rd Quarter (amended).

TABLE 1
 PROPOSED 2021 GRET FACTORS, BASED ON AVERAGE OF 2018/2019 DATA

| Description | Acquisition per Policy | Acquisition per Unit | Acquisition per Premium | Maintenance per Policy | Companies Included | Average Premium Per Policy Issued During Year | Average Face Amt (000) Per Policy Issued During Year |
|---|------------------------|----------------------|-------------------------|------------------------|--------------------|---|--|
| Independent | \$166 | \$0.90 | 42% | \$50 | 121 | 2,916 | 194 |
| Career | 214 | 1.20 | 54% | 64 | 63 | 2,517 | 195 |
| Direct Marketing | 195 | 1.10 | 49% | 59 | 15 | 2,933 | 119 |
| Niche Marketing | 137 | 0.80 | 34% | 41 | 26 | 590 | 11 |
| Other* | 126 | 0.70 | 32% | 38 | 67 | 836 | 29 |
| * 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

| Description | Acquisition per Policy | Acquisition per Unit | Acquisition per Premium | Maintenance per Policy | Companies Included | Average Premium Per Policy Issued During Year | Average Face Amt (000) Per Policy Issued During Year |
|---|------------------------|----------------------|-------------------------|------------------------|--------------------|---|--|
| Independent | \$168 | \$0.90 | 42% | \$50 | 118 | 3,263 | 200 |
| Career | 214 | 1.20 | 54% | 64 | 63 | 2,661 | 217 |
| Direct Marketing | 217 | 1.20 | 54% | 65 | 20 | 2,489 | 213 |
| Niche Marketing | 125 | 0.70 | 32% | 38 | 21 | 757 | 13 |
| Other* | 140 | 0.80 | 35% | 42 | 104 | 876 | 34 |
| * Includes companies that did not respond to this or prior year surveys | | | | | 326 | | |

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:

| | Acquisition/ Policy | Acquisition/ Face Amount (000) | Acquisition/ Premium | Maintenance/ Policy |
|--------------------|------------------------|-----------------------------------|-------------------------|------------------------|
| Term | | | | |
| Weighted Average | \$149 | \$0.62 | 38% | \$58 |
| Unweighted Average | \$237 | \$0.80 | 57% | \$76 |
| Median | \$196 | \$0.59 | 38% | \$64 |
| Permanent | | | | |
| Weighted Average | \$167 | \$1.43 | 42% | \$56 |
| Unweighted Average | \$303 | \$1.57 | 49% | \$70 |
| Median | \$158 | \$1.30 | 41% | \$67 |

CURRENT UNIT EXPENSE SEEDS:

| | Acquisition/ Policy | Acquisition/ Face Amount (000) | Acquisition/ Premium | Maintenance/ Policy |
|---------------------------|------------------------|-----------------------------------|-------------------------|------------------------|
| All distribution channels | \$200 | \$1.10 | 50% | \$60 |



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, 2015¹.

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

¹ <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.

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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

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8. **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.
9. **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.
10. **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

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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.

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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.
- iv. This actuarial guideline shall not apply for any new business or in force life insurance illustrations on policies sold on or after December 14, 2020.
- v. Notwithstanding part iv of this section, an insurer may choose to utilize AG-49A guidance for new illustrations on policies sold prior to the effective date of AG49A provided that, one, the insurer utilizes AG-49A guidance for all new product illustrations subject to AG49, and, two, the insurer does not revert back to the AG-49 guidance.

1. 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. 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 illustrated rate credited to the loan balance does not exceed the illustrated loan charge.
- iii. All other non-guaranteed elements are equal to the non-guaranteed elements for the illustrated scale.

B. 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.

C. Fixed Account: An account where the credited rate is not tied to an external index or indices.

D. 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 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 arithmetic mean of the geometric average annual credited rates 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 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).
- 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 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.

Life Actuarial (A) Task Force
Technical Amendment to AG 49-A

Purpose: This amendment is intended to revise the regulation, adopted by the Executive (EX) Committee and Plenary on Aug. 14, to coordinate its effective date with the anticipated adoption of proposed revisions to *Actuarial Guideline XLIX—The Application of the Life Illustrations Model Regulation to Policies With Index-Based Interest* (AG 49), to be considered for adoption by the Executive (EX) Committee and Plenary at the Fall National Meeting.

Background: *Actuarial Guideline XLIX-A—The Application of the Life Illustrations Model Regulation to Policies With Index-Based Interest Sold On or After November 25, 2020* (AG 49-A) applies to illustrations on applicable policies sold on or after Nov. 25. The Life Actuarial (A) Task Force recently exposed a revision to the existing AG 49 requirements to limit its application to in-force illustrations on policies sold before Nov. 25.

The Nov. 25 effective date of AG 49-A was chosen in anticipation of the Executive (EX) Committee and Plenary adoption of the revisions to AG 49 at the Fall National Meeting, initially scheduled for mid-November. Due to the impact of the corona virus, the meeting was moved to early December, delaying the adoption of the AG 49 revisions and necessitating this amendment for changes to the effective date for AG 49-A.

Amendments:

- The date reference in the title of the regulation is changed from “on or after November 25” to “on or after December 14,” reflecting the new anticipated adoption date of the proposed revisions to AG 49 due to the shift in the Fall National Meeting dates.
- Language in the effective date paragraph is changed to make the guideline effective on or after Dec. 14.

Draft: 11/2/20

Adopted by the Executive (EX) Committee and Plenary, Dec. 9, 2020

Adopted by the Life Insurance and Annuities (A) Committee, Nov. 10, 2020

Adopted by the Life Actuarial (A) Task Force, Oct. 8, 2020

2021 Proposed Charges

LIFE ACTUARIAL (A) TASK FORCE

The mission of the Life Actuarial (A) Task Force is to identify, investigate and develop solutions to actuarial problems in the life insurance industry.

Ongoing Support of NAIC Programs, Products or Services

1. The **Life Actuarial (A) Task Force** will:
 - A. Work to keep reserve, reporting and other actuarial-related requirements current. This includes principle-based reserving (PBR) and other requirements in the *Valuation Manual*, actuarial guidelines, and recommendations for appropriate actuarial reporting in blanks. Respond to charges from the Life Insurance and Annuities (A) Committee and referrals from other groups or committees, as appropriate.
 - B. Report progress on all work to the Life Insurance and Annuities (A) Committee and provide updates to the Financial Condition (E) Committee on matters related to life insurance company solvency. This work includes the following:
 1. Work with the American Academy of Actuaries (Academy) and the Society of Actuaries (SOA) to develop new mortality tables for valuation and minimum nonforfeiture requirements, as appropriate, for life insurance and annuities.
 2. Provide recommendations for guidance and requirements for accelerated underwriting, as needed.
 3. Evaluate and provide recommendations regarding the VM-21, Requirements for Principle-Based Reserves for Variable Annuities/*Actuarial Guideline XLIII—CARVM Variable Annuities* (AG 43) Standard Projection Amount, which may include continuing as a required floor or providing a disclosure. This evaluation is to be completed prior to year-end 2023.
 4. Work with the SOA on the annual development of the Generally Recognized Expense Table (GRET) factors.
 5. Provide recommendations and changes, as appropriate, to other reserve and nonforfeiture requirements to address issues and provide actuarial assistance and commentary to other NAIC committees relative to their work on actuarial matters.
 6. Work with the selected vendor to develop and implement a new economic scenario generator (ESG) for use in regulatory reserve and capital calculations.
 7. Monitor international developments regarding life and health insurance reserving, capital, and related topics. Compare and benchmark with PBR requirements.
2. The **Variable Annuities Capital and Reserve (E/A) Subgroup** of the Life Risk-Based Capital (E) Working Group and the Life Actuarial (A) Task Force will:
 - A. Monitor the impact of the changes to the variable annuities reserve framework and risk-based capital (RBC) calculation and determine if additional revisions need to be made.
 - B. Develop and recommend appropriate changes, including those to improve accuracy and clarity of variable annuity (VA) capital and reserve requirements.
3. The **Experience Reporting (A) Subgroup** will:
 - A. Continue development of the experience reporting requirements within the *Valuation Manual*. Provide input, as appropriate, for the process regarding the experience reporting agent, data collection, subsequent analysis, and use of experience submitted.
4. The **Indexed Universal Life (IUL) Illustration (A) Subgroup** will:
 - A. Monitor the results and practices of IUL illustrations following implementation of *Actuarial Guideline XLIX-A—The Application of the Life Illustrations Model Regulation to Policies with Index-Based Interest to Policies Sold On or After Dec. 14, 2020* (AG 49-A). Provide recommendations for consideration of changes to *Life Insurance Illustrations Model Regulation* (#582) to the Life Actuarial (A) Task Force, as needed.

5. The **Longevity Risk (E/A) Subgroup** of the Life Actuarial (A) Task Force and the Life Risk-Based Capital (E) Working Group will:
 - A. Provide recommendations for recognizing longevity risk in statutory reserves and/or RBC, as appropriate. Complete by the 2021 Summer National Meeting.
6. The **Valuation Manual (VM)-22 (A) Subgroup** will:
 - A. Recommend requirements, as appropriate, for non-variable (fixed) annuities in the accumulation and payout phases for consideration by the Life Actuarial (A) Task Force. Continue working with the Academy on a PBR methodology for non-variable annuities.
7. The **Guaranteed Issue (GI) Life Valuation (A) Subgroup** will:
 - A. Provide recommendations regarding valuation requirements for GI life business, including any appropriate mortality table(s) for valuation, as well as nonforfeiture. Initial recommendations are to be provided to the Life Actuarial (A) Task Force by the 2021 Summer National Meeting.

NAIC Support Staff: Reggie Mazyck/Jennifer Frasier

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Draft: 11/2/20

Adopted by the Executive (EX) Committee and Plenary, Dec. 9, 2020

Adopted by the Life Insurance and Annuities (A) Committee, Nov. 10, 2020

2021 Proposed Charges

LIFE INSURANCE AND ANNUITIES (A) COMMITTEE

The mission of the Life Insurance and Annuities (A) Committee is to: 1) consider issues relating to life insurance and annuities; and 2) review new life insurance products.

Ongoing Support of NAIC Programs, Products or Services

1. The **Life Insurance and Annuities (A) Committee** will:
 - A. Monitor the activities of the Life Actuarial (A) Task Force.
2. The **Accelerated Underwriting (A) Working Group** will:
 - A. Consider the use of external data and data analytics in accelerated life underwriting, including consideration of the ongoing work of the Life Actuarial (A) Task Force on the issue; and, if appropriate, draft guidance for the states.
3. The **Annuity Disclosure (A) Working Group** will:
 - A. Review and revise, as necessary, Section 6—Standards for Annuity Illustrations in the *Annuity Disclosure Model Regulation* (#245) to take into account the disclosures necessary to inform consumers in light of the product innovations currently in the marketplace.
4. The **Annuity Suitability (A) Working Group** will:
 - A. Review and revise, as necessary, the *Suitability in Annuity Transactions Model Regulation* (#275).
 - B. Consider how to promote greater uniformity across NAIC member jurisdictions.
5. The **Life Insurance Illustration Issues (A) Working Group** will:
 - A. Explore how the narrative summary required by Section 7B of the *Life Insurance Illustrations Model Regulation* (#582) and the policy summary required by Section 5A(2) of the *Life Insurance Disclosure Model Regulation* (#580) can be enhanced to promote consumer readability and understandability of these life insurance policy summaries, including how they are designed, formatted and accessed by consumers.
6. The **Life Insurance Online Guide (A) Working Group** will:
 - A. Develop an online resource on life insurance, including the evaluation of existing content on the NAIC website, to be published digitally for the benefit of the public.
7. The **Retirement Security (A) Working Group** will:
 - A. Explore ways to promote retirement security consistent with the NAIC's continuing "Retirement Security Initiative."

NAIC Support Staff: Jennifer R. Cook/Jolie H. Matthews

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Michael Lovendusky
Vice President & Associate General Counsel

4 November 2020

Marlene Caride, Commissioner, New Jersey Department of Banking & Insurance, Chair
NAIC Life Insurance & Annuities (A) Committee
c/o Jennifer Cook, Senior Life & Health Counsel, NAIC
via jcook@naic.org

RE: Life Insurance Illustrations Issues (A) Working Group

Dear Chairwoman Caride & Members of the Committee:

The American Council of Life Insurers (ACLI) commends the efforts of the Life Insurance Illustrations Issues (A) Working Group over the last four and a half years and respectfully recommends that you recognize the accomplishments of, receive a final report from, and retire the Working Group. This letter explains the basis of the ACLI recommendation and concludes with suggestions about how to address any lingering considerations, if necessary.

The Working Group substantially explored how the narrative summary required by Section 7B of the Life Insurance Illustrations Model Regulation and the policy summary required by Section 5A(2) of Life Insurance Disclosures Model Regulation might be enhanced to promote consumer readability and understandability of these life insurance policy summaries, including how they are designed, formatted and accessed by consumers. Years of time and energy were invested by participating regulators and interested parties in explorations.

The ACLI believes the working group explorations were a success. No regulator found fault with the sample policy summaries provided by ACLI members to the working group in 2016; the reasons for the traditional business practice of providing consumer disclosures at time of policy delivery – and especially the importance of the Free Look Period – were remembered; and the importance of agents and financial advisors in helping consumers select the most appropriate plan of life insurance and explain policy features was appreciated anew. Hence the ACLI believes that the Working Group succeeded in its charge and should not move forward with its current effort to devise “policy overviews” for Term, Whole, and Universal Life insurance policies. Currently, two, alternative Term Life Insurance Sample Policy Overviews are exposed for consideration. Neither alternative policy overview is likely to promote consumer readability and understandability of any type of life insurance policy.

American Council of Life Insurers | 101 Constitution Ave, NW, Suite 700 | Washington, DC 20001-2133

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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.

With this opinion, the ACLI joins Birny Birnbaum of the Center for Economic Justice (who for years has criticized the benefit of any policy overview produced at the time of policy delivery) in concluding that the exposed Term Life Insurance Sample Policy Overview Post-Underwriting (i.e., at Time of Delivery) will not, on top of existing disclosures, promote consumer readability and understandability of the policy.

However, the ACLI also does not support development of the alternative, exposed Term Life Insurance Policy Overview at Time of Application. This concept will not improve the ability of a consumer to select *the most appropriate plan of life insurance for the buyer's needs* in the absence of an agent, broker or advisor; or improve the buyer's understanding of the *features of the policy that has been purchased*.¹ Rather, such a document is likely to confuse rather than assist consumers, as it will lack personalized information for the consumer due to its timing. For more background, see ACLI Letter to NAIC Life Insurance Illustrations Issues (A) Working Group (11/15/19) [here](#).

Should the Committee believe that further consideration of consumer disclosures is needed, the ACLI recommends that the NAIC undertake its traditional approach to review any concerns raised by members or interested parties, namely, an objective fact-finding and study. The ACLI would welcome the opportunity to review objective evidence that any serious problem may exist and evaluate it against the manifest success of life insurance policy disclosures based upon the existing, successful model regulations. The current NAIC consumer disclosure paradigm – respected by the regulators in all the states – has been in place for decades. During that time, millions of life insurance policies have provided billions of dollars of value to their purchasers and beneficiaries.

In such circumstances, the ACLI will gladly contribute information and empirical knowledge to any further study by the Committee. If a serious problem is found, we will certainly work with you to rectify it. Thank you for your consideration.

Sincerely,



THE AMERICAN COUNCIL OF LIFE INSURERS
Michael Lovendusky, Vice President & Associate General Counsel
202.624.2390 telephone | michaellovendusky@acli.com

C: NAIC Life Insurance Illustrations Issues (A) Working Group

¹ Italicized comments quote the NAIC *Life Insurance Disclosure Model Regulation* § 2A (“Purpose”).



Presentation by the Center for Economic Justice

To the NAIC Life Insurance & Annuities (A) Committee

Re-Engineering Life and Annuity Illustrations and Disclosures

November 10, 2020

Birny Birnbaum
Center for Economic Justice

NAIC Models Related to Life and Annuity Illustrations and Marketing

The NAIC has several model regulations and actuarial guidelines regarding life and annuity illustrations, disclosures and advertising.

NAIC Life Insurance Illustrations Model Regulation

Purpose: The purpose of this regulation is to provide rules for life insurance policy illustrations that will protect consumers and foster consumer education.

The goals of this regulation are to ensure that illustrations do not mislead purchasers of life insurance and to make illustrations more understandable. Insurers will, as far as possible, eliminate the use of footnotes and caveats and define terms used in the illustration in language that would be understood by a typical person within the segment of the public to which the illustration is directed.

NAIC Life Insurance Disclosure Model Regulation

Purpose: The purpose of this regulation is to require insurers to deliver to purchasers of life insurance information that will improve the buyer's ability to select the most appropriate plan of life insurance for the buyer's needs and improve the buyer's understanding of the basic features of the policy that has been purchased or is under consideration.

NAIC Annuity Disclosure Model Regulation

Purpose: The purpose of this regulation is to provide standards for the disclosure of certain minimum information about annuity contracts to protect consumers and foster consumer education.

The goal of this regulation is to ensure that purchasers of annuity contracts understand certain basic features of annuity contracts.

Advertisements of Life Insurance and Annuities Model Regulation

Purpose: The purpose of this regulation is to set forth minimum standards and guidelines to assure a full and truthful disclosure to the public of all material and relevant information in the advertising of life insurance policies and annuity contracts.

Actuarial Guidelines 49 and 49A for Indexed Universal Life illustrations.

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

Limits the policy loan leverage shown in an illustration.

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

Current Insurer Marketing and Illustration of Investment-Type Life and Annuities Fails to Meet the Purposes of These Models

Illustrations obscure, instead of explain, the operation of the policy or contract.

Illustrations and advertisements present misleading information about risk and return.

Illustrations create unrealistic expectations for consumers about policy accumulation values.

Products and related illustrations are relying more and more on the use of custom indexes produced by data mining historical results resulting in:

- Backtesting, not permitted for any other type of investment product, based on hypothetical results before the index was created; and
- Conflicts of interest created when the provider of the index is also providing the hedging program to support the insurers' products.

Current Insurer Marketing and Illustration of Investment-Type Life and Annuities Fails to Meet the Purposes of These Models

Competition among insurers is focused on product design to game illustration rules, instead of competition to provide consumer value and understanding

Projections, not permitted for any other type of investment product, for 20, 30, 40 and 50 years showing constant annual returns

Misleading premium financed product illustrations showing riskless arbitrage

Annual rates of return untethered to actual market conditions

Bottom Line: Setting unrealistic expectations, ensuring future consumer complaints and lawsuits and creating retirement insecurity.

Illustration Re-engineering Concepts

The Illustration

Simpler Explanation about How the Product Operates

Apples to Apples Comparison of Product Accumulation with Alternative Investments

Show the Cost and Value of Insurance

Show Meaningful Measures of Risk and Return

Set Realistic Expectations for Policyholders

Illustration Re-engineering Concepts

Consumer Protections and Fair Competition

Encourage Product and Insurer Competition and Discourage Illustration Competition

Discourage Product Design to Juice Illustrations

Prohibit Backtesting

Prohibit Index Providers from Providing the Hedging Program to Support the Product Using That Index.

Prohibit Indexes That Are Not Transparent and Allow the Consumer to Independently Verify the Stated Results.

Finish Life Insurance Policy Overview Work and Create Similar Policy Overview for Annuities

Provide Buyer's Guide and Policy Overview Prior to Purchase

Illustration Re-engineering Concepts – Not Consumer-Tested!

Simpler Explanation of How the Product Operates

[Product Name]: How Your Account Value Changes for One Period

| Show in Account Value | Index Increases by 3% | Index Increases by 15% | Index Stays the Same – 0% Change | Index Decreases by 3% | Index Decreases by 15% |
|--|-----------------------|------------------------|----------------------------------|-----------------------|------------------------|
| Product Value at Start of Period | | | | | |
| Change in Value from Changes in Index Inclusive of All Policy Features | | | | | |
| Change in Value from Policy Fees or Any Charges | | | | | |
| Product Value at End of Period | | | | | |

How is the Change in Account Value Calculated?

Show steps in similar table showing participation rates, multipliers, caps and every other product feature affecting account value calculation.

[Product Name]: How Your Account Value Changes – Part 2

| Show in Cumulative Percentage Change | Index Increases by 3% | Index Increases by 15% | Index Stays the Same – 0% Change | Index Decreases by 3% | Index Decreases by 15% |
|---|-----------------------|------------------------|----------------------------------|-----------------------|------------------------|
| Change in Value from Changes in Index | | | | | |
| Policy Feature 1 (Cap/Floor) | | | | | |
| Policy Feature 2 (Participation Rate) | | | | | |
| Policy Feature 3 (Multiplier/Bonus) | | | | | |
| Policy Feature 4 | | | | | |
| Policy Feature 5 | | | | | |
| Change in Value from Policy Fees or Any Charges | | | | | |
| Total Change in Product Value at End of Period | | | | | |

Show Meaningful Measures of Risk and Return

The changes in your product's account value are tied to changes in [name of index].

[Name of index] has been in existence for [X] years.

Over the past [X] years, here are some best and worst performance information about your index and a comparison to the S&P 500 (with and without dividends). The S&P 500 is provided for comparison because it is the most common measure of the returns of a diversified stock market investment and has been in existence for a long time.

The comparison to the S&P 500 results shows you the value of the insurance you are purchasing. An investment in the S&P 500 is risky because you are exposed to all the gains or losses of the "market." Your insurance product may provide protection against some or all of the losses if the "market" declines, as well as other benefits.

No comparison is perfect. Insurance products may have tax advantages that are significant for you.

Past performance is not a guaranty of future outcomes.

Historical Performance of [Name of Product Index/Investment/Dividend] and Product] and [Name of Index]

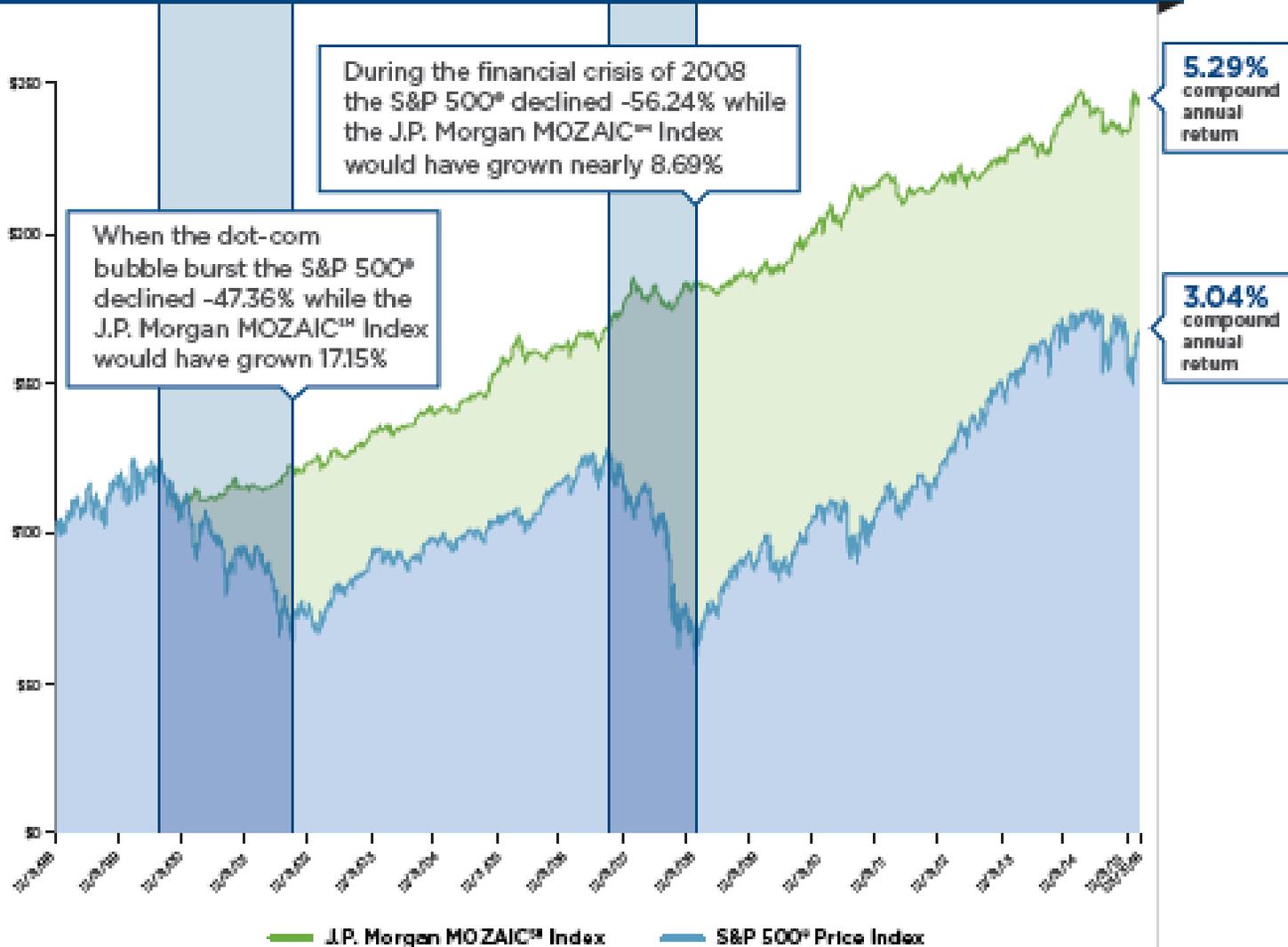
| | [Name of Index / Investment] | [Name of Product] including policy features, fees and charges | S&P 500 excluding dividends (1970-2019) | S&P500 including dividends (1970 – 2019) |
|---------------|------------------------------|---|---|--|
| Worst 1 year | | | -38.5% | -37.0% |
| Best 1 year | | | 34.1% | 37.6% |
| Worst 5 Year | | | -5.73% | -2.35% |
| Best 5 Year | | | 26.18% | 28.56% |
| Worst 10 Year | | | -3.04% | -1.38% |
| Best 10 Year | | | 16.04% | 19.21% |

Apples to Apples Comparisons

Show the Cost and Value of Insurance

Why is this chart, taken from an insurer's marketing materials, misleading and deceptive?

J.P. Morgan MOZAICSM Index vs S&P 500[®] Price Index



Cost and Value of Insurance

Compared to investing directly in the S&P 500 or the securities that comprise the [Name of Index / Investment], your insurance product offers the following benefits:

[List benefits – Protection against loss when the market or investments go down, tax advantages, death benefit, etc.]

The cost of these insurance benefits is:

[X% of the return from directly investing in the securities that comprise the [Name of Index / Investment]

[\$Y and/or Z% in annual charges]

[Charges for withdrawing more than A% annually for B years]

[Other costs/charges]

Consumer Protections and Fair Competition

Consumer Testing to Verify Consumers Are Not Misled or Deceived

Encourage Product and Insurer Competition and Discourage Illustration Competition

Discourage Product Design to Juice Illustrations

Prohibit Backtesting for Periods the Index Has Not Been in Existence

Prohibit Index Providers from Providing the Hedging Program to Support the Product Using That Index.

Prohibit Indexes That Are Not Transparent and Allow the Consumer to Independently Verify the Stated Results.

Finish Life Insurance Policy Overview Work and Create Similar Policy Overview for Annuities

Provide Buyer's Guide and Policy Overview Prior to Purchase

Next Steps

Establish a charge and working group to re-engineer life and annuity illustrations and disclosure, including convergence of illustration concepts for life and annuities;

Complete the life insurance policy overview project currently underway and develop similar brief product overviews for annuities;

Stop the work of the annuity disclosure working group pending the recommendations and work product of the illustration re-engineering effort;

Complete the work of the Life Insurance Online Guide Working Group and develop a similar online guide for annuities; and

Consumer Test Life and Annuity Illustrations and Disclosures

Questions?

Thank you!



**Comments for the Center for Economic Justice
To the NAIC Life Insurance and Annuities (A) Committee**

Proposed Revisions to AG 49

July 7, 2020

1. Summary of Comments

The Center for Economic Justice urges the Life and Annuities (A) Committee to *reject the flawed, industry-orchestrated re-write of Actuarial Guideline 49* (proposed “AG49-A”) and take the following actions:

- A. Return the revision of AG 49 to the Life Actuarial Task Force with direction to work with and finalize a proposed revision *based on the Independent Proposal* to the A Committee no later than mid-October 2020.
- B. Further direct LATF to
 - i. *Apply the revised AG49 to all new illustrations* – whether for new policies or for new illustrations on in-force policies regardless of date of issue – on and after the effective date; and
 - ii. *Eliminate any loan arbitrage* by prohibiting illustration of crediting rates greater than policy loan rates.
- C. If the A Committee fails to reject the proposed AG49-A, then the A Committee should make the two changes in item 2 before adopting the proposed revisions to AG49.
- D. *Immediately seek a charge to perform a reengineering of the illustration framework for life insurance and annuities* to address the over-complexity and inherent deceptiveness of current illustrations and to particularly address the problems posed by the use of data-mined custom indexes designed to inflated insurance product accumulation values. The redesign of life insurance annuity illustrations must be consumer-driven, utilizing best practices in the development of consumer information and disclosure, including consumer testing. The redesign must also expand the application of illustration protections to the new indexed variable annuities – buffer annuities and registered indexed linked annuities. *This is not a job for LATF, but for an EX Task Force.*

2. The AG49-A Proposal before the A Committee is Powerful Evidence of Much of What is Wrong with Current Life Insurance Illustrations and the NAIC Life Insurance and Illustration Regulatory Frameworks.

*Appendix A is a specimen illustration for a current Indexed Universal Life (IUL) product.*¹ Recall that the oft-cited purpose of illustrations is to show consumers how the product operates. One glance at this 55 page illustration filled with arcane terminology and pages of dense tables shows that contrary to the stated purpose of the NAIC Life Illustration Model Regulation – to protect consumers and foster consumer education, to ensure that illustrations do not mislead purchasers of life insurance and to make illustrations more understandable.

The illustration in Appendix A is an example of the problems that the original AG49 has spawned and why the NAIC is now considering the second revision to an actuarial guideline that is only five or six years old – it reflects a product designed to show massive, riskless – and unrealistic – accumulations of account values for consumers.

We defy any member of the A Committee to

- a. Comprehend and explain, so a purchaser of the product could understand, how this product operates and how this illustration, meets the purposes of the Life Illustration model; and
- b. Comprehend and explain, so a consumer faced with an IUL illustration could understand, how the proposed AG49-A works and what the rationale is for the crediting rates produced by proposed AG49-A.

We are not talking about a highly technical issue, like how to establish reserves for IUL under principles-based reserving. We are talking about the fundamental consumer-facing disclosure used in the sale of life insurance and annuities – the illustration. If you, as Commissioner of Insurance in your states, cannot do these two things, it should be evident that illustrations – used for selling life insurance products for which consumers transfer some or all of their savings in hopes of achieving future retirement security – are broken and need a major re-imagining and re-engineering to actually protect consumers.

Towards that end, we urge the A Committee to seek a charge to thoroughly review and revise the design and guidance for life and annuity illustrations. While regulatory actuaries are skilled at many things, designing consumer-facing disclosures is not one of those skills as evidenced by the proposal before you.

Do not be confused by arguments that the AG49 revision process always contemplated two phases – one to fix the illustration loopholes and a second to develop new disclosures for consumers regarding risk and return of the products. The latter cannot be developed as yet another add-on to an already over-long documents and no additional disclosure will be able to

¹ The illustration was provided by the recipient of the illustration and is attached with permission to make public.

3. The Proposed AG49-A Should Be Rejected in Favor of the Independent Proposal

The proposed AG49-A should be rejected because of a flawed process and because the Independent Proposal is a simpler, more effective and more accountable approach to establishing crediting rates for IUL illustrations.

3.1 LATF Employed a Flawed Process That Likely Violated Antitrust Laws and Never Gave the Independent Proposal a Fair Hearing.

When LATF was given the task in 2019 to address the loopholes in AG49 that had prompted IUL products designed specifically to game AG49 to produce unrealistic illustrations, LATF attempted some minor tweaks to quickly close the loopholes. LATF learned that the minor tweaks would not work and asked stakeholders to come up with proposals to close the loopholes.

To provide some context, the original AG49 was created because regulators were concerned that some insurers were using unrealistic crediting rates – in excess of 10% -- to produce unrealistic illustrations of future account values. AG49 essentially capped the crediting rate – at around 6.5% to 7%. Yet, in recent years, IUL issuers developed new product designs – claimed as innovations, but complex and opaque features which no consumer would have demanded – which used the lower crediting rates while massively increasing policy fees and expenses and, magically, dramatically increasing accumulation values. One might ask—how could illustrations produce higher accumulation values despite higher fees and charges and lower crediting rates. The answer – new product features like cap-buys, multipliers and bonuses – which, for a fee, increased the investment returns despite the lower crediting rates.

The fixes to AG49 became more and more complex because of the fundamentally-flawed AG49 framework. Think of trying to repair a home with cracks and leaks due to a faulty foundation, but without fixing the foundation.

As the fixes became more complex, LATF asked the ACLI to coordinate the development of an industry proposal. ACLI, a trade association, accepted the request and did coordinate industry players to produce an industry proposal. In making this request to ACLI, LATF encouraged insurers to engage in antitrust violations. In accepting this request from LATF, ACLI likely engage in antitrust violations because ACLI was facilitating the collusion of insurers for a proposal directly related to product designs. We understand that ACLI sent a message to its members to support – and not oppose – the ACLI industry proposal.

Beyond the antitrust violation aspect of the LATF request, LATF effectively gave ownership of the AG49 rewrite to the very insurers whose practices were causing the problems that LATF was charged with stopping.

Once LATF directed ACLI to coordinate and develop an industry rewrite of AG49, the die was cast with the result that a proposal by over a dozen independent experts in the design and sale of IUL – the Independent Proposal – was never given a fair hearing.

3.2 The Independent Proposal was Drafted by Independent Experts Concerned about the Misuse of Illustrations in Their Industry.

Appendices B and C contains the Independent Proposal and the proposed AG49-A, respectively, showing redlined changes to current AG49. The drafters of the Independent Proposal are independent experts who have expertise in the design and sale of IUL and other life insurance products and who have great concern that current illustrations are harming consumers and harming their industry.

A comparison of the Independent Proposal and proposed AG49-A shows that the Independent Proposal makes a small number of changes and simplifies AG49, while the industry-designed AG49-A is virtually a complete re-write of AG49 that adds much greater complexity to an already complex guideline.

3.3 The Independent Proposal is Both Simpler and More Effective at Stopping Abuses Spawned by AG49.

The guts of an IUL product account value changes tied to an external index or indexes paired with a floor to protect account values if the reference index declines in value and a cap on the increase in account value. For example, an IUL might have account value changes tied to changes in the S&P 500 Index subject to a floor of 0% and a cap of 9%. If the index were to, say, lose 5% in value over the reference period, the IUL account value would not change because of the floor of 0%. If the index were to gain 15%, the account value would gain the 9% cap. If the index were to gain 4%, the account value would gain that 4%.

How do insurers provide this protection against losses in account value – the floor of 0%? They do this by buying options or hedges. So, to support the IUL contract promises, the insurer relies upon net investment income earnings (less an amount invested in hedges) and returns on the hedge investments.

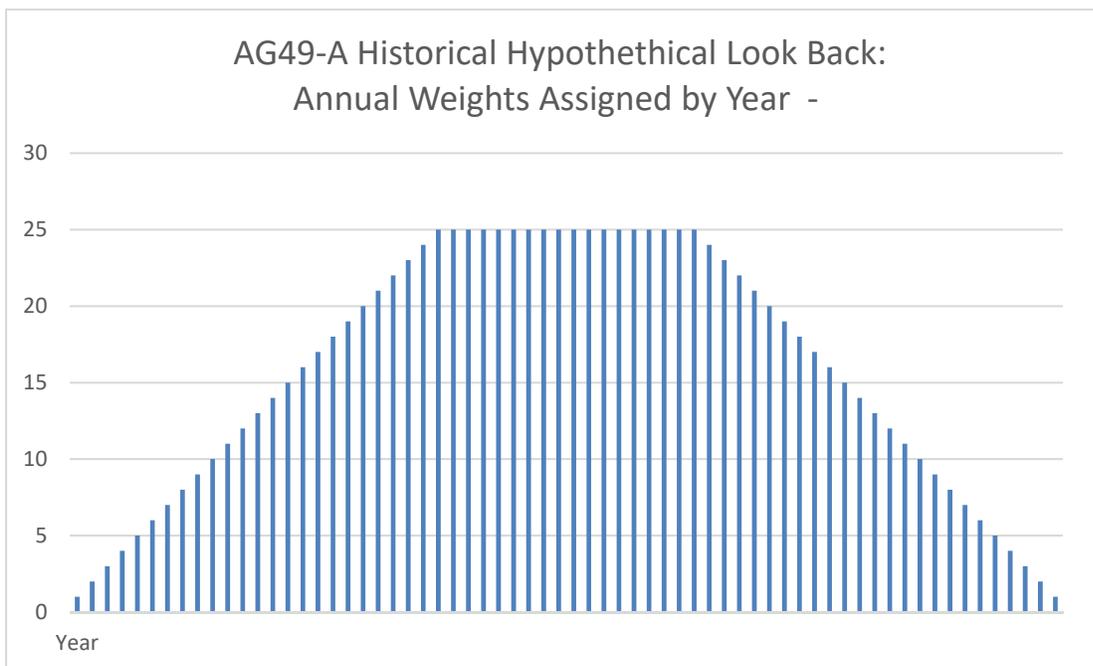
The Independent Proposal and proposed AG49-A both start from the same two places – the net investment income earnings and the market cost of the hedge investments. The independent proposal uses these values directly to establish the maximum crediting rate. In contrast, the proposed AG49-A converts these two values through labyrinthine – and unsupported by financial theory – calculations to create new arbitrary values to serve as the crediting rate cap.

3.4 The Independent Proposal Rests on Defensible Financial Theory and Practice; the Proposed AG49-A Does Not.

Both the IP and ACLI proposal start from the same two values – Net Investment Earnings Rate (NIER) and Market Cost of Hedges, as universally determined by application of the Black-Scholes option pricing model, to support the indexed product features. The Independent Proposal 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 transmogrifies 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 crediting rate cap based on the lesser of the Section 4A hypothetical historical credited rate (HHCR) or $\text{NIER} \times 145\%$. 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. The table below shows that the AG49-A calculation of historical returns for the S&P 500 gives far different weights – in an arbitrary manner and unsupported by any finance theory – to some years over others. As a result, the calculation bears no relationship to actual historical returns and, consequently, the ACLI part 4Bi is a nonsensical value.



AG49-A 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 AG49-A 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?

Putting aside the fact that it is unrealistic to expect average returns of 145% on hedge investments over a long time frame, even if one believed that was the long-term average – subject to a range of volatility – why would you employ that long-term average as a constant, riskless rate of return every year?

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.

3.5 The Independent Proposal Eliminates the Riskless Arbitrage – Returns from Risky Investments without Paying the Risk Premium – Created by AG49

The foundational problem with the AG49 and AG49-A frameworks is the riskless arbitrage associated with the 145% return on hedge investments. Once insurers figured out that, through different product designs, they could move more of the investment from the 4% net investment earnings return portion to the 145% hedge return portion, the “innovations” were rampant. Instead of products pitched as conservative investments to protect account values in an economic downturn, the IUL products became greater and greater option plays with greater expenses producing greater risk and volatility of returns for consumers.

The Independent Proposal eliminates the arbitrary 145% and replaces it with the actual market cost of the hedges. By doing so, the returns on hedge investments are tied directly to actual market expectations and not an arbitrary and inflated value.

3.6 The Few Arguments Against The Independent Proposal Reveal the Misguided Perspectives of Some LATF Members.

In the brief discussion and dismissal by LATF of the Independent Proposal, the misguided perspectives of some LATF members were revealed. One argument against the Independent Proposal was that it went beyond the charges given to LATF to fix AG49 and/or beyond the limiting decisions LATF made in 2019 or 2020. The fact that the Independent Proposal not only addressed the specific issues of concern – multipliers, bonuses, cap buy-ups – but also addressed other foreseeable loopholes in AG49 was seen not as a virtue of the Independent Proposal, but as disqualifying.

Another argument lodged against the Independent Proposal is that IUL illustrations would become similar, in terms of accumulation values, to Universal Life illustrations. Some LATF members claimed this was a problem because IUL had “outperformed” UL in recent years. The fact that some LATF members view their role as deciding which product should illustrate better accumulation values reflects misplaced emphasis on illustrations as predictors of future accumulation versus illustrations as explanation how a product will operate. Regulatory actuaries should be indifferent to how “well” a particular product illustrates accumulation values. Regulators should be concerned with effective the illustration is at improving consumer understanding of and expectations about the product.

Another argument offered against the Independent Proposal and for the AG49-A involves some mythical trade-off between innovation and consumer protection. Some members of LATF defended AG49-A because it allegedly balances innovation with consumer protection. First, the alleged innovation seen with IUL products is not a response to consumer demand, but to find ways to avoid the intended consumer protections of AG49. Consumers who are faced with investing their lifetime savings to secure some form of retirement security have enough difficulty understanding a plain vanilla IUL. The argument that consumers are demanding ever more complex and opaque products based on exotic, custom-designed indexes with no actual track record is simply preposterous. But, second, it’s not the actuaries’ role to determine – and it wasn’t the charge to LATF – how much consumer protection should be compromised in the name of innovation. This is particularly true when there is no data or empirical basis to support the claim of consumer demand for “innovative products” or that the “innovative” products seen are actually a response to anything consumers seek.

4. Two Critical Consumer Protections – Application to All New Illustrations and Elimination of Loan Arbitrage – Must Be Included to Stop Abuses with IUL Illustrations

LATF inexplicably decided to accept industry demands to limit the application of the revised AG49 to illustrations only on new policies issued on or after the effective date and to continue to permit illustrations of monotonic, unchanging crediting rates at values greater than policy loan interest rates. Both are profoundly anti-consumer.

4.1 The Purpose of Revising AG49 is to Stop Practices That Game AG49 to Produce Misleading and Deceptive IUL Illustrations. It Makes No Sense to Deny Consumers Who Purchased IUL Products before the Effective Date These Consumer Protections for New Illustrations Produced After the Effective Date

The purpose of the AG49 revision exercise is to stop unrealistic illustrations and provide consumers with better information and expectations about how the IUL product will operate and perform. Logic dictates that the consumer protections in a revised AG49 should be available to all consumers – whether they are consumers receiving an illustration as part of a new policy purchase or as a new, updated illustration for an in-force policy.

Industry argued – and LATF agreed – that consumers who purchase IUL policies prior to the effective date of the revisions would not be entitled to these new consumer protections. The AG49-A proposal includes a provision that it applies only to illustrations for new policies issued on or after the effective date. Consumers with in-force policies receiving a new illustration after the effective date would continue to receive illustrations based on the old AG49 – despite the recognition that illustrations produced under that regime were unrealistic and deceptive.

What was the rationale for denying consumers of in-force policies with the new consumer protections? Industry offered two arguments – it would be a “retroactive” change to the policy and it would confuse the consumer. The “retroactive” claim is without merit because application of revised AG49 to new illustrations after the effective date does not change any contract provisions or features. It merely gives the consumer of an in-force policy who gets a new illustration a better illustration – better by definition of the purpose of the revisions to AG49.

Claims about consumer confusion with application to all new illustrations are without any empirical support and given current illustrations, the claims about consumer confusion by getting a more realistic illustration are insulting. It makes no sense to permit insurers to continue with an illustration methodology that regulators have acknowledged as failing to protect consumers. There is absolutely no logic to the argument that because insurers used unrealistic illustrations for a product in the past they should be permitted to continue to use a methodology that perpetuates unrealistic and misleading illustrations.

If this point wasn’t already clear, Mr. Sanders of NAIFA drove it home with his comments that giving a consumer a more realistic new illustration on an in-force policy would erode the producer-client relationship because the client might ask the producer why the illustration has changed and not be satisfied with the answer – perhaps becoming unhappy with the product.

According to Mr. Sanders’ logic, the consumer should continue to get illustrations that are now unrealistic by definition of AG49 because providing the consumer with more realistic expectations about the performance of the product might reduce the client’s confidence in the producer and that this client is better off not learning that the illustrations they had been receiving were unrealistic until years later when it may be too late to take any action to protect their retirement savings or after the producer has retired. This logic may make sense in the world of insurer or insurance producer trade associations, but it is insane from the perspective of consumer protection.

We must also ask, why is industry so concerned about providing in-force policyholders with more realistic illustrations? If product design is a response to consumer demand, as claimed repeatedly by industry, why would a change in illustrated values change the consumer’s perception of the value proposition of the product? If the purpose of illustrations is to demonstrate the operation of the product to the consumer, why would a more realistic illustration be objectionable?

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?

No evidence or logic has been provided regarding claims of consumer confusion with the application to in-force policies. If “consumer confusion” was truly an issue, we would have seen evidence of that following the 2015 change. We didn’t. Further, the claims of “consumer confusion” are based on assertions about alleged purposes of illustrations for in-force policies. Yet, there is no agreement or evidence that illustrations for in-force policies serve any single purpose. Regardless of the consumer’s purpose for the in-force illustration, no consumer is well served by an illustration that would violate requirements for a new illustration.

For example, if the consumer is considering surrendering or exchanging the policy, they should have the best illustration/projection of future performance as prescribed in AG 49. It makes no sense for a consumer to compare an existing policy illustrated with banned multiplier enhancements to a new policy for which such multiplier enhancements are not permitted.

It is important to remember that an illustration for an in-force policy shows actual historical experience with the policy coupled with an updated projection/illustration of future experience. The new in-force illustrations can already vary from the original illustration because the crediting rate or cap can change. If a consumer is concerned about future funding of the policy, the in-force illustration should pair the actual historical experience with the best illustration/project of future performance as prescribed in AG 49.

Whether in the Independent Proposal or a revised AG49-A, the application and effective date of the revised AG49 should be:

This version of the Actuarial Guideline is effective for all new business and new in-force life insurance illustrations on and after [date].

4.2 A Fundamental Flaw in the Life Insurance Illustration Regime Is the Presentation of Account Values Accumulating at Same Amount Year After Year With No Demonstration of the Risk or Impact of the Volatility of Returns. If Policy Loan Interest Rates Can Be Illustrated at Values Less Than The Account Crediting Rates, the IUL Will Illustrate Like a Riskless ATM.

Current AG49 and proposed AG49-A permit policy loans to be illustrated with a policy loan interest rate less than the crediting rate for illustrating account value accumulation. Stated differently, if you illustrate account value credits at 6.5% every year, you can illustrate a policy loan cost at 6%. This is an example of illustrating riskless arbitrage – the consumer can borrow money at one rate and use it earn a higher rate of return without any risk. This is analogous to taking out a mortgage on your home and using that money to invest in the stock market – because the market has averaged returns of, say, 8%, while your mortgage loan rate is 3%. Of course this would be terrible financial advice because the loan cost is fixed – you have to pay the interest regardless of what your investment returns might be and the investment returns are erratic and may be negative in several years.

By being able to illustrate riskless loan arbitrage, IUL illustrations are used to present future loans on the policy as cash disbursements that never need to be paid back because the policy is continuing to earn the constant better-than-loan-interest-rate returns. Does anyone recall the vanishing premium illustration debacle?

By being able to illustrate riskless loan arbitrage, IUL products are sold in connection with premium finance loans, in which a consumer borrows money to buy an IUL policy.

If the NAIC's stated commitment to ensuring retirement security for consumers is to have any meaning at all, loan arbitrage in AG49 must be eliminated.

**Comments for the Center for Economic Justice
To the NAIC Life Insurance and Annuities (A) Committee**

Proposed Revisions to AG 49

July 7, 2020

Appendix A

Specimen IUL Illustration

The illustration was provided by the recipient of the illustration and is attached with permission to make public as redacted.

Pacific Discovery Xelerator IUL

A Flexible Premium Indexed Adjustable Life Insurance Policy

A Life Insurance Policy Illustration Prepared For:

[REDACTED]

Life Insurance Producer:

[REDACTED]
695 Town Center Dr Ste 700
Costa Mesa, CA 92626-7187
CA License [REDACTED]

Pacific Life is a product provider. It is not a fiduciary and therefore does not give advice or make recommendations regarding insurance or investment products.

Proposed Insured: ██████████
██████████
 Male, Age 40
 Super Preferred Nonsmoker

 Death Benefit Option = A - (Level)
 Initial Total Face Amount =
 \$10,212,915
 Premium Frequency = Annual

 Life Insurance Producer:
██████████
 695 Town Center Dr Ste 700
 Costa Mesa, CA 92626-7187

Non-Guaranteed Policy Values: Ledger

This illustration assumes non-guaranteed policy charges and non-guaranteed crediting rates.

| Year | Age | Premium Outlay* (1) | Policy Loan (2) | Net Outlay (3) | Non-Guaranteed Values (End Of Year) @ 6.00% ¹ | | |
|--------------|-----|---------------------|-----------------|------------------|--|------------------------------|-------------------|
| | | | | | Net Accumulated Value (4) | Net Cash Surrender Value (5) | Death Benefit (6) |
| 1 | 40 | 1,803,002 | 0 | 1,803,002 | 1,754,685 | 1,659,552 | 10,212,915 |
| 2 | 41 | 0 | 0 | 0 | 1,789,795 | 1,742,223 | 10,212,915 |
| 3 | 42 | 0 | 0 | 0 | 1,845,836 | 1,803,023 | 10,212,915 |
| 4 | 43 | 0 | 0 | 0 | 1,915,101 | 1,877,047 | 10,212,915 |
| 5 | 44 | 0 | 0 | 0 | 1,999,042 | 1,965,748 | 10,212,915 |
| 6 | 45 | 0 | 0 | 0 | 2,093,234 | 2,064,689 | 10,212,915 |
| 7 | 46 | 0 | 0 | 0 | 2,198,478 | 2,174,693 | 10,212,915 |
| 8 | 47 | 0 | 0 | 0 | 2,315,231 | 2,296,204 | 10,212,915 |
| 9 | 48 | 0 | 0 | 0 | 2,444,502 | 2,434,983 | 10,212,915 |
| 10 | 49 | 0 | 0 | 0 | 2,581,514 | 2,581,514 | 10,212,915 |
| Total | | 1,803,002 | 0 | 1,803,002 | | | |
| 11 | 50 | 0 | 0 | 0 | 2,758,904 | 2,758,904 | 10,212,915 |
| 12 | 51 | 0 | 0 | 0 | 2,947,101 | 2,947,101 | 10,212,915 |
| 13 | 52 | 0 | 0 | 0 | 3,151,145 | 3,151,145 | 5,388,458 |
| 14 | 53 | 0 | 0 | 0 | 3,367,298 | 3,367,298 | 5,522,368 |
| 15 | 54 | 0 | 0 | 0 | 3,596,285 | 3,596,285 | 5,646,168 |
| 16 | 55 | 0 | 0 | 0 | 3,838,798 | 3,838,798 | 5,758,197 |
| 17 | 56 | 0 | 0 | 0 | 4,095,828 | 4,095,828 | 5,979,909 |
| 18 | 57 | 0 | 0 | 0 | 4,367,756 | 4,367,756 | 6,202,214 |
| 19 | 58 | 0 | 0 | 0 | 4,655,674 | 4,655,674 | 6,424,830 |
| 20 | 59 | 0 | 0 | 0 | 4,960,830 | 4,960,830 | 6,647,512 |
| Total | | 1,803,002 | 0 | 1,803,002 | | | |

This report is not complete and cannot be presented without the Basic Illustration. Please refer to the Basic Illustration for guaranteed elements and other important information. Non-guaranteed elements are not guaranteed.

*A zero in the Premium Outlay column does not mean the policy is paid up. Charges will continue to be deducted from the Accumulated Value as long as the policy remains in-force. The actual premium amounts and number of years of premium payments that are needed to maintain the illustrated non-guaranteed policy benefits will depend on the policy's non-guaranteed elements and on your actual use of the policy's options.

Non-Guaranteed Policy Values: Ledger

| Year | Age | Premium Outlay* (1) | Policy Loan (2) | Net Outlay (3) | Non-Guaranteed Values (End Of Year) @ 6.00% ¹ | | |
|--------------|-----|---------------------|-------------------|-------------------|--|------------------------------|-------------------|
| | | | | | Net Accumulated Value (4) | Net Cash Surrender Value (5) | Death Benefit (6) |
| 21 | 60 | 0 | 365,000 | -365,000 | 4,908,996 | 4,908,996 | 6,494,160 |
| 22 | 61 | 0 | 365,000 | -365,000 | 4,857,531 | 4,857,531 | 6,432,824 |
| 23 | 62 | 0 | 365,000 | -365,000 | 4,806,165 | 4,806,165 | 6,363,043 |
| 24 | 63 | 0 | 365,000 | -365,000 | 4,755,631 | 4,755,631 | 6,284,775 |
| 25 | 64 | 0 | 365,000 | -365,000 | 4,705,812 | 4,705,812 | 6,196,816 |
| 26 | 65 | 0 | 365,000 | -365,000 | 4,657,532 | 4,657,532 | 6,099,026 |
| 27 | 66 | 0 | 365,000 | -365,000 | 4,609,183 | 4,609,183 | 6,064,868 |
| 28 | 67 | 0 | 365,000 | -365,000 | 4,562,973 | 4,562,973 | 6,028,676 |
| 29 | 68 | 0 | 365,000 | -365,000 | 4,517,452 | 4,517,452 | 5,988,148 |
| 30 | 69 | 0 | 365,000 | -365,000 | 4,473,801 | 4,473,801 | 5,944,052 |
| Total | | 1,803,002 | 3,650,000 | -1,846,998 | | | |
| 31 | 70 | 0 | 365,000 | -365,000 | 4,432,248 | 4,432,248 | 5,895,973 |
| 32 | 71 | 0 | 365,000 | -365,000 | 4,386,371 | 4,386,371 | 5,732,322 |
| 33 | 72 | 0 | 365,000 | -365,000 | 4,343,619 | 4,343,619 | 5,551,855 |
| 34 | 73 | 0 | 365,000 | -365,000 | 4,306,455 | 4,306,455 | 5,355,288 |
| 35 | 74 | 0 | 365,000 | -365,000 | 4,275,911 | 4,275,911 | 5,141,488 |
| 36 | 75 | 0 | 365,000 | -365,000 | 4,253,220 | 4,253,220 | 4,909,324 |
| 37 | 76 | 0 | 365,000 | -365,000 | 4,235,690 | 4,235,690 | 4,931,833 |
| 38 | 77 | 0 | 365,000 | -365,000 | 4,223,492 | 4,223,492 | 4,961,988 |
| 39 | 78 | 0 | 365,000 | -365,000 | 4,216,748 | 4,216,748 | 5,000,016 |
| 40 | 79 | 0 | 365,000 | -365,000 | 4,215,635 | 4,215,635 | 5,046,214 |
| Total | | 1,803,002 | 7,300,000 | -5,496,998 | | | |
| 41 | 80 | 0 | 365,000 | -365,000 | 4,220,115 | 4,220,115 | 5,100,652 |
| 42 | 81 | 0 | 365,000 | -365,000 | 4,233,174 | 4,233,174 | 5,166,585 |
| 43 | 82 | 0 | 365,000 | -365,000 | 4,255,205 | 4,255,205 | 5,244,549 |
| 44 | 83 | 0 | 365,000 | -365,000 | 4,283,066 | 4,283,066 | 5,331,377 |
| 45 | 84 | 0 | 365,000 | -365,000 | 4,320,013 | 4,320,013 | 5,430,623 |
| 46 | 85 | 0 | 365,000 | -365,000 | 4,366,048 | 4,366,048 | 5,542,434 |
| 47 | 86 | 0 | 365,000 | -365,000 | 4,421,103 | 4,421,103 | 5,666,891 |
| 48 | 87 | 0 | 365,000 | -365,000 | 4,484,842 | 4,484,842 | 5,803,798 |
| 49 | 88 | 0 | 365,000 | -365,000 | 4,556,704 | 4,556,704 | 5,952,733 |
| 50 | 89 | 0 | 365,000 | -365,000 | 4,635,891 | 4,635,891 | 6,113,033 |
| Total | | 1,803,002 | 10,950,000 | -9,146,998 | | | |

This report is not complete and cannot be presented without the Basic Illustration. Please refer to the Basic Illustration for guaranteed elements and other important information. Non-guaranteed elements are not guaranteed.

*A zero in the Premium Outlay column does not mean the policy is paid up. Charges will continue to be deducted from the Accumulated Value as long as the policy remains in-force. The actual premium amounts and number of years of premium payments that are needed to maintain the illustrated non-guaranteed policy benefits will depend on the policy's non-guaranteed elements and on your actual use of the policy's options.

Non-Guaranteed Policy Values: Ledger

| Year | Age | Premium Outlay* (1) | Policy Loan (2) | Net Outlay (3) | Non-Guaranteed Values (End Of Year) @ 6.00% ¹ | | |
|--------------|-----|---------------------|-------------------|-------------------|--|------------------------------|-------------------|
| | | | | | Net Accumulated Value (4) | Net Cash Surrender Value (5) | Death Benefit (6) |
| 51 | 90 | 0 | 0 | 0 | 5,093,971 | 5,093,971 | 6,656,284 |
| 52 | 91 | 0 | 0 | 0 | 5,594,062 | 5,594,062 | 6,916,221 |
| 53 | 92 | 0 | 0 | 0 | 6,144,808 | 6,144,808 | 7,194,140 |
| 54 | 93 | 0 | 0 | 0 | 6,763,966 | 6,763,966 | 7,504,736 |
| 55 | 94 | 0 | 0 | 0 | 7,461,401 | 7,461,401 | 7,853,898 |
| 56 | 95 | 0 | 0 | 0 | 8,207,293 | 8,207,293 | 8,623,143 |
| 57 | 96 | 0 | 0 | 0 | 9,010,552 | 9,010,552 | 9,451,123 |
| 58 | 97 | 0 | 0 | 0 | 9,866,969 | 9,866,969 | 10,333,628 |
| 59 | 98 | 0 | 0 | 0 | 10,777,581 | 10,777,581 | 11,271,746 |
| 60 | 99 | 0 | 0 | 0 | 11,751,983 | 11,751,983 | 12,275,211 |
| Total | | 1,803,002 | 10,950,000 | -9,146,998 | | | |
| 61 | 100 | 0 | 0 | 0 | 12,785,858 | 12,785,858 | 13,339,710 |
| 62 | 101 | 0 | 0 | 0 | 13,888,515 | 13,888,515 | 14,474,694 |
| 63 | 102 | 0 | 0 | 0 | 15,061,279 | 15,061,279 | 15,681,550 |
| 64 | 103 | 0 | 0 | 0 | 16,294,329 | 16,294,329 | 16,950,413 |
| 65 | 104 | 0 | 0 | 0 | 17,597,371 | 17,597,371 | 18,291,143 |
| 66 | 105 | 0 | 0 | 0 | 18,959,280 | 18,959,280 | 19,692,560 |
| 67 | 106 | 0 | 0 | 0 | 20,392,128 | 20,392,128 | 21,166,922 |
| 68 | 107 | 0 | 0 | 0 | 21,897,399 | 21,897,399 | 22,715,788 |
| 69 | 108 | 0 | 0 | 0 | 23,462,782 | 23,462,782 | 24,326,796 |
| 70 | 109 | 0 | 0 | 0 | 25,104,997 | 25,104,997 | 26,016,903 |
| Total | | 1,803,002 | 10,950,000 | -9,146,998 | | | |
| 71 | 110 | 0 | 0 | 0 | 26,831,542 | 26,831,542 | 27,793,756 |
| 72 | 111 | 0 | 0 | 0 | 28,645,290 | 28,645,290 | 29,660,336 |
| 73 | 112 | 0 | 0 | 0 | 30,530,509 | 30,530,509 | 31,600,837 |
| 74 | 113 | 0 | 0 | 0 | 32,537,624 | 32,537,624 | 33,666,274 |
| 75 | 114 | 0 | 0 | 0 | 34,674,248 | 34,674,248 | 35,864,429 |
| 76 | 115 | 0 | 0 | 0 | 36,948,461 | 36,948,461 | 38,203,555 |
| 77 | 116 | 0 | 0 | 0 | 39,368,832 | 39,368,832 | 40,692,411 |
| 78 | 117 | 0 | 0 | 0 | 41,921,262 | 41,921,262 | 43,316,860 |
| 79 | 118 | 0 | 0 | 0 | 44,636,052 | 44,636,052 | 46,107,616 |
| 80 | 119 | 0 | 0 | 0 | 47,523,223 | 47,523,223 | 49,074,919 |
| Total | | 1,803,002 | 10,950,000 | -9,146,998 | | | |
| 81 | 120 | 0 | 0 | 0 | 50,593,404 | 50,593,404 | 52,229,625 |
| Total | | 1,803,002 | 10,950,000 | -9,146,998 | | | |

The Allocations and Hypothetical Interest Rates below are for policy year 1. For any illustrated changes to the Allocations and Hypothetical Interest Rates see the Narrative Summary.

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*A zero in the Premium Outlay column does not mean the policy is paid up. Charges will continue to be deducted from the Accumulated Value as long as the policy remains in-force. The actual premium amounts and number of years of premium payments that are needed to maintain the illustrated non-guaranteed policy benefits will depend on the policy's non-guaranteed elements and on your actual use of the policy's options.

Non-Guaranteed Policy Values: Ledger

| | Allocation | Hypothetical Interest Rate |
|--------------------------------------|------------|----------------------------|
| Fixed Account | 0.00% | N/A |
| 1-Year Indexed Account | 100.00% | 6.00% |
| 1-Year International Indexed Account | 0.00% | N/A |
| 1-Year High Par Indexed Account | 0.00% | N/A |
| 1-Year No Cap Indexed Account | 0.00% | N/A |
| 1-Year High Cap Indexed Account | 0.00% | N/A |
| 2-Year Indexed Account | 0.00% | N/A |
| High Par 5-Year Indexed Account | 0.00% | N/A |

¹The Non-Guaranteed values shown reflect the illustrated interest rate assumptions that you have requested. These values will reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

Any policy withdrawals, loans and loan interest will reduce policy values and may reduce benefits.

The values shown may reflect the non-guaranteed Fixed Account additional credit and/or the non-guaranteed Indexed Account Performance Factor. Refer to the Narrative Summary for information on these non-guaranteed features.

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Policy Charges

All assumptions are based on non-guaranteed values unless otherwise stated.

| Year | Age | What You Pay | What We Deduct | | | | | What Is Added | What You Take Out | | What Your Policy Values Are ¹ | | | | Policy Charges As A Percentage of Gross Accumulated Value ² |
|--------------|-----|------------------|------------------------------|----------------------------------|--------------------------------|----------------------------------|-----------------|------------------------------|---------------------------------|-------------------|--|-------------------------|--------------------------|---------------------------------|--|
| | | Premium Outlay* | Non-Guaranteed Premium Loads | Administrative and Rider Charges | Non-Guaranteed Coverage Charge | Non-Guaranteed Cost of Insurance | Total Charges | Interest Credit ¹ | Net Annual Policy Disbursements | Loan Interest Due | Net Accumulated Value | Policy Surrender Charge | Net Cash Surrender Value | Net Alternate Accumulated Value | |
| 1 | 40 | 1,803,002 | -71,219 | -1,154 | -73,986 | -3,315 | -149,674 | 101,357 | 0 | 0 | 1,754,685 | 95,133 | 1,659,552 | 1,687,117 | -8.53% |
| 2 | 41 | 0 | 0 | -1,151 | -62,888 | -3,924 | -67,963 | 103,073 | 0 | 0 | 1,789,795 | 47,572 | 1,742,223 | 1,652,162 | -3.80% |
| 3 | 42 | 0 | 0 | -1,147 | -72,893 | -5,106 | -79,146 | 135,187 | 0 | 0 | 1,845,836 | 42,813 | 1,803,023 | 1,626,535 | -4.29% |
| 4 | 43 | 0 | 0 | -1,140 | -72,521 | -5,465 | -79,125 | 148,390 | 0 | 0 | 1,915,101 | 38,053 | 1,877,047 | 1,607,519 | -4.13% |
| 5 | 44 | 0 | 0 | -1,131 | -72,160 | -5,739 | -79,030 | 162,972 | 0 | 0 | 1,999,042 | 33,294 | 1,965,748 | 1,595,333 | -3.95% |
| 6 | 45 | 0 | 0 | -1,121 | -71,974 | -5,750 | -78,845 | 173,036 | 0 | 0 | 2,093,234 | 28,545 | 2,064,689 | 1,586,642 | -3.77% |
| 7 | 46 | 0 | 0 | -1,109 | -71,800 | -5,743 | -78,652 | 183,897 | 0 | 0 | 2,198,478 | 23,786 | 2,174,693 | 1,581,535 | -3.58% |
| 8 | 47 | 0 | 0 | -1,096 | -71,614 | -5,775 | -78,484 | 195,237 | 0 | 0 | 2,315,231 | 19,027 | 2,296,204 | 1,580,047 | -3.39% |
| 9 | 48 | 0 | 0 | -1,081 | -71,427 | -5,643 | -78,152 | 207,423 | 0 | 0 | 2,444,502 | 9,518 | 2,434,983 | 1,582,416 | -3.20% |
| 10 | 49 | 0 | 0 | -1,065 | -71,427 | -5,504 | -77,996 | 215,008 | 0 | 0 | 2,581,514 | 0 | 2,581,514 | 1,584,989 | -3.02% |
| Total | | 1,803,002 | -71,219 | -11,195 | -712,691 | -51,964 | -847,068 | 1,625,579 | | | | | | | |

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Policy Charges

All assumptions are based on non-guaranteed values unless otherwise stated.

| | | What You Pay | What We Deduct | | | | | What Is Added | What You Take Out | | What Your Policy Values Are ¹ | | | | |
|-------|-----|-----------------|------------------------------|----------------------------------|--------------------------------|----------------------------------|---------------|------------------------------|---------------------------------|-------------------|--|-------------------------|--------------------------|---------------------------------|--|
| Year | Age | Premium Outlay* | Non-Guaranteed Premium Loads | Administrative and Rider Charges | Non-Guaranteed Coverage Charge | Non-Guaranteed Cost of Insurance | Total Charges | Interest Credit ¹ | Net Annual Policy Disbursements | Loan Interest Due | Net Accumulated Value | Policy Surrender Charge | Net Cash Surrender Value | Net Alternate Accumulated Value | Policy Charges As A Percentage of Gross Accumulated Value ² |
| 11 | 50 | 0 | 0 | -1,048 | -70,334 | -5,324 | -76,706 | 254,097 | 0 | 0 | 2,758,904 | 0 | 2,758,904 | 1,610,249 | -2.78% |
| 12 | 51 | 0 | 0 | -1,026 | -70,334 | -5,138 | -76,498 | 264,694 | 0 | 0 | 2,947,101 | 0 | 2,947,101 | 1,636,224 | -2.60% |
| 13 | 52 | 0 | 0 | -355 | -70,334 | -1,377 | -72,066 | 276,111 | 0 | 0 | 3,151,145 | 0 | 3,151,145 | 1,667,198 | -2.29% |
| 14 | 53 | 0 | 0 | -339 | -70,334 | -1,545 | -72,218 | 288,371 | 0 | 0 | 3,367,298 | 0 | 3,367,298 | 1,698,638 | -2.14% |
| 15 | 54 | 0 | 0 | -327 | -70,334 | -1,730 | -72,391 | 301,378 | 0 | 0 | 3,596,285 | 0 | 3,596,285 | 1,730,532 | -2.01% |
| 16 | 55 | 0 | 0 | -312 | -70,334 | -2,068 | -72,714 | 315,227 | 0 | 0 | 3,838,798 | 0 | 3,838,798 | 1,762,738 | -1.89% |
| 17 | 56 | 0 | 0 | -308 | -70,334 | -2,361 | -73,004 | 330,033 | 0 | 0 | 4,095,828 | 0 | 4,095,828 | 1,795,295 | -1.78% |
| 18 | 57 | 0 | 0 | -302 | -70,334 | -2,661 | -73,298 | 345,226 | 0 | 0 | 4,367,756 | 0 | 4,367,756 | 1,828,206 | -1.68% |
| 19 | 58 | 0 | 0 | -295 | -70,334 | -2,970 | -73,600 | 361,517 | 0 | 0 | 4,655,674 | 0 | 4,655,674 | 1,861,470 | -1.58% |
| 20 | 59 | 0 | 0 | -285 | -70,334 | -3,292 | -73,911 | 379,067 | 0 | 0 | 4,960,830 | 0 | 4,960,830 | 1,895,084 | -1.49% |
| Total | | 1,803,002 | -71,219 | -15,791 | -1,416,034 | -80,429 | -1,583,473 | 4,741,301 | | | | | | | |

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Policy Charges

All assumptions are based on non-guaranteed values unless otherwise stated.

| Year | Age | What You Pay | What We Deduct | | | | | What Is Added | What You Take Out | | What Your Policy Values Are ¹ | | | | Policy Charges As A Percentage of Gross Accumulated Value ² |
|-------|-----|-----------------|------------------------------|----------------------------------|--------------------------------|----------------------------------|---------------|------------------------------|---------------------------------|-------------------|--|-------------------------|--------------------------|---------------------------------|--|
| | | Premium Outlay* | Non-Guaranteed Premium Loads | Administrative and Rider Charges | Non-Guaranteed Coverage Charge | Non-Guaranteed Cost of Insurance | Total Charges | Interest Credit ¹ | Net Annual Policy Disbursements | Loan Interest Due | Net Accumulated Value | Policy Surrender Charge | Net Cash Surrender Value | Net Alternate Accumulated Value | |
| 21 | 60 | 0 | 0 | -274 | -70,334 | -3,547 | -74,155 | 397,206 | -365,000 | -9,885 | 4,908,996 | 0 | 4,908,996 | 1,554,239 | -1.40% |
| 22 | 61 | 0 | 0 | -273 | -70,334 | -4,044 | -74,651 | 416,816 | -365,000 | -28,630 | 4,857,531 | 0 | 4,857,531 | 1,194,829 | -1.33% |
| 23 | 62 | 0 | 0 | -271 | -70,334 | -4,576 | -75,181 | 437,126 | -365,000 | -48,311 | 4,806,165 | 0 | 4,806,165 | 815,886 | -1.26% |
| 24 | 63 | 0 | 0 | -267 | -70,334 | -5,120 | -75,722 | 459,164 | -365,000 | -68,977 | 4,755,631 | 0 | 4,755,631 | 416,418 | -1.19% |
| 25 | 64 | 0 | 0 | -263 | -70,334 | -5,626 | -76,223 | 482,079 | -365,000 | -90,676 | 4,705,812 | 0 | 4,705,812 | 0 | -1.12% |
| 26 | 65 | 0 | 0 | -257 | -70,334 | -6,274 | -76,865 | 507,045 | -365,000 | -113,459 | 4,657,532 | 0 | 4,657,532 | 0 | -1.07% |
| 27 | 66 | 0 | 0 | -259 | -70,334 | -7,214 | -77,807 | 531,840 | -365,000 | -137,382 | 4,609,183 | 0 | 4,609,183 | 0 | -1.02% |
| 28 | 67 | 0 | 0 | -260 | -70,334 | -8,264 | -78,858 | 560,150 | -365,000 | -162,501 | 4,562,973 | 0 | 4,562,973 | 0 | -0.97% |
| 29 | 68 | 0 | 0 | -261 | -70,334 | -9,423 | -80,018 | 588,374 | -365,000 | -188,876 | 4,517,452 | 0 | 4,517,452 | 0 | -0.92% |
| 30 | 69 | 0 | 0 | -260 | -70,334 | -10,692 | -81,287 | 619,206 | -365,000 | -216,570 | 4,473,801 | 0 | 4,473,801 | 0 | -0.88% |
| Total | | 1,803,002 | -71,219 | -18,436 | -2,119,377 | -145,209 | -2,354,240 | 9,740,307 | | | | | | | |

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Policy Charges

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| | | What You Pay | What We Deduct | | | | | What Is Added | What You Take Out | | What Your Policy Values Are ¹ | | | | |
|--------------|-----|------------------|------------------------------|----------------------------------|--------------------------------|----------------------------------|-------------------|------------------------------|---------------------------------|-------------------|--|-------------------------|--------------------------|---------------------------------|--|
| Year | Age | Premium Outlay* | Non-Guaranteed Premium Loads | Administrative and Rider Charges | Non-Guaranteed Coverage Charge | Non-Guaranteed Cost of Insurance | Total Charges | Interest Credit ¹ | Net Annual Policy Disbursements | Loan Interest Due | Net Accumulated Value | Policy Surrender Charge | Net Cash Surrender Value | Net Alternate Accumulated Value | Policy Charges As A Percentage of Gross Accumulated Value ² |
| 31 | 70 | 0 | 0 | -260 | -70,334 | -11,754 | -82,348 | 651,444 | -365,000 | -245,649 | 4,432,248 | 0 | 4,432,248 | 0 | -0.84% |
| 32 | 71 | 0 | 0 | -246 | -52,748 | -11,919 | -64,913 | 660,217 | -365,000 | -276,181 | 4,386,371 | 0 | 4,386,371 | 0 | -0.63% |
| 33 | 72 | 0 | 0 | -230 | -52,748 | -11,744 | -64,722 | 695,211 | -365,000 | -308,240 | 4,343,619 | 0 | 4,343,619 | 0 | -0.59% |
| 34 | 73 | 0 | 0 | -211 | -52,748 | -11,166 | -64,124 | 733,863 | -365,000 | -341,902 | 4,306,455 | 0 | 4,306,455 | 0 | -0.55% |
| 35 | 74 | 0 | 0 | -189 | -52,748 | -10,074 | -63,011 | 774,713 | -365,000 | -377,247 | 4,275,911 | 0 | 4,275,911 | 0 | -0.51% |
| 36 | 75 | 0 | 0 | -165 | -52,748 | -8,319 | -61,231 | 817,901 | -365,000 | -414,360 | 4,253,220 | 0 | 4,253,220 | 0 | -0.47% |
| 37 | 76 | 0 | 0 | -169 | -52,748 | -9,718 | -62,635 | 863,432 | -365,000 | -453,328 | 4,235,690 | 0 | 4,235,690 | 0 | -0.45% |
| 38 | 77 | 0 | 0 | -174 | -52,748 | -11,360 | -64,281 | 911,328 | -365,000 | -494,244 | 4,223,492 | 0 | 4,223,492 | 0 | -0.44% |
| 39 | 78 | 0 | 0 | -179 | -52,748 | -13,273 | -66,200 | 961,662 | -365,000 | -537,206 | 4,216,748 | 0 | 4,216,748 | 0 | -0.42% |
| 40 | 79 | 0 | 0 | -184 | -52,748 | -15,409 | -68,341 | 1,014,546 | -365,000 | -582,317 | 4,215,635 | 0 | 4,215,635 | 0 | -0.41% |
| Total | | 1,803,002 | -71,219 | -20,443 | -2,664,440 | -259,945 | -3,016,046 | 17,824,623 | | | | | | | |

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Policy Charges

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| Year | Age | What You Pay | What We Deduct | | | | | What Is Added | What You Take Out | | What Your Policy Values Are ¹ | | | | Policy Charges As A Percentage of Gross Accumulated Value ² |
|--------------|-----|------------------|------------------------------|----------------------------------|--------------------------------|----------------------------------|-------------------|------------------------------|---------------------------------|-------------------|--|-------------------------|--------------------------|---------------------------------|--|
| | | Premium Outlay* | Non-Guaranteed Premium Loads | Administrative and Rider Charges | Non-Guaranteed Coverage Charge | Non-Guaranteed Cost of Insurance | Total Charges | Interest Credit ¹ | Net Annual Policy Disbursements | Loan Interest Due | Net Accumulated Value | Policy Surrender Charge | Net Cash Surrender Value | Net Alternate Accumulated Value | |
| 41 | 80 | 0 | 0 | -190 | -52,748 | -17,963 | -70,901 | 1,070,063 | -365,000 | -629,683 | 4,220,115 | 0 | 4,220,115 | 0 | -0.40% |
| 42 | 81 | 0 | 0 | -196 | -52,748 | -20,961 | -73,904 | 1,131,381 | -365,000 | -679,417 | 4,233,174 | 0 | 4,233,174 | 0 | -0.40% |
| 43 | 82 | 0 | 0 | -203 | -52,748 | -24,457 | -77,407 | 1,196,075 | -365,000 | -731,638 | 4,255,205 | 0 | 4,255,205 | 0 | -0.39% |
| 44 | 83 | 0 | 0 | -209 | -52,748 | -28,550 | -81,507 | 1,260,838 | -365,000 | -786,469 | 4,283,066 | 0 | 4,283,066 | 0 | -0.39% |
| 45 | 84 | 0 | 0 | -216 | -52,748 | -33,355 | -86,319 | 1,332,309 | -365,000 | -844,043 | 4,320,013 | 0 | 4,320,013 | 0 | -0.39% |
| 46 | 85 | 0 | 0 | -224 | -52,748 | -39,082 | -92,053 | 1,407,583 | -365,000 | -904,495 | 4,366,048 | 0 | 4,366,048 | 0 | -0.39% |
| 47 | 86 | 0 | 0 | -232 | -52,748 | -45,773 | -98,753 | 1,486,778 | -365,000 | -967,970 | 4,421,103 | 0 | 4,421,103 | 0 | -0.40% |
| 48 | 87 | 0 | 0 | -240 | -52,748 | -53,702 | -106,690 | 1,570,048 | -365,000 | -1,034,618 | 4,484,842 | 0 | 4,484,842 | 0 | -0.40% |
| 49 | 88 | 0 | 0 | -249 | -52,748 | -63,085 | -116,082 | 1,657,543 | -365,000 | -1,104,599 | 4,556,704 | 0 | 4,556,704 | 0 | -0.42% |
| 50 | 89 | 0 | 0 | -258 | -52,748 | -74,089 | -127,095 | 1,749,360 | -365,000 | -1,178,079 | 4,635,891 | 0 | 4,635,891 | 0 | -0.43% |
| Total | | 1,803,002 | -71,219 | -22,661 | -3,191,917 | -660,962 | -3,946,758 | 31,686,602 | | | | | | | |

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Policy Charges

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| Year | Age | What You Pay | What We Deduct | | | | | What Is Added | What You Take Out | | What Your Policy Values Are ¹ | | | | Policy Charges As A Percentage of Gross Accumulated Value ² |
|--------------|-----|------------------|------------------------------|----------------------------------|--------------------------------|----------------------------------|-------------------|------------------------------|---------------------------------|-------------------|--|-------------------------|--------------------------|---------------------------------|--|
| | | Premium Outlay* | Non-Guaranteed Premium Loads | Administrative and Rider Charges | Non-Guaranteed Coverage Charge | Non-Guaranteed Cost of Insurance | Total Charges | Interest Credit ¹ | Net Annual Policy Disbursements | Loan Interest Due | Net Accumulated Value | Policy Surrender Charge | Net Cash Surrender Value | Net Alternate Accumulated Value | |
| 51 | 90 | 0 | 0 | -268 | -52,748 | -89,119 | -142,134 | 1,845,562 | 0 | -1,245,348 | 5,093,971 | 0 | 5,093,971 | 0 | -0.45% |
| 52 | 91 | 0 | 0 | -239 | -52,748 | -86,200 | -139,188 | 1,946,894 | 0 | -1,307,615 | 5,594,062 | 0 | 5,594,062 | 0 | -0.42% |
| 53 | 92 | 0 | 0 | -207 | -52,748 | -77,598 | -130,552 | 2,054,295 | 0 | -1,372,996 | 6,144,808 | 0 | 6,144,808 | 0 | -0.37% |
| 54 | 93 | 0 | 0 | -170 | -52,748 | -60,954 | -113,872 | 2,174,675 | 0 | -1,441,646 | 6,763,966 | 0 | 6,763,966 | 0 | -0.31% |
| 55 | 94 | 0 | 0 | -129 | -52,748 | -33,416 | -86,292 | 2,297,456 | 0 | -1,513,728 | 7,461,401 | 0 | 7,461,401 | 0 | -0.22% |
| 56 | 95 | 0 | 0 | -131 | -52,748 | -39,526 | -92,405 | 2,427,711 | 0 | -1,589,414 | 8,207,293 | 0 | 8,207,293 | 0 | -0.22% |
| 57 | 96 | 0 | 0 | -133 | -52,748 | -47,064 | -99,945 | 2,572,089 | 0 | -1,668,885 | 9,010,552 | 0 | 9,010,552 | 0 | -0.23% |
| 58 | 97 | 0 | 0 | -136 | -52,748 | -55,543 | -108,427 | 2,717,174 | 0 | -1,752,329 | 9,866,969 | 0 | 9,866,969 | 0 | -0.23% |
| 59 | 98 | 0 | 0 | -139 | -52,748 | -66,284 | -119,170 | 2,869,728 | 0 | -1,839,946 | 10,777,581 | 0 | 10,777,581 | 0 | -0.24% |
| 60 | 99 | 0 | 0 | -142 | -52,748 | -79,435 | -132,324 | 3,038,669 | 0 | -1,931,943 | 11,751,983 | 0 | 11,751,983 | 0 | -0.25% |
| Total | | 1,803,002 | -71,219 | -24,355 | -3,719,393 | -1,296,101 | -5,111,068 | 55,630,854 | | | | | | | |

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Policy Charges

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| | | What You Pay | What We Deduct | | | | | What Is Added | What You Take Out | | What Your Policy Values Are ¹ | | | | |
|--------------|-----|------------------|------------------------------|----------------------------------|--------------------------------|----------------------------------|-------------------|------------------------------|---------------------------------|-------------------|--|-------------------------|--------------------------|---------------------------------|--|
| Year | Age | Premium Outlay* | Non-Guaranteed Premium Loads | Administrative and Rider Charges | Non-Guaranteed Coverage Charge | Non-Guaranteed Cost of Insurance | Total Charges | Interest Credit ¹ | Net Annual Policy Disbursements | Loan Interest Due | Net Accumulated Value | Policy Surrender Charge | Net Cash Surrender Value | Net Alternate Accumulated Value | Policy Charges As A Percentage of Gross Accumulated Value ² |
| 61 | 100 | 0 | 0 | -145 | -52,748 | -92,709 | -145,601 | 3,208,016 | 0 | -2,028,540 | 12,785,858 | 0 | 12,785,858 | 0 | -0.26% |
| 62 | 101 | 0 | 0 | -148 | -52,748 | -109,967 | -162,863 | 3,395,488 | 0 | -2,129,967 | 13,888,515 | 0 | 13,888,515 | 0 | -0.28% |
| 63 | 102 | 0 | 0 | -151 | -52,748 | -131,152 | -184,051 | 3,593,281 | 0 | -2,236,466 | 15,061,279 | 0 | 15,061,279 | 0 | -0.30% |
| 64 | 103 | 0 | 0 | -155 | -52,748 | -156,685 | -209,587 | 3,790,926 | 0 | -2,348,289 | 16,294,329 | 0 | 16,294,329 | 0 | -0.32% |
| 65 | 104 | 0 | 0 | -158 | -52,748 | -187,533 | -240,439 | 4,009,185 | 0 | -2,465,703 | 17,597,371 | 0 | 17,597,371 | 0 | -0.35% |
| 66 | 105 | 0 | 0 | -162 | -52,748 | -222,795 | -275,705 | 4,226,602 | 0 | -2,588,989 | 18,959,280 | 0 | 18,959,280 | 0 | -0.38% |
| 67 | 106 | 0 | 0 | -166 | -52,748 | -262,310 | -315,224 | 4,466,510 | 0 | -2,718,438 | 20,392,128 | 0 | 20,392,128 | 0 | -0.41% |
| 68 | 107 | 0 | 0 | -171 | -52,748 | -305,967 | -358,886 | 4,718,516 | 0 | -2,854,360 | 21,897,399 | 0 | 21,897,399 | 0 | -0.44% |
| 69 | 108 | 0 | 0 | -175 | -52,748 | -353,385 | -406,308 | 4,968,769 | 0 | -2,997,078 | 23,462,782 | 0 | 23,462,782 | 0 | -0.47% |
| 70 | 109 | 0 | 0 | -180 | -52,748 | -402,815 | -455,742 | 5,244,889 | 0 | -3,146,932 | 25,104,997 | 0 | 25,104,997 | 0 | -0.50% |
| Total | | 1,803,002 | -71,219 | -25,965 | -4,246,870 | -3,521,419 | -7,865,473 | 97,253,035 | | | | | | | |

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Policy Charges

All assumptions are based on non-guaranteed values unless otherwise stated.

| Year | Age | What You Pay | What We Deduct | | | | What Is Added | What You Take Out | | What Your Policy Values Are ¹ | | | | Policy Charges As A Percentage of Gross Accumulated Value ² | |
|--------------|-----|------------------|------------------------------|----------------------------------|--------------------------------|----------------------------------|--------------------|------------------------------|---------------------------------|--|-----------------------|-------------------------|--------------------------|--|---------------------------------|
| | | Premium Outlay* | Non-Guaranteed Premium Loads | Administrative and Rider Charges | Non-Guaranteed Coverage Charge | Non-Guaranteed Cost of Insurance | Total Charges | Interest Credit ¹ | Net Annual Policy Disbursements | Loan Interest Due | Net Accumulated Value | Policy Surrender Charge | Net Cash Surrender Value | | Net Alternate Accumulated Value |
| 71 | 110 | 0 | 0 | -185 | -52,748 | -451,091 | -504,024 | 5,534,848 | 0 | -3,304,278 | 26,831,542 | 0 | 26,831,542 | 0 | -0.52% |
| 72 | 111 | 0 | 0 | -190 | -52,748 | -503,215 | -556,153 | 5,839,392 | 0 | -3,469,492 | 28,645,290 | 0 | 28,645,290 | 0 | -0.55% |
| 73 | 112 | 0 | 0 | -196 | -52,748 | -560,284 | -613,228 | 6,141,414 | 0 | -3,642,967 | 30,530,509 | 0 | 30,530,509 | 0 | -0.57% |
| 74 | 113 | 0 | 0 | -201 | -52,748 | -590,806 | -643,755 | 6,475,985 | 0 | -3,825,115 | 32,537,624 | 0 | 32,537,624 | 0 | -0.57% |
| 75 | 114 | 0 | 0 | -207 | -52,748 | -623,007 | -675,962 | 6,828,957 | 0 | -4,016,371 | 34,674,248 | 0 | 34,674,248 | 0 | -0.57% |
| 76 | 115 | 0 | 0 | -214 | -52,748 | -656,978 | -709,939 | 7,201,341 | 0 | -4,217,190 | 36,948,461 | 0 | 36,948,461 | 0 | -0.57% |
| 77 | 116 | 0 | 0 | -221 | -52,748 | -692,818 | -745,786 | 7,594,207 | 0 | -4,428,049 | 39,368,832 | 0 | 39,368,832 | 0 | -0.56% |
| 78 | 117 | 0 | 0 | -228 | -52,748 | -730,629 | -783,604 | 7,985,485 | 0 | -4,649,451 | 41,921,262 | 0 | 41,921,262 | 0 | -0.56% |
| 79 | 118 | 0 | 0 | -235 | -52,748 | -770,391 | -823,374 | 8,420,087 | 0 | -4,881,924 | 44,636,052 | 0 | 44,636,052 | 0 | -0.56% |
| 80 | 119 | 0 | 0 | -243 | -52,748 | -812,333 | -865,324 | 8,878,515 | 0 | -5,126,020 | 47,523,223 | 0 | 47,523,223 | 0 | -0.56% |
| Total | | 1,803,002 | -71,219 | -28,086 | -4,774,347 | -9,912,971 | -14,786,622 | 168,153K | | | | | | | |
| 81 | 120 | 0 | 0 | -251 | -52,748 | -856,575 | -909,574 | 9,362,076 | 0 | 0 | 50,593,404 | 0 | 50,593,404 | 0 | -0.56% |
| Total | | 1,803,002 | -71,219 | -28,337 | -4,827,094 | -10,769,546 | -15,696,196 | 177,515K | | | | | | | |

¹The Non-Guaranteed values shown reflect the illustrated interest rate assumptions that you have requested. These values will reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

²This column represents the Total Charges divided by the policy's end of year gross Accumulated Value. If a loan is illustrated, the Total Insurance Charges do not include any annual loan interest due.

Any Withdrawals, Policy Loans, and Loan Interest will reduce policy values and may reduce benefits.

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Policy Loan Details

| Year | Your Age | Premium Outlay* (1) | Standard Policy Loan (2) | Standard Policy Debt (3) | Alternate Policy Loan (4) | Alternate Policy Debt (5) | Total Policy Loan (6) | Total Policy Debt (7) | Annual Loan Interest Charged (8) | Non-Guaranteed Values (End Of Year) @ 6.00% ¹ | | | | |
|--------------|----------|---------------------|--------------------------|--------------------------|---------------------------|---------------------------|-----------------------|-----------------------|----------------------------------|--|--|----------------------------|-------------------------------|--------------------|
| | | | | | | | | | | Net Outlay (9) | Net Accumulated Value Excluding Last Indexed Credit (10) | Net Accumulated Value (11) | Net Cash Surrender Value (12) | Death Benefit (13) |
| 1 | 40 | 1,803,002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,803,002 | 1,653,328 | 1,754,685 | 1,659,552 | 10,212,915 |
| 2 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,686,722 | 1,789,795 | 1,742,223 | 10,212,915 |
| 3 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,710,649 | 1,845,836 | 1,803,023 | 10,212,915 |
| 4 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,766,711 | 1,915,101 | 1,877,047 | 10,212,915 |
| 5 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,836,070 | 1,999,042 | 1,965,748 | 10,212,915 |
| 6 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,920,197 | 2,093,234 | 2,064,689 | 10,212,915 |
| 7 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,014,582 | 2,198,478 | 2,174,693 | 10,212,915 |
| 8 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,119,994 | 2,315,231 | 2,296,204 | 10,212,915 |
| 9 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,237,079 | 2,444,502 | 2,434,983 | 10,212,915 |
| 10 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,366,505 | 2,581,514 | 2,581,514 | 10,212,915 |
| Total | | 1,803,002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,803,002 | | | | |
| 11 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,504,808 | 2,758,904 | 2,758,904 | 10,212,915 |
| 12 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,682,406 | 2,947,101 | 2,947,101 | 10,212,915 |
| 13 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,875,034 | 3,151,145 | 3,151,145 | 5,388,458 |
| 14 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,078,927 | 3,367,298 | 3,367,298 | 5,522,368 |
| 15 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,294,907 | 3,596,285 | 3,596,285 | 5,646,168 |
| 16 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,523,571 | 3,838,798 | 3,838,798 | 5,758,197 |
| 17 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,765,795 | 4,095,828 | 4,095,828 | 5,979,909 |
| 18 | 57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,022,530 | 4,367,756 | 4,367,756 | 6,202,214 |
| 19 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,294,157 | 4,655,674 | 4,655,674 | 6,424,830 |
| 20 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,581,762 | 4,960,830 | 4,960,830 | 6,647,512 |
| Total | | 1,803,002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,803,002 | | | | |
| 21 | 60 | 0 | 0 | 0 | 365,000 | 374,885 | 365,000 | 374,885 | 9,885 | -365,000 | 4,511,790 | 4,908,996 | 4,908,996 | 6,494,160 |
| 22 | 61 | 0 | 0 | 0 | 365,000 | 768,515 | 365,000 | 768,515 | 28,630 | -365,000 | 4,440,715 | 4,857,531 | 4,857,531 | 6,432,824 |
| 23 | 62 | 0 | 0 | 0 | 365,000 | 1,181,826 | 365,000 | 1,181,826 | 48,311 | -365,000 | 4,369,039 | 4,806,165 | 4,806,165 | 6,363,043 |
| 24 | 63 | 0 | 0 | 0 | 365,000 | 1,615,803 | 365,000 | 1,615,803 | 68,977 | -365,000 | 4,296,467 | 4,755,631 | 4,755,631 | 6,284,775 |
| 25 | 64 | 0 | 0 | 0 | 365,000 | 2,071,479 | 365,000 | 2,071,479 | 90,676 | -365,000 | 4,223,733 | 4,705,812 | 4,705,812 | 6,196,816 |
| 26 | 65 | 0 | 0 | 0 | 365,000 | 2,549,938 | 365,000 | 2,549,938 | 113,459 | -365,000 | 4,150,488 | 4,657,532 | 4,657,532 | 6,099,026 |
| 27 | 66 | 0 | 0 | 0 | 365,000 | 3,052,320 | 365,000 | 3,052,320 | 137,382 | -365,000 | 4,077,343 | 4,609,183 | 4,609,183 | 6,064,868 |
| 28 | 67 | 0 | 0 | 0 | 365,000 | 3,579,822 | 365,000 | 3,579,822 | 162,501 | -365,000 | 4,002,823 | 4,562,973 | 4,562,973 | 6,028,676 |
| 29 | 68 | 0 | 0 | 0 | 365,000 | 4,133,698 | 365,000 | 4,133,698 | 188,876 | -365,000 | 3,929,078 | 4,517,452 | 4,517,452 | 5,988,148 |
| 30 | 69 | 0 | 0 | 0 | 365,000 | 4,715,268 | 365,000 | 4,715,268 | 216,570 | -365,000 | 3,854,595 | 4,473,801 | 4,473,801 | 5,944,052 |
| Total | | 1,803,002 | 0 | 0 | 3,650,000 | 3,650,000 | 3,650,000 | 3,650,000 | 216,570 | -1,846,998 | | | | |

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Policy Loan Details

| Year | Your Age | Premium Outlay* (1) | Standard Policy Loan (2) | Standard Policy Debt (3) | Alternate Policy Loan (4) | Alternate Policy Debt (5) | Total Policy Loan (6) | Total Policy Debt (7) | Annual Loan Interest Charged (8) | Net Outlay (9) | Non-Guaranteed Values (End Of Year) @ 6.00% ¹ | | | |
|--------------|----------|---------------------|--------------------------|--------------------------|---------------------------|---------------------------|-----------------------|-----------------------|----------------------------------|-------------------|--|----------------------------|-------------------------------|--------------------|
| | | | | | | | | | | | Net Accumulated Value Excluding Last Indexed Credit (10) | Net Accumulated Value (11) | Net Cash Surrender Value (12) | Death Benefit (13) |
| 31 | 70 | 0 | 0 | 0 | 365,000 | 5,325,917 | 365,000 | 5,325,917 | 245,649 | -365,000 | 3,780,804 | 4,432,248 | 4,432,248 | 5,895,973 |
| 32 | 71 | 0 | 0 | 0 | 365,000 | 5,967,099 | 365,000 | 5,967,099 | 276,181 | -365,000 | 3,726,154 | 4,386,371 | 4,386,371 | 5,732,322 |
| 33 | 72 | 0 | 0 | 0 | 365,000 | 6,640,339 | 365,000 | 6,640,339 | 308,240 | -365,000 | 3,648,409 | 4,343,619 | 4,343,619 | 5,551,855 |
| 34 | 73 | 0 | 0 | 0 | 365,000 | 7,347,241 | 365,000 | 7,347,241 | 341,902 | -365,000 | 3,572,593 | 4,306,455 | 4,306,455 | 5,355,288 |
| 35 | 74 | 0 | 0 | 0 | 365,000 | 8,089,489 | 365,000 | 8,089,489 | 377,247 | -365,000 | 3,501,197 | 4,275,911 | 4,275,911 | 5,141,488 |
| 36 | 75 | 0 | 0 | 0 | 365,000 | 8,868,849 | 365,000 | 8,868,849 | 414,360 | -365,000 | 3,435,320 | 4,253,220 | 4,253,220 | 4,909,324 |
| 37 | 76 | 0 | 0 | 0 | 365,000 | 9,687,177 | 365,000 | 9,687,177 | 453,328 | -365,000 | 3,372,257 | 4,235,690 | 4,235,690 | 4,931,833 |
| 38 | 77 | 0 | 0 | 0 | 365,000 | 10,546,421 | 365,000 | 10,546,421 | 494,244 | -365,000 | 3,312,164 | 4,223,492 | 4,223,492 | 4,961,988 |
| 39 | 78 | 0 | 0 | 0 | 365,000 | 11,448,627 | 365,000 | 11,448,627 | 537,206 | -365,000 | 3,255,086 | 4,216,748 | 4,216,748 | 5,000,016 |
| 40 | 79 | 0 | 0 | 0 | 365,000 | 12,395,944 | 365,000 | 12,395,944 | 582,317 | -365,000 | 3,201,090 | 4,215,635 | 4,215,635 | 5,046,214 |
| Total | | 1,803,002 | 0 | 0 | 7,300,000 | 7,300,000 | 7,300,000 | 7,300,000 | | -5,496,998 | | | | |
| 41 | 80 | 0 | 0 | 0 | 365,000 | 13,390,627 | 365,000 | 13,390,627 | 629,683 | -365,000 | 3,150,051 | 4,220,115 | 4,220,115 | 5,100,652 |
| 42 | 81 | 0 | 0 | 0 | 365,000 | 14,435,043 | 365,000 | 14,435,043 | 679,417 | -365,000 | 3,101,793 | 4,233,174 | 4,233,174 | 5,166,585 |
| 43 | 82 | 0 | 0 | 0 | 365,000 | 15,531,681 | 365,000 | 15,531,681 | 731,638 | -365,000 | 3,059,130 | 4,255,205 | 4,255,205 | 5,244,549 |
| 44 | 83 | 0 | 0 | 0 | 365,000 | 16,683,150 | 365,000 | 16,683,150 | 786,469 | -365,000 | 3,022,228 | 4,283,066 | 4,283,066 | 5,331,377 |
| 45 | 84 | 0 | 0 | 0 | 365,000 | 17,892,193 | 365,000 | 17,892,193 | 844,043 | -365,000 | 2,987,704 | 4,320,013 | 4,320,013 | 5,430,623 |
| 46 | 85 | 0 | 0 | 0 | 365,000 | 19,161,688 | 365,000 | 19,161,688 | 904,495 | -365,000 | 2,958,465 | 4,366,048 | 4,366,048 | 5,542,434 |
| 47 | 86 | 0 | 0 | 0 | 365,000 | 20,494,658 | 365,000 | 20,494,658 | 967,970 | -365,000 | 2,934,325 | 4,421,103 | 4,421,103 | 5,666,891 |
| 48 | 87 | 0 | 0 | 0 | 365,000 | 21,894,277 | 365,000 | 21,894,277 | 1,034,618 | -365,000 | 2,914,794 | 4,484,842 | 4,484,842 | 5,803,798 |
| 49 | 88 | 0 | 0 | 0 | 365,000 | 23,363,876 | 365,000 | 23,363,876 | 1,104,599 | -365,000 | 2,899,161 | 4,556,704 | 4,556,704 | 5,952,733 |
| 50 | 89 | 0 | 0 | 0 | 365,000 | 24,906,955 | 365,000 | 24,906,955 | 1,178,079 | -365,000 | 2,886,530 | 4,635,891 | 4,635,891 | 6,113,033 |
| Total | | 1,803,002 | 0 | 0 | 10,950, | 10,950, | 10,950, | 10,950, | | -9,146,998 | | | | |
| 51 | 90 | 0 | 0 | 0 | 0 | 26,152,303 | 0 | 26,152,303 | 1,245,348 | 0 | 3,248,408 | 5,093,971 | 5,093,971 | 6,656,284 |
| 52 | 91 | 0 | 0 | 0 | 0 | 27,459,918 | 0 | 27,459,918 | 1,307,615 | 0 | 3,647,168 | 5,594,062 | 5,594,062 | 6,916,221 |
| 53 | 92 | 0 | 0 | 0 | 0 | 28,832,914 | 0 | 28,832,914 | 1,372,996 | 0 | 4,090,513 | 6,144,808 | 6,144,808 | 7,194,140 |
| 54 | 93 | 0 | 0 | 0 | 0 | 30,274,560 | 0 | 30,274,560 | 1,441,646 | 0 | 4,589,291 | 6,763,966 | 6,763,966 | 7,504,736 |
| 55 | 94 | 0 | 0 | 0 | 0 | 31,788,287 | 0 | 31,788,287 | 1,513,728 | 0 | 5,163,946 | 7,461,401 | 7,461,401 | 7,853,898 |
| 56 | 95 | 0 | 0 | 0 | 0 | 33,377,702 | 0 | 33,377,702 | 1,589,414 | 0 | 5,779,582 | 8,207,293 | 8,207,293 | 8,623,143 |
| 57 | 96 | 0 | 0 | 0 | 0 | 35,046,587 | 0 | 35,046,587 | 1,668,885 | 0 | 6,438,463 | 9,010,552 | 9,010,552 | 9,451,123 |
| 58 | 97 | 0 | 0 | 0 | 0 | 36,798,916 | 0 | 36,798,916 | 1,752,329 | 0 | 7,149,795 | 9,866,969 | 9,866,969 | 10,333,628 |
| 59 | 98 | 0 | 0 | 0 | 0 | 38,638,862 | 0 | 38,638,862 | 1,839,946 | 0 | 7,907,853 | 10,777,581 | 10,777,581 | 11,271,746 |
| 60 | 99 | 0 | 0 | 0 | 0 | 40,570,805 | 0 | 40,570,805 | 1,931,943 | 0 | 8,713,314 | 11,751,983 | 11,751,983 | 12,275,211 |
| Total | | 1,803,002 | 0 | 0 | 10,950, | 10,950, | 10,950, | 10,950, | | -9,146,998 | | | | |

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Policy Loan Details

| Year | Your Age | Premium Outlay* (1) | Standard | | Alternate | | Total Policy Loan (6) | Total Policy Debt (7) | Annual Loan Interest Charged (8) | Non-Guaranteed Values (End Of Year) @ 6.00% ¹ | | | | |
|--------------|----------|---------------------|-----------------|--------------------------|-----------------|---------------------------|-----------------------|-----------------------|----------------------------------|--|--|----------------------------|-------------------------------|--------------------|
| | | | Policy Loan (2) | Standard Policy Debt (3) | Policy Loan (4) | Alternate Policy Debt (5) | | | | Net Outlay (9) | Net Accumulated Value Excluding Last Indexed Credit (10) | Net Accumulated Value (11) | Net Cash Surrender Value (12) | Death Benefit (13) |
| | | | | | | | | | | | | | | |
| 61 | 100 | 0 | 0 | 0 | 0 | 42,599,345 | 0 | 42,599,345 | 2,028,540 | 0 | 9,577,842 | 12,785,858 | 12,785,858 | 13,339,710 |
| 62 | 101 | 0 | 0 | 0 | 0 | 44,729,313 | 0 | 44,729,313 | 2,129,967 | 0 | 10,493,028 | 13,888,515 | 13,888,515 | 14,474,694 |
| 63 | 102 | 0 | 0 | 0 | 0 | 46,965,778 | 0 | 46,965,778 | 2,236,466 | 0 | 11,467,999 | 15,061,279 | 15,061,279 | 15,681,550 |
| 64 | 103 | 0 | 0 | 0 | 0 | 49,314,067 | 0 | 49,314,067 | 2,348,289 | 0 | 12,503,403 | 16,294,329 | 16,294,329 | 16,950,413 |
| 65 | 104 | 0 | 0 | 0 | 0 | 51,779,771 | 0 | 51,779,771 | 2,465,703 | 0 | 13,588,187 | 17,597,371 | 17,597,371 | 18,291,143 |
| 66 | 105 | 0 | 0 | 0 | 0 | 54,368,759 | 0 | 54,368,759 | 2,588,989 | 0 | 14,732,678 | 18,959,280 | 18,959,280 | 19,692,560 |
| 67 | 106 | 0 | 0 | 0 | 0 | 57,087,197 | 0 | 57,087,197 | 2,718,438 | 0 | 15,925,618 | 20,392,128 | 20,392,128 | 21,166,922 |
| 68 | 107 | 0 | 0 | 0 | 0 | 59,941,557 | 0 | 59,941,557 | 2,854,360 | 0 | 17,178,883 | 21,897,399 | 21,897,399 | 22,715,788 |
| 69 | 108 | 0 | 0 | 0 | 0 | 62,938,635 | 0 | 62,938,635 | 2,997,078 | 0 | 18,494,013 | 23,462,782 | 23,462,782 | 24,326,796 |
| 70 | 109 | 0 | 0 | 0 | 0 | 66,085,567 | 0 | 66,085,567 | 3,146,932 | 0 | 19,860,108 | 25,104,997 | 25,104,997 | 26,016,903 |
| Total | | 1,803,002 | 0 | 10,950, | 10,950, | | | | | -9,146,998 | | | | |
| 71 | 110 | 0 | 0 | 0 | 0 | 69,389,845 | 0 | 69,389,845 | 3,304,278 | 0 | 21,296,695 | 26,831,542 | 26,831,542 | 27,793,756 |
| 72 | 111 | 0 | 0 | 0 | 0 | 72,859,337 | 0 | 72,859,337 | 3,469,492 | 0 | 22,805,897 | 28,645,290 | 28,645,290 | 29,660,336 |
| 73 | 112 | 0 | 0 | 0 | 0 | 76,502,304 | 0 | 76,502,304 | 3,642,967 | 0 | 24,389,095 | 30,530,509 | 30,530,509 | 31,600,837 |
| 74 | 113 | 0 | 0 | 0 | 0 | 80,327,419 | 0 | 80,327,419 | 3,825,115 | 0 | 26,061,639 | 32,537,624 | 32,537,624 | 33,666,274 |
| 75 | 114 | 0 | 0 | 0 | 0 | 84,343,790 | 0 | 84,343,790 | 4,016,371 | 0 | 27,845,291 | 34,674,248 | 34,674,248 | 35,864,429 |
| 76 | 115 | 0 | 0 | 0 | 0 | 88,560,980 | 0 | 88,560,980 | 4,217,190 | 0 | 29,747,119 | 36,948,461 | 36,948,461 | 38,203,555 |
| 77 | 116 | 0 | 0 | 0 | 0 | 92,989,029 | 0 | 92,989,029 | 4,428,049 | 0 | 31,774,626 | 39,368,832 | 39,368,832 | 40,692,411 |
| 78 | 117 | 0 | 0 | 0 | 0 | 97,638,480 | 0 | 97,638,480 | 4,649,451 | 0 | 33,935,777 | 41,921,262 | 41,921,262 | 43,316,860 |
| 79 | 118 | 0 | 0 | 0 | 0 | 102,520K | 0 | 102,520K | 4,881,924 | 0 | 36,215,964 | 44,636,052 | 44,636,052 | 46,107,616 |
| 80 | 119 | 0 | 0 | 0 | 0 | 107,646K | 0 | 107,646K | 5,126,020 | 0 | 38,644,707 | 47,523,223 | 47,523,223 | 49,074,919 |
| Total | | 1,803,002 | 0 | 10,950, | 10,950, | | | | | -9,146,998 | | | | |
| 81 | 120 | 0 | 0 | 0 | 0 | 113,029K | 0 | 113,029K | 5,382,321 | 0 | 41,231,327 | 50,593,404 | 50,593,404 | 52,229,625 |
| Total | | 1,803,002 | 0 | 10,950, | 10,950, | | | | | -9,146,998 | | | | |

¹The Non-Guaranteed values shown reflect the illustrated interest rate assumptions that you have requested. These values will reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

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Policy Loan Details

Column Descriptions

| Column Name | Description |
|---|---|
| Standard Policy Debt | The sum of Standard Loans and any related accrued loan interest charged. |
| Alternate Policy Debt | The sum of Alternate Loans and any accrued alternate loan interest charged |
| Total Policy Debt | The sum of Standard Policy Debt and Alternate Policy Debt. |
| Annual Loan Interest Charged | The loan interest charged on Standard Loans and Alternate Loans. Accrues daily and is due at the end of each policy year. However, for purposes of this illustration only, the loan interest accrues monthly. |
| Net Accumulated Value Excluding Last Indexed Credit | This column is the same as the Net Accumulated Value column but excludes the Segment Indexed Interest Credit that is assumed to be applied at the end of the year. The intent is to show the effect on Net Accumulated Value if the final Segment Indexed Interest Credit for that year is zero. This helps demonstrate the potential for the policy lapsing if the final Segment Indexed Interest Credit is less than illustrated. The values shown in this column may not represent the lowest Net Accumulated Value in that year. Your policy's Net Accumulated Value will depend in part on the timing of your segments and the amount of Segment Indexed Interest Credits. |

Proposed Insured: [REDACTED]
[REDACTED]
Male, Age 40
Super Preferred Nonsmoker

Death Benefit Option = A - (Level)
Initial Total Face Amount =
\$10,212,915
Premium Frequency = Annual

Life Insurance Producer:
[REDACTED]
695 Town Center Dr Ste 700
Costa Mesa, CA 92626-7187

The Life Insurance Illustration: Narrative Summary

Thank you for considering Pacific Life Insurance Company. We look forward to helping you meet your goals throughout your lifetime. The Narrative Summary introduces you to the policy options you have chosen to illustrate.

Your life insurance producer can provide you with more information about policy options that have not been illustrated, as well as additional illustrations with different assumptions for Pacific Discovery Xelerator IUL (Form Series P15IUL, S16PDX or ICC15 P15IUL, ICC16 S16PDX based on state of policy issue). Requesting illustrations with different assumptions may help you better understand how the policy charges and non-guaranteed elements, like interest crediting rates, will affect the policy. Please choose your illustrated rate carefully. Once your policy is in force, you should consider a periodic review of your policy with your life insurance producer.

Important Information

This is an illustration only. An illustration is not intended to predict actual performance. Interest rates, dividends, or values that are set forth in the illustration are not guaranteed, except for those items clearly labeled as guaranteed.

The illustrated product was designed for use with moderate to higher premiums. If you pay lower premiums than illustrated or policy performance is less favorable than illustrated, there is an increased risk of policy lapse, particularly in the early years.

If you apply for a policy, you should obtain an illustration from your life insurance producer that reflects the intended Indexed Account allocations in your application. Each Indexed Account represents a different potential risk and reward to an owner. Refer to the Indexed Accounts section in the Narrative Summary for further details on each account.

Underwriting Class

The underwriting class used in the illustration has a significant impact on the resulting values. Your actual underwriting class will be determined prior to issue.

Non-Guaranteed Assumptions

Some policy elements, such as policy charges and interest crediting rate are not guaranteed and may be referred to as "current". These elements may be changed by Pacific Life Insurance Company at any time and for any reason, but cannot be less favorable to you than the policy's guarantees.

This illustration assumes that currently illustrated non-guaranteed elements will continue as shown for all years illustrated.

Values shown in this illustration are based on non-guaranteed policy charges and non-guaranteed crediting rates. Over time, the policy's actual non-guaranteed elements, and perhaps your actual use of the policy's options, are likely to vary from the assumptions used in this illustration. For these reasons, actual policy values will either be more or less favorable than shown in this illustration.

Non-guaranteed/current elements are not guaranteed by definition. As such, Pacific Life Insurance Company reserves the right to change or modify any non-guaranteed or current elements. The right to modify these elements is not limited to a specific time or reason.

You may also request illustrations with different assumptions to better understand how the policy charges and non-guaranteed elements, like interest crediting rates and/or policy loans and withdrawals, will affect the policy Accumulated Value and Death Benefit.

This is the Basic Illustration

Death Benefit The Death Benefit is paid to the beneficiaries at the insured's death. The actual amount paid to beneficiaries will be reduced by any distributions taken from the policy. You have the flexibility to raise or lower your death benefit in the future, but increases may require additional underwriting.

Initial Death Benefit:
 \$10,212,915

Coverage Type Your Death Benefit can include Basic Coverage plus other coverage types. Each coverage type has unique features that should be considered when determining your coverage mix.

- Annual Renewable Term Rider (ARTR, Form Series ICC15 R15ART, ICC15 R15ART SP or R15ART, R15ART SP, based on state of policy issue)
- Scheduled Annual Renewable Term Rider (S-ARTR, Form Series ICC15 R15SRT, ICC15 R15SRT SP or R15SRT, R15SRT SP, based on state of policy issue)

Certain product features and riders may not be available through your life insurance producer.

Obtaining Death Benefits through a combination of Basic, ARTR and/or S-ARTR Coverage may be more economical than obtaining the same Death Benefits through Basic Coverage alone, because ARTR and/or S-ARTR Coverage have different current and guaranteed charges than Basic Coverage. The charges are based on various factors including, but not limited to, age, gender, risk classification, death benefit option and coverage amount.

Illustrations with the same Total Face Amount and premiums but with different proportions of Basic, ARTR, and/or S-ARTR Coverage will have different policy values. When deciding whether or not to add ARTR, and/or S-ARTR Coverage to your policy, there are several factors to consider. These factors include, but are not limited to the following:

- ARTR and S-ARTR Impacts on Accumulated Value
 - **Non-Guaranteed** - The non-guaranteed cost of ARTR and S-ARTR Coverage is generally less than the non-guaranteed cost of Basic Coverage. Generally, under non-guaranteed assumptions, a higher proportion of ARTR and S-ARTR Coverage will result in higher Accumulated Values.
 - **Guaranteed** - The guaranteed maximum cost of ARTR and S-ARTR Coverage is generally greater than the guaranteed maximum cost of Basic Coverage. Generally, under guaranteed assumptions, a higher proportion of ARTR and S-ARTR Coverage will result in lower Accumulated Values.
- Other Impacts
 - Different combinations of Basic, ARTR, and/or S-ARTR Coverage will result in different amounts and patterns of life insurance producer compensation.

Your life insurance producer can provide you with additional illustrations showing the effects of different proportions of Basic, ARTR, and/or S-ARTR Coverage to help you make your decision.

Illustrated Coverage The following face amounts are illustrated:

| Basic Coverage | Face Amount | Start Year | End Year |
|----------------|-------------|------------|----------|
| | 10,212,915 | 1 | 12 |
| | 5,039,542 | 13 | 81 |

| Death Benefit Option | Start Year | End Year |
|----------------------|------------|----------|
| A - (Level) | 1 | 81 |

This is the Basic Illustration

Premium Your policy's flexible premiums allow you to choose the amount and frequency of your premium payments, within limits. Flexible Premium Indexed Adjustable Life Insurance generally requires additional payments after the initial premium. If either no premiums are paid, or subsequent premiums are insufficient to continue coverage, it is possible that the coverage will expire.

Initial Premium:
\$0.00

Initial Frequency: Annual Illustrated premium payments are made at the beginning of the frequency shown.

| Premium | Frequency | Annualized Premium | Start Year | End Year |
|---------|-----------|--------------------|------------|----------|
| \$0.00 | Annual | \$0.00 | 1 | 81 |

In addition, the following lump sum premium amounts are also illustrated.

| Lump Sum | Start Year | End Year |
|----------------|------------|----------|
| \$1,803,002.16 | 1 | 1 |
| \$0.00 | 2 | 81 |

The illustration includes a premium of \$1,803,002.16 at the beginning of year 1 from a 1035 Exchange. If that premium is not actually received in month 1, policy values will be lower than illustrated. The assumed cost basis is associated with the 1035 Exchange is \$2,000,000.00.

There are circumstances in which replacing your existing life insurance or annuity can benefit you. As a general rule, however, replacement is not in your best interest. Your life insurance producer can provide you with detailed information as to how a replacement may affect your plan of insurance. You should make a careful comparison of the costs and benefits, including any applicable surrender charges, of your existing policy and the proposed policy to determine whether replacement is in your best interest.

The annual premium required to guarantee the initial Total Face Amount for the duration of the contract exceeds the maximum allowable Guideline Level Premium of \$157,052.70.

Premium Allocation & Transfers

When you pay a premium, we subtract a premium load and then allocate the net premium to the Fixed Account. You have the option to transfer some or all of the Fixed Account to the Indexed Account, subject to restrictions outlined in the policy.

The amount transferred to the Indexed Account is the lesser of: 1) your selected transfer percentage multiplied by all net premium and loan repayments paid since the last Transfer Date; and 2) the balance of the Fixed Account as of the applicable Transfer Date. The illustrated allocation and transfer percentages are:

Please note, not all indexed accounts are available in all states. Please have your life insurance producer check indexed account availability for your state.

| Accounts | Percentage | Start Year | End Year |
|------------------------|------------|------------|----------|
| 1-Year Indexed Account | 100.00% | 1 | 81 |

Accumulated Value

Accumulated Value is equal to the premiums paid, less premium load, cost of insurance, other charges and deductions, and withdrawals, accumulated at interest. Net Accumulated Value equals the Accumulated Value minus any outstanding policy debt. If the Net Accumulated Value is less than the monthly charges, you will need to pay additional premium to keep the policy in force, unless the policy has a no-lapse guarantee in effect.

This is the Basic Illustration

Cash Surrender Value The Cash Surrender Value equals the Accumulated Value minus any applicable surrender charge, or if greater, the Alternate Accumulated Value less any applicable surrender charge. The Net Cash Surrender Values equals the Cash Surrender Value minus any outstanding policy debt. The Net Cash Surrender Value is the amount you would receive if you surrender the policy and the amount available for distributions.

The surrender charge reaches zero 120 policy months after the issue date of any Basic Coverage amount whether it is included at policy issue or added later through a face amount increase.

Fixed Account The Fixed Account earns interest at the current interest rate, which is declared by us. The current interest rate when the policy is issued is guaranteed for the first policy year. After the first policy year, the current interest rate may change at our discretion, but will never be less than the guaranteed interest rate.

Current Interest Rate: 3.50%
Guaranteed Interest Rate: 2.00%
Illustrated Interest Rate:

| Rate | Start Year | End Year |
|-------|------------|----------|
| 3.50% | 1 | 81 |

Illustrated Fixed Account additional credit: The non-guaranteed Fixed Account additional credit begins in policy year 3 and continues through the insured's age 121. This additional credit is reflected in this illustration but is not guaranteed. Certain policy charges will be used in determining the amount of additional credit applied to the Fixed Account.

All policy charges, Standard Policy Loans and Withdrawals will be deducted from the Fixed Account. If the Fixed Account is depleted, any remaining deductions are taken proportionate to each Segment Value across all segments in the Indexed Accounts.

Transfer to the Indexed Account In accordance with contract provisions, net premiums paid are initially allocated to the Fixed Account and subsequently transferred to the Indexed Account(s) selected per your instructions. Transfers from the Fixed Account to the Indexed Accounts are processed on specified Transfer Dates, currently the 15th of every month. To make a transfer, adequate Accumulated Value must be available in the Fixed Account, and transfer instructions must be filed with us no later than two business days prior to the 15th.

- Segment Lifecycle**
- Each transfer creates a new Segment in the Indexed Account.
 - When a new Segment is created, the current segment components are locked-in as a minimum guarantee for that Segment's term.
 - Once the Segment matures it will be credited interest, if applicable. If your policy terminates before Segment Maturity, no indexed interest will be credited above the Segment Guaranteed Interest Rate, which is credited daily prior to termination.
 - At Segment Maturity, it may be reallocated to any account. If you don't specify a new account, it will create a new Segment in the same Indexed Account.

Lockout Period If a deduction from an Indexed Account(s) occurs as a result of a Policy Loan or Withdrawal that is not part of the Automated Income Option (AIO), then no allocations from the Fixed Account into the Indexed Account(s) will be allowed for 12 months following the date of the deduction. This 12 month period is called the lockout period.

- Transactions that may be impacted include:
- Transfers from the Fixed Account into the Indexed Accounts
 - Premium or loan repayments with allocations to the Indexed Accounts

Based on the assumptions used in this illustration, a lockout has not occurred.

This is the Basic Illustration

Indexed Interest Each Segment earns Indexed Interest based on the percentage change in value of its underlying index, subject to the segment components and will mature on the Segment Maturity Date. In this illustration, Indexed Interest Credits are shown as applied at the end of the policy year preceding the Segment Maturity Date. In fact, any Indexed Interest Credits will be credited on the Segment Maturity Date. To the extent that the actual Indexed Account performance is less favorable than illustrated, the sum of your policy's cost of insurance charges will be greater than those illustrated, all of which will result in an Accumulated Value and Cash Surrender Value less than illustrated.

Each Indexed Account is projected at its own rate and the results are combined with the Fixed Account in this illustration. Actual policy performance will be either more or less favorable than illustrated.

Hypothetical Indexed Interest Rate The following sections show a hypothetical Indexed Interest Rate based on historical index returns. This is not an indication of future performance and is not guaranteed. The maximum illustrated rates are based on the lower of your chosen Indexed Account's hypothetical Indexed Interest Rate or the 1-Year Indexed Account's hypothetical Indexed Interest Rate. All Indexed Accounts were calculated by averaging the compound rates for the 25-year period starting on 12/31/1952, 12/31/1987 for the 1-Year International Indexed Account, and for each 25-year period starting on each subsequent trading day thereafter, ending with the 25-year period that ends on 12/31/2017.

1-Year Indexed Account Segment Components:

| Segment Term | Underlying Index (excluding dividends) | Participation Rate | Growth Cap | Segment Guaranteed Interest Rate | Performance Factor |
|--------------|--|--------------------|---|----------------------------------|--------------------|
| 12 Months | S&P 500® | 100% Guaranteed | 10.25% Current (3.00% guaranteed minimum) | 0% | 1.00 Guaranteed |

Historical Index Return: The average annual return of the S&P 500® index, excluding dividends, over the last 65-year historical period was 7.30%.

Using the historical returns along with the current Growth Cap, Participation Rate and Segment Guaranteed Interest Rate, a hypothetical average annual Indexed Account Interest Rate would be 6.21%.

Hypothetical Interest Example: Here is an example of hypothetical Indexed Interest Rates based on hypothetical S&P 500® returns (excluding dividends) and current segment components, not including the Performance Factor.

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------------------------------------|--------|--------|--------|--------|--------|
| Hypothetical S&P 500® index Returns* | 11.44% | -2.40% | 16.65% | 26.38% | 11.37% |
| Hypothetical Indexed Interest Rate | 10.25% | 0.00% | 10.25% | 10.25% | 10.25% |

*The Hypothetical S&P 500® index Returns listed above are based on the S&P 500® index returns (excluding dividends) from 2010 through 2014.

Illustrated Indexed Interest Rate:

| Rate | Start Year | End Year |
|-------|------------|----------|
| 6.00% | 1 | 81 |

This is the Basic Illustration

**1-Year
International
Indexed Account**
Segment Component:

| Segment Term | Underlying Indexes (excluding dividends) | Participation Rate | Growth Cap | Segment Guaranteed Interest Rate | Performance Factor |
|--------------|---|--------------------|---|----------------------------------|--------------------|
| 12 Months | Hang Seng, EURO STOXX 50® & MSCI Emerging Markets | 100% Guaranteed | 11.00% Current (3.00% guaranteed minimum) | 0% | 1.00 Guaranteed |

This account is called the 1 Year Indexed Account 2 in the contract.

Historical Index Returns: The Hang Seng, EURO STOXX 50®, and MSCI Emerging Markets Indexes' average annual returns, excluding dividends, over the last 30-year historical period are shown in the following table:

| Hang Seng Index Annual Return | EURO STOXX 50® Index Annual Return | MSCI Emerging Markets Index Annual Return |
|-------------------------------|------------------------------------|---|
| 8.06% | 4.97% | 6.39% |

The annual results of these three indices, excluding dividends, are averaged to create the combined international index. The average annual return of the combined international index over the last 30-year historical period was 7.24%.

The current Growth Cap, Participation Rate and Segment Guaranteed Interest Rate are applied to the annual returns for each index. The results are then averaged to determine the final Indexed Account Interest Rate. The hypothetical average annual Indexed Account Interest Rate would be 6.32%.

Hypothetical Interest Example: Here is an example of Hypothetical Indexed Interest Rates based on different hypothetical returns for each index and current segment components, not including the Performance Factor.

| | Hang Seng Index Growth Rate* | Hang Seng Indexed Interest Rate | EURO STOXX 50 Index Growth Rate* | EURO STOXX 50 Indexed Interest Rate | MSCI Emerging Markets Index Growth Rate* | MSCI Emerging Markets Indexed Interest Rate | Average Segment Indexed Interest Rate |
|--------|------------------------------|---------------------------------|----------------------------------|-------------------------------------|--|---|---------------------------------------|
| Year 1 | 6.09% | 6.09% | -0.81% | 0.00% | 15.29% | 11.00% | 5.70% |
| Year 2 | -21.67% | 0.00% | -22.92% | 0.00% | -19.93% | 0.00% | 0.00% |
| Year 3 | 23.16% | 11.00% | 19.25% | 11.00% | 15.36% | 11.00% | 11.00% |
| Year 4 | 2.25% | 2.25% | 13.24% | 11.00% | -5.03% | 0.00% | 4.42% |
| Year 5 | -0.38% | 0.00% | 0.14% | 0.14% | -6.70% | 0.00% | 0.05% |

*The Hypothetical Index Growth Rates listed above are based on the index returns from 2010 through 2014.

**1-Year High Par
Indexed Account**
Segment Components:

| Segment Term | Underlying Index (excluding dividends) | Participation Rate | Growth Cap | Segment Guaranteed Interest Rate | Performance Factor |
|--------------|--|---------------------------------|--|----------------------------------|--------------------|
| 12 Months | S&P 500® | 150% Current 140% Guaranteed | 8.50% Current (2.00% guaranteed minimum) | 0% | 1.00 Guaranteed |

This account is called the 1 Year Indexed Account 3 in the contract.

This is the Basic Illustration

Historical Index Return: The average annual return of the S&P 500® index, excluding dividends, over the last 65-year historical period was 7.30%.

Using the historical returns along with the current Growth Cap, Participation Rate and Segment Guaranteed Interest Rate, a hypothetical average annual Indexed Account Interest Rate would be 5.63%.

Hypothetical Interest Example: Here is an example of hypothetical Indexed Interest Rates based on different hypothetical S&P 500® index returns (excluding dividends) and using the current segment components, not including the Performance Factor.

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------------------------------------|--------|--------|--------|--------|--------|
| Hypothetical S&P 500® index Returns* | 11.44% | -2.40% | 16.65% | 26.38% | 11.37% |
| Hypothetical Indexed Interest Rate | 8.50% | 0.00% | 8.50% | 8.50% | 8.50% |

*The Hypothetical S&P 500® index Returns listed above are based on the S&P 500® index returns (excluding dividends) from 2010 through 2014.

1-Year No Cap Indexed Account

Segment Components:

| Segment Term | Underlying Index (excluding dividends) | Participation Rate | Threshold Rate | Growth Cap | Segment Guaranteed Interest Rate | Performance Factor |
|--------------|--|--------------------|--|------------|----------------------------------|--------------------|
| 12 Months | S&P 500® | 100% Guaranteed | 5.00% Current (20% guaranteed maximum) | N/A | 0% | 1.00 Guaranteed |

This account is called the 1 Year Indexed Account 4 in the contract. The Threshold Rate is the percentage subtracted from the Indexed Growth Rate. An Indexed Growth Rate equal to or less than the current Threshold Rate will result in a 0.00% Indexed Interest Rate.

Historical Index Return: The average annual return of the S&P 500® index, excluding dividends, over the last 65-year historical period was 7.30%.

Using the historical returns along with the current Participation Rate, Threshold Rate and Segment Guaranteed Interest Rate, a hypothetical average annual Indexed Account Interest Rate would be 7.95%.

Hypothetical Interest Example: Here is an example of hypothetical Indexed Interest Rates based on hypothetical S&P 500® returns (excluding dividends) and current segment components, not including the Performance Factor.

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------------------------------------|--------|--------|--------|--------|--------|
| Hypothetical S&P 500® index Returns* | 11.44% | -2.40% | 16.65% | 26.38% | 11.37% |
| Hypothetical Indexed Interest Rate | 6.44% | 0.00% | 11.65% | 21.38% | 6.37% |

*The Hypothetical S&P 500® index Returns listed above are based on the S&P 500® index returns (excluding dividends) from 2010 through 2014.

1-Year High Cap Indexed Account

Segment Components:

| Segment Term | Underlying Index (excluding dividends) | Participation Rate | Indexed Account Charge (annualized) | Growth Cap | Segment Guaranteed Interest Rate | Performance Factor |
|--------------|--|--------------------|--|---|----------------------------------|--------------------|
| 12 Months | S&P 500® | 100% Guaranteed | 0.80% Current (0.80% guaranteed maximum) | 13.25% Current (4.00% guaranteed minimum) | 0% | 1.00 Guaranteed |

This is the Basic Illustration

This account is called the 1 Year Indexed Account 5 in the contract. The Indexed Account Charge shown above is a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account.

Historical Index Return: The average annual return of the S&P 500® index, excluding dividends, over the last 65-year historical period was 7.30%.

Using the historical returns along with the current Growth Cap, Participation Rate and Segment Guaranteed Interest Rate, a hypothetical average annual Indexed Account Interest Rate would be 7.44%.

Hypothetical Interest Example: Here is an example of hypothetical Indexed Interest Rates based on hypothetical S&P 500® returns (excluding dividends) and current segment components, not including the Performance Factor.

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------------------------------------|--------|--------|--------|--------|--------|
| Hypothetical S&P 500® index Returns* | 11.44% | -2.40% | 16.65% | 26.38% | 11.37% |
| Hypothetical Indexed Interest Rate | 11.44% | 0.00% | 13.25% | 13.25% | 11.37% |

*The Hypothetical S&P 500® index Returns listed above are based on the S&P 500® index returns (excluding dividends) from 2010 through 2014.

2-Year Indexed Account

Segment Components:

| Segment Term | Underlying Index (excluding dividends) | Participation Rate | Growth Cap | Segment Guaranteed Interest Rate | Performance Factor |
|--------------|--|--------------------|--|----------------------------------|--------------------|
| 24 Months | S&P 500® | 100% Guaranteed | 30.00% over 2 years (6.00% over 2 years guaranteed minimum) | 0% | 1.00 Guaranteed |

Historical Index Return: The average annualized two-year return of the S&P 500® index, excluding dividends, over the last 65-year historical period was 7.25%

Using the historical returns along with the current Growth Cap, Participation Rate and Segment Guaranteed Interest Rate, a hypothetical average annualized two-year Indexed Account Interest Rate would be 7.42%.

Hypothetical Interest Example: Here is an example of hypothetical Indexed Interest Rates based on different hypothetical S&P 500® index returns (excluding dividends) and using the current segment components, not including the Performance Factor.

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------------------------------------|--------|--------|--------|--------|--------|
| Hypothetical S&P 500® index Returns* | n/a | 8.77% | n/a | 47.43% | n/a |
| Hypothetical Indexed Interest Rate | 0.00% | 8.77% | 0.00% | 30.00% | 0.00% |

*The Hypothetical S&P 500® index Returns listed above are based on the S&P 500® index returns (excluding dividends) from 2010 through 2014.

This is the Basic Illustration

High Par 5-Year Indexed Account
Segment Components:

| Segment Term | Underlying Index (excluding dividends) | Participation Rate | Growth Cap | Segment Guaranteed Interest Rate | Performance Factor |
|--------------|--|--------------------------------|--|----------------------------------|--------------------|
| 60 Months | S&P 500® | 110% Current (105% Guaranteed) | No Current Growth Cap (15.00% over 5 years guaranteed minimum) | 0% | 1.00 Guaranteed |

This account is called the 5 Year Indexed Account 2 in the contract.

Historical Index Return: The average annualized five-year return of the S&P 500® index, excluding dividends, over the last 65-year historical period was 6.63%.

Using the historical returns along with the current Growth Cap, Participation Rate and Segment Guaranteed Interest Rate, a hypothetical average annualized five-year Indexed Account Interest Rate would be 7.64%.

Hypothetical Interest Example: Here is an example of hypothetical Indexed Interest Rates based on different hypothetical S&P 500® index returns (excluding dividends) and using the current segment components, not including the Performance Factor.

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------------------------------------|--------|--------|--------|--------|--------|
| Hypothetical S&P 500® index Returns* | n/a | n/a | n/a | n/a | 72.03% |
| Hypothetical Indexed Interest Rate | 0.00% | 0.00% | 0.00% | 0.00% | 79.23% |

*The Hypothetical S&P 500® index Returns listed above are based on the S&P 500® index returns (excluding dividends) from 2010 through 2014.

Illustrated Indexed Account Performance Factor

The illustrated account values reflect each segment's Segment Indexed Interest, which is applied to the segments at each Segment Maturity. One of the segment components, the Performance Factor, is used to determine the Segment Indexed Interest. The Performance Factor is determined for each segment at the segment start date based upon certain factors, including but not limited to: the face amount, the policy's Accumulated Value, and which Indexed Account the segment is allocated to. The Performance Factor may vary by segments, but will never be less than the Guaranteed Minimum Performance Factor for the Segment Term, as shown in the Indexed Account sections found in the Narrative Summary. A Performance Factor greater than the Guaranteed Minimum Performance Factor for an Indexed Account will increase the Segment Indexed Interest as reflected in this illustration, but is not guaranteed. This illustration reflects Performance Factors greater than the minimum beginning with segments created in policy year 3 and until age 121.

Illustrated Riders

Riders add benefits that can provide flexibility or additional coverage for you or a family member. Some riders are optional and others are automatically included. The next section includes a brief description of the riders, including costs, that are included in this illustration. There may be other riders available to you. Your life insurance producer can provide more information.

Premier Living Benefits Rider

Provides an accelerated payment of the Death Benefit if you have a chronic illness. There is no up-front cost or monthly rider charge. Each time you receive a benefit payment, the Death Benefit, Cash Surrender Value, and any policy debt will be reduced based on the amount of the benefit payment.

(Form Series R12CII)

Terminal Illness Rider

Gives you access to a portion of the policy's Basic, ARTR and/or S-ARTR Coverage face amount(s) if the insured has been diagnosed by a licensed physician as terminally ill, resulting in a life expectancy of 12 months or less. We will pay the terminal illness benefit proceeds only once per policy.

Benefits paid by accelerating the policy's death benefit may or may not qualify for favorable tax treatment under Section 101(g) of the Internal Revenue Code of 1986. Tax treatment of an accelerated death benefit due to terminal illness depends on the life expectancy of the insured at the time benefits are accelerated. Receipt of accelerated death benefits may affect eligibility for public

This is the Basic Illustration

assistance programs such as Medicaid. Tax laws relating to accelerated death benefits are complex. Pacific Life Insurance Company cannot determine whether the benefits are taxable. Clients are advised to consult with qualified and independent legal and tax advisors for more information.

There is no up-front cost or monthly rider charge. The cost of exercising the rider is that the death benefit is reduced by an amount greater than the rider benefit payment itself to reflect the early payment of the death benefit. Rider benefit payments will reduce the death benefit, cash surrender value, and any policy debt. Additionally, rider benefit payments may adversely affect the benefits under other riders. The rider will be added to your policy, unless you specifically decline it in the application. (Form Series ICC12 R12TII or R12TII, based on state of policy issue)

2% Interest
Guarantee on
Termination
Rider

This rider provides an Alternate Accumulated Value that grows at an Alternate Interest Rate of 2% on eligible accounts. Under this rider, the Alternate Accumulated Value is equal to premiums paid, minus premium loads, cost of insurance, other charges and deductions, and withdrawals plus an interest credit. Net Alternate Accumulated Value equals the Alternate Accumulated Value minus any outstanding Policy Debt.

Alternate Interest Rate - The Alternate Interest Rate applies only to those accounts identified as an eligible account. The Alternate Interest Rate equals the sum of the value of all eligible accounts divided by the policy's Accumulated Value, multiplied by 2%. If the policy's Accumulated Value is less than or equal to zero, then the Alternate Interest Rate will be 2%.

The following are the eligible accounts for the Alternate Interest Rate:

- Fixed Account
- Loan Account
- 1-Year Indexed Account
- 1-Year International Indexed Account
- 1-Year High Par Indexed Account
- 1-Year No Cap Indexed Account
- 1-Year High Cap Indexed Account

Pacific Life Insurance Company may change the eligible accounts at any time.

There are no excess interest credits payable on the Alternate Accumulated Value.

If greater than the Accumulated Value, the Alternate Accumulated Value will be used to determine the policy values at lapse or surrender. The Alternate Accumulated Value will also be used to determine policy values at death if Death Benefit Option B or if the policy is in corridor. This rider is automatically included in your policy.

This rider is provided at no additional cost. (Form Series ICC15 R15IGT, or R15IGT, based on state of policy issue).

Short-Term No-
Lapse
Guarantee
Rider

While the Short-Term No-Lapse Guarantee Rider (STNLG) is in effect, your death benefit is guaranteed, regardless of future changes to interest rates or policy charges. In order for the rider to be in effect, a minimum premium must be paid.

Maximum STNLG Duration: 20 years

| STNLG Minimum Premium | | | |
|-----------------------|-------------|-----------|----------|
| Annual | Semi-Annual | Quarterly | Monthly |
| 82,816.60 | 41,814.30 | 21,009.65 | 7,026.12 |

This is the Basic Illustration

Short-Term No-Lapse Guarantee Rider (continued)

Important Information

The actual STNLG Minimum Premium depends on the actual amount of premium payments and distributions. Any changes in benefit amounts will also affect the STNLG Duration. Paying only the Short-Term No-Lapse Guarantee Premiums will guarantee the death benefit from 4 to 20 years, based on the insured's age at issue, but will not guarantee cash value accumulation. If you discontinue paying the Short-Term No-Lapse Premiums or take a loan or withdrawal from the policy, the no-lapse feature will terminate before the guaranteed duration. Additional premiums will be required to continue the policy beyond the guaranteed duration.

This rider is provided at no additional cost. (Form Series R02NL5)

No-Lapse Guarantee Rider (NLG)

The No-Lapse guarantee, depending on how you structure your policy, has a maximum duration stated below, subject to certain limits.

Illustrated No-Lapse Guarantee Duration: 24 years; up to the insured's age 64.
Maximum No-Lapse Guarantee Duration: insured's lifetime

If your net no-lapse guarantee value is zero, the no-lapse feature terminates. If the no-lapse feature terminates, additional premiums would be required to resume the no-lapse guarantee. If policy performance is such that your policy is being maintained solely by the no-lapse guarantee, your policy will not build cash value.

Important Information

The actual No-Lapse Guarantee Duration depends on the actual timing and amount of premium payments and distributions. Any changes in benefit amounts will also affect the No-Lapse Guarantee Duration. If actual premium payments or distributions are different than what is illustrated, or if your policy benefits change, the length of the guarantee will also change and there may be a greater chance that your benefits could terminate. Premium payments must be made at the beginning of the premium payment interval for the rider to perform as illustrated.

You must pay sufficient premium so the net no-lapse guarantee value is positive in order for the no-lapse guarantee to be in effect.

The charges for this rider are based on various factors including, but not limited to, age, gender, underwriting classification, death benefit option and coverage amount. (Form Series ICC14 R14FNL or R14FNL, based on state of policy issue.)

Conversion Rider

Anytime during the 8th policy year, while your policy is in force, you may convert this policy to any cash value life insurance policy that is available for conversions. The Total Face Amount of the new policy will equal the current Basic Coverage of your current policy. All applicable surrender charges on the surrendered policy will be waived, and no evidence of insurability will be required for the conversion. This conversion right is subject to state availability. This rider is provided at no additional cost. (Form Series ICC13 R13CON or R13CON, based on state of policy issue.)

Other Riders

The following riders have not been illustrated. See individual rider descriptions for more information.

Overloan Protection 3 Rider

If exercised and as long as the rider remains in-force, the policy will not lapse even if the Policy Debt exceeds the Accumulated Value. The rider can be exercised only if all of the conditions of the rider are met. You may not be able to exercise this rider as illustrated if your actual use of the policy's options, actual interest rate, or policy charges, differs from those assumed. Upon exercising this rider, a one-time rider exercise charge will be assessed. This amount will vary depending on the actual Accumulated Value at the time of exercising this rider. Certain transactions and policy changes after exercising the rider will terminate the rider. If this rider terminates other than by the death of the insured, any amount by which the Policy Debt exceeds the Accumulated Value is due and payable. This rider is provided at no additional cost until the rider is exercised.

The potential tax consequences of the Overloan Protection 3 Rider have not specifically been ruled on by the IRS or the courts. Consult your tax adviser. (Form Series R15OLP, R15OLP SP or ICC R15OLP, ICC R15OLP SP, based on state of policy issue.)

This is the Basic Illustration

Distributions Distributions can be taken as Policy Loans and Withdrawals when there is adequate Net Cash Surrender Value available, as explained in the policy. The illustrated distributions may not be available if the policy does not perform as illustrated. This illustration shows distributions that are requested and distributed in 12 equal monthly payments. Distributions will reduce policy values and may reduce Death Benefits.

Interest credited to the Accumulated Value of a life insurance policy is generally tax-deferred but may be taxable at the time of withdrawal, surrender or lapse. See the Tax Information section information about when distributions or other policy events could result in taxable income.

Currently, the charge for each Withdrawal is \$0. However, we reserve the right to charge up to \$25 for each withdrawal.

Automated Income Option Automated Income Option (AIO) is a program that electronically deposits distributions into your checking or savings account on a recurring basis. Enrollment is not automatic; certain requirements must be met, and you must request enrollment when distributions are to begin.

Policy Loans A policy loan, if not repaid earlier, is eventually repaid from policy proceeds at death, surrender, or lapse. The Death Benefit and Net Cash Surrender Value columns reflect values net of policy loans.

Standard Loans Compared to Alternate Loans You may take policy loans as Standard Loans or Alternate Loans or a combination of both types of loans, subject to the policy provisions. **Your choice of a Standard Loan or Alternate Loan can have a significant impact on policy values and the cost of a loan.**

| | Maximum Loan Amount Available | Loan Interest Crediting & Loan Interest Charged |
|-----------------|---|---|
| Standard Loans | The entire policy's Accumulated Value is available, subject to the policy's maximum loan provisions. | Neither the loan interest charged nor the loan interest credited is affected by the performance of the policy. |
| Alternate Loans | Only the Net Accumulated Value in any of the 1-Year Indexed Accounts is available, subject to the policy's maximum loan provisions. | The loan interest charged <u>is not</u> affected by the performance of the policy. However, the loan interest credited <u>is</u> affected by the performance of the policy. This causes Alternate Loans to be significantly more volatile than Standard Loans |

Standard Loans Interest is due at the end of each policy year when a policy loan is outstanding. In this illustration the policy loan interest charged is borrowed and added to the loan balance.

Loan Charge Rate: 2.25%

Interest is credited to the portion of Accumulated Value securing the Policy Loan. We reserve the right to decrease the current loan interest crediting rate. However, we will not reduce the rate to less than the guaranteed rate.

Current Loan Interest Crediting Rate: 2.00% in years 1-5 and 2.25% in years 6+
Guaranteed Loan Interest Crediting Rate: 2.00%

This illustration also assumes that standard policy loan interest payments are allocated to the Fixed Account and earn Fixed Account Interest Credits at the declared rate.

Alternate Loans Interest is due at the end of each policy year when a policy loan is outstanding. We reserve the right to increase the current loan interest charge rate. However, we will not increase the rate to more than the guaranteed rate.

Current Loan Interest Charge Rate: 4.65%
Guaranteed Loan Interest Charge Rate: 7.50%

Illustrated Loan Interest Charge Rate:

This is the Basic Illustration

| Rate | Start Year | End Year |
|-------|------------|----------|
| 4.65% | 1 | 1 |
| 5.00% | 2 | 81 |

Interest is credited to the portion of Accumulated Value securing the Policy Loan based on the Segment Growth Rate. Loan interest is credited at the end of a Segment Term.

Illustrated Loan Interest Crediting Rate: Equals the illustrated Indexed Interest Rates

Illustrating a hypothetical Indexed Interest Rate greater than the loan interest charge rate over an extended period of time may not be realistic. If you change this assumption, the impact on your policy could be quite dramatic, even resulting in a policy lapse.

The actual Alternate Loan interest charged may be higher or lower than the interest credited. The net result can vary significantly from year to year. It is important to illustrate this volatility.

To determine if an Alternate Loan is the right choice for you

- Consider the impact to your policy if:
 - Indexed interest credit is lower than the loan charge rate
 - the Index underperforms due to an extended market downturn
 - the Growth Cap is lowered, thereby limiting the Indexed Interest Rate
 - actual Indexed Interest Rates fluctuate, instead of level illustrated Indexed Interest Rates
- Request additional illustrations from your life insurance producer to see the effects of choosing:
 - Standard Loans, Alternate Loans or a combination of both
 - Different Indexed Interest Rates and loan interest charge rates

The Alternate Loan is available under the Alternate Loan Rider (R10ALR) which is automatically added to your policy. Alternate Loans are contractually guaranteed to be available in year four of the Policy. This illustration may reflect Alternate Loans being made available prior to year four on a non-guaranteed basis. As is the case with any non-guaranteed component of the Policy, we reserve the right to restrict such earlier availability. Riders will likely incur additional charges and are subject to availability, restrictions and limitations. Clients should be shown policy illustrations with and without riders to help show the rider's impact on the policy's values.

Future Action Required

Certain policy changes will not happen automatically and will require a written request. This illustration reflects possible future changes. Please contact your life insurance producer prior to each change to see if a written request is required.

| Policy Year | Calendar Year | Age | Policy Changes | Amount |
|-------------|---------------|-----|-----------------------------|-----------|
| 13 | 2030 | 52 | Reduction in Basic Coverage | 5,173,373 |
| 21 | 2038 | 60 | ***Start Distributions | 365,000 |

Calendar years specified above assume the policy is issued in year 2018.

***This illustration reflects Policy Loan(s). Each requires a written request. The specific amount and timing of the Policy Loan(s) can be affected by your actual use of the policy's options, actual rates of return, policy charges, premium amount or frequency and may not be available as illustrated.

Tax Information

This material is **not** intended to be used, nor can it be used by any taxpayer, for the purpose of avoiding U.S. federal, state or local tax penalties. This material is written to support the promotion or marketing of the transaction(s) or matter(s) addressed by this material. Pacific Life Insurance Company, its affiliates, their distributors and their respective representatives do not provide tax, accounting or legal advice. Any taxpayer should seek advice based on the taxpayer's particular circumstances from an independent tax advisor or attorney.

This is the Basic Illustration

**Tax Information
(continued)**

Although the information contained in this illustration is based on our understanding of the Internal Revenue Code (IRC) and on certain tax and legal assumptions, it is not intended to be tax or legal advice. Such advice should be obtained from your own counsel or other tax advisor. Tax laws or interpretations of tax laws can change. This may cause the performance and underlying tax assumptions of this policy, including any riders, to be different than illustrated. For example, tax law changes may result in distributions that are more or less than illustrated. In some cases, these changes could result in a decrease in policy values or lapse. You should request an inforce illustration from your life insurance producer periodically so that you can monitor your policy's performance in light of any tax law changes. Your actual taxes will be different from those illustrated.

Tax Rates The following tax rates have been used to estimate your taxes, if any, on distributions.

Illustrated Tax Rates:

| Rate | Start Year | End Year |
|--------|------------|----------|
| 31.00% | 1 | 81 |

Death Proceeds

For federal income tax purposes, life insurance death benefits generally pay income tax-free to beneficiaries pursuant to IRC Sec. 101(a)(1). In certain situations, however, life insurance death benefits may be partially or wholly taxable. Situations include, but are not limited to: the transfer of a life insurance policy for valuable consideration unless the transfer qualifies for an exception under IRC Sec. 101(a)(2) (i.e. the transfer-for-value rule); arrangements that lack an insurable interest based on state law; and an employer-owned policy unless the policy qualifies for an exception under IRC Sec. 101(j).

Guideline Premium Test

A life insurance policy will qualify as life insurance under IRC Section 7702 if it meets one of two alternative tests. This illustration uses the Guideline Premium Test which requires that the sum of premiums paid reduced by non-taxable Withdrawals at any time does not exceed the Guideline Premium Test Limit. The Guideline Premium Test Limit is the greater of the guideline single premium or the sum of the guideline level premiums at such time, and the Death Benefit payable under the policy at any time is at least equal to an applicable percentage of the Accumulated Value (the "cash value corridor test").

Guideline Premiums are calculated at issue, but are also recalculated upon certain changes in the terms or benefits of the policy. In some cases, a recalculation of the Guideline Premiums may cause the Guideline Premium Test Limit to reduce either immediately or over time. This may require us to force out a portion of your Accumulated Value in one or more withdrawals. Such withdrawals may become taxable to you. See the Tax Information section that follows for information about when distributions or other policy events could result in taxable income.

Your policy would be allowed to pay premiums in excess of the Guideline Premium Test Limit under certain conditions in order to prevent your policy from lapsing.

Modified Endowment Contract (MEC)

A Modified Endowment Contract (MEC) is a life insurance policy and like other life insurance policies provides favorable tax treatment of death benefits and the tax deferred growth of cash value. However, a MEC is subject to less favorable taxation on distributions of cash value, including withdrawals, policy loans and certain other "deemed" distributions. Rules defining a MEC and its tax treatment can be found in IRC Section 7702A and 72, respectively. Depending upon whether or not future distributions are taken from a policy, the MEC status may or may not impact the taxation of the policy. **As such, we recommend you consult your tax advisor prior to taking any action on your policy that may cause it to become a MEC.**

As provided in IRC Section 7702A, a life insurance policy becomes a MEC if it fails the Seven-Pay Test. The Seven-Pay Test compares the premiums paid into the policy during the testing period against the Seven-Pay Premium Limit, which grows from year to year over that period. The Seven-Pay Test starts at policy issue and continues for seven years. Also, upon any Seven-Pay Material Change a new Seven-Pay Test with a new limit will start and continue for seven more years. A policy may never have a Seven-Pay Material Change, or it may have more than one, depending upon any policy changes made over the life of the policy.

This is the Basic Illustration

**Modified
Endowment
Contract (MEC)
(continued)**

A Seven-Pay Material Change will generally occur if there are both: 1) an increase in policy benefits; and 2) a premium payment not necessary to fund the policy benefits assumed in the most recent Seven-Pay Premium Limit determination. This can occur whether or not the policy is currently in a Seven-Pay Test Period. A Seven-Pay Material Change may also occur as a result of certain other policy changes.

Generally, once a policy is a MEC, it is always a MEC. However, if premiums in excess of the Seven-Pay Premium Limit are paid, the MEC status can be avoided if the excess premium payments, plus interest (which is taxable), are returned to you prior to 60 days after the end of the 'measuring year' in which the premium payment was made.

A policy may be subject to retroactive 're-testing' if policy benefits are reduced. Premiums previously applied to the policy during the Seven-Pay Test Period will be retested against a new Seven-Pay Premium Limit reflecting the lower policy benefits and can cause the policy to become a MEC. Before you request a withdrawal or otherwise reduce your policy benefits, you should confirm with us whether your policy would become a MEC. **Prior to any Seven-Pay Material Change you should consider whether future reductions or withdrawals may take place.** If so, we recommend that you request an in-force illustration and consult your tax advisor.

MEC Status

Based on our understanding of the Internal Revenue Code a policy issued and maintained consistent with the assumptions in this illustration would not be a MEC at issue or become one thereafter.

Whether and when your policy might actually become a MEC depends on the timing and amounts of premium payments and Withdrawals, the policy's non-guaranteed elements, your actual use of the policy's options, and any policy changes made pursuant to your request. The federal income tax consequences of a MEC can be significant. Consult your tax advisor for further details.

**Tax-Free
Income**

For federal income tax purposes, tax-free income assumes, among other things: 1) withdrawals do not exceed tax basis (generally, premiums paid less prior withdrawals); 2) policy remains in force until death (any outstanding policy debt at time of lapse or surrender that exceeds the tax basis will be subject to tax); 3) withdrawals taken during the first 15 policy years do not cause, occur at the time of, or during the two years prior to, any reduction in benefits; and 4) the policy does not become a modified endowment contract. See IRC Secs. 72, 7702(f)(7)(B), 7702A. Any policy withdrawals, loans and loan interest will reduce policy values and may reduce benefits.

Taxable Income

Lapses or Surrenders With an Outstanding Policy Loan:

If a life insurance Policy Loan is still outstanding when a policy is surrendered or lapses, the Policy Loan is automatically repaid from policy values. This will result in taxable income to the extent the Net Cash Surrender Value plus the amount of the repaid loan exceeds the cost basis of the policy. This potential tax is not reflected in any tax calculation(s) included in this illustration.

Assuming the life insurance policy is not a MEC:

1. Withdrawals (and other distributions) are taxed under the "cost recovery rule" and are generally taxable only to the extent the Withdrawal exceeds the cost basis of the policy. Policy cost basis generally equals the gross premiums paid less prior untaxed Withdrawals.
2. However, Withdrawals in the first 15 policy years may be taxable in part or in full under IRC 7702(f)(7)(B) if they occur in connection with a reduction in benefits.
3. Further, when such a reduction in benefits has occurred during the first 15 policy years, it is possible that earlier Withdrawals (within the two years prior to the reduction in benefits) may be similarly taxable. This illustration does not reflect this "two years prior" taxation.
4. After 15 policy years, Withdrawals up to policy cost basis are not taxable.

If the life insurance policy is a MEC:

1. Distributions from a MEC, including Withdrawals, Policy Loans, and certain assignments, are taxed to the extent of gain in the policy and may be subject to additional penalties. Generally, gain in the policy is the excess, if any, of the Accumulated Value, not reduced by Policy Debt over the policy cost basis.
2. Further, distributions taken from a policy during the two years prior to the policy becoming a MEC will be subject to MEC rules in the year the policy became a MEC and may become taxable at that time. This illustration does not reflect this "two years prior" taxation.

This is the Basic Illustration

Initial Premium Limits Summary
Seven Pay Premium: 104,232.67
Guideline Single Premium: 1,803,002.20
Guideline Level Premium: 157,052.70

When the Death Benefit is greater than the Face Amount due to Accumulated Value growth, payment of additional premium will be subject to approval.

Other Information

This illustration assumes you are the owner of the policy.

Life insurance is subject to underwriting and approval of the application and will incur monthly policy charges.

The sale or liquidation of any stock, bond, individual retirement account (IRA), certificate of deposit (CD), mutual fund, annuity, or other asset to fund the purchase of this product may have tax consequences, early Withdrawal penalties, or other costs or penalties as a result of the sale or liquidation. You may wish to consult independent legal or financial advice before selling or liquidating any assets, prior to the purchase of the life insurance product being solicited.

Pacific Life Insurance Company does not provide qualified plan administrative services or impartial investment advice, and does not act in a fiduciary capacity for any plan.

Pacific Life Insurance Company is licensed to issue insurance products in all states except New York. Product availability and features may vary by state. Insurance products and their guarantees, including optional benefits and any crediting rates, are backed by the financial strength and claims-paying ability of the issuing insurance company. Look to the strength of the life insurance company with regard to such guarantees as these guarantees are not backed by the broker-dealer, insurance agency, or their affiliates from which products are purchased. Neither these entities nor their representatives make any representation or assurance regarding the claims-paying ability of the life insurance company.

This is the Basic Illustration

No-Lapse Guarantee Summary Page

The No-Lapse Guarantee shown in this illustration is provided by the No-Lapse Guarantee (NLG, ICC14 R14FNL or R14FNL, based on state of policy issue.) This page provides an overview of the No-Lapse Guarantee policy values, planned premium payments and projected No-Lapse Guarantee duration.

Summary of Illustrated Premiums

Illustrated premiums are assumed to be paid at the beginning of each premium payment interval in the amounts and frequencies shown below.

| Premium | Frequency | Annualized Premium | Start Year | End Year |
|---------|-----------|--------------------|------------|----------|
| \$0.00 | Annual | \$0.00 | 1 | 81 |

Additional Lump sum premium(s) are paid in the month and year shown in the following table:

| Policy Year | Policy Month | Additional Amount |
|-------------|--------------|-------------------|
| 1 | 1 | \$1,803,002.16 |

No Lapse Guarantee Duration

Based on the assumptions of this illustration, the policy and the rider will provide:

| | |
|---|--------------|
| First Year Guaranteed Death Benefit: | \$10,212,915 |
| Illustrated No-Lapse Guarantee Duration: | 24 years |
| Maximum No-Lapse Guarantee Duration: | Lifetime |

See the guaranteed Death Benefit column of the Tabular Detail for more detail, as the Death Benefit may vary year by year.

This means that if the illustrated assumptions below are realized, then the illustrated Guaranteed Death Benefit will be provided. Those assumptions include the following:

1. The policy must be issued exactly as illustrated. This includes the face amounts, the underwriting class (approved by us after underwriting), the issue age or issue ages, and the presence of any riders and their amounts, cost, features and benefits, if applicable.
2. No changes in death benefit options or face amount, other than what is illustrated here; no riders are added or terminated after the issue of the policy.
3. All premium payments, including any 1035 Exchanges lump sums, are paid exactly as illustrated. If the actual amount or timing of premium payments is different than what is illustrated, the No-Lapse Guarantee Duration will also change.
4. Illustrated distributions were anticipated to be taken at the beginning of each policy month and are reflected in this illustration. If the actual amount or timing of distributions is different than what is illustrated, the No-Lapse Guarantee Duration will also change.

Backdating the Policy

Backdating a policy will affect the No-Lapse Guarantee Duration. This illustration assumes the policy will not be backdated.

Refer to the Tabular Detail page(s)

The Tabular Detail pages demonstrate the No-Lapse Guarantee even if the Accumulated Value in the "Guaranteed" columns becomes zero.

Important Information

The actual No-Lapse Guarantee Duration depends on the actual timing and amount of premium payments and distributions. Any changes in benefit amounts will also affect the No-Lapse Guarantee Duration. If actual premium payments or distributions are different than what is illustrated or if your policy benefits change, the length of the guarantee will also change. Premium payments must be made at the beginning of the premium payment interval for the rider to perform as illustrated. You must pay sufficient premium so the net no-lapse guarantee value is positive in order for the no-lapse guarantee to be in effect.

This is the Basic Illustration

Policy Values: Numeric Summary

| Year | Age | Cumulative | | End of Year Guaranteed Values ¹ 0.00% | | End of Year Non-Guaranteed Values ¹ | | | |
|------|-----|------------------------|--------------------|---|----------------------|--|----------------------|---------------------------------|----------------------|
| | | Premium Outlay* (1) | Policy Loan (2) | Net Cash Surrender Value (3) | Death Benefit (4) | Intermediate | | Illustrated 6.00% | |
| | | | | | | Net Cash Surrender Value (5) | Death Benefit (6) | Net Cash Surrender Value (7) | Death Benefit (8) |
| 5 | 44 | 1,803,002 | 0 | 1,333,297 | 10,212,915 | 1,518,547 | 10,212,915 | 1,965,748 | 10,212,915 |
| 10 | 49 | 1,803,002 | 0 | 961,904 | 10,212,915 | 1,394,149 | 10,212,915 | 2,581,514 | 10,212,915 |
| 20 | 59 | 1,803,002 | 0 | 0 | 5,039,542 | 1,122,204 | 5,039,542 | 4,960,830 | 6,647,512 |
| 30 | 69 | 1,803,002 | 3,650,000 | ## | ## | ## | ## | 4,473,801 | 5,944,052 |
| 31 | 70 | 1,803,002 | 4,015,000 | | | | | 4,432,248 | 5,895,973 |

The Allocations and Hypothetical Interest Rates below are for policy year 1. For any illustrated changes to the Allocations and Hypothetical Interest Rates see the Narrative Summary.

| | Allocation | Initial Guaranteed Interest Rate | Non-Guaranteed Intermediate Hypothetical Interest Rate | Non-Guaranteed Hypothetical Interest Rate |
|--------------------------------------|------------|----------------------------------|--|---|
| Fixed Account | 0.00% | N/A | N/A | N/A |
| 1-Year Indexed Account | 100.00% | 0.00% | 3.00% | 6.00% |
| 1-Year International Indexed Account | 0.00% | N/A | N/A | N/A |
| 1-Year High Par Indexed Account | 0.00% | N/A | N/A | N/A |
| 1-Year No Cap Indexed Account | 0.00% | N/A | N/A | N/A |
| 1-Year High Cap Indexed Account | 0.00% | N/A | N/A | N/A |
| 2-Year Indexed Account | 0.00% | N/A | N/A | N/A |
| High Par 5-Year Indexed Account | 0.00% | N/A | N/A | N/A |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. Intermediate columns reflect non-guaranteed elements, including charges and credits at rates that are halfway between the rates used in the "guaranteed" and "illustrated" columns. Illustrated columns reflect assumptions about non-guaranteed elements, including the interest rate assumptions that you have requested. These values will reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

*A zero in the Premium Outlay column does not mean the policy is paid up. Charges will continue to be deducted from the Accumulated Value as long as the policy remains in-force. The actual premium amounts and number of years of premium payments that are needed to maintain the illustrated non-guaranteed policy benefits will depend on the policy's non-guaranteed elements and on your actual use of the policy's options.

Where either guaranteed or intermediate scale Cash Surrender Value is insufficient, any distributions illustrated are: (1) based on non-guaranteed assumptions; (2) reflected in the non-guaranteed columns; and (3) not reflected in the guaranteed or intermediate scale columns.

Any Withdrawals, Policy Loans, and Loan Interest will reduce policy values and may reduce benefits.

Indicates that insurance coverage will cease in year 25 based on guaranteed assumptions. ## Indicates that insurance coverage will cease in year 25 based on intermediate assumptions. ## Indicates that insurance coverage would remain in force at least through year 81 (insured's age 120) based on illustrated assumptions.

Historical performance of the underlying Index should not be considered a representation of past or future performance of the Indexed Accounts under this life insurance policy. Actual Segment Indexed Interest Credits will vary from year to year depending on the underlying Index, Growth Cap, Participation Rate, Performance Factor, 1-Year High Cap Indexed Account Charge and Threshold Rate if applicable.

I have received and read a copy of this illustration and understand that any non-guaranteed elements illustrated are subject to change and could be higher or lower. I understand this is an illustration and not a contract. For full policy

This is the Basic Illustration

Policy Values: Numeric Summary

details, I will refer to the contract.

APPLICANT'S SIGNATURE**

DATE

**If a Corporation, the signature and title of an authorized officer is required, and the full name of the Corporation must be shown. If a Trust all required Trustees must sign according to the trust agreement.

I certify that this illustration has been presented to the applicant and that I have explained that any non-guaranteed elements are subject to change. I have made no statements that are inconsistent with this illustration nor have I made any promises about the expected future Index Credits of this contract

LIFE INSURANCE PRODUCER'S SIGNATURE

DATE

PL LIFE INSURANCE PRODUCER [REDACTED]

This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|-------|-----|-----------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 1 | 40 | 1,803,002 | 0 | 1,589,316 | 1,526,791 | 10,212,915 | 1,712,453 | 1,617,320 | 10,212,915 | 1,754,685 | 1,659,552 | 10,212,915 |
| 2 | 41 | 0 | 0 | 1,498,662 | 1,515,159 | 10,212,915 | 1,703,112 | 1,655,541 | 10,212,915 | 1,789,795 | 1,742,223 | 10,212,915 |
| 3 | 42 | 0 | 0 | 1,406,344 | 1,457,858 | 10,212,915 | 1,699,698 | 1,656,885 | 10,212,915 | 1,845,836 | 1,803,023 | 10,212,915 |
| 4 | 43 | 0 | 0 | 1,312,157 | 1,397,427 | 10,212,915 | 1,701,867 | 1,663,814 | 10,212,915 | 1,915,101 | 1,877,047 | 10,212,915 |
| 5 | 44 | 0 | 0 | 1,215,600 | 1,333,297 | 10,212,915 | 1,710,127 | 1,676,833 | 10,212,915 | 1,999,042 | 1,965,748 | 10,212,915 |
| 6 | 45 | 0 | 0 | 1,116,446 | 1,265,154 | 10,212,915 | 1,721,680 | 1,693,135 | 10,212,915 | 2,093,234 | 2,064,689 | 10,212,915 |
| 7 | 46 | 0 | 0 | 1,014,725 | 1,192,967 | 10,212,915 | 1,736,739 | 1,712,953 | 10,212,915 | 2,198,478 | 2,174,693 | 10,212,915 |
| 8 | 47 | 0 | 0 | 910,188 | 1,116,397 | 10,212,915 | 1,755,333 | 1,736,306 | 10,212,915 | 2,315,231 | 2,296,204 | 10,212,915 |
| 9 | 48 | 0 | 0 | 803,814 | 1,041,092 | 10,212,915 | 1,777,889 | 1,768,371 | 10,212,915 | 2,444,502 | 2,434,983 | 10,212,915 |
| 10 | 49 | 0 | 0 | 695,267 | 961,904 | 10,212,915 | 1,801,317 | 1,801,317 | 10,212,915 | 2,581,514 | 2,581,514 | 10,212,915 |
| Total | | 1,803,002 | | | | | | | | | | |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

²The Non-Guaranteed Alternate Scale Values columns reflect assumptions about non-guaranteed elements and assumes the allocated indexed accounts will receive the current Fixed Account crediting rate.

³Non-Guaranteed columns reflect assumptions about non-guaranteed elements and include the interest rate assumptions that you have requested. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

*A zero in the Premium Outlay column does not mean the policy is paid up. Charges will continue to be deducted from the Accumulated Value as long as the policy remains in-force. The actual premium amounts and number of years of premium payments that are needed to maintain the illustrated non-guaranteed policy benefits will depend on the policy's non-guaranteed elements and on your actual use of the policy's options.

**The 1-Year High Cap Indexed Account has a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account. Refer to the Narrative Summary for more information.

This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|-------|-----|-----------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 11 | 50 | 0 | 0 | 584,016 | 868,689 | 10,212,915 | 1,844,486 | 1,844,486 | 10,212,915 | 2,758,904 | 2,758,904 | 10,212,915 |
| 12 | 51 | 0 | 0 | 469,414 | 770,225 | 10,212,915 | 1,889,244 | 1,889,244 | 10,212,915 | 2,947,101 | 2,947,101 | 10,212,915 |
| 13 | 52 | 0 | 0 | 374,130 | 689,318 | 5,039,542 | 1,940,030 | 1,940,030 | 5,039,542 | 3,151,145 | 3,151,145 | 5,388,458 |
| 14 | 53 | 0 | 0 | 276,230 | 604,148 | 5,039,542 | 1,992,283 | 1,992,283 | 5,039,542 | 3,367,298 | 3,367,298 | 5,522,368 |
| 15 | 54 | 0 | 0 | 175,078 | 513,987 | 5,039,542 | 2,045,999 | 2,045,999 | 5,039,542 | 3,596,285 | 3,596,285 | 5,646,168 |
| 16 | 55 | 0 | 0 | 70,045 | 418,100 | 5,039,542 | 2,100,845 | 2,100,845 | 5,039,542 | 3,838,798 | 3,838,798 | 5,758,197 |
| 17 | 56 | 0 | 0 | 0 | 316,034 | 5,039,542 | 2,157,237 | 2,157,237 | 5,039,542 | 4,095,828 | 4,095,828 | 5,979,909 |
| 18 | 57 | 0 | 0 | 0 | 207,852 | 5,039,542 | 2,214,933 | 2,214,933 | 5,039,542 | 4,367,756 | 4,367,756 | 6,202,214 |
| 19 | 58 | 0 | 0 | 0 | 94,278 | 5,039,542 | 2,274,073 | 2,274,073 | 5,039,542 | 4,655,674 | 4,655,674 | 6,424,830 |
| 20 | 59 | 0 | 0 | 0 | 0 | 5,039,542 | 2,334,556 | 2,334,556 | 5,039,542 | 4,960,830 | 4,960,830 | 6,647,512 |
| Total | | 1,803,002 | | | | | | | | | | |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

²The Non-Guaranteed Alternate Scale Values columns reflect assumptions about non-guaranteed elements and assumes the allocated indexed accounts will receive the current Fixed Account crediting rate.

³Non-Guaranteed columns reflect assumptions about non-guaranteed elements and include the interest rate assumptions that you have requested. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

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**The 1-Year High Cap Indexed Account has a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account. Refer to the Narrative Summary for more information.

This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|-------|-----|-----------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 21 | 60 | 0 | 365,000 | 0 | 0 | 5,039,542 | 2,396,615 | 2,022,421 | 4,665,349 | 5,283,881 | 4,908,996 | 6,494,160 |
| 22 | 61 | 0 | 365,000 | 0 | 0 | 5,039,542 | 2,459,941 | 1,694,154 | 4,273,755 | 5,626,046 | 4,857,531 | 6,432,824 |
| 23 | 62 | 0 | 365,000 | 0 | 0 | 5,039,542 | 2,524,696 | 1,349,107 | 3,863,953 | 5,987,992 | 4,806,165 | 6,363,043 |
| 24 | 63 | 0 | 365,000 | 0 | 0 | 5,039,542 | 2,590,839 | 986,391 | 3,435,094 | 6,371,434 | 4,755,631 | 6,284,775 |
| 25 | 64 | 0 | 365,000 | ## | ## | ## | 2,658,391 | 605,143 | 2,986,294 | 6,777,291 | 4,705,812 | 6,196,816 |
| 26 | 65 | 0 | 365,000 | | | | 2,727,005 | 204,088 | 2,516,625 | 7,207,470 | 4,657,532 | 6,099,026 |
| 27 | 66 | 0 | 365,000 | | | | ## | ## | ## | 7,661,503 | 4,609,183 | 6,064,868 |
| 28 | 67 | 0 | 365,000 | | | | | | | 8,142,794 | 4,562,973 | 6,028,676 |
| 29 | 68 | 0 | 365,000 | | | | | | | 8,651,150 | 4,517,452 | 5,988,148 |
| 30 | 69 | 0 | 365,000 | | | | | | | 9,189,070 | 4,473,801 | 5,944,052 |
| Total | | 1,803,002 | | | | | | | | | | |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

²The Non-Guaranteed Alternate Scale Values columns reflect assumptions about non-guaranteed elements and assumes the allocated indexed accounts will receive the current Fixed Account crediting rate.

³Non-Guaranteed columns reflect assumptions about non-guaranteed elements and include the interest rate assumptions that you have requested. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

*A zero in the Premium Outlay column does not mean the policy is paid up. Charges will continue to be deducted from the Accumulated Value as long as the policy remains in-force. The actual premium amounts and number of years of premium payments that are needed to maintain the illustrated non-guaranteed policy benefits will depend on the policy's non-guaranteed elements and on your actual use of the policy's options.

**The 1-Year High Cap Indexed Account has a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account. Refer to the Narrative Summary for more information.

This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|-------|-----|-----------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 31 | 70 | 0 | 365,000 | | | | | | | 9,758,165 | 4,432,248 | 5,895,973 |
| 32 | 71 | 0 | 365,000 | | | | | | | 10,353,469 | 4,386,371 | 5,732,322 |
| 33 | 72 | 0 | 365,000 | | | | | | | 10,983,958 | 4,343,619 | 5,551,855 |
| 34 | 73 | 0 | 365,000 | | | | | | | 11,653,697 | 4,306,455 | 5,355,288 |
| 35 | 74 | 0 | 365,000 | | | | | | | 12,365,399 | 4,275,911 | 5,141,488 |
| 36 | 75 | 0 | 365,000 | | | | | | | 13,122,069 | 4,253,220 | 4,909,324 |
| 37 | 76 | 0 | 365,000 | | | | | | | 13,922,866 | 4,235,690 | 4,931,833 |
| 38 | 77 | 0 | 365,000 | | | | | | | 14,769,913 | 4,223,492 | 4,961,988 |
| 39 | 78 | 0 | 365,000 | | | | | | | 15,665,375 | 4,216,748 | 5,000,016 |
| 40 | 79 | 0 | 365,000 | | | | | | | 16,611,579 | 4,215,635 | 5,046,214 |
| Total | | 1,803,002 | | | | | | | | | | |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

²The Non-Guaranteed Alternate Scale Values columns reflect assumptions about non-guaranteed elements and assumes the allocated indexed accounts will receive the current Fixed Account crediting rate.

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**The 1-Year High Cap Indexed Account has a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account. Refer to the Narrative Summary for more information.

This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|-------|-----|-----------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 41 | 80 | 0 | 365,000 | | | | | | | 17,610,741 | 4,220,115 | 5,100,652 |
| 42 | 81 | 0 | 365,000 | | | | | | | 18,668,218 | 4,233,174 | 5,166,585 |
| 43 | 82 | 0 | 365,000 | | | | | | | 19,786,886 | 4,255,205 | 5,244,549 |
| 44 | 83 | 0 | 365,000 | | | | | | | 20,966,216 | 4,283,066 | 5,331,377 |
| 45 | 84 | 0 | 365,000 | | | | | | | 22,212,206 | 4,320,013 | 5,430,623 |
| 46 | 85 | 0 | 365,000 | | | | | | | 23,527,736 | 4,366,048 | 5,542,434 |
| 47 | 86 | 0 | 365,000 | | | | | | | 24,915,761 | 4,421,103 | 5,666,891 |
| 48 | 87 | 0 | 365,000 | | | | | | | 26,379,119 | 4,484,842 | 5,803,798 |
| 49 | 88 | 0 | 365,000 | | | | | | | 27,920,580 | 4,556,704 | 5,952,733 |
| 50 | 89 | 0 | 365,000 | | | | | | | 29,542,846 | 4,635,891 | 6,113,033 |
| Total | | 1,803,002 | | | | | | | | | | |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

²The Non-Guaranteed Alternate Scale Values columns reflect assumptions about non-guaranteed elements and assumes the allocated indexed accounts will receive the current Fixed Account crediting rate.

³Non-Guaranteed columns reflect assumptions about non-guaranteed elements and include the interest rate assumptions that you have requested. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

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This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|-------|-----|-----------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 51 | 90 | 0 | 0 | | | | | | | 31,246,273 | 5,093,971 | 6,656,284 |
| 52 | 91 | 0 | 0 | | | | | | | 33,053,980 | 5,594,062 | 6,916,221 |
| 53 | 92 | 0 | 0 | | | | | | | 34,977,722 | 6,144,808 | 7,194,140 |
| 54 | 93 | 0 | 0 | | | | | | | 37,038,525 | 6,763,966 | 7,504,736 |
| 55 | 94 | 0 | 0 | | | | | | | 39,249,689 | 7,461,401 | 7,853,898 |
| 56 | 95 | 0 | 0 | | | | | | | 41,584,995 | 8,207,293 | 8,623,143 |
| 57 | 96 | 0 | 0 | | | | | | | 44,057,139 | 9,010,552 | 9,451,123 |
| 58 | 97 | 0 | 0 | | | | | | | 46,665,885 | 9,866,969 | 10,333,628 |
| 59 | 98 | 0 | 0 | | | | | | | 49,416,443 | 10,777,581 | 11,271,746 |
| 60 | 99 | 0 | 0 | | | | | | | 52,322,788 | 11,751,983 | 12,275,211 |
| Total | | 1,803,002 | | | | | | | | | | |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

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³Non-Guaranteed columns reflect assumptions about non-guaranteed elements and include the interest rate assumptions that you have requested. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

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**The 1-Year High Cap Indexed Account has a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account. Refer to the Narrative Summary for more information.

This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|-------|-----|-----------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 61 | 100 | 0 | 0 | | | | | | | 55,385,203 | 12,785,858 | 13,339,710 |
| 62 | 101 | 0 | 0 | | | | | | | 58,617,828 | 13,888,515 | 14,474,694 |
| 63 | 102 | 0 | 0 | | | | | | | 62,027,058 | 15,061,279 | 15,681,550 |
| 64 | 103 | 0 | 0 | | | | | | | 65,608,396 | 16,294,329 | 16,950,413 |
| 65 | 104 | 0 | 0 | | | | | | | 69,377,142 | 17,597,371 | 18,291,143 |
| 66 | 105 | 0 | 0 | | | | | | | 73,328,039 | 18,959,280 | 19,692,560 |
| 67 | 106 | 0 | 0 | | | | | | | 77,479,326 | 20,392,128 | 21,166,922 |
| 68 | 107 | 0 | 0 | | | | | | | 81,838,956 | 21,897,399 | 22,715,788 |
| 69 | 108 | 0 | 0 | | | | | | | 86,401,417 | 23,462,782 | 24,326,796 |
| 70 | 109 | 0 | 0 | | | | | | | 91,190,564 | 25,104,997 | 26,016,903 |
| Total | | 1,803,002 | | | | | | | | | | |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

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This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|-------|-----|-----------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 71 | 110 | 0 | 0 | | | | | | | 96,221,387 | 26,831,542 | 27,793,756 |
| 72 | 111 | 0 | 0 | | | | | | | 101,505K | 28,645,290 | 29,660,336 |
| 73 | 112 | 0 | 0 | | | | | | | 107,033K | 30,530,509 | 31,600,837 |
| 74 | 113 | 0 | 0 | | | | | | | 112,865K | 32,537,624 | 33,666,274 |
| 75 | 114 | 0 | 0 | | | | | | | 119,018K | 34,674,248 | 35,864,429 |
| 76 | 115 | 0 | 0 | | | | | | | 125,509K | 36,948,461 | 38,203,555 |
| 77 | 116 | 0 | 0 | | | | | | | 132,358K | 39,368,832 | 40,692,411 |
| 78 | 117 | 0 | 0 | | | | | | | 139,560K | 41,921,262 | 43,316,860 |
| 79 | 118 | 0 | 0 | | | | | | | 147,156K | 44,636,052 | 46,107,616 |
| 80 | 119 | 0 | 0 | | | | | | | 155,170K | 47,523,223 | 49,074,919 |
| Total | | 1,803,002 | | | | | | | | | | |

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

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This is the Basic Illustration

Policy Values: Tabular Detail

| Year | Age | Premium Outlay* | Policy Loan | Guaranteed Values End Of Year @ 0.00% ¹ | | | Non-Guaranteed Alternate Scale Values End Of Year @ 3.50% ² | | | Non-Guaranteed Values End Of Year @ 6.00% ³ | | |
|--------------|-----|------------------|-------------|--|--------------------------|---------------|--|--------------------------|---------------|--|--------------------------|---------------|
| | | | | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit | Accumulated Value | Net Cash Surrender Value | Death Benefit |
| 81 | 120 | 0 | 0 | | | | | | | 163,622K | 50,593,404 | 52,229,625 |
| Total | | 1,803,002 | | | | | | | | | | |

The Allocations and Hypothetical Interest Rates below are for policy year 1. For any illustrated changes to the Allocations and Hypothetical Interest Rates see the Narrative Summary.

¹Guaranteed columns reflect maximum policy charges and guaranteed interest. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

²The Non-Guaranteed Alternate Scale Values columns reflect assumptions about non-guaranteed elements and assumes the allocated indexed accounts will receive the current Fixed Account crediting rate.

³Non-Guaranteed columns reflect assumptions about non-guaranteed elements and include the interest rate assumptions that you have requested. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

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**The 1-Year High Cap Indexed Account has a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account. Refer to the Narrative Summary for more information.

This is the Basic Illustration

Policy Values: Tabular Detail

| | Allocation | Initial Guaranteed Interest Rate | Non-Guaranteed Alternate Scale Hypothetical Interest Rate | Non-Guaranteed Hypothetical Interest Rate |
|--------------------------------------|------------|----------------------------------|---|---|
| Fixed Account | 0.00% | N/A | N/A | N/A |
| 1-Year Indexed Account | 100.00% | 0.00% | 3.50% | 6.00% |
| 1-Year International Indexed Account | 0.00% | N/A | N/A | N/A |
| 1-Year High Par Indexed Account | 0.00% | N/A | N/A | N/A |
| 1-Year No Cap Indexed Account | 0.00% | N/A | N/A | N/A |
| 1-Year High Cap Indexed Account** | 0.00% | N/A | N/A | N/A |
| 2-Year Indexed Account | 0.00% | N/A | N/A | N/A |
| High Par 5-Year Indexed Account | 0.00% | N/A | N/A | N/A |

Distributions can be taken on a policy only when there is adequate Cash Surrender Value available to support the illustrated distribution. Any distributions shown in a policy year with no Cash Surrender Value would not be available.

The Death Benefit continues in the "Guaranteed Values" columns, even though the corresponding guaranteed Cash Surrender Value is zero. This is because the No-Lapse Guarantee Rider is in effect, based on the illustrated assumptions.

Any Withdrawals, Policy Loans, and Loan Interest will reduce policy values and may reduce benefits.

Indicates that insurance coverage will cease in year 25 based on guaranteed assumptions. ## Indicates that insurance coverage will cease in year 27 based on non-guaranteed Alternate Scale assumptions. Insurance coverage would remain in force at least through year 81 based on illustrated assumptions.

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²The Non-Guaranteed Alternate Scale Values columns reflect assumptions about non-guaranteed elements and assumes the allocated indexed accounts will receive the current Fixed Account crediting rate.

³Non-Guaranteed columns reflect assumptions about non-guaranteed elements and include the interest rate assumptions that you have requested. The values shown in the Cash Surrender Value columns and the Death Benefit columns may reflect the policy's Alternate Accumulated Value if the 2% Interest Guarantee on Termination Rider applies. Refer to the Narrative Summary for more information.

*A zero in the Premium Outlay column does not mean the policy is paid up. Charges will continue to be deducted from the Accumulated Value as long as the policy remains in-force. The actual premium amounts and number of years of premium payments that are needed to maintain the illustrated non-guaranteed policy benefits will depend on the policy's non-guaranteed elements and on your actual use of the policy's options.

**The 1-Year High Cap Indexed Account has a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account. Refer to the Narrative Summary for more information.

This is the Basic Illustration

Column Definitions

These column definitions apply to all the reports generated in this illustration.

| Column Name | Description |
|--------------------------|--|
| Accumulated Value | Premiums paid, less premium load, cost of insurance and other charges, and withdrawals, accumulated at interest. If the Alternate Accumulated Value is higher than the Accumulated Value, the Alternate Accumulated Value will be used to determine the policy values at lapse, surrender, or death. |
| Age | The insured's age on the birthday nearest the beginning of the policy year shown. |
| Death Benefit | The amount payable upon your death. The Death Benefit is always reduced by any Policy Debt and increased by any applicable rider benefits. |
| Net Accumulated Value | Accumulated Value minus policy debt. |
| Net Cash Surrender Value | Cash Surrender Value minus policy debt. |
| Net Outlay | The premium paid minus any Policy Loans or Withdrawals plus any illustrated estimated tax and loan interest paid in cash. |
| Policy Loan | The loan amount taken in cash from a policy. A negative amount indicates a loan repayment. This column does not include loans taken to pay loan interest. |
| Premium Outlay | The sum of the premium payments you plan to make each year. |
| Year | The number of years from when the policy was issued. |

This is the Basic Illustration

Index Disclosures

Overview Neither the policy nor the Indexed Account directly participates in the stock market or the S&P 500®, Hang Seng, EURO STOXX 50®, MSCI Emerging Markets Index. Historical performances of any Index should not be considered a representation of past or future performance. Future performance of the Indexed Account under this life insurance policy may be greater or less than the earnings shown for the Index. The descriptions below are in the format required by the index providers.

S&P 500® index The S&P 500® index is composed of 500 common stocks representing major U.S. industry sectors. Segment Indexed Interest Credits are added to each Segment at Segment Maturity using a calculation that is based, in part, on the performance of the S&P 500® index, excluding dividends.

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This is the Basic Illustration

I-1V

Life Insurance Producer: [REDACTED]

For: [REDACTED]

Pacific Life Insurance Company, 45 Enterprise, Aliso Viejo, CA 92656

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Segment Growth Rates and Hypothetical Average Returns

The purpose of this report is to help you understand the risk and returns that are possible under each of the accounts.

Example of Segment Growth Rate Calculations

| 1-Year Indexed Account | | | 1-Year International Indexed Account | | | | | 1-Year High Par Indexed Account | | | 1-Year No Cap Indexed Account | | | 1-Year High Cap Indexed Account* | | |
|------------------------|------------------------------|------------------------------------|--------------------------------------|--|---|--|------------------------------------|---------------------------------|------------------------------|------------------------------------|-------------------------------|------------------------------|------------------------------------|----------------------------------|------------------------------|------------------------------------|
| 1 Year Period Ending | Annualized Index Growth Rate | Hypothetical Indexed Interest Rate | 1 Year Period Ending | Annualized Hang Seng Index Growth Rate | Annualized EURO STOXX 50® Index Growth Rate | Annualized MSCI Emerging Markets Index Growth Rate | Hypothetical Indexed Interest Rate | 1 Year Period Ending | Annualized Index Growth Rate | Hypothetical Indexed Interest Rate | 1 Year Period Ending | Annualized Index Growth Rate | Hypothetical Indexed Interest Rate | 1 Year Period Ending | Annualized Index Growth Rate | Hypothetical Indexed Interest Rate |
| 12/15/98 | 18.46% | 10.25% | 12/15/98 | -5.85% | 24.84% | -26.69% | 3.67% | 12/15/98 | 18.46% | 8.50% | 12/15/98 | 18.46% | 13.46% | 12/15/98 | 18.46% | 13.25% |
| 12/15/99 | 22.96% | 10.25% | 12/15/99 | 65.72% | 48.14% | 57.93% | 11.00% | 12/15/99 | 22.96% | 8.50% | 12/15/99 | 22.96% | 17.96% | 12/15/99 | 22.96% | 13.25% |
| 12/15/00 | -4.44% | 0.00% | 12/15/00 | -4.83% | 6.65% | -23.88% | 2.22% | 12/15/00 | -4.44% | 0.00% | 12/15/00 | -4.44% | 0.00% | 12/15/00 | -4.44% | 0.00% |
| 12/15/01 | -16.25% | 0.00% | 12/15/01 | -26.01% | -25.82% | -10.92% | 0.00% | 12/15/01 | -16.25% | 0.00% | 12/15/01 | -16.25% | 0.00% | 12/15/01 | -16.25% | 0.00% |
| 12/15/02 | -18.94% | 0.00% | 12/15/02 | -15.78% | -29.33% | -3.76% | 0.00% | 12/15/02 | -18.94% | 0.00% | 12/15/02 | -18.94% | 0.00% | 12/15/02 | -18.94% | 0.00% |
| 12/15/03 | 17.32% | 10.25% | 12/15/03 | 29.66% | 7.01% | 44.46% | 9.67% | 12/15/03 | 17.32% | 8.50% | 12/15/03 | 17.32% | 12.32% | 12/15/03 | 17.32% | 13.25% |
| 12/15/04 | 12.67% | 10.25% | 12/15/04 | 12.17% | 8.72% | 19.32% | 10.24% | 12/15/04 | 12.67% | 8.50% | 12/15/04 | 12.67% | 7.67% | 12/15/04 | 12.67% | 12.67% |
| 12/15/05 | 5.76% | 5.76% | 12/15/05 | 6.64% | 19.94% | 35.02% | 9.55% | 12/15/05 | 5.76% | 8.50% | 12/15/05 | 5.76% | 0.76% | 12/15/05 | 5.76% | 5.76% |
| 12/15/06 | 12.00% | 10.25% | 12/15/06 | 26.33% | 17.04% | 28.12% | 11.00% | 12/15/06 | 12.00% | 8.50% | 12/15/06 | 12.00% | 7.00% | 12/15/06 | 12.00% | 12.00% |
| 12/15/07 | 2.98% | 2.98% | 12/15/07 | 45.69% | 6.45% | 38.11% | 9.48% | 12/15/07 | 2.98% | 4.47% | 12/15/07 | 2.98% | 0.00% | 12/15/07 | 2.98% | 2.98% |
| 12/15/08 | -40.83% | 0.00% | 12/15/08 | -45.41% | -45.09% | -54.05% | 0.00% | 12/15/08 | -40.83% | 0.00% | 12/15/08 | -40.83% | 0.00% | 12/15/08 | -40.83% | 0.00% |
| 12/15/09 | 28.27% | 10.25% | 12/15/09 | 46.78% | 19.84% | 74.03% | 11.00% | 12/15/09 | 28.27% | 8.50% | 12/15/09 | 28.27% | 23.27% | 12/15/09 | 28.27% | 13.25% |
| 12/15/10 | 11.44% | 10.25% | 12/15/10 | 6.09% | -0.81% | 15.29% | 5.70% | 12/15/10 | 11.44% | 8.50% | 12/15/10 | 11.44% | 6.44% | 12/15/10 | 11.44% | 11.44% |
| 12/15/11 | -2.40% | 0.00% | 12/15/11 | -21.67% | -22.92% | -19.93% | 0.00% | 12/15/11 | -2.40% | 0.00% | 12/15/11 | -2.40% | 0.00% | 12/15/11 | -2.40% | 0.00% |
| 12/15/12 | 16.65% | 10.25% | 12/15/12 | 23.16% | 19.25% | 15.36% | 11.00% | 12/15/12 | 16.65% | 8.50% | 12/15/12 | 16.65% | 11.65% | 12/15/12 | 16.65% | 13.25% |
| 12/15/13 | 26.38% | 10.25% | 12/15/13 | 2.25% | 13.24% | -5.03% | 4.42% | 12/15/13 | 26.38% | 8.50% | 12/15/13 | 26.38% | 21.38% | 12/15/13 | 26.38% | 13.25% |
| 12/15/14 | 11.37% | 10.25% | 12/15/14 | -0.38% | 0.14% | -6.70% | 0.05% | 12/15/14 | 11.37% | 8.50% | 12/15/14 | 11.37% | 6.37% | 12/15/14 | 11.37% | 11.37% |
| 12/15/15 | 1.62% | 1.62% | 12/15/15 | -7.46% | 5.24% | -16.54% | 1.75% | 12/15/15 | 1.62% | 2.44% | 12/15/15 | 1.62% | 0.00% | 12/15/15 | 1.62% | 1.62% |
| 12/15/16 | 11.44% | 10.25% | 12/15/16 | 5.38% | 2.31% | 13.17% | 6.23% | 12/15/16 | 11.44% | 8.50% | 12/15/16 | 11.44% | 6.44% | 12/15/16 | 11.44% | 11.44% |
| 12/15/17 | 17.70% | 10.25% | 12/15/17 | 29.88% | 10.73% | 28.47% | 10.91% | 12/15/17 | 17.70% | 8.50% | 12/15/17 | 17.70% | 12.70% | 12/15/17 | 17.70% | 13.25% |

*The 1-Year High Cap Indexed Account has a benefit charge that is treated as part of the Monthly Deduction and is deducted from the Accumulated Value, based on the value of the 1-Year High Cap Indexed Account. Refer to the Narrative Summary for more information.

This is the Basic Illustration

Segment Growth Rates and Hypothetical Average Returns

The purpose of this report is to help you understand the risk and returns that are possible under each of the accounts.

Example of Segment Growth Rate Calculations

| 2-Year Indexed Account | | | | High Par 5-Year Indexed Account | | | |
|------------------------|------------------------------|------------------------------------|--|---------------------------------|------------------------------|---|--|
| 2 Year Period Ending | Annualized Index Growth Rate | Hypothetical Indexed Interest Rate | | 5 Year Period Ending | Annualized Index Growth Rate | Hypothetical High Par 5-Year Indexed Account Annual Indexed Interest Rate | |
| 12/15/98 | 25.81% | 14.02% | | 12/15/98 | 18.39% | 19.71% | |
| 12/15/99 | 20.69% | 14.02% | | 12/15/99 | 23.79% | 25.37% | |
| 12/15/00 | 8.40% | 8.40% | | 12/15/00 | 18.19% | 19.50% | |
| 12/15/01 | -10.54% | 0.00% | | 12/15/01 | 10.48% | 11.33% | |
| 12/15/02 | -17.60% | 0.00% | | 12/15/02 | 0.75% | 0.82% | |
| 12/15/03 | -2.48% | 0.00% | | 12/15/03 | -3.24% | 0.00% | |
| 12/15/04 | 14.97% | 14.02% | | 12/15/04 | -4.25% | 0.00% | |
| 12/15/05 | 9.16% | 9.16% | | 12/15/05 | -2.05% | 0.00% | |
| 12/15/06 | 8.84% | 8.84% | | 12/15/06 | 3.07% | 3.35% | |
| 12/15/07 | 7.40% | 7.40% | | 12/15/07 | 10.15% | 10.98% | |
| 12/15/08 | -21.94% | 0.00% | | 12/15/08 | 2.65% | 2.90% | |
| 12/15/09 | -12.88% | 0.00% | | 12/15/09 | -4.75% | 0.00% | |
| 12/15/10 | 19.56% | 14.02% | | 12/15/10 | -2.10% | 0.00% | |
| 12/15/11 | 4.29% | 4.29% | | 12/15/11 | -2.28% | 0.00% | |
| 12/15/12 | 6.70% | 6.70% | | 12/15/12 | -1.29% | 0.00% | |
| 12/15/13 | 21.42% | 14.02% | | 12/15/13 | 13.62% | 14.67% | |
| 12/15/14 | 18.64% | 14.02% | | 12/15/14 | 11.46% | 12.38% | |
| 12/15/15 | 6.38% | 6.38% | | 12/15/15 | 10.65% | 11.52% | |
| 12/15/16 | 6.42% | 6.42% | | 12/15/16 | 11.53% | 12.45% | |
| 12/15/17 | 14.53% | 14.02% | | 12/15/17 | 11.60% | 12.53% | |

This is the Basic Illustration

I-1V

Life Insurance Producer: [REDACTED]

For: [REDACTED]

Pacific Life Insurance Company, 45 Enterprise, Aliso Viejo, CA 92656

PDX IUL N1 - GPT - NonGI

Average Indexed Interest Rates

To help you understand the potential interest rates and risks over a longer term, encompassing multiple segments, we have calculated the Average Indexed Rates, Minimum Indexed Rates, Maximum Indexed Rates and Standard Deviation. The following is neither guaranteed, nor intended to predict your actual risk or return over any period.

| | 1-Year Indexed Account | 1-Year International Indexed Account | 1-Year High Par Indexed Account | 1-Year No Cap Indexed Account | 1-Year High Cap Indexed Account | 2-Year Indexed Account | High Par 5-Year Indexed Account |
|----------------------|------------------------|--------------------------------------|---------------------------------|-------------------------------|---------------------------------|------------------------|---------------------------------|
| Average Indexed Rate | 6.21% | 6.32% | 5.63% | 7.95% | 7.44% | 7.42% | 7.64% |
| Minimum Indexed Rate | 4.05% | 5.50% | 4.04% | 4.09% | 4.75% | 3.94% | 3.00% |
| Maximum Indexed Rate | 7.94% | 7.29% | 7.16% | 11.98% | 9.58% | 10.66% | 13.30% |
| Standard Deviation | 0.73% | 0.35% | 0.62% | 1.48% | 0.92% | 1.42% | 2.17% |

The Minimum Indexed Rate reflects the lowest interest rate achieved over the historical period measured. The Maximum Indexed Rate reflects the highest interest rate achieved over the historical period measured. The Standard Deviation is one measure of the volatility with each Indexed Account. It is calculated using the average annual interest rate of each Indexed Account over the historical period*.

*The table assumes an allocation of Accumulated Value into the Indexed Accounts, accumulated over a 30-year period for the 1-Year International Indexed Account and a 65-year period for all other Indexed Accounts, with no deductions for policy charges, withdrawals or loans. For a more detailed description of each Indexed Account, see the Narrative Summary.

This is the Basic Illustration

I-1V

Life Insurance Producer: [REDACTED]

For: [REDACTED]

Pacific Life Insurance Company, 45 Enterprise, Aliso Viejo, CA 92656

PDX IUL N1 - GPT - NonGI

Premier Living Benefits Rider

The Premier Living Benefits Rider (Form Series R12CII) provides an accelerated payment of the Death Benefit if you have a chronic illness. Chronic illness, means that the insured is certified in writing by a Licensed Health Care Practitioner as unable to perform at least two Activities of Daily Living without substantial assistance from another individual due to a loss of functional capacity and the condition is expected to be permanent; or requiring substantial supervision to protect the individual from threats to health and safety due to severe cognitive impairment and the condition is expected to be permanent. For each benefit requested we must receive written certification that you have a chronic illness. You may use the accelerated death benefit proceeds for any reason.

Each time you receive a benefit payment, policy values are reduced proportionately by the acceleration percentage. Because the Net Death Benefit is larger than the Net Cash Surrender Value, the reduction to the Death Benefit will be larger than the reduction to the Net Cash Surrender Value. If a Policy Loan is outstanding at the time of a benefit payment, a portion of the benefit payment will go towards repaying the Policy Loan, which will reduce the payment you receive which also reduces the Total Loan Balance. Accelerating the entire Death Benefit will terminate the policy. The benefit payment is subject to a maximum, which will vary each time you receive a benefit payment. You can choose to receive any amount up to the maximum benefit payment.

The cost of exercising the rider is that the Death Benefit is reduced by an amount greater than the rider benefit payment itself to reflect the early payment of the Death Benefit. Rider benefit payments will reduce the Death Benefit, Cash Surrender Value, and any Policy Debt. Additionally, rider benefit payments may adversely affect the benefits under other riders.

This is a life insurance benefit that also gives you the option to accelerate some or all of the Death Benefit in the event that you meet the criteria for a qualifying event described in the policy. This policy or certificate does not provide long-term care insurance subject to California long-term care insurance law. This policy or certificate is not a California Partnership for Long-Term Care program policy. This policy or certificate is not a Medicare supplement (policy or certificate).

How Does this Rider Differ from Long-Term Care Insurance?

While both options generally use the same definition for chronic illness and pay benefits for insureds who meet that definition, a long-term care policy is specifically designed to reimburse the cost of qualified long-term care services received. A long-term care policy's benefits are based on elections made at policy issue.

Unlike long-term care insurance, the Premier Living Benefits rider accelerates a portion of the life insurance policy's Death Benefit when a person has a permanent chronic illness. The rider's benefits are not tied to the actual cost of services received and no receipts are required. The acceleration of the life insurance benefit is based on the underlying life insurance policy values, which may or may not cover the costs of long-term care incurred. This rider is **not and does not intend to qualify as long-term care insurance and is not intended to replace the need for long-term care insurance.**

The chronic illness rider may be attached to only one policy per insured. If you have existing Pacific Life policies with a chronic illness rider, you may choose to either:

1. terminate the chronic illness rider on your existing policy, and obtain a new chronic illness rider with a newly-issued policy, if you qualify; or
2. maintain the chronic illness rider on your existing policy, and accept any applied for life insurance, if issued, without the chronic illness rider.

You should not terminate any existing Pacific Life chronic illness rider until the new application with a chronic illness rider has been approved by Pacific Life. If an insured's chronic illness has generated benefits under any existing Pacific Life policy, that insured does not qualify for a new chronic illness rider. Please understand that chronic illness benefits may be higher or lower based upon the policy to which it is attached. Request sample illustrations from your life insurance producer to help determine the policy configuration is appropriate for you.

Payments of accelerated Death Benefits provided by this rider are intended to qualify under Section 101(g) of the Internal Revenue Code. Tax treatment of an accelerated Death Benefit may depend on factors such as the amount of benefits in relation to certain IRS limitations (referred to as "per diem" limitations), the amount of qualified expenses incurred or if similar benefits are being received under other contracts. Receipt of accelerated Death Benefits may affect eligibility for public assistance programs such as Medi-Cal. When benefits are received from multiple policies providing long-term care

This report is not complete and cannot be presented without the Basic Illustration. Please refer to the Basic Illustration for guaranteed elements and other important information. Non-Guaranteed elements are not guaranteed.

Premier Living Benefits Rider

or chronic illness benefits for a given insured, including policies with different owners, all of those benefits must be aggregated to determine their taxability. Tax laws relating to accelerated Death Benefits are complex. Pacific Life cannot determine whether the benefits are taxable. Clients are advised to consult with qualified and independent legal and tax advisors for more information.

The table below shows the non-guaranteed net maximum annual benefit payment on the following eligible insured(s), if they qualify. Benefit payments are subject to a maximum, which will vary each time you receive a benefit. Benefits are not guaranteed and actual benefit payments may be less than illustrated.

| Age | Net Maximum Annual Payment |
|-----|----------------------------|
| 75 | \$59,364 |
| 80 | \$44,895 |

The 2018 IRS per diem limitation is \$360.00 and may change annually.

This report is not complete and cannot be presented without the Basic Illustration. Please refer to the Basic Illustration for guaranteed elements and other important information. Non-Guaranteed elements are not guaranteed.

Prepared for [REDACTED]
by [REDACTED] February 27, 2018
R-01

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Policy Form #ICC15 P15IUL or P15IUL
For presentation in California

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Values may contain guaranteed and non-guaranteed elements, including but not limited to current illustrated rates and current cost of insurance rates. This is not an estimate of future performance.

Riders will likely incur additional charges and are subject to availability, restrictions and limitations. When considering a rider, request a policy illustration from your life insurance producer to see the rider's impact on your policy's values.

Indexed Universal Life Insurance generally requires additional premium payments after the initial premium. If either no premiums are paid, or subsequent premiums are insufficient to continue coverage, it is possible that coverage will expire.

This policy does not directly participate in any stock or equity investments.

Some of the policy elements in this supplemental illustration are non-guaranteed. Non-guaranteed/current elements are not guaranteed by definition. As such, Pacific Life Insurance Company reserves the right to change or modify any of these elements. This right to change these elements is not limited to a specific time or reason. Over time, the policy's actual non-guaranteed elements, and perhaps your actual use of the policy's options, are likely to vary from the assumptions used in this illustration. For these reasons, actual policy performance will either be more or less favorable than shown in this illustration. Please refer to the Basic Illustration for Guaranteed values and other important information.

Pacific Life Insurance Company is licensed to issue insurance products in all states except New York. Product availability and features may vary by state. Insurance products and their guarantees, including optional benefits and any crediting rates, are backed by the financial strength and claims-paying ability of the issuing insurance company. Look to the strength of the life insurance company with regard to such guarantees as these guarantees are not backed by the broker-dealer, insurance agency or their affiliates from which products are purchased. Neither these entities nor their representatives make any representation or assurance regarding the claims-paying ability of the life insurance company.

This report is not complete and cannot be presented without the Basic Illustration. Please refer to the Basic Illustration for guaranteed elements and other important information. Non-Guaranteed elements are not guaranteed.

Prepared for [REDACTED]
by [REDACTED] February 27, 2018
R-01

Page 38 of 38
Policy Form #ICC15 P15IUL or P15IUL
For presentation in California

**Comments for the Center for Economic Justice
To the NAIC Life Insurance and Annuities (A) Committee**

Proposed Revisions to AG 49

July 7, 2020

Appendix B

Independent Proposal for Revisions to AG49

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.

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% ($5\% * 1.2 = 6\% - 1\% \text{ charge} = 5\%$ 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 $\text{NIER} * 1.45$ (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 $\text{NIER} * 1.45$
 - 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 $\text{NIER} + \min(\text{NIER}, \text{HB}) * 1.45$. There are already products in 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 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 $\text{NIER} * 1.45$ 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 (HFLM) 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 $\text{NIER} * 1.45$ 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 attributable 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

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Mike Brohawn, President, Your Life Insurance Solution

Steven Roth, President, Wealth Management International, Inc., Licensed Life & Disability Insurance Analyst

Ben Baldwin Jr

**Comments for the Center for Economic Justice
To the NAIC Life Insurance and Annuities (A) Committee
Proposed Revisions to AG 49**

July 7, 2020

Appendix C

Redlined Version of AG49-A Showing Changes From Current AG49

Adopted by the Life Insurance and Annuities (A) Committee—Dec. 11, 2016
Adopted by the Life Actuarial (A) Task Force—Nov. 17, 2016

Actuarial Guideline XLIX-A – Draft [ACLI DRAFT JUNE 25, 2020]

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 that are linked to an index or indices 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:~~

- ~~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 [greater 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 5 months after March 1, 2016-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. Interest credits are linked to an external index or indices.~~

ii. 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 for each Index Account shall never be less than the guaranteed credited rate for that account.~~

that account. However, the Annual Rate of Indexed Credits for each Index Account shall never be less than the guaranteed Annual Rate of Indexed Credits for that account.

ii.

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 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.

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 (D) (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 in excess of the interest provided by 3 (D) (i) through 3 (D) (v), 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 guideline. 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. 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.
- G. Index Account: An account where ~~the~~ some or all of the amounts credited are Indexed Credits.
- ~~D.~~ 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 ~~rate to the policy~~ resulting from a floor greater than zero on an account with any interest credit, multiplier, factor, bonus, charge reduction, or other enhancement to policy values that is ~~not~~ linked to an ~~external~~ index or indices 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:
- 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.
- 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. The Supplemental Hedge Budget will never be less than zero. This amount should be consistent with the hedging program of the company.

3.

4. Illustrated Scale

The credited rate

4. The 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~~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 ~~an applicable~~a 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~~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~~a Benchmark Index Account, and shall use that cap in 4 (A).
- B. For ~~each applicable~~the Benchmark Index Account, ~~the Annual Rate of Indexed Credits shall not exceed the minimum of (i) and (ii):~~
- ~~B.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 for Account that is not the illustrated scale. The determination shall reflect Benchmark Index Account in 3 (D), 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.
 - ~~C.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~~ The illustration actuary shall the credited rate for the illustrated scale exceed the applicable rate calculated in use actuarial judgment to determine this value using lookback methodology consistent with 4 (A) and 4 (B)- (i) where appropriate.

- D. For the purposes of compliance with Section 6 (C) of Model #582, the Supplemental Hedge Budget is subtracted from the Annual Rate of Indexed Credits before comparing to the earned interest rate underlying the disciplined current scale.

~~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

5. 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 the lesser of (i) and (ii):

i. the Annual Net Investment Earnings Rate, plus 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.

ii. the Annual Rate of Indexed Credits plus the Annual Net Investment Earnings Rate minus the Hedge Budget.

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.

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 ~~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

6. 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~~50 basis points. For example, if the illustrated Policy Loan Interest Rate is 4.00%, the Policy Loan Interest Credited Rate shall not exceed 4.50%.

7. Additional Standards

The basic illustration shall also include the following:

- 7.
- 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.-

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