# FINAL REPORT* OF THE TASK FORCE $\dagger$ FOR RESEARCH ON LIFE INSURANCE SALES ILLUSTRATIONS UNDER THE AUSPICES OF THE COMMITTEE FOR RESEARCH ON SOCIAL CONCERNS 

EXECUTIVE SUMMARY

## Purpose

The Task Force for Research on Life Insurance Sales Illustrations reports to the Society's Committee for Research on Social Concerns. The Task Force was formed in recognition of the declining level of consumer confidence in the life insurance industry and, in particular, to investigate how sales illustration practices can add to, or detract from, consumer confidence.

In developing this report, the Task Force surveyed life insurance company illustration practices, reviewed available literature and regulatory requirements, held open forums at Society of Actuaries (SOA) and Canadian Institute of Actuaries (CIA) meetings, and considered the methodology applied to other financial products.

## Situation Analysis

Sales illustrations have been developed to meet a variety of needs from a variety of consumers, all placing different requirements on an illustration. There are two major uses of illustrations:

- Type A Usage is intended to show the consumer the mechanics of the policy being purchased and how policy values or premium payments change over time. The emphasis is a matter of how and what rather than how much.
- Type B Usage tries to project likely or best estimates of future performance and compare cost or performance of different policies. It attempts to show how much on the premise that the hows and whats are comparable enough for this to be meaningful.
Illustrations handle Type A requirements well, especially if several illustrations are used to show different scenarios. Illustrations inherently do not

[^0]handle Type B requirements well. How credible are any nonguaranteed numbers projected 20 years into the future, even if constructed with integrity? How does a consumer evaluate the credibility of two illustrations if they are from different companies or even from the same company if different products with different guarantees are being considered? Most illustration problems arise because illustrations create the illusion that the insurance company knows what will happen in the future, and that knowledge has been used to create the illustration.

In many countries, Type B usage of life illustrations is prevented, in effect, through use of standardized assumptions. It is acknowledged that there are real differences in performance between companies, but such differences cannot be described through illustrations. Within North America in other financial products such as mutual funds, it is recognized that future performance cannot be illustrated. The emphasis of these illustrations is to disclose expense charges, not the performance of the underlying fund.

Life insurance policies are complex financial contracts. There is no simple measure or analysis to compare future performance of unpredictable events. This fact is well understood in the securities industry and needs to be assimilated into the life insurance industry as well.

CONCLUSION: Illustrations are a valuable tool for the consumer and third-party advisors when used properly. Most companies are making a good-faith effort to comply with the regulatory requirements and disclose material facts on the illustration. However, the consumer would benefit from illustrations that demonstrate the sensitivity and operation of nonguaranteed elements and better methods/measures to compare policies and companies.

## Alternatives to Current Practices

The Task Force considered a number of alternatives to current practices for illustrations. Specific recommendations are contained in Sections VI and VII of the report. The recommendations fall into these main categories:

- Educational Efforts: A large educational effort should be undertaken with consumers, agents and head office personnel concerning the limitations of illustrations for Type B purposes. The sales process should emphasize selling of the product, not the illustration.
- Standards, Disclosures and Regulations: The CIA and American Academy of Actuaries (AAA) should consider developing specific standards
on what assumptions should be used in illustrations or on required disclosure of assumptions used. It should be required that unique product features are prominently disclosed as well.
- Optional Improvements: Companies could require a consumer signature on illustrations. Historical data could be provided separately from the illustration. Illustrations could be accompanied by graphs or quinquennial summaries to avoid the illusion of precision.
- Continuing Research: The proposed alternatives are not a complete solution to the problem of properly explaining a policy to a consumer and allowing an informed choice to be made. Research on methods to achieve this should continue.


## I. SCOPE OF RESEARCH

A life insurance policy illustration is a mathematical calculation of benefits and values over time under specific, simplified, and generally static assumptions. Illustrations have evolved into relatively sophisticated marketing tools. Their popularity and importance have increased not only with easier access to fast, powerful computers, but also as the result of heightened consumer need to understand what is being purchased and how much it will cost.
Consumers and their advisors use illustrations to understand how a policy operates and its expected cost over time. When a consumer is comparing several products, illustrations are often used to determine relative performance or cost. While current practices may have some flaws, illustrations are an important source of information to the consumer.

The Task Force on Life Insurance Sales Illustrations was formed to research life insurance company sales illustration practices from the perspective of the consumer. Much of the motivation for this research was based on the perception that:

- Serious problems exist with respect to the use of life insurance sales illustrations in the U.S. and Canada.
- More than two decades of regulations and required disclosures have not solved the problems; if anything, the situation is getting worse.
- Actuaries are familiar with these problems and should be involved in the solutions. Our goal is to encourage an efficient market by applying principles of actuarial science. These principles include:
- Appropriate and consistent recognition of the time value of money.
- Use of probability to measure uncertainty or risk.

As part of this research, the Task Force undertook to investigate:

- Current illustration practices, including regulatory requirements and the flexibility that companies provide agents to customize illustrations in the field
- Alternatives to current illustration practices
- Advantages and disadvantages of current and alternative practices
- Appropriate uses for illustrations.

To support these efforts, the Task Force considered:

- How consumers currently use illustrations
- How to make illustrations more intelligible to the consumer
- The approptiate disclosures to the consumer
- How to maintain credibility with the consumer in the illustration process
- What data and assumptions should be displayed on the illustration
- Illustration practices in other countries
- Illustration practices for other financial products.

While the following items may have an impact on the illustrations delivered to the consumer and merit study, they are beyond the scope of this research paper:

- How agents modify illustrations beyond the flexibility provided by the company
- The setting of profit standards and pricing assumptions within a company
- The appropriateness of policy provisions and their conformance with regulatory or actuarial standards
- Variable life insurance.

Further, we focused primarily on life insurance. Annuities and health insurance were not generally considered. While our comments are specific to sales illustrations, many of them apply equally to in-force illustrations. We did not consider variable product illustrations, except as an example of alternative illustration methodology. While we primarily focused on the situation in the U.S., we believe our research and conclusions are equally appropriate to Canada.

It may be useful to describe our research activities.

- We surveyed 87 life insurance companies regarding their current illustration practices and sought their ideas on positive change. These companies were selected as being major writers of participating insurance policies, universal life and/or innovative life insurance policies in the U.S. and Canada. Their responses are summarized in Appendix I.
- We compiled a bibliography from actuarial literature, which is shown in Appendix IV.
- We reviewed the work of other organizations and state regulations.
- We talked with actuaries from other countries to gain an understanding of their illustration practices and the associated strengths and weaknesses.
- We talked with our counterparts in other financial services to determine whether their illustration practices were adaptable to life insurance.
- We sought input from our colleagues: actuaries, legal counsel, compliance officers, agents, marketing officers, regulators, and others.
The result of these efforts is this white paper. To those who contributed, we appreciate your input. The development of regulations and standards of practice is beyond the purview of the Society of Actuaries. However, we hope that this paper will provide input, and serve as a catalyst, to the organizations that can effect such changes.


## II. REGULATORY REQUIREMENTS FOR LIFE INSURANCE ILLUSTRATIONS

The policy performance and features illustrated to the buyer have been an issue with regulators for at least a century. At the turn of the century, there was concern about the tontine dividends that companies illustrated to their customers. An outgrowth of the Armstrong Commission was the required annual distribution of dividends and the elimination of tontines based on survivorship.

During the 1930s, there was again concern about illustrations because dividend scales were decreasing due to the economic environment. Among the issues discussed were:

- The appropriate number of years for dividend illustrations (20 years was common but thought too long, given the uncertainties of the 1930s)
- Display of year-by-year dividends or 3-5 year totals
- Disclosure to the buyer of the nonguaranteed nature of dividends and the assumptions underlying the current scale.
More recently, there has been concern about the impact of policy illustrations on the industry's credibility in the context of changes in interest rates, asset quality and policy features. Policies are more flexible and more complex than in the past and place greater emphasis on nonguaranteed values.

The insurance code of each state has certain requirements that apply to illustrations. While these requirements vary by state, the following are generally applicable:

- If dividends are illustrated, the illustration must use the insurer's current dividend scale.
- If nonguaranteed elements other than dividends are illustrated, the illustration must use the insurer's current interest rate, mortality charges and expense charges.
- If the policy provides for a separately identified interest credit, the interest rate used in the illustration must be displayed. If the interest rate is linked to an index, the index must be described. Any limitations on the crediting of interest must also be described.
- Any reference to dividends or nonguaranteed elements must include a statement that such elements are not guaranteed.
- Illustrations of nonguaranteed values must display, with equal prominence, the comparable guaranteed values. If nonguaranteed and guaranteed values are shown combined as a single sum, they must also be shown separately in close proximity thereto.
- For policies providing for flexible premiums and/or death benefits, all data shall be displayed assuming the schedule of anticipated premiums and death benefits.
- Interest-adjusted cost indexes must be displayed for specified durations. These indexes are the net payment cost index and the net surrender cost index. If the policy is participating, the interest-adjusted equivalent level annual dividend also must be displayed.
- If the guaranteed policy cost factors or the initial policy cost factor assumptions would result in policy values becoming exhausted prior to the policy's maturity date, such fact shall be disclosed.
Additionally, for U.S. business, Exhibit 8, Question 3 of the Annual Statement requires a company to opine on its ability to support the nonguaranteed elements currently illustrated for new and existing business. This applies only to illustrations authorized by the company. Schedule M requires an attachment that describes the precise methods by which dividends are calculated. In Canada, the valuation actuary must comment on the appropriateness of the dividend scale but not any other nonguaranteed elements.

The purpose of these illustration requirements is to ensure that both the guaranteed and nonguaranteed performance of the policy are disclosed to the buyer. The cost indexes are intended to help the buyer judge the relative value or cost of an insurance policy. However, the Life Insurance Buyer's Guide points out that cost comparisons should only be made between similar plans of insurance. Further, it states that other information, such as company financial strength and historical performance, will be needed on which to
base the purchase decision. When the cost indexes were originally developed, they were perhaps more useful than they are now. Policies had, at that time, fixed premium patterns with fairly consistent design features and profit margins. This is not the case with most permanent, cash value life insurance being sold today.

Regulations and requirements must change to remain appropriate and effective. Evolving marketplace and economic conditions necessitate periodic updating of regulations, including rescinding requirements that are no longer helpful. The regulations of the early 1980s did not anticipate the product features, payment options and anomalies of the succeeding decade. As examples:

- Illustrations of a vanishing premium for a fixed-premium product depend upon the nonguaranteed policy factors to support premium payments after the vanish year. Should the accompanying guaranteed values be based on the illustrated premium outlay by the buyer or the payment of full premiums in all years?
- Companies are required to illustrate the current dividend scale or the current scale of nonguaranteed factors as appropriate. At a time when interest rates, mortality experience and expenses may not be improving, current scale may provide an overly optimistic projection of future results. Many companies currently provide agents with the flexibility to illustrate performance under alternative dividend scales or scales of nonguaranteed factors. While such sensitivity analysis is not explicitly provided for by most states, we believe it provides valuable information to the buyer.
- There is a great deal of discretion given to companies in the development of current dividends or nonguaranteed factors. There is no regulation, or any required disclosure, of the degree of risk or contingency associated with those nonguarantees.
- When a company increases its current dividend scale to distribute accumulated surplus over a specified period of years, there is no required disclosure of the likelihood of lower dividends at the end of that period.
- There is no regulation or disclosure of policies that are lapse supported, that are not self-supporting or that are based on assumptions that are inconsistent with a company's experience. Each of these items increases the performance risk to the buyer.
- The Internal Revenue Code in the U.S. contains sections which may have an impact on the tax treatment to the buyer or beneficiary of death proceeds, policy surrenders and partial withdrawals of policy values.

Most companies alert the buyer to possible tax implications through some disclosure on the illustration, although such disclosure is not required.

## III. CURRENT PRACTICES

## A. General

To better understand current illustration practices, we surveyed 87 companies; 56 responded. A sample questionnaire with responses summarized is contained in Appendix I.

The first section of the survey provided companies with an opportunity to present their perspective on life insurance sales illustration practices. Over 95 percent of the companies responding to our survey perceive a problem with current industry sales illustration practices in terms of successfully communicating with the potential buyer in a good-faith manner. Of these, 65 percent thought that the problem was serious but could be fixed.

Based on the comments from respondents, the perceived problems are:

- The typical consumer does not understand which values in 50-year projections are guaranteed.
- The consumer cannot determine if the underlying assumptions are realistic.
- The consumer cannot evaluate the relative conservatism of the nonguaranteed policy values illustrated by different companies.
- Footnotes and other narrative disclose assumptions and other important facts, but they are often not carefully reviewed by the consumer.
- Providing agents with the ability to run their own illustrations limits the control companies have over what the consumer is shown.
- Companies have too much discretion in illustrating nonguaranteed elements.

Some companies provide the agent with tools to customize illustrations to particular client needs, or agents can buy or develop these tools on their own. The tools that companies provide allow flexibility with respect to column selection and formats, variations on nonguaranteed elements, and different premium patterns. Many companies that allow this flexibility require that the client also be given a ledger illustration in an approved format.

Companies are generally opposed, or neutral, to such complete flexibility. Respondents are concerned about outside programming that alters policy values or eliminates required columns or footnotes. There is also concern as to whether the consumer receives the complete illustration package, including the pages of caveats and footnotes.

While information regarding company size and financial strength is important to the consumer, most companies do not provide this as part of the illustration.

Respondents believe that the best features of their illustrations are flexibility, completeness and conservatism. Completeness includes disclosure of the contract's operation and the tax consequences to the buyer. Basing nonguaranteed elements on current experience and lack of "gimmicks" were cited by several companies as examples of the conservatism built into their illustrations.

Respondents offered a number of suggestions regarding how illustrations could be improved to the benefit of the consumer.

- Simplify illustrations; there are too many numbers and too much "legalese."
- Educate the consumer that an illustration demonstrates the operation of a contract under only one scenario and that there is a range of possible outcomes as to nonguaranteed benefit levels.
- Establish standards for illustration practices; in particular, provide more specificity in the definition of current experience and require disclosure of assumptions.
- Require that scenario testing with defined assumptions be part of the illustration package.


## B. Dividend-Paying Policies

Of the 56 companies responding to the Task Force survey, 35 write participating policies.

When asked the question, "Which, if any, of the following dividend factors as illustrated anticipate a change from current experience, either by projecting trends or on some other basis?. . . Mortality, Interest, Expense," one company indicated that it used mortality projections in its current illustrations. Three companies responded positively regarding interest and two reported anticipated changes in expense.

The comments accompanying this question indicate that only one company is anticipating lower expenses in its illustrations. One company occasionally anticipates higher expenses in its illustrations. At least two of the three companies projecting interest rates are companies that only allow agents to select a lower-than-current rate for illustration purposes. The company using mortality projections is assuming improved mortality in the future.

To the question, "Are such changes disclosed to the consumer?", three of these companies answered affirmatively.

Seventeen companies, or almost half of the 35 responding, answered yes to the question, "Do your agents have the flexibility to run illustrations at dividend interest rates or mortality rates higher or lower than the current scale?" All 17 companies indicated that they allow fluctuations in the dividend interest rate only. Fourteen of the companies stated that they only allow dividend interest rates to be illustrated that are lower than the current scale. Only two companies allow either higher or lower interest rates to be illustrated. Eight companies cap the maximum variance from current scale at 2 percent. Two of the companies allow the variance to be as much as 3 percent. One company allows agents to choose the average interest rate from the past $8,12,20$, or 40 quarters.

Ten of the 35 responding companies answered "yes" to the question "Has your company received an increasing number of policyowner complaints about dividends paid versus dividends illustrated?" Eight companies indicated that the largest number of complaints concerned the vanishing point of premiums. Typical comments included:
"Most misunderstandings relate to vanishing premium illustrations and dividend scale changes. Policyholders mistake a vanishing-premium illustration for a promise of a paid-up policy."
"Policyowner complaints have increased as dividend scales have decreased. [Policyowners] do not always comprehend the nonguaranteed nature of dividends."
The Task Force also asked three state insurance departments whether or not they had observed an increase in complaints regarding dividend illustrations. Two (New York and Wisconsin) indicated that very few of the complaints they received were related to life insurance and, further, that they did not keep records in sufficient detail to respond to our questions. However, both expressed great interest in our research and voiced the concern that complaints may become more significant in the future. The third (California) noted that, based on a random sample of recent complaints, illustration complaints arose from decreasing dividend scales which affected total policy values and the vanish point.

In addition to asking companies to fill in the questionnaire concerning their current practices, the Task Force also asked them to send samples of policy illustrations currently being used. Exhibits A-H are examples, as described below. All exhibits are in Appendix II.

## Exhibit A

Exhibit A is an example of a traditional illustration for a participating whole life policy. It shows dividends, paid-up additions, guaranteed and total cash values and death benefits, increase in total cash value and guaranteed paid-up insurance for each policy year from the date of issue until age 100. It also includes the interest-adjusted surrender and payment cost indexes for 10 and 20 years.

Although the sheer volume of numbers may be overwhelming, the footnotes are kept to a bare minimum. They simply mention that the first dividend is contingent upon the payment of the second-year's premium, that dividends are affected by policy loans, that dividend figures are based on the current scale assuming no loans, and that dividends are not guaranteed.

## Exhibit B

The illustration shown in Exhibit B builds on the traditional model but gives the prospective buyer fewer numbers and a great deal more text material. The first page is a summary of the numerical results at the end of 20 years and at attained age 65. This is followed by two pages of numbers showing year-by-year values from the year of issue to attained age 98 . Footnotes are again kept to a minimum, but a statement at the bottom of page 3 warns that two other forms must be enclosed with the illustration. These forms add two more pages of explanatory material.

One form is a listing of all the optional benefits that are available with the policy. The second form contains the dividend caveat, an explanation of illustrative life income figures, a brief explanation of term plans, and some information about the policy loan provision and interest-adjusted indexes.

## Exhibit C

Exhibit C is another fairly traditional illustration, but it is included here because of its unusually forthright dividend caveat. Page 1 is a complete illustration showing 20 years of values plus values at attained ages 65 and 75. It has a very brief dividend caveat but refers the prospect to an attached page of footnotes.

Page 2 gives the year-by-year values through age 95 . Page 3 is the footnote page. The first footnote assures the client that the policy is not a modified endowment contract. The second footnote pertains to dividends. It first gives the usual statement that dividends are based on the current scale and are not guaranteed. However, it then goes on to say, "Due to new federal taxes and
economic conditions including declining interest rates, dividends based on the 1992 dividend schedule are expected to be lower than those shown in the illustration." Among all the illustrations submitted to the Task Force, this one surely deserves an award for its candor! Several more footnotes follow, including a statement that the illustration does not recognize the time value of money and should not be used to compare policy costs.

Finally, the bottom of page 3 shows the interest-adjusted surrender cost and net payment cost index numbers, and gives an explanation of them.

## Exhibits $D$ and $E$

Exhibits D and E show how two different companies handle illustrating dividend interest rates which differ from the current scale. The illustration in Exhibit D simply takes the standard illustration format and runs it at an alternate dividend interest rate. The actual rate used and the fact that it is less than the current rate are disclosed at the very top of the illustration on each page.
The illustration in Exhibit E compares the results of the current dividend scale and an alternative dividend scale in the same illustration. The first page shows values for the first 20 policy years and at attained ages 65 and 70 . Page 2 is an illustration based on the alternative dividend sale showing a vanishing-premium scenario. This page also includes a comparative rate of return. Page 3 gives some summary figures at the end of 20 years and shows the interest-adjusted costs and payments.
The fourth page of the illustration contains several footnotes, including a statement about the hypothetical dividend interest rates and an explanation of the comparative rate of return. At the bottom of the page are listed the actual hypothetical interest rates used in the illustration.

## Exhibit F

Since several companies indicated that vanishing-premium illustrations were their largest source of policyowner complaints, it was natural that many of these illustrations were sent in as samples. It is obvious that some companies are trying hard to find ways to educate policyowners to the fact that the vanish point depends on the dividends that will be paid in the future.
The illustration in Exhibit F is a case in point. It illustrates policy values on a vanishing-premium basis but places a full-pay illustration right alongside the vanishing-premium illustration for comparison purposes. The footnotes state that 'the term 'vanish' does not mean that the premiums are no
longer due, but that the cash premium due reflects the payments of future gross annual premiums through the use of current dividends. If future dividends are reduced from the current, results of the vanish may differ from that illustrated. Additional premium payments may be required if the current scale of dividends is reduced."

## Exhibit G

The illustration in Exhibit $G$ is another example of an attempt at complete disclosure. The first page, labeled 1 of 4 , shows the vanishing premiums, together with the paid-up additions that need to be surrendered in years 12 through 15. Page 2 shows a guaranteed ledger assuming all premiums paid. Pages 3 and 4 contain explanations, including an explanation of vanishing premiums and a suggestion that an alternate proposal be requested on a lower dividend interest rate. Finally, the policyowner and agent must sign a statement to the effect that they have received and reviewed all four pages of the proposal, including the footnotes.

## Exhibit H

Exhibit H represents an innovative approach to showing a vanishing prcmium plan on both the current scale and 1 percent less than current scale, all on the same page. From the wording in the first footnote, we can see that it is designed to be shown along with a full-pay ledger and is to be accompanied by an explanation of the vanishing premium concept.

## C. Universal Life

From the beginning, a necessity for successful marketing of universal life has been the ability of the seller to illustrate the performance of a policy tailored (within policy limits) to the needs and resources of the prospective purchaser. The agent and prospect have the ability to choose almost any pattern of benefits and premiums. No longer is the sale limited to one of several fixed plans of insurance from a ratebook. Each one is different.
Any system of policy illustrations will have some limitations on this flexibility. For instance, few can illustrate off-anniversary changes. Besides such practical constraints and the policy's inherent restrictions, how should the illustrations be limited? What interest rates can be shown? What cost of insurance rates can be used?

Most observers would agree on the appropriateness of current rates of interest and cost of insurance deductions along with guaranteed rates. But
what about other than current rates of interest and cost of insurance, such as lower or higher interest rates? Should the buyer be able to factor in his or her own conservatism, or optimism, about future economic conditions?

In our survey of insurance company practices in this area, 49 of 56 responding companies reported that they allow the agent or consumer to vary interest rates. Four of these allow higher interest rates than the current scale, usually with a footnote disclosing this fact. Others show both the current rate and another lower rate chosen by the agent. Most of the companies allowing cost-of-insurance variations reported offering a choice of only current or guaranteed deductions.

Since any life insurance policy is a long-term contract, its performance depends more on what happens in the future than on current credits and deductions. Some companies will pay more interest than others. Some companies will charge lower cost-of-insurance rates or loads than others. How can these differences be discerned and/or illustrated at the time of sale? The premiums on this policy have not been invested yet. There is no experience on the mortality and persistency of this year's sales yet. How can the company show that it is different, and how can a consumer judge differences?

From an actuarial point of view, there is guidance. In the U.S., Actuarial Standards of Practice No. 1, "The Redetermination (or Determination) of Non-Guaranteed Charges and/or Benefits for Life Insurance and Annuity Contracts" (ASOP 1), sets a standard of using anticipated experience factors, that is, "those elements in the redetermination (or determination) of nonguaranteed charges and benefits that reflect expected future experience." ASOP 1 states that "anticipated, or projected, experience of a factor class means experience expected in the future as determined by the actuary through the application of sound professional judgement." It should be based on recent experience and expected trends, where applicable. ASOP 1 also explicitly recognizes that current company experience may be of limited value in projecting future experience.

ASOP 1 thus allows a company to use its best judgment in estimating its future experience factors to use in setting parameters for determining illustrative policy values.

Of the 56 responses to the survey, five use mortality assumptions which differ from current experience, eight use different interest rates, and two use different expenses. Since policy illustrations may go for as long as 100 years, and the oldest universal life policy is only 12 years old, some projections of future experience from current are obviously necessary.

The question remains: To what degree will the illustrated differences in policies actually occur? Currently, there are no recognized yardsticks for the consumer to use. At best, a comparison of credited interest rates with bond yields, and a comparison of actual to illustrated cost-of-insurance rates, may show how the company's customers have fared in the past.
Separate from the questions of the ultimate realization of illustrated interest and cost-of-insurance factors is that of "persistency bonuses." For this purpose, a persistency bonus is a retrospective or prospective credit structure which provides enhanced values to a long-term policyowner compared to a short-term one. If guaranteed, persistency bonuses are limited in most states by the workings of the smoothness test in the Standard Nonforfeiture Law. Simply put, this test requires that policy values grade smoothly within each successive five-year period, so that large, one-time bonuses are not allowed. Most states do not restrict the crediting of properly disclosed nonguaranteed bonuses.
Ten of the 56 survey respondents reported bonuses. The existence of a bonus in the illustrated values is disclosed in footnotes by these companies, along with disclosure of its nonguaranteed nature, if appropriate.
We are aware of at least one company which displays the current cash surrender values in a footnote; only the accumulation values are shown in the body of the illustration.
Companies responding to the survey also provided us with sample illustrations for universal life and interest-sensitive whole life products. The representative illustrations that we selected deal with policy features that are unique to these products. These are shown in Exhibits I-M.

## Exhibits I-M

Exhibit I is an illustration showing values on three different bases: current, illustrative and guaranteed. The interest rates associated with each set of values are clearly displayed on the first page. A footnote at the bottom of the page indicates that the policy has a prospective interest rate bonus that is applicable after 20 years. We assume that it is not guaranteed since it is included for only the current values.
For each rate basis, account value, cash value and death benefit are shown. Footnotes describe the assumptions for each rate basis. Cost indexes are shown for all three bases.

A footnote indicates that the policy terminates in year 31 based on guaranteed values. This is a year not displayed on the illustration.

Disclosure of persistency bonuses is a key feature in these illustrations. Exhibit J is an example of a guaranteed bonus. Values are shown on three bases, with both the implicit and nominal interest rates displayed. Pages 4 and 5 describe the assumptions underlying each set of values, as well as the impact of the persistency bonus at each bonus point.

Exhibit K contains several variations. The assumptions, including those for mortality and expense, for both guaranteed and current values are part of the column caption. There is a footnote on page 3 alerting the consumer to a number of tax issues and citing the need for professional advice. Page 4 describes certain product features, including a prospective persistency bonus. The comments on the persistency bonus do not mention whether it is guaranteed.

Exhibit L is included for its use of graphics. Displaying key values graphically is certainly easier for the typical consumer to grasp than seven columns of numbers. The graphic display is based on projected values.

Exhibit $M$ is an example of a product with an accelerated death benefit, or living benefit. The cover page describes how the living benefit works. There is no reference to the tax treatment of the living benefit although the tax treatment of death proceeds is mentioned. This is followed by one illustration page of values and two pages of explanatory notes.

This policy has two types of bonuses: interest and mortality. The consumer is referred to the policy for a complete description of factors affecting the mortality bonus.

## D. Term and Term Look-Alikes

Approximately three-fourths of the companies responding to our survey sell these types of products. None of the responses to our survey questions pointed to any potentially abusive or questionable illustration practices on these kinds of products, nor did contact with state regulators turn up any. We were particularly interested in whether the conversion privilege (or lack thereof) was being adequately explained, and it appears that it is.

However, a couple of problems have been observed. One is that a company will display a cost comparison of its term plan with another company's permanent plan strictly on the basis of premium. Clearly, this is inappropriate. Another problem is that illustrations of indeterminate-premium term plans do not always display the corresponding guaranteed premiums. When the term plan includes a deposit fund, guaranteed values are not always displayed.

Companies provided us with several representative illustrations, which are contained in Exhibits N and O .

## Exhibits $N$ and $O$

These are two basic term illustrations, displaying current and guaranteed premiums. Exhibit N shows the death benefit, current premium, accumulated premium, and maximum premium for an indeterminate yearly renewable term plan. Interest-adjusted cost indexes are displayed. The only footnote references the nonguaranteed nature of current premiums.

Exhibit $O$ is an illustration of a 10 -year re-entry term product. Current premiums are displayed for the second 10 -year period, both with and without re-entry. A footnote discloses that re-entry is subject to evidence of insurability.

## E. Second-To-Die Policies

Of the 56 responding companies, 39 indicated that they sell a second-todie product. Only six of the 39 companies offer a product that provides for a cash value increase at the first death. Of those six, only one company answered "yes" to the question, "Are the values shown on your illustration always based on the assumption that both lives remain alive?" Three companies mentioned that agents could choose the year of death for the first death for illustration purposes.

To the question, "Does the illustration contain an explicit statement that there is no death benefit payable on the first death?'", 12 companies answered yes.

Exhibits P and Q are examples of illustrations of second-to-die policies.

## Exhibits P and $Q$

Exhibit, P is a survivor life ledger showing a traditional policy with dividends used to purchase paid-up additions. The final footnote makes it clear that no death benefit is paid until the second death. Although a term rider is mentioned in the footnote, it does not seem to be included in the illustration. Also, without further analysis, it is not readily apparent whether or not this policy provides a cash value increase on the first death.

Exhibit Q offers perhaps the ultimate in full disclosure. The first illustration, consisting of six pages, shows a 10 -year vanishing premium and both insureds alive. Note that the policy is a combination of permanent whole life and term insurance.

Pages 4 through 6 show results on an alternative dividend scale, but do not include the vanishing-premium concept. Following this six-page illustration is a three-page illustration which assumes that the male insured dies at age 64 . All premiums are assumed to be paid. This is followed by another three-page illustration assuming both insureds are alive and also assuming an alternative dividend scale. Then there is another three-page illustration that assumes the male dies at age 64 and that premiums vanish in the eleventh year.

Presumably, in addition to all these alternatives, one could request still more illustrations on different alternative dividend interest rates and different years of death for the first death.

## F. Two-Tier Products

A two-tier product is one that has different cash surrender and annuitization values. Typically, the annuity value cannot be commuted and surrendered; it is available only as an income stream. Only five of the 56 companies answering our survey sell two-tier products. Most of these five companies feel that their illustrations clearly indicate that the policyholder who surrenders will receive less than the amount that would be applied toward annuitization at the same point in time. In some cases this is emphasized with additional statements on the illustration.

Another area of concern is whether the annuity income figures shown on the illustration are calculated only using current annuitization rates, or on both current and guaranteed annuitization-rate bases. Again, most but not all companies are showing the results on both bases.
A nonstandard illustration practice we encountered on two-tier products was that of a company whose illustration included a footnote naming its reinsurer-a large, well-known company-and stating that the reinsurer approved of the product.

## G. Special Issues for Corporate Buyers

Corporate buyers of insurance are concerned about the accounting and tax impact of the purchase, as well as the product's operation. Illustrations may be for individual insureds, but it is quite common for the corporation to be given illustrations that include all insureds, either on an actual or modeled basis.

Illustrations typically show all cash flows: premiums, use of dividends or other nonguaranteed elements, policy loans or withdrawals, benefits paid to
employees, annual expected death proceeds paid to the corporation, and the tax impact. The cash flows and asset (cash value) development are summarized to reflect the impact on the corporation's balance sheet and the profit and loss statement. The illustration might also demonstrate the development of the benefit liability and its impact on the company's accounting statements.

There are two common ways of reflecting the impact of deaths in the illustration. One is to assume that each insured dies at a specified age, such as 75 or 80 . The other method is to adjust for mortality based on an appropriate table; this is known as fractional mortality or partial mortality. Based on discussions with several companies, there is concern that corporate buyers do not appreciate that the timing of the death proceeds is not guaranteed.

Traditional interest-adjusted cost indexes may be shown, but buyers focus on performance measures such as Internal Rate of Return and Net Present Value of Gain. Net present value of gain is usually calculated at the corporation's after-tax cost of capital. These measures are usually calculated on a basis consistent with the expected death proceeds.

Guaranteed values are not usually displayed prominently next to current values although companies may require an accompanying ledger illustration. There are some group experience-rated contracts used in this market that do not have guaranteed maximum mortality charges and therefore do not have guaranteed values.

As with individual illustrations, illustrations for the corporate buyer are subject to company discretion as to the timing of certain events.

Illustrated funding patterns are more aggressive or flexible in this market than for individual purchases. The most aggressive is a 7 -pay contract with premiums paid by policy loan in policy years 1-3 and by the surrender of nonguaranteed values in policy years 4-7, with the only illustrated outlay from the corporation being the payment of policy loan interest. This gives the perception that insurance can be purchased without real premium outlay by the buyer.

Because the products and the benefit plans being funded are very complex, companies attempt to disclose pertinent tax issues such as the impact of TAMRA, TEFRA, etc. Many include footnotes stating that buyers should seek their own tax counsel and not rely on the illustration for any tax advice.

## H. Current Practices-Other

Other noteworthy illustration practices that we found included the following: (a) a Product Features Page which gives the answers item by item to
the questions posed in the CLU Professional Practices guidelines; (b) a full page dedicated to the 7-pay test, including the company's interpretation of some of the aspects of TAMRA; (c) a place for the client to sign the illustration signifying that he or she has read and understands all the disclaimers; and (d) page-numbering schemes that inhibit removal of footnote pages (for example, "Page 1 of 5 "). We also found: (a) unclear column headings, for example, lack of clarity as to whether benefits and values shown reflect reduction for loan, and (b) vanishing-premium illustrations in which the guaranteed figures shown alongside the current figures assume premiums paid all the way to maturity.
Survey and preliminary report respondents also expressed the following concerns:

- Whether products that are a blend of whole life and term insurance are in some cases being improperly portrayed as simply "whole life"
- The impropriety of Company X printing comparisons of its nonguaranteed values to Company Y's guaranteed values
- The appropriateness of calculating net outlay as the premium less the dividend payable at the end of the same policy year, that is, not recognizing the time value of money during the year.


## IV. USES OF LIFE POLICY ILLUSTRATIONS

An extensive body of literature already exists on this subject. However, most previous work deals with symptoms, rather than with underlying causes. For example, many articles decry aggressive assumptions, unrealistic nonguaranteed elements, lapse-supported pricing, and question the integrity of some illustrations. However, there is very little written about what caused the symptoms.

One way to get at root causes is to examine appropriate and inappropriate uses of illustrations. If an illustration is used for addressing questions it inherently cannot answer, problems will occur, even if the illustration is built with integrity.

The primary users of life insurance illustrations are:

## - Consumers

- Life Insurance Agents/Brokers
- Companies (actuarial and marketing departments)
- Outside Advisers/Third-Party Analysts.

Each of these may have multiple needs which they hope to satisfy with an illustration. In general, these needs are of two primary types:

Type A usage tries to:

- Demonstrate how policy values change over time under specified premium payment and experience (for example, interest rate) scenarios.
- Demonstrate how a particular financial design or concept works, such as deferred compensation or vanishing premium.
Type A usage helps the consumer understand what is being purchased. It focuses on a single contract and its contractual features and mechanisms. It shows how a particular contract responds to illustrative conditions. Multiple illustrations of a single contract demonstrate how contractual values change in response to variations in assumptions.

Type B usage tries to:

- Project likely or best estimate future performance.
- Evaluate comparative cost or performance of several policies.

Type B usage helps the consumer understand which policy is the best buy. It evaluates comparative cost or performance among competing alternatives. It also focuses on projecting most likely estimates of cost.

Type B questions are of great interest to all user groups. Therefore, an objective, credible, inexpensive and quantitative means of answering these questions is highly desirable. Illustrations are quantitative and relatively inexpensive. But are they objective and credible? What can actuaries say about the ability of illustrations to accommodate Type A and B usage?

Illustrations appear well suited for Type A questions. In particular, multiple illustrations run under different premium patterns and interest rates are very helpful in explaining contractual mechanisms.

Type B usage is a different story. Today's life insurance and annuity products are complex financial instruments, whose ultimate future cost and performance depend on macroeconomic and demographic factors, individual company performance and individual consumer behavior. Type B questions necessarily involve many factors, including:

- Evaluation of the likelihood of future economic events
- Measurement of company-specific performance risks
- Measurement of product-specific performance risks
- The individual consumer's likely response to various future events.

For today's individual life insurance products, reliable answers to Type $B$ questions are not possible using illustrations. The footnotes, caveats and disclosures on a typical illustration are already overwhelming for most consumers. Yet this information adds little value in terms of developing a reliable estimate of future performance.

It can be seen that Type B usage is inappropriate unless the illustrations include a measure of relative risk. For example, if one illustration shows 15 percent lower premiums but has 60 percent greater risk of not achieving projected values, then lack of risk disclosure renders the comparison meaningless. Since relative risk cannot be calculated, Type B questions assume similar degrees of relative risk. Regulations try to assure "consistency" between illustrations as a way to keep relative risk equal. However, since there are really no practical means of assuring similar relative risks, Type B usage for illustrations is fundamentally inappropriate.

The incentives associated with Type B questions are considerable. However, an objective actuarial evaluation must conclude that typical life insurance products are too complex and the number of unknowable events is too great to allow for simple answers to questions of this type. Even when developed appropriately and with integrity, illustrations are structurally incapable of handling Type B questions. Illustrations, by their nature, cannot answer these questions. Problems arise because of the illusion that they can.

Many people believe that although illustrations aren't perfect, they are the best available indicator of future performance. They may believe, for example, that all illustrations are somewhat optimistic, but then conclude, "Even if they're all high by 15 percent, I'll still do better with the one which shows the highest values on these illustrations." Actuaries should oppose this myth.

## V. OTHER ILLUSTRATION PRACTICES

It is easy to forget that sales illustrations in the U.S. and Canada have a unique history. Life insurance products sold in other countries, and other financial products sold in North America, do not share the same illustration practices. A review of these practices is helpful before evaluating alternatives for our system.

## A. Other Countries

A quick survey of illustration practices in other countries reveals the importance of a historical and cultural context. In countries where insurance products are standardized by law, there is little controversy with respect to illustrations. This is the case for much of the Far East and Europe. Where product standardization is the rule, there is little product competition as we know it, and illustrations are naturally limited to noncontroversial Type A usage.

The United Kingdom and Australia have relatively competitive life insurance markets, with many similarities to the North American market. As in our market, ledger illustrations have been employed for Type B comparative cost and performance evaluation. Not surprisingly, these countries have also encountered problems with sales illustrations.

## Japan

Currently, sales illustrations in Japan are based on the "current" dividend scale. There is increasing concern that this practice may cause the consumer to believe that the current scale will remain unchanged in future years. Consequently, procedures will be revised to show the effect of a 0.1 percent decrease in the dividend interest rate. Disclosures will emphasize the variable nature of dividends and the fact that the illustration is based on current scale. In addition, special maturity dividends will be identified and shown separately from regular dividends.
U.K.

Sales illustrations are heavily regulated in the U.K. Regulations were influenced by a number of perceived abuses which developed during the 1980s. Currently, illustrations are constrained in at least three major ways:
(a) Upper-level performance constraint (maximum interest rate)
(b) Risk disclosure, by means of two alternative scenarios at significantly different interest rate levels. The regulators believe that two scenarios are better than either one or three at conveying the basic uncertainty of the investment performance assumption. Low and high investment rates are specified, and only change occasionally, based on underlying inflation expectations. There is a deliberate emphasis against specifying a "best estimate" rate.
(c) Standardized expense and mortality assumptions. All companies are required to use the same nonguaranteed expense and mortality assumptions. These are set by regulation based on current industry averages. While conceding that actual expense and mortality differences could influence the choice of a life carrier, the regulators felt that they should not be reflected in projections. This emphasizes their strong belief that illustrations have a limited scope, and should not be used for comparative performance measurement.

## Australia

In early 1991, the Insurance and Superannuation Commission Circular \#291 promulgated completely new guidelines for benefit illustrations in Australia. This was the first major change since 1985 and followed growing concerns about overly optimistic assumptions and a lack of consistency in the approach to long-term benefit projections.

The circular takes note of the situation in the U.K., where illustrations have been "ruthlessly standardized" and "serve only to create a generalized impression of the order of magnitude of benefits."

Under the Australian approach, companies have some latitude, through their Appointed Actuary, to reflect individual circumstances in their projections. There is a clear threat that this remaining privilege will disappear if these new guidelines do not work.

Australian companies are required to ensure that agents, brokers or other intermediaries representing them do not alter their benefit projections in any way.

Principal provisions of the Australian regulations are:

- A specified maximum assumption basis, with lower rates permitted if appropriate.
- Specific standards of practice to follow for all promotional material, aimed at avoiding ambiguity or false impressions.
- Two illustrations are normally required. The higher rate cannot be greater than $(C B+3) \times(1-t)$ where $C B=$ the 3 -year average 10 -year Treasury bond yield, and $t$ is the maximum tax rate on the type of business in question. The lower rate is no more than 80 percent of the higher rate. If only one illustration is shown, it must be at the lower rate. If more than two rates are illustrated, the third and subsequent cannot exceed the higher rate.
- Projections are required to include an illustration of the effects of inflation, for the term of the projection, with an inflation rate of 60 percent of $C B$.
In summary, regulation of illustrations in both the U.K. and Australia has been structured to emphasize their suitability for Type A usage only. To enforce this, illustrations are highly standardized and provide little or no opportunity for comparative performance or cost evaluation.


## B. Other Financial Products

A review of other financial products' illustration practices provides interesting comparisons to life insurance.

The securities industry has many complex financial products. The risk and uncertainty of future performance in these products are so well accepted by the public, however, that it is difficult to imagine Type B usage in ledger illustrations. For example, try to imagine a stockbroker advising a consumer on whether to buy IBM or AT\&T stock, using a 30 -year projection of last quarter's dividend and change in stock price!

For most securities, the consumer must use something other than illustrations to make judgments about performance. The prospectus is the primary document for this purpose. It is both highly structured and complex. It is difficult, if not impossible, for a consumer to have a quick, easy-to-understand, numerical basis for doing comparative performance evaluation for mutual funds or securities.

The NASD Manual on Investment Company Securities gives detailed guidance on what must be done if comparison of investment products or services is to be done.* The essence of this guidance is that comparisons should not be performed unless all factors which could possibly be considered relevant are disclosed.

Mutual funds may be illustrated on a "hypothetical" basis, with full disclosure of all expense charges and a statement that the illustration is based on past performance and is not indicative of future performance. The relative simplicity of a mutual fund product structure makes it feasible to use illustrations for this purpose. There are no "nonguaranteed elements" or "participating" expenses and mortality charges to muddy the waters. The prospectuses for both mutual funds and variable annuities include fee table examples, so that buyers can compare expense levels among different products.

Variable life insurance illustrations are regulated by the SEC and the NASD. Investment returns must be specified as gross yields. At least one investment return assumption must be 0 percent, and no return can be higher than 12 percent. All expense charges and loads must be shown explicitly in the prospectus. It is easier to attempt Type B comparisons on variable life, particularly since one of the most important factors, investment return, is assumed constant between products. In a more fundamental sense, however, Type B analysis of variable life illustrations may have limited value, since differences in expenses and cost of insurance could be overwhelmed by differences in investment performance. Some observers see a trend toward more nonguaranteed bonuses and charges in variable life products. If this is

[^1]true, it may be progressively more difficult to use sales illustrations to answer Type B questions for variable life insurance, as is true today for nonvariable products.

In general, a review of relevant practices for other countries and other financial products reveals an understanding that illustrations should not be used for comparative performance measurement. This is particularly true for the more complex products containing nonguaranteed performance elements.

## VI. ALTERNATIVES TO CURRENT PRACTICES

Our Task Force presented 23 alternatives to current illustration practices in our preliminary report. During the exposure period, we received a number of comments on these alternatives, and suggestions of other alternatives that we might consider.

We categorized the alternatives that were identified during our research as follows:

- Reduce or limit numbers
- More stringent requirements for nonguaranteed elements
- Product or market specific issues
- Consistency of illustrations
- Strategic/educational efforts.

Our Task Force was charged with researching illustration practices from the perspective of the consumer. Therefore, we evaluated alternatives on these criteria:

- Will it improve the consumer's understanding of the life insurance policy being considered?
- Will it improve the consumer's understanding of life insurance generally?


## A. Reduce or Limit Numbers

The road to full disclosure has some pitfalls. In showing as many numbers on illustrations as most companies already do, a couple of phenomena occur. First, consumers who are simply not numbers-oriented, and there are many such people, may tune out or be misled; they may be more interested in a careful verbal explanation of the basic concepts. On the other hand, there are consumers who will fixate on the numbers, particularly the current account value column on a typical universal life illustration or the total value column on a dividend-paying whole life illustration, which marches mesmerizingly toward a 6 - or 7 -figure number. Compounding this problem is the fact that the prevailing practice is to show these account values to the
nearest dollar, which, perhaps unwittingly, ascribes a level of credibility to the numbers that is quite inappropriate, especially for durations in the murky future beyond the 10th or 20th year. These account values are purely illustrative figures that, at best, are based on convenient, reasonable working assumptions as to what future mortality charges and interest rates might be like. Small differences between the assumptions and actual experience will compound to a very large "error" before very many years go by. In short, our Task Force sees a need for the industry to take some definitive steps away from selling our packaging (the illustration) and toward selling products, by reducing the focus on raw numbers.

There are several possible remedies to this general problem:

1. If possible, supplement numeric information with a presentation in graph form. Technical advances now make this feasible in many instances. This approach addresses the need to emphasize concepts more and numbers less, and the problem of "extra" significant digits in the account values disappears. Safeguards against the misleading scaling of graphs may be needed, however. Graphics, if done well, can be an excellent tool for conveying information to the average person. One reason often cited for the tremendous success of the newspaper USA Today is its very popular and informative graphs.
CONCLUSION: We would encourage actuaries to work with their colleagues in systems and sales/marketing to find new and more customer-friendly ways to present illustration information in graphic form.
2. Limit illustrations of current values to 20 years and every fifth duration thereafter. This, we think, would help to make it clear that we have a sketchier picture of the distant future than of the near future. Also, it reduces the degree to which the client is overwhelmed by numbers and leaves more room on the page for useful narrative. It is important that values be shown to maturity or lapse so that the consumer is aware of any changes in benefits over time. However, if there is a change in premium or if a policy provision first manifests itself after the twentieth year, the illustration should display all durations.
CONCLUSION: Companies should consider adopting this convention on a voluntary basis.
3. Show current values to the nearest $\$ 10$ per thousand of initial face amount. This rule could apply at all durations, or perhaps just after the fifth or tenth year.
CONCLUSION: Companies should consider adopting this convention on a voluntary basis.

## B. More Stringent Requirements on Nonguaranteed Elements

The Task Force identified five alternatives that deal with nonguaranteed elements.

## 1. More Complete Definition of "Current Experience" or "Current Dividend Scale"

At present, confusion exists as to what is meant by current experience or current dividend scale. For example, a current-dividend-scale illustration may assume mortality improvements built into it, but those improvements are not reflected in the dividends of older duration in-force policies. Is the illustration really based on the company's "current scale"? Some may define current-scale illustrations much more stringently as only those on a dividend scale having the same experience factors as are currently being paid to inforce policyholders.

In 1978 a paper appeared in the Transactions of the Society of Actuaries (Volume XXX, pp. 447-475) entitled "Choice of Basis for Dividend Illustrations" by Russell R. Jensen. In it Jensen states,
"The simplest definition of current experience would be in terms of those factors of mortality, interest, and expense used in determining dividends currently payable (current allocation). Yet at times this type of definition may not be valid or applicable. There may be no such factors that are appropriate for the illustration of dividends because anticipated mortality, lapses, or expenses of the new business are clearly different from those now experienced on any block of business in force. Or, a company may use different investment yield rates for different eras of business, and there may be a question as to the rate to be applied to current issues."

A company entering a new market will not have any past experience to illustrate. A new product may require a different investment pattern from anything the company currently has. These and other situations would mean that showing current experience can be more misleading than using currently anticipated experience.

CONCLUSION: We believe that further study and research into this issue would be worthwhile. Therefore, we encourage the AAA and the CIA to:

- Review existing regulations requiring the use of current experience or current dividend scales in life insurance sales illustrations;
- Suggest revisions to those regulations which would clarify the meaning of "current," and
- Recommend modifications to the regulations which would allow the use of both current experience and deviations from current experience, but, if the latter, only with appropriate and mandated disclosure of the assumptions used.


## 2. Standards of Practice for "Illustration Actuary"

As part of his response to our survey of current illustration practices, Armand de Palo suggested that the time has come to consider the concept of an "Illustration Actuary." This individual would be responsible for informing senior management whenever illustrations with unrealistic assumptions are being used. This might be considered as part of the enhanced standards for nonguaranteed elements.

CONCLUSION: We are not ready to endorse this concept at this time, but we agree that it is an idea worth pursuing. Therefore, we encourage the AAA and the CIA to study this concept further.

## 3. Furnish Historical Data

This alternative would require agents to furnish clients with dividend histories, and dividend history comparisons with other companics, in addition to current illustrations. These would show clients how the company performed over the last 20 years, information similar to that supplied to buyers of mutual funds.

The argument is often made that dividend histories are not subject to manipulation and, therefore, are a more reliable gauge of a company's performance than are current illustrations. Certainly for those companies included in Best's annual 20-year history study, the information is readily available, including rankings and comparisons with other companies.

Companies have reasons for arguing that historical comparisons are not pertinent. Today's products are much different from products issued 20 years ago. For example, 20 -year histories of universal life policies are not yet available. A company may argue that it has changed its approach to underwriting, its investment philosophy or its expense controls. Also, the formation of new companies, mergers and acquisitions pose practical problems for presenting 20 -year histories.

One danger in using histories is that often the historical results are compared with the illustration provided at the time of issue. Over the past 20 years, of course, actual results have been much better than the illustrated results of 20 years ago. This could give both buyers and agents the false impression that they could expect the same pattern of results in the future,
that is, that illustrations are always conservative and actual results will always be significantly better.

CONCLUSION: We believe there is value to illustrating historical performance and in providing buyers with a company's actual record of dividends or experience rates credited over the past 10 or 20 years. However, given the fact that many of today's products were not being issued $\mathbf{1 0}$ or $\mathbf{2 0}$ years ago, and that linking past performance of significantly different products with today's products may be misleading, we do not recommend that historical data be made a required part of illustrations.

## 4. Disclosure of Underlying Assumptions and Current Experience Supporting Illustrated Performance

Complete disclosure would include publication of interest rates, mortality charges, lapse assumptions, expenses (home office, field, investment, etc.), taxes, and profit assumptions that support current values. Most companies disclose the current interest rates used in their illustrations and some disclose mortality charges. Many companies, however, would object to such full disclosure on the grounds that the information is proprietary and disclosure would be competitively damaging.

Even the information being disclosed today is suspect in that the interest rates disclosed may be before or after investment expenses and taxes, mortality charges may or may not reflect actual experience, and expense charges may or may not cover actual expenses. Would a consumer be able to sort out all of the different experience factors and assumptions used in an illustration to determine if the illustrated values are in fact reasonable or not?

CONCLUSION: We believe that the idea of requiring more complete disclosure deserves further study. Therefore, we recommend that the AAA and the CIA pursue this topic further.
5. Identification of, or Special Reserving Requirements for, Unusual Features Such as Lapse-Supported or Two-Tiered Products, Terminal Dividends, Interest Rate Kickers, Persistency Bonuses
We wholeheartedly support complete and clear disclosure of unusual policy or pricing features, particularly if they result in inconsistent treatment of one group of policyholders relative to another group (for example, persisters versus early terminators).

CONCLUSION: We would encourage the AAA and the CIA to work toward development of appropriate disclosure requirements for such
practices and to determine whether or not special reserves should be required.

## C. Specific Product Issues

Based on the illustrations available to us, we believe the following prod-uct-specific issues must be resolved.

## 1. Vanishing Premium Illustrations of Fixed-Premium Products

There should be consistency between the premium patterns assumed for guaranteed and nonguaranteed values, particularly when they are shown next to each other. If the underlying premium pattern is not consistent, the illustration should explicitly show both premium patterns. This is not an issue for flexible-premium policies since both current and guaranteed values must be based on the same premium pattern.

Many consumer complaints relate to vanishing-premium illustrations. Consumers do not understand what is guaranteed or the sensitivity of illustrated performance to changes in the nonguaranteed policy factors.

CONCLUSION: The AAA and the CIA should both consider and recommend improvements to these illustrations which will communicate the sensitivity and the associated guarantees. The result should be consistent with the illustration requirements for flexible premium policies.

## 2. Second-To-Die Products

Second-to-die product illustrations should be required to disclose whether or not there is a cash value increase on the first death. If there is, the illustration should include examples of values after a first death occurs.

For second-to-die products that include a term portion-usually paid for through dividends-it is especially important to illustrate values all the way to the end of the mortality table. It is also crucial to show how these policies perform at lower than current dividend interest rates. While current scales may support the policy adequately for 20 or 30 years, the insureds could be faced with very large premiums due at very advanced ages.

CONCLUSION: We believe that important policy features must be disclosed to the consumer. Further, modular policy design may increase the sensitivity of nonguaranteed policy features. The AAA and the CIA should consider appropriate disclosures and/or standards for sensitivity analysis that will help the consumer understand these features and their impact on performance.

## 3. Two-Tier Products

The difference between the tiers can be quite large. The tier differential could be viewed (and is viewed, by some regulators) as a surrender charge, so certainly one alternative to current practice is to format the illustration accordingly, possibly even including a column that explicitly displays this surrender charge. Another alternative is to add language to the illustration that provides the needed additional emphasis of the important point that needs to be made to the client: the cost of rolling the funds out of this product to another one is unusually high, that is, the client needs to feel highly committed to staying with this company. Also, as life expectancies and expenses increase, annuitization rates may become less favorable, so a case could be made for using something more conservative than current annuitization rates on the illustration for someone who is not going to annuitize until several decades from now.

Another idea worthy of consideration, which comes from the California Department of Insurance, is to require that the account value column heading say "not available in cash."

Mandating that the tier differential be explicitly characterized as a surrender charge may be a bit severe and could unduly limit a company's freedom to illustrate its products in a reasonable way. Adequate disclosure is really the key point. Thus, for example, the idea of requiring the words "not available in cash" for the annuitization account value column heading seems like a good one.

Good-faith disclosure also clearly calls for showing monthly incomes on both a current and guaranteed annuitization-rate basis. As to the idea of using slightly conservative current annuitization rates for this purpose, in anticipation of future increases in life expectancy, this may be laudable but it does not seem necessary, since the juxtaposition of the corresponding guaranteed figure next to the current figure should convey the sense that things may not work out as favorably as the current figure suggests. Furthermore, this could create additional unneeded complexity and could even be latched onto as a defense of using future mortality improvements on life illustrations. Likewise, monthly incomes should be shown based on both the current and guaranteed annuitization account values.

CONCLUSION: The Task Force believes that the AAA and the CIA should consider the appropriate disclosures for two-tier products and appropriate changes to the values displayed.

## 4. Concept Illustrations

These illustrations demonstrate a concept or a program, such as split dollar or executive benefits. The focus is typically the accounting or tax impact rather than the operation of the insurance policy. Concept illustrations usually do not meet the regulatory requirements for policy illustrations. To demonstrate both concept and policy operation in the same illustration would overwhelm the consumer with numbers.

The Task Force believes that concept illustrations are appropriate. However, these illustrations should be clearly labeled "Concept Illustration Only." Unless guaranteed values are prominently displayed next to current valucs, the footnotes should disclose that this is not a policy illustration. This would allow agents to demonstrate concepts while alerting the consumer that the illustration does not demonstrate the operation of the policy.

CONCLUSION: We would recommend the recognition of concept illustrations and would encourage the AAA and the CIA to develop the appropriate disclosure to differentiate concept illustrations from policy illustrations.

## D. Consistency of Illustrations

A somewhat more standardized approach to illustrations could make it easier for a buyer to understand the illustration. The Task Force identified five possible areas of standardization.

## 1. Standard Definition of Terms

Commonly used terms should have the same meaning in all companies' illustrations. For example, the column labeled "Current-Year's Death Benefit" should have data that are consistent for all companies. There should be no discretion as to whether it is the death benefit at the beginning of the year, end of the year or some interim value. Standard definitions of terms would increase the clarity of illustrations to all users, not just to consumers.

CONCLUSION: We encourage the AAA and the CLA to consider pursuing this suggestion with industry trade groups, professional organizations and regulatory bodies.

## 2. Standardized Notes

There are probably too many notes on illustrations today, and they are not consumer-friendly. Furthermore, given today's product features, regulatory requirements for notes do not keep current with the need for disclosure
of how a product operates. Since the notes are at the end of the illustration, it is not clear how much attention they are given by the buyer. It would seem appropriate that important notes should be placed at the beginning of the illustration.

CONCLUSION: While the complete standardization of notes is most likely unattainable and perhaps not even desirable, we would encourage the AAA and the CIA to determine what degree of standardization might be helpful to consumers.

## 3. Different Print Sizes

Currently, all the data and notes on an illustration are given equal prominence. To the extent that it is technologically possible, the Task Force believes there is merit to using boldface or different print sizes for emphasis. This would help to ensure that the buyer reads important notes such as the nonguaranteed nature of illustrated values.

CONCLUSION: We encourage the AAA and the CIA to pursue this concept.

## 4. Standard Assumptions

Three possible models have been described in this paper: the illustration of variable life and the illustration practices in the United Kingdom and Australia. These models for standardization of assumptions help the buyer to understand that the illustrated performance varies with the underlying assumptions and is not guaranteed. The Australian requirement that effects of inflation also be demonstrated for the term of the projection has considerable appeal to the Task Force.

CONCLUSION: We encourage the AAA and the CIA to consider pursuing this alternative with industry trade groups, professional organizations and regulatory bodies.

## 5. Range Approach/Specified Scenarios

The range approach was advanced by the American Council of Life Insurance to the National Association of Insurance Commissioners in 1988. As proposed, it would apply to both life insurance and annuity illustrations. Use of the approach would have been elective, not compulsory. It would have allowed a range of interest rates only-not of mortality or expense assumptions. Finally, it would have allowed interest rates up to two percentage points higher and two percentage points lower than the interest rates underlying the company's current scale.

The assumption behind this approach was that the agent would actually show three complete illustrations to the client. One would be on the current scale, one up to two percentage points higher than the current scale and the third based on an interest rate up to two percentage points lower than the current scale. The current-scale illustration would always be required. The other two would be optional, but if an illustration based on an interest rate higher than current scale is shown, then the correspondingly lower-interestrate illustration must also be shown. The NAIC did not adopt this approach.

An advantage of the range approach is that it allows clients to see how the policy performs under different interest rate assumptions. More importantly, it demonstrates powerfully that variations are likely. In his presentation to the NAIC, Anthony T. Spano, Actuary with the American Council of Life Insurance (ACLI), said,
"Use of the range approach would demonstrate to the insurance buying public that illustrations are merely examples of how a product may perform rather than benchmarks on how it will perform. An undue focus on the company's current scale, which would result if illustrations were restricted to current scale, would be a disservice to the consumer in that it may create the impression that there is something magical or permanent about a company's current scale. This could lead the consumer to feel that current-scale figures are tantamount to guarantees."

Needless to say, companies were not unanimous in their support of the ACLI in advancing the range approach. The most controversial aspect of this proposal was that companies would be allowed to illustrate policies at higher than current interest rates for the first time. The counterbalance to this, of course, was the requirement to also show an illustration at a rate lower than current scale. The fear, however, was that agents would not always show the lower-interest-rate illustration, or even the current-scale illustration, but instead would concentrate only on the higher-interest-rate numbers.

Another concern was that only the interest rate could be varied and not mortality or expenses, which could also be expected to change over time.

Although the NAIC did not adopt the range approach, the industry seems to have gone part way towards it on its own. Several companies are allowing agents to show illustrations at dividend interest rates lower than current scale, while very few allow illustrations at higher than current scale. Most illustrations of products with explicit interest credits allow the interest rate to vary, either up or down.

The Task Force strongly believes that consumers should be made aware of a product's sensitivity to changes in the environment. The range approach is one approach that might be considered.

CONCLUSION: We think further discussion on the range approach within the industry and within our profession is warranted. As stated in Section B-1 above, we encourage the AAA and the CIA to:

- Review current regulations requiring the use of current experience or current dividend scales in life insurance sales illustrations;
- Suggest revisions to those regulations which would clarify the meaning of "current," and
- Recommend modifications to the regulations which would allow the use of both current experience and deviations from current experience, but, if the latter, only with appropriate and mandated disclosure of the assumptions used.


## E. Strategic/Educational Efforts

## 1. Change Use of Illustration in Sales Process: Consumer Disclosure

Consumer education efforts should focus on appropriate uses for illustrations. Usage disclosure should be clear and simple. It should indicate that illustrations are only useful for Type A questions, as defined in this paper. Required disclosures should make clear that it is inappropriate for agents, companies or advisers to use illustrations for Type B questions, regardless of the integrity of the illustrations involved.

This is not a ban on illustrations. Over time, however, such disclosure should reduce the occurrence of abusive practices. Previous regulations and disclosures have not been effective, because it has been possible to design around a rulc whilc still using illustrations for comparative cost purposes.

Sample usage disclosures, for display at the top of the illustration:
a. Sales illustrations should not be used for comparative policy performance purposes. Life insurance policies are complex financial instruments, which generally contain both guaranteed and nonguaranteed elements. A sales illustration may be helpful in understanding how a particular policy performs under specified circumstances. It is generally not feasible, however, to use sales illustrations to determine whether one policy is a better buy than another.
b. The only promises a life insurance company makes when it sells a policy are the contractual guarantees. Policy illustrations are not promises. Rather, they are hypothetical examples of what might happen if certain assumptions are met.
c. Policy illustrations should not be used for comparing the relative cost or performance of life insurance products.
d. Most life insurance policies are complex financial contracts which contain both guaranteed and nonguaranteed features which depend on unpredictable future events. Consequently, the amount of risk associated with a particular sales illustration cannot be determined.
If illustrations cannot be used as a comparative performance measure, many people will demand to know, "What can be used?" The honest answer is that there is no simple measure or analysis which can be done for such complex financial products. The consumer bears a degree of future performance risk, and this cannot be readily estimated, especially for competing policies. This fact is already well understood in the securities industry. It needs to be assimilated in the life insurance industry.

Of course, there are other factors to consider, including rating agency analyses and retrospective cost measures. There are also many service and quality factors. Contractual features which have value to the consumer's individual situation may be more important than generalized cost estimates. Finally, an evaluation and recommendation by the agent or broker may be of critical importance. Ultimately, although many factors may be considered, the final decision on the best policy must be based on individual judgment.

CONCLUSION: The AAA and the CIA should encourage their respective regulatory bodies to mandate inclusion of sales illustration disclosures of the type shown above. At least one of the disclosures should be prominently displayed at the top of every page.

## 2. Consumer Brochure

A small, easy-reading brochure, developed by an industry or professional association, could supplement the proposed disclosures and explain proper and improper uses of policy illustrations in more detail. It could also cover other due diligence questions which a consumer might want to ask before making a decision. The brochure should be offered in every situation in which an illustration is used as part of a decision to buy, lapse or replace life insurance coverage. It should be designed as a way to educate the consumer about both insurance and illustrations.

CONCLUSION: There are many associations that could sponsor or contribute to this effort, including the ACLI and the Canadian Life and Health Insurance Association (CLHIA). We believe that it is important to have active actuarial sponsorship of this publication. We recommend
that the AAA and the CIA take the lead in developing the text. The brochure could replace the current buyers' guides used in the U.S. and Canada.

## 3. Consumer Hotline

Though it would be a logistic challenge to set up, an industry-funded consumer hotline could be established, staffed by actuaries or other industry personnel interested in addressing the illustration problem on a one-on-one basis with the public. Consumers would call in (or fax) their questions.

This approach would be the most proactive of all the methods of addressing the illustration problem discussed in this paper, since it is a direct, handson approach rather than just another report or regulation. The concept is similar to that of the Legal Aid hotlines set up by various bar associations.

CONCLUSION: We do not recommend proceeding with this approach. In our opinion, most questions of this type are best handled by the individual company or the servicing agent.

## 4. Consumer Signature

There is value in having the consumer acknowledge something about the process used in deciding to buy, lapse or replace life insurance coverage. This is similar to the requirement that a consumer receive a prospectus prior to buying securities. The acknowledgment should be simple and short enough that it actually gets read before it is signed.

A sample might be: "I understand that my decision to buy/lapse/replace this life insurance policy should not be based on illustrations of nonguaranteed future performance or cost. If I was shown an illustration, I was given a copy of the brochure, Life Insurance Illustrations."

CONCLUSION: Companies should implement such disclosures on a voluntary basis.

## 5. Illustrations as Road Maps

As technology advances, it may soon be possible to store the illustration upon which the sale was made in the home office's computer. Then each year on the anniversary, the total current value would be compared to the value originally illustrated for that anniversary and, if it is less, the policyholder would be given (a) the reason(s) why it is less, and (b) the chance to make up the difference via an additional premium payment, if feasible. Illustrations would thus be used as road maps instead of just as point-of-sale
projections, credibility would be enhanced, and the workings of the policy would be clearer to the buyer on an ongoing basis.

CONCLUSION: Companies should consider providing "in-force illustrations" on a voluntary basis to help educate and inform their customers.

## 6. Agent and Home Office Education

A knowledgeable, well-informed agent is critical to ensuring that illustrations are used and interpreted properly. Our industry already invests a great deal of money in home office and field training of agents. With respect to illustrations, this effort is currently focused principally in two areas: (a) how to explain the "performance" of their own illustrations in a positive way; (b) how to discover and discredit "unreasonable" assumptions in competing illustrations. The sense of our Task Force is that agent education about illustrations should refocus on proper and improper usage, as described previously in this paper.

Once the concept of Type A and Type B usage is widely understood and accepted, agents will have more time to spend on activities which truly benefit themselves and their clients. For example, they can try to understand and explain the contractual differences between two policies (Type A), rather than trying to infer which policy will have the lowest cost over the next 40 years (Type B).

Educational efforts should not be limited to agents. Home office marketing, sales and product areas must understand and accept the concepts involved before meaningful progress can be made among agents.

CONCLUSION: The effort to refocus agent and home office education should start with the industry's professional societies and trade associations, including SOA, AAA, CIA, ACLI, CLHIA, Life Underwriters Association of Canada (LUAC), Association Des Intermediares en Assurance de Personnes du Quebec (AIAPQ), and The American College. Trade publications, such as the National Underwriter and Best's Review, are important educational forums which should be used to further this effort.

## VII. SUMMARY OF RECOMMENDATIONS AND NEXT STEPS

To summarize, the Task Force endorses the use of illustrations for Type A purposes. We do not believe they are appropriate for Type B purposes. Educating the consumer and others on the appropriate uses for illustrations
is a long-term effort. In the interim, we must deal with the Type B uses, and our report makes recommendations specific to these uses. The need for some of these recommendations may diminish as consumers understand the uses for, and limitations of, illustrations.

Several persons commented that we must provide consumers with a basis on which to compare different policies and companies. Past committees of the SOA and others have grappled with this issue, and have "tolerated" the use of illustrations and interest-adjusted indexes for this purpose. We would recommend that the actuarial profession renew its efforts to develop appropriate methodologies or indexes on which to compare products and companies.

Our recommendations are in four areas:

- Educational Efforts
- Standards, Disclosures and Regulations
- Optional Improvements
- Continuing Research.


## Educational Efforts

Educational efforts represent a long-term strategy for the industry. These efforts will necessarily involve insurance professionals from a number of disciplines, including agents, actuaries, regulators and company management. Without management commitment, these efforts are not likely to succeed.

We would recommend that the AAA and the CIA consider the educational efforts that have been identified and develop a strategic plan for development and implementation. These organizations would determine the appropriate forum for bringing in other insurance disciplines.

Among the alternatives that we believe have particular merit for further consideration are:

- Agent education and licensing
- Home office education
- Consumer brochures.


## Standards, Disclosures and Regulations

These recommendations represent the short-term approaches to deal with the problems arising from Type B uses. They also deal with the changes needed to support and enhance Type A uses. The AAA and the CIA should be charged with the development of an integrated program of standards, disclosures and regulations to improve illustrations in the near term. This Task Force believes that the following have considerable potential:

- Standard assumptions, following the variable life or Australian model
- Disclosure of underlying assumptions
- Review of actuarial standards for establishing nonguaranteed factors
- Disclosure of unique product features
- Display of alternative scenarios or sensitivity testing.

The Task Force strongly recommends the adoption of changes to vanishing premium illustrations in order to properly communicate the concept, and its nonguaranteed nature, to the consumer.

## Optional Improvements

The Task Force identified several alternatives that could improve illustrations that companies could implement on an optional basis. These would include:

- Consumer signatures on illustrations
- Presentation of historical data, separate from the illustration
- Use of graphs to supplement numerical data
- Display only quinquennial durations after year 20
- Round current values to nearest $\$ 10$ per 1000 of initial face amount
- Illustrations as road maps.


## Continuing Research

We would recommend that the SOA form a task force to research an appropriate methodology for comparison of products. The Task Force believes that in the current product environment, a measure that is not adjusted for risk is not helpful to the consumer or any reviewer of life insurance illustrations and contracts.

CONCLUSION: The illustration practices of most companies are consistent with regulatory practices and attempt to communicate in a goodfaith manner with the consumer. However, there is room for improvement. Life insurance policies are complex, and consumers often do not understand which benefits are guaranteed and which benefits are not.
The Task Force strongly encourages the AAA and the CIA to consider our recommendations and to work with the other industry groups and regulatory bodies to improve illustration practices and to develop educational materials that will aid consumers.

## APPENDIX I <br> SAMPLE SURVEY AND SUMMARY OF RESPONSES

## I. GENERAL

A. To what extent does your company feel that a problem exists within the industry regarding life illustration practices today, in terms of successfully communicating with the potential buyer in a good-faith manner?
(5) We think there is a serious problem but the nature of today's products makes it unavoidable.

- Problem is that the people selling them (producers, agents, reps, etc.) oftentimes will do and say anything to make the sale. Product differences and volatility of interest rates, etc. make it difficult for the consumer to compare products and understand all the pieces.
- The trend in the industry seems to be a return to more responsible illustrations. But illustrations still create a strong visual impact. Footnote, disclaimers, and ledger have trouble competing for the buyer's attention.
- So long as agents are allowed to run their own proposals, there will never be assurance that what the company intended is shown. Also, differences between companies will never be able to be accurately portrayed.
(35) We think there is a serious problem which can be fixed.
- We do not, however, believe that policies with adjustable elements will ever be completely understood by the buying public.
- Many agents sell on the basis of a 40-50 year projection of policy values as if these had a reasonable probability of materializing. Furthermore, they frequently misunderstand some of the fundamentals (that is, they often compare UL policies at a fixed rate of interest for several products even though companies take margins differently and may actually be paying very different rates at the time the illustration was prepared).
- We feel that some companies are misleading their customers by showing unrealistic illustrations, for example, a rate of interest which the agent knows will never be attained. This raises the issue of integrity because the individual agent and company are left to decide how to illustrate nonguaranteed elements, so long as the guaranteed elements are shown. The industry should develop, and the state regulators should adopt, a
standard by which all companies must conform when illustrating nonguaranteed elements. This would eliminate the practice of companies and agents competing by way of misleading sales illustrations which give the customer unrealistic expectations.
- It is important to disclose what is being illustrated rather than restrict or complicate the illustration.
- Many aggressive companies do not want to fix this problem and choose to illustrate values that are not likely to be paid, or will be paid only to a very few policyowners. These companies, in general, cannot be competitive on actual performance. However, there are still a few quality companies doing the right thing, although they are considered old fashioned since they believe in giving good value to the policyholder and in paying out real value, rather than illusions.
- The lowering of dividend scales has helped agents finally understand that dividends really are not guaranteed!
- Many companies show unrealistic interest rates and have great flexibility in making products look better. Disclosure statements and footnotes should be required to improve situation.
- The fix will require a realignment of some companies' fiber of integrity and a decision to include guidelines in full disclosure.
- Our company position is that the insurance industry must take steps to begin monitoring the practices of its representatives and initiate consistent regulation of the industry throughout the country.
- We have been working on consumer education pieces to supplement illustrations which provide additional information on the nature of illustrations.
- Illustrations of unrealistic projection of mortality and bonuses.
(13) We think there is a problem, but it's not serious.
- In Canada, some UL illustrations may use unrealistic interest rates. Major complaints arise from (name of company)'s unbelievable Par illustrations.
- Most agents and companies are OK, the bad cases get a lot of attention.
- Some illustrations need improvement in both stock and mutual companies; however, most companies do an adequate job.
- As the marketplace becomes more sophisticated, so must products sold in these markets. Illustrating complex products in a simple fashion causes unavoidable problems for the consumer.
- Overall practices are acceptable. Very few problem areas. TAMRA should be handled better. Handful of copies allow illustration at much higher interest rates than current credited rates, and some companies do utilize projected improvements in future mortality rates.
- I don't see how to enable the prospective policyowner to judge the relative value of nonguaranteed policies from different companies.
- Any attempt to fix may make the cost of doing business too high.
(2) We think current practices are acceptable.
B. Software packages are available that enable an agent to take the numerical output from a company-produced illustration program and ' $r$ cast'" the results into a format individually tailored by the agent. Examples include the ability to rearrange, add or delete columns, and to change headings and footnotes. Also, some agents have sufficient programming skills to accomplish this on their own. What is your company's position on this?
(9) We promote it (for example, we make such software available).
- However, we strongly discourage any alterations and/or deletions of information.
- We don't like it, but competition has forced us to make it available.
(4) We condone it.
- Some flexibility is necessary to meet the needs of sophisticated markets.
(10) We are neutral.
(19) Officially we're opposed, but there's little enforcement.
- Difficult to enforce in brokerage environment. Can control branch offices easier, but it still happens.
- We do everything we can to ensure that this doesn't happen, but you can never have 100 percent control of software running on a PC.
(6) We oppose these practices and vigorously enforce this.
- But it is difficult to catch individuals that doctor illustrations. We fire any that are caught.
- Officially we're opposed . . . however, we do encourage agents to have Head Office review proposals.
- Our software is designed to prevent these practices.
(8) Other.
- It is available, but we don't promote it-those that find it are capable and we work with them.
- We allow agents to add additional information by adding columns to the standard illustration.
- Allow specified adjustments.
- Currently we make available a software package which translates our company-produced illustration into a different format. The format is chosen by the agent from a menu of formats, and so the individual agent cannot modify or otherwise rearrange the output to suit his/her needs. The software company, however, has the ability to add or modify formats, and we have basically trusted them not to abuse or misrepresent our products. Only one area of disagreement has arisen to date: the software's treatment of a MEC is different from ours, and our solution is to not pass the data over from our company's system if the policy turns out to be a MEC. Hopefully, solutions for all disagreements can be accomplished as easily.
- We promote use of (name of company), but our illustration is required.
- Different marketing channels follow different approaches. The largest one opposes. Other channels encourage or attempt to limit to companyapproved programs. In any case it is very difficult to control agents who are computer-literate and can design their own spreadsheets.
- We have asked our field to show us their special charts for review. While we do not receive many, we do review all that come in and we have requested changes where appropriate.
- Agents have the ability to customize columns but not numerical values. We condone customization of this type and oppose agent programming that allows altering values in any manner.
Please indicate the illustration flexibility, if any, that your company provides to your agents, or explicitly allows them to use.
- Graphic interfaces.
- We provide ability to download data and reformat it using commercial graphics packages. This facility is used by relatively few agents. Minimum disclosure requirements for such presentations are being developed.
- An agent may edit a print file created from the illustration. However, we feel that this is a better option than allowing an agent the flexibility of typing his own error-prone illustration.
- Customize column selection from a predetermined list, output to an ASCII file, limited interest rate flexibility, and input Universal Life in-force information.
- Cannot alter form or format of proposal. May only change the current credited rate and this should be done only when company declares a change in rate.
- We allow the agent to use a lower interest rate than the current rate.
- We use a company called (name of company). We require all agents to show the company-produced illustration; it is automatically printed, but the agent can always throw it away (that is, enforcement may be impossible).
- Illustrations can not be modified. Agents can incorporate them in their sales package, but they must include "all" pages generated by our proposal system.
- We offer the (name of company) system.
- We allow agents to use a software package that reformats columns and rewords headings and footnotes in whatever manner the agent desires, so as to produce a snazzier-looking illustration. However, company policy is that this second illustration is to be provided to the client in addition to (not instead of) the regular company-approved illustration.
- Choice of interest rate for some products; no choice on others.
- Headings and footnotes cannot be changed. A variety of pre-set and user-defined illustrations may be selected from a menu.
- Ability to illustrate with their own interest rate assumptions as well as the current rate. Some flexibility as to what output is produced -optional graphs, additional notes, etc.
- Our illustrations can be converted to (name of company). Agents then can produce whichever numbers they choose. Footnotes are not converted, however.
- Our software allows agents to rearrange or delete columns, or add columns from a group of columns that are available through the software. VUL is an exception, however, as no alterations may take place.
- Our software allows column add/deletion only-no footnote or header editing.
- Company provided software with fixed formats; other formats require our ledger to be attached.
- We allow customization of illustration output; however, we strictly maintain footnotes that require a standard illustration that provides all guaranteed values.
- A limited range is $\pm 1 / 2$ of 1 percent on interest rate assumptions.
- We support an interface to Advanced Underwriting Software but do not provide such software.
- An agent can always retype any illustration, even without a PC. We take strong action if we find erroneous numbers or an outrageous illustration that is not company-produced. All software has flexibility and the market demands this flexibility, but we always require a ledger and footnote to precede any summary. However, no one is with the agent to ensure that he gives it to the customer. All pages are numbered as " $x$ " of " $y$ " pages, that is, page 1 of 4 , etc. Company illustration system has over 200 available columns of information that can be displayed, but standard formats exist. The results of the PC version can be captured by agentowned software that we have little control over. Outside independent vendors, who we cannot control, have our rate files.
- None for company-provided computer system. If outside PC software is used, we have no control.
- Minimal flexibility is provided.
- Lower dividend interest rate, first-death scenarios for survivorship, optional columns to show, for example, face amount of PUA's, cost of 5th div rider.
- (name of company), cash needs analysis, advanced needs analysis, split dollar.
- We require agents get pre-approval on any special format illustrations.
- Planners have only the ability to select the pages that are included in the sales presentation. They must always include the ledger (numerical) illustration.
- We have little or no flexibility.
- Ability to add, delete and customize columns; however, we require a 'compliance" page which shows GTD values. Portfolio rates may be illustrated with lower assumptions-not higher.
- Difficult to summarize briefly. Column selection is available to some agents and brokerage offices. Changing headings and footnotes is generally not condoned.
- For our universal life product, we allow agents to select an interest rate for illustration from 4-14 percent inclusive. Current rates are, however, disclosed.
- We allow download into prearranged packages.
- We support (name of company).
- None, except for illustrative rate flexibility.
- Ability to vary interest rates, and specify premiums (within policy limits).
- Some column selection and report writing capabilities; (name of company) download conversion.
- All life products (including UL) are participating, and only current dividend scale can be shown. Agents have flexibility to show various interest rates for annuity illustrated.
- Agent can enter interest rate but not change format.
- Flexibility about what pages to produce, what columns to output.
- Any illustrated rate between $41 / 2$ percent and 14 percent can be shown, but whatever is illustrated is disclosed. Mortality and expenses are only shown at current levels with no option to vary. Of course the premium and face amounts in a UL illustration may also vary.
- Column customization, funding flexibility, optional report selections.
- The agent can illustrate changing premium patterns, death benefits and interest rates, but footnotes, column headings, guarantees cannot be altered.
- Agent can download for graphics. Once downloaded, however, the possibility of rearrangement exists.
C. Do your illustrations routinely contain text about:
(5) Your company's ratings from the various rating agencies.
(5) Company size.
(4) Company financial strength.
- Yes. Yes. Yes. Marketing page that is available.
- Yes. Yes. Yes, but do not explicitly state our surplus.
- This information can be produced as an OPTION on the software.
- Yes. Yes. Yes. But agent has to request.
- No. No. No. Separate sales publications are used for above.
- (1) Optional on some products.
- This is an area we are exploring.
D. What do you consider to be the best feature of your illustrations?
- Electronic data transfer to (name of company)/graphics.
- Illustrated values are generally based upon reasonable assumptions. Volatility disclosed by way of mandatory conservative rate illustration.
- The fact that it is maintained "in-house" and has a large degree of flexibility.
- Flexibility to customize to consumer's own situation.
- Strong vendor who produces the software, comprehensive system that is state-of-the-art and accurate.
- The menu of options on our flexible UL allows agents to be very flexible in illustrating deposit and withdrawal scenarios. Proposals may almost appear custom-tailored.
- Checks for DEFRA, TAMRA, etc.; can vary premium, death benefit, etc.
- We have no gimmicks (COI give-backs, retroactive interest rate bonuses, etc.).
- Our alternative illustration demonstrates the impact of IIT, AIDS, etc. No other Canadian company illustrates lower dividend rates even when the IIT was introduced and everyone knew it would decrease dividends by $50-75 \mathrm{bps}$ on the investment return.
- Consistency.
- User-friendliness of input screens; speed of calculations, especially on solve-for-the-premium requests.
- Our sales illustrations are developed to comply with state laws and regulations. While the expiration date of the policy is not required by law, it is an important feature because it lets the customer know how long the policy will remain in-force, based on guaranteed factors and planned premiums.
- Meaningful disclosure of contract guarantees and current values.
- Illustrate specific products well. Flexible enough to assist an agent in selling with different marketing strategies (U-Life).
- We feel that our illustrations present a fair, conservative picture. We do not overstate values, and these values are based on our current experience.
- The column add/delete feature allows the agent to adjust the complexity of the illustration to suit his client.
- Honest, straightforward, no gimmicks.
- Readability and easy to understand.
- Our illustration systems are very flexible.
- The completeness.
- User-friendly input.
- They are clear, concise, and complete.
- Flexibility.
- A decoupled dividend interest scale can be run showing dividend interest lower than currently payable. The allowable range is between current and guaranteed. Also complete and extensive footnotes exist. Note: This is very unusual. Most companies cannot do this.
- Accurate/complete including benefits.
- Integrity through promotion of conservatism in assumptions and welldocumented disclosure of assumptions and guarantees.
- Pertinent and accurate information and dividends are based on current experience.
- Simple to understand.
- Flexibility in showing premium payment options (borrow or surrender PUAs only in certain years, use paid-up add riders to achieve quick pay in targeted years), and in showing cash distributions from policies.
- Integration of products on one software piece.
- Can illustrate flexibility of the products (for example, future changes); footnotes regarding compliance with tax laws.
- Simplicity of basic input; marketing support including graphics and concepts display.
- The fact that it can be easily read and understood by our prospects as well as our field force.
- Simplicity of use.
- User-friendly system with no "trick" illustrations or assumptions.
- Flexibility; accuracy compared with administrative system (ties in very well).
- The large number of available page formats, and the flexibility to tailor new formats to a specific need.
- Alternate interest rate scenarios. On vanishing premium illustrations, a "low side" illustration is now produced automatically by our major systems.
- They are short and easy to read.
- Flexibility, user-friendliness.
- Flexibility of sales presentations.
- Ease of use, flexibility, supplement pages with text explaining product and marketing concept.
- TAMRA and TEFRA premium checks.
- Interest-sensitive products show intermediate values from use and an illustrative interest rate. In addition to current and guaranteed.
- Ease of use for agent.
- The disclosure regarding the nonguaranteed elements.
- Variability of interest/premiums to match prospects' outlook and needs.
- Simplicity, user-friendliness, speed.
- Ease of use to agent, easy to read.
- Their flexibility.
- User-friendly.
- Flexibility relative to formats and supporting reports.
- Completeness and correctness. We check for TEFRA and TAMRA.
- Uniformity of presentation on all products, straightforward presentation.
- Straightforward, easy-to-use software, which does not project improvement in any factors except possibly interest with disclosure. There are also a lot of options to allow the agent to solve for solutions to the client needs.
E. How, if at all, would you change illustrations to improve them from the consumer's standpoint?
- Show the consumer how his needs are being solved, ask for signature.
- Reduce the amount of data presented which tends to suggest more accuracy and higher probability of realization than is warranted. More emphasis should be placed on the volatility of future results.
- Try to make them more efficient from a time perspective (that is, make them faster). Greater disclosure with respect to variable products.
- Better disclosure about proper use-should not be used as a prospective cost measure.
- Standardize footnotes for all companies so consumer can make a fair comparison.
- Use graphics.
- No illustration of "gimmicks" unless guaranteed and reserved for. Greater clarity and explanation of the fluctuation of interest (particularly the down side). Include a couple of interest rate indexes such as 5 -year treasuries and Moody's AAA bonds with explanation of the companies interest rate margins and the risks of crediting too high a rate.
- 1 . Simplify them. The total volume of numbers intimidates many clients. 2. Deemphasize the importance of illustrations to the sale. In many cases the agent uses the 40th-year CSV as the key selling point as if it were a given.
- Use the illustrations to explain the product rather than just show numbers.
- Only show first 10 years of values, and quinquennial thereafter. More disclosure. In short, fewer numbers and more words, as it should be for a "concept" sale.
- Companies should not be allowed to show illustrated values which are greater than those currently being credited. As the rates change, the customer should be notified accordingly.
- Require disclosure if illustration does not reflect current assumptions.
- Require disclosure of improved lapse, mortality and/or expense assumptions shown in the illustration, and require an alternative illustration showing results if the improvements are not realized.
- More explanation aimed at the "average person," not just legalese. Perhaps also cut down on the level of technical detail that is presented in our standard illustrations.
- As it happens, we are undertaking some research to establish the answer to that very question.
- Should explain unusual features. Remove the requirement to show guarantees on the same page. (Still must show them.) Space could be used to make numbers easier to follow.
- Consumers need education about products to understand them before illustration changes will help-anyway, an interest cap will help.
- From the consumer's standpoint, all of our illustrations are very well caveated.
- In the same way a valuation actuary needs to sign off on reserves, require an actuary to sign off on illustration procedures.
- Similar terminology; more graphic illustrations.
- Make them more clear, concise and complete.
- Better caveats and explanations, more control over "current experience" requirements, better agent education.
- Require a standard ledger be run with all of the other possible variations.
- No change.
- We attempt to stay current with enhancements and modifications which improve the usefulness of our illustrations; no improvements are outstanding at this time.
- Ideally, limit illustrations to 10 or 20 years.
- Disclose all important information in an easy and understandable format.
- Illustrate true performance of product; use of graphics; require financial ratings of at least two rating agencies; indicate investment quality.
- More accurate depiction of expenses and mortality, especially in later years. Showing the impact on policy values, when expense and mortality assumptions are kept at current.
- The illustrations are easy to read and understand in the format they are currently in. I wouldn't change them at all.
- Require a standardized format for traditional, UL, interest-sensitive products. Use would be in addition to customized format.
- Accuracy of mid-year projections; too much verbiage.
- Require more disclosure of the assumptions behind each illustration. Give the consumer the necessary information to properly evaluate the risks involved. (For example 1, possible consequences of future tax law changes; for example 2, current mortality charges assume future improvements in underlying mortality; for example 3 , current interest rate would be $X$ percent if company could earn $Y$ percent after investment expenses.)
- This subject is under constant discussion within our marketing and actuarial organizations. We would like to simplify illustration outputs, so that people are not confused by masses of numbers and multiple pages of footnotes. At the same time, we would like the customer to be thinking about a range of possible outcomes. Our new vanishing premium ("abbreviated payment plan") may help us meet this goal. Another idea which is under discussion and has not been implemented is to round nonguaranteed cash values and death benefits to the lower multiple of say, $\$ 100$ or $\$ 1,000$. Numbers with six or eight significant digits have an aura of precision which can't be overcome by footnotes or other disclaimers.
- More restrictions regarding disclosure.
- Clear explanation of product features.
- Decrease amount of footnotes on each page by putting clearer notes on a required extra page.
- Provide a page of comparison values: that is, assuming current interest and current mortality project the premium and values, the same assuming guaranteed mortality and guaranteed interest, current interest and guaranteed mortality, etc.
- 1. Bar retroactive mortality or interest credits. 2. Mandate illustrative rate showing results at lower than current interest.
- 1. Require a historical angle to the output. 2. Regulate what is being used in the assumptions or disclose what's used currently (fully disclose).
- Highlight or emphasize (large print) that illustration is nothing more than a sample of how the contract MAY work.
- Include brief definitions of terminology used on illustrations. Include graphics.
- Use graphics rather than tables of numbers to show results.
- Wouldn't.
- Yes, I would include company ratings and financial strength.
- Limit number of years that could be illustrated.
- Automatically include variations of CSV and DB development, less numbers, more verbiage.
- We would prefer to provide easy-to-understand supplemental brochures describing important issues since footnotes on illustrations are not effective.
F. (7) Does your company have an illustration that you regard as a positive innovation in terms of format, content, or concept, from a consumer standpoint?
- We produce a policy illustration and include it in the policy. Differences between this independently produced projection and the one originally provided by the agent can and has identified misunderstandings right at the outset when they can most easily be corrected.
- Edit screen on UL.
- We're the only Canadian company to illustrate an alternative (lower only) dividend scale, but this is common in the U.S. (I believe) so it's not really a great innovation.
- Signature page; various columns for IRR calculations; three scenario pages.
- Screen graphics are available-easier to visualize.
- We examine our illustrations regularly to see what improvements we can make. While they may not be "innovative," we believe that they do an excellent job of fairly presenting the product.
- No. But we do allow interest rate modeling, and we have an extensive re-illustration (in-force ledger) system.
- Question is not clear-we have a typical big company type of system, except for our decoupled illustration, and an in-force system.
- The ability to illustrate dividends less than the current scale.
- This is a vanishing premium illustration that automatically produces a low-dividend-interest-rate scenario. Also, the zero premium has been replaced by a special character that references a footnote.
- It isn't so much an illustration, rather that we have adjusted our products to include investment income tax (as stated in the footnotes).


## II. DIVIDEND-PAYING PRODUCTS

A. (35) Does your company sell this type of product? (If no, skip to III).
B. Which, if any, of the following dividend factors as illustrated anticipate a change from current experience, either by projecting trends or on some other basis? Please explain the general nature of such changes.
(1) Mortality.
(2) Interest.
(3) Expense.

- Mortality. Projected improvements.
- Company does not illustrate dividends higher than our current scale.
- We are aggressively attacking the expense issue.
- Performance of our par fund is more than enough to support dividends this year, and our projections suggest we'll be fine in 1992. However, a continued deterioration in the economy could accelerate that occurrence. A few years ago when the AIDS issue was heating up and the IIT was about to be implemented, we specifically showed a reduction to reflect the potential impact. Currently, we simply show a $1 / 2$ percent reduction in interest rate to illustrate the effect of a drop in yields. Our field force hates our doing this at all.
- Use current dividend assumptions. For projections, don't try to anticipate change.
- The standard illustrated scale is the actual payable scale with no projection. The agent has the option to run any lower dividend interest assumption the client wants to see.
- Illustrations reflect current experience.
- (This was a response to II-B. and II-C.) Unless otherwise requested, the dividend factors which produce the illustrated dividends will be based on the following: (a) The mortality and expense factors will reflect the current-dividend-scale assumptions. (b) The interest factor will reflect the current-dividend-scale assumptions unless it has been determined that the scale which applies to the policy will in fact contain a lower-interestrate assumption. If this is the case, this lower rate will be used. If the reverse is true, however, and it is anticipated that the actual interest rate will be higher than the current value, we do NOT reflect this higher rate but instead remain at the current level. Lower only. We do not allow dividends to be illustrated in excess of the current scale. Agents have the flexibility to run illustrations where the interest component can range from zero to a maximum which assumes the default rate as defined in (b) above. The mortality and expense components currently cannot be adjusted. However, an upcoming enhancement will provide the flexibility to completely zero out the dividends. Our illustrations contain a supplementary page which illustrates all nonguaranteed elements otherwise buried within the illustration.
- Current scale is projected to continue-no changes in experience are anticipated.
- In aggregate the current experience reflects actual; by blocks they don't. DAC has not been reflected.
- Currently illustrated refunds are calculated using expense factors which have become out-of-date. This will be corrected on next change.
- We illustrate current scale only; in 1988, when tax laws were changing, we temporarily illustrated a lower-than-current scale.
(3) Are such changes disclosed to the consumer?
- Dividends are not guaranteed on the illustration. Values illustrated may vary depending upon actual experience.
- Yes, though the change is not imminent, so it is shown as an alternative scenario.
- Advise consumer that these factors affect dividends and changes may occur.
- Not specifically, but reproposals are available as requested.
C. (17) Do your agents have the flexibility to run illustrations at dividend interest rates or mortality rates higher or lower than the current scale?
If yes, please indicate the degree of flexibility they have.
- Select interest rate to be assumed within a range rate assumed disclosed on illustration along with actual recent experience.
- Interest only. Higher or lower. Illustration will say "hypothetical."
- Lower, but not higher.
- Only lower.
- $-1 \%,-2 \%$ and $-3 \%$.
- Illustrations can be run up to 200 basis points below the current gross crediting rate. Our conservative illustration practices do not allow us to show an increase in dividends.
- We allow up to a 200 -basis-point reduction. We do not allow illustrations of a dividend increase.
- Current scale, reduce interest factor 1 percent or 2 percent.
- Interest rate less than current scale only.
- Lower dividend interest rates only may be run.
- At lower rate only. May decrease dividend interest rate by up to 200 basis points.
- Yes-lower only; 200 basis points lower than current.
- Agents can illustrate dividend interest rates lower than the current rate. (As low as three percentage points below current.) Mortality rates cannot be varied.
- Up to 2 percent lower than current scale, average of $8,12,20$ or 40 prior quarter interest rates.
- Can show results of lower interest factor (higher not santioned by company).
- Lower interest only. Two percent interest drop, no change in mortality.
- Limited to illustrating increased or decreased dividend interest rate assumption. Maximum differential is 2 percent.
D. (10) Has your company received an increasing number of policyowner complaints about dividends paid versus dividends illustrated?
(1) Have these complaints indicated any common misunderstandings of illustrations furnished at the time of sale? Please explain.
- No. Consumers thought of dividends as guaranteed.
- No. These plans are relatively new. Track record thus far has been pretty good-dividends have generally exceeded expectations.
- Same. Only in terms of the "vanish" if dividends are decreased and have more premiums will need to be paid prior to "vanish."
- The problem has not been dividends paid versus dividends illustrated, but how the changes in the dividend scale affect the vanish point of the contract. That is, the way they see it, if you had a 1 percent reduction in your dividend scale, total cash to vanish should only increase by 1 percent!
- Policyowner complaints have increased as dividend scales have decreased. They do not always comprehend the "nonguaranteed" nature of dividends.
- The nonguaranteed nature of dividends was not well understood nor presented well.
- Normal level. Most complaints are minor. The majority of the questions concern vanishing outlay or values less than originally projected. However, once the policyowner understands that he/she is still being credited a competitive return versus available options, then the policyowner in general is satisfied.
- Yes, but relatively few so far. Impression, belief, or hope that dividends only increase.
- Many complaints deal with misunderstandings that quick-pay years were guaranteed, or at least highly unlikely to change.
- Most misunderstandings relate to vanishing-premium illustrations and dividend scale changes. Policyholders mistake a vanishing-premium illustration for a promise of a paid-up policy.
- Policyholders believed dividends would cover premiums by a certain date, and due to a decrease in the dividend scale this is not so.
- People seem to think insurance dividends should be unaffected by expense changes and interest swings. They remember the $15-16$ percent interest rates of 10 years ago.
- We had some complaints immediately following scale drops in 1987 and 1988, but fewer than expected.
- The consumer did not understand the relationship of investment yield to product performance.
- "Vanish" illustrations are frequently misunderstood regardless of the agent's explanation at the time of sale.
- Most complaints pertain vanish year increasing due to reduction in dividend scale.
III. UNIVERSAL LIFE AND INTEREST-SENSITIVE LIFE PRODUCTS
A. (52) Does your company sell these types of product? (If no, skip to IV.)
B. Which, if any, of the following experience factors as illustrated anticipate a change from current levels, either by projecting trends or on some other basis? Please explain the general nature of such changes.
(5) Mortality.
(8) Interest.
(2) Expense.
- Mortality - can illustrate based upon current or guaranteed maximum scale. Interest-select rate from an allowable range. Mandatory lower rate projection also produced. Expense-administrative fees subject to fixed inflation factor.
- An input assumption.
- All current values are based on company experience.
- Mortality on juvenile issues. Illustrations for juveniles assume conversion to nonsmoker product at minimum allowable attained age.
- Mortality-no, have priced for AIDS. Interest-no, based on current interest rate. Expense-no, have priced for IIT, AST, etc.
- Bonus interest.
- Negative anticipated changes are not considered when the illustrations are developed. We see this as part of the integrity problem because, while there is no legal obligation to forewarn customers of anticipated negative changes, the company and/or agent may be aware of such changes. For example, a decrease in interest rates may be imminent, but until it's effective, the agents continue to illustrate the higher rate as if that rate will remain in effect for 20 years. Although agents should not be required to provide predictions, they should be honest with the customer if it appears that a change is about to occur.
- All factors reflect current assumptions.
- Projections may be done using an interest table based on anticipated future changes.
- We don't anticipate changes.
- We are opposed to future enhancements in these factors.
- Current level projected to continue-can lower interest assumptions over time.
- Alternate interest rate projections are available.
- Illustration values are based on (1) current assumed interest and mortality and (2) guaranteed rates.
- Mortality-OK in aggregate; in process of repricing. Interest-too high on new premiums; managed down over time. Expense-doesn't reflect DAC, otherwise OK.
- Expense factors are out of date and need to be updated.
- We expect mortality to continue to improve as it has in almost every period in the past.
- Rates are adjusted for the guaranteed added interest credits at the end of years 10, 15, 17, 18, 19 and 20.
- Use of a higher credited rate (i.e., lower spread) after 5 years.
(9) Are such changes disclosed to the consumer?
- Mortality and interest.
- Footnotes/guaranteed values illustrated.
- Before the full level of the IIT was known, we advised new clients of the potential range of the impact.
- Not on illustration; in Exhibit interrogatories.
C. Which, if any, of the following experience factors can the agent vary from current levels in your illustrations?
(49) Interest.
(6) Cost of insurance.
(2) Minimum premium.
( ) Policy loads.
- Interest. Cost of Insurance - guaranteed and current, only.
- Interest. Cost of Insurance-choice is current rate or guaranteed maximum scale only.
- None. Our branch offices only can go 3 percent above current interest rate and this is footnoted.
- Interest in a separate section of proposal labelled "projected values."
- Interest-but must show current rates and a minimum rate illustration. The current rate is the upper limit the agent can use in the projection.
- Interest. Agents are permitted to vary interest rates up or down (up to a maximum of 14 percent). Due to good training and (to some extent) a fear of litigation, more of our agents vary the interest rate downward than upward.
- Interest, from 4 percent to 10 percent. Cost of Insurance, illustration can be run with guaranteed mortality charges.
- Interest, but never more than current rate.
- Interest, additional page only.
- Interest-This is done so we don't have to provide new software when interest rates change.
- Interest-Our illustrations show Universal Life values on a current basis allowing for an alternate interest rate either higher (subject to a maximum) or lower if desired. In addition, values are illustrated on a guaranteed basis which are based on the guaranteed minimum interest rate and the guaranteed maximum cost of insurance charges.
- Interest-this is an agency input item.
- Interest-but only a lower rate than current, only available on some illustrations systems.
- Interest-However, the current illustration is automatically printed in addition to the assumed-rate illustration.
- Cost of insurance, guaranteed only.
- Cost of insurance, show current and/or guaranteed.
- Interest, range of values. Cost of Insurance, choice: guaranteed or nonguaranteed cost. Minimum Premium, compensation is not based on the premium chosen but on the cost of insurance and policy fees.
D. (10) Does your policy include any contingent credits or persistency bonuses? If yes, how are they disclosed?
- Some policies guarantee a higher credited rate from year $11+$ on. Footnote explains.
- Bonus interest credited once policy reaches a certain duration. This feature is fully disclosed and is contractually guaranteed.
- Footnote. Illustration of credit is optional-agent may decide not to show it.
- Contractually guaranteed bonus interest is disclosed in a footnote.
- No. We believe most of these "gimmicks" will be taken away from the consumer unless persistency is lousy. Most "gimmicks" are designed to encourage persistency.
- The bonuses are guaranteed, so they are reflected in both the current and guaranteed values shown on the illustration. In some cases there is further explanation in footnotes also.
- Within the footnotes.
- As a company practice in a footnote.
- They are disclosed in footnotes on the illustration.
- A paragraph describing the requirements to receive the benefit, the amount, and any other restrictions is included.
- A footnote provides the method of calculation and notes that the bonuses are "nonguaranteed."
- They are illustrated only if they apply in situation illustrated. Caveats explain requirements to get credits.
- On the summary page of the illustration.
- By footnote at bottom of illustration.
- Payroll deduction UL discloses higher interest beginning years 11 and 21 if premiums are paid pro-rata thru 10 years.
- They are disclosed in a footnote in the summary page.
- In the page of notes following the illustration.
- In footnotes.
- Reduced COI after specified cumulative amount of insurance purchased; asterisk on ledger once lower COIs are being charged.
- Bonus interest, described in footnote at bottom of sales proposal, cost disclosure.
- No. We will, however, soon introduce a UL product that includes an interest rate bonus of 1.25 percent after 10 years provided cumulative
target premiums have been paid. This will be fully disclosed in the explanatory notes section of illustration.
- Interest rate bonus is listed in ledger and in the footnotes.

> IV. TERM AND TERM-LIKE (FOR EXAMPLE, GRADED PREMIUM WHOLE LIFE) PRODUCTS
A. (41) Do you sell this type of product? (If no, skip to V.)
B. (13) Can your agents illustrate conversion to universal life, participating life or interest-sensitive life plans on a term or GPWL proposal?
(12) If yes, does the conversion illustration show both current and guaranteed values?
C. (8) Do you sell nonconvertible term?
(10) Or term with a very short conversion period?
(9) If yes, does the illustration prominently disclose that the product is nonconvertible or very limited in its conversion rights?

- No illustration.
- Very short, first 3 years only on a 20 -year decreasing term plan.
- We do not provide illustrations for our NCT product.
- No, but the illustration is entitled ". . . Nonconvertible Term."
- Covered in brochure and contract. The term illustration shows rates on a guaranteed and current basis with and without re-entry.


## V. SECOND-TO-DIE PRODUCTS

- These are the wrong questions to ask on this product. You need to consider both the base policy and the term riders.
A. (41) Do you sell this type of product? (If no, skip to VI.)
- No. We offer a beneficiary insurance rider. It gives the insureds a guaranteed right to purchase an additional amount of insurance at the first death.
B. (6) Does your product provide for a cash value increase on the first death?
(1) If yes, are the values shown on your illustration always based on the assumption that both lives remain alive?
- Yes. Yes. Agents can illustrate death and illustration does prominently disclose the death scenario.
- Yes. No. Agent can choose both alive or first death in any duration.
- Yes. No, can be run to choose year of death of either life.
( ) If yes, is this assumption prominently disclosed on the illustration?
C. (14) Does the illustration contain an explicit statement that there is no death benefit payable on the first death?
- Company has death benefit payable on 1st death Rider approach. Two separate policies are issued.
- No, but the illustration is entitled ". . .Second-to-Die."
- No-but it shows that cash value increases.
- N/A. We offer a guaranteed insurability option that, upon the first death, allows for the use of the death benefit as premium for a Universal Life policy payable upon the death of the second life.


## VI. TWO-TIER PRODUCTS

A. (6) Do you sell this type of product? (If no, skip to VII.)
B. (5) Does the illustration clearly indicate the amount payable if the policyholder surrenders rather than annuitizing?

- Additional verbiage also emphasizes this fact.
C. ( ) Are the illustrated monthly incomes (upon annuitization) shown using both current and guaranteed annuitization factors?


## VII. OTHER

A. (20) Are there other specialty products on the market for which you feel illustration practices should be researched? If so, please indicate which products:

- First-to-Die, Variable Universal.
- Registered Life. Variable Life.
- Variable Life products.
- Disability Income.
- Living benefits.
- Term-to-100 (basically low premium whole life with no nonforfeiture values and is sold in Canada only). Often assume very high lapses in pricing and illustrations.
- Annuities; lapse-supported illustrations.
- Yes, UL and VUL products.
- Annuities.
- Accelerated benefits.
- Renewable health product with low initial rates may be worth considering.
- Two-tier Universal Life, 10-year indeterminate level premium which becomes 1 -year term thereafter, and deferred annuities where interest rate for the initial period and renewal period are different.
- Realism of second to die product pricing/illustration; use of projections of improving experience in combination WL/term illustrations.
- Products that are stated to be whole life but are actually blends of base and term.
- No, except (name of company) shows their projections against others' guarantees.
- Annuities.
- Universal life products with equity side funds, in relation to credited interest rates and tax status.
- Universal life maturing as an annuity.
- Interest-sensitive whole life.
- Group UL especially for executive purchases.
B. (35) Are there specific illustration practices that you believe should be researched? If so, please indicate which practices:
- On traditional WL illustrations, "guaranteed" values should never include any dividends.
- 1. Use of nominal interest rates. 2. Disclosure of only the gross fund value before surrender charge for UL products. 3. Ability to illustrate temporary coverage (say to life expectancy) without adequate disclosure.
- Producers creating their own illustrations via (name of company), etc. Telling consumer wrong information about guarantees.
- Are graphs easier to understand than columns of numbers for the consumer.
- Projecting continual improvement in mortality for UL policies.
- I believe agents put too much emphasis on illustrations during the sale process and some companies go too far in selecting optimistic assumptions to make long term values look good.
- Lapse-supported illustrations; increasing interest rates, mortality improvement. As somewhat already addressed in this survey, the issue of an agent's ability to manipulate figures in the illustration is of importance because of the potential to mislead customers by illustrating unrealistic interest rates. Further research is needed to ascertain how often such
practices occur. Also of importance is compliance with state disclosure regulations. This issue should be researched and the insurance departments made aware of any widespread noncompliance, so that appropriate action can be taken at a state level to enforce the laws and regulations that govern disclosure.
- Necessity of illustrating at a low interest rate even for asset products like the RRIF.
- Failure to disclose guaranteed charges/costs (mortality, expenses, etc.) and illustrating improved lapse, mortality experience, etc.
- Any illustrations that show the extent to which funds may be attached to and accumulate tax-free within an insurance policy. There is a propensity to liberally interpret the Canadian Income Tax Act.
- Refunding cost of insurance and other bonuses.
- Any illustration practices which have incomplete disclosure, are ambiguous or are confusing, should be examined. Though theses concepts are difficult to formalize, some guidance should be codified.
- Failure to illustrate to age 100 , or to such duration where coverage may decrease under current assumptions.
- Persistency or lapse supported illustrations should be made illegal. We should urge the adoption of an IRR approach, a modified Linton-type yield with cost of mortality. There should also be a standardization of decoupled formats. Some companies blend lower new money rates into their portfolio that will not reach a 200 basis point cut for $10-20$ years. However, these companies claim they are using the lower rate.
- Concern that some companies are not reflecting current costs (for example, expenses, IIT) in their illustrations.
- Practices which do not adequately disclose nonguaranteed assumptions and values.
- Premium offset.
- Projected improvements in mortality.
- Placing disclosure statements within the illustration, not on a separate sheet that can be discarded.
- List assumed improvements in experience, and bonuses and how they impact the illustration.
- Practice of illustrating improving expenses or mortality assumptions.
- Interest rate kickers, terminal dividends and persistency bonuses, interest rate improvements, assumed mortality improvements, unlabeled columns, that is, BOY/EOY death benefit. Unidentified rider blends.
- Illustrations should not anticipate mortality improvement. In the past guaranteed minimum value used guaranteed interest but current mortality for some companies.
- Mortality improvement in pricing or in illustrations. Declared interest rates that cannot be supported. Vanish on a current basis by surrendering PUAs and put these columns next to guaranteed columns (based on a full pay) with the result that the guaranteed values look like they are based on the vanishing premium. Agents compare illustrations at a common declared interest rate-it is not obvious to them or the consumer why this is not a fair comparison.
- Nonguaranteed persistency bonuses for which no reserve is held. Also, illustrating mortality improvement. What disclosure is needed if better than current mortality is assumed in a traditional product, or better than current mortality changes is a UL product?
- More explicit disclosure of nonguarantees.
- Current interest rates and validation.
- 1. Tontine credits. 2. Interest far in excess of earnings.
- Abuse in the super select illustrations. Misuse of annual versus monthly premiums.
- Lapse supported bonus arrangements, disclosure.
- Reduction in future mortality charges (guaranteed and nonguaranteed). Dividends on universal life, lump sum and accumulated mortality charge persistency bonuses.
- Projected improvement in mortality.
- Nonguaranteed terminal dividends and bonuses, particularly those that are retroactive.
- Illustration of long-term values when product is not expected to persist that many years.
- Enhanced mortality and bonus rates-especially higher interest rates than company currently earning.
C. Undoubtedly all companies get an occasional question or complaint about an illustration from a consumer. What is the most common kind of illustration complaint received in your Home Office?
- Contract performance not as illustrated and additional premiums needed. Surrender charges not understood.
- Illustrated policy values are at policy anniversaries. Annual statements based on actual data after anniversary processing so differences occur that require explanation.
- Why can't the illustration be run faster?
- Sold on a "vanish" premium, and dividends decreased.
- Don't understand where the numbers are coming from, "Vanish" year discrepancies when dividends are changed.
- Discrepancies between proposals and "Statement of Policy Benefits \& Costs"' required by state regulations, which is provided with the policy. These are easily explained. Usually the reason is due to monthly premiums on the proposal versus annual premiums used in the disclosure statement.
- We haven't any major complaints from our consumers.
- Illustration doesn't match contract summary pages-usually because policy was not illustrated (mode, riders) as issued.
- Interest rate illustrated versus paid, or premium vanish illustrated versus actual.
- Quick pay illustrations (for example, at 11 percent interest in 1984) not being fulfilled as originally illustrated.
- Specific statistics regarding complaints received concerning sales illustrations are not available. However, our group that handles customer complaints has indicated that the most common kind of complaint involving sales illustrations is the misunderstanding of the surrender charges and their effect on cash values.
- Illustration differs from cost disclosure due to change in interest rates.
- No overall common complaints that I know of.
- Policyowners frequently do not understand that illustrations are projections, subject to change, and they especially are unaware of the results of a dividend change.
- 1. Vanish illustrated at issue differs from current vanish. 2. Want more flexibility, for example, show what happens if dividends fall 25 basis points in each of the next five years, then begin to rise again.
- Vanishing premiums, but using side-funds rather than dividends. Interest rate changes cause the payment stream into the fund to be altered or some "spillover" into a taxable fund.
- Too much compliance information.
- Only that did not understand not all premium earning interest-not illustration itself.
- Dividend scale reduction.
- Premium cease date is later than initially illustrated so client needs to continue paying premiums.
- Illustration too difficult to understand and compare with other company's products/illustrations.
- We do not get complaints about proposals. We believe that this is a direct result of our philosophy of clear, complete, concise wording. My experience is that agents are usually the people that complain about illustrations.
- Actual performance falls short of illustration-for example, premium vanish period is longer than illustrated.
- Misunderstanding of what the policyowner purchased. Our agents have a good relationship with their clients. We have few real complaints.
- Customer not fully understanding that it is an "illustration."
- Interest rates on UL policies less than that illustrated.
- Premium offset.
- Consumers don't understand quick pays; don't understand effect of loans on policy values.
- Consumers assume the illustration is a "guarantee" of what their policies will look like.
- Removal of detailed illustration from back of annual report for universal life contract.
- Effect of increase or decrease in assumed interest rates especially in relation to vanish.
- We typically do not hear consumers' complaints first hand. Planners' complaints about our competitor's illustrations usually involve the fact that they are often difficult to read and understand. Many times, pages are missing from the presentation.
- Extended vanish period due to dividend/interest rate decreases.
- Regarding unfamiliarity with UL, which is labeled "Flexible Premium." Term information also shows "end of year"' to be consistent with cash value products.
- Actual policy configuration or performance did not match the illustration given by agent.
- That the originally illustrated premium vanish point has not been realized.
- Our most common illustration question is, "What happens after age 75?"
- Illustration does not always match materials received at issue.
- Having to pay more premiums before vanishing the premium with dividends.
- Rarely receive a complaint. Most often they involve the premium illustrated which does not hold when interest falls.
- 1. Failed expectations on vanishing premium when interest rates decline after issue. 2. Minimum deposit post-1986 Tax Act.
- Vanishing premium.
- Lower values (dividends) than illustrated.
- Policyowner believes illustration was a guarantee.
- Don't understand why "current" projection goes to maturity but "guaranteed" stops after a few years. Guaranteed is too conservative or too costly.
- The numbers in the policy don't match the illustration. This is because the policy does not reflect any future changes to premiums or face amounts except as required by tax law, and the illustration can reflect changes that may be contemplated.
- Required to pay more premiums than anticipated to vanish policy (due to drop in interest rates).
- Vanish delays.
- Calculation of settlement options.
- Agent does not show footnotes.
D. (21) Has the number of illustration complaints your company receives increased over the past five years?
- Yes-use and volume have significantly increased during past five years.
- Slightly, due to pricing assumptions used and the decline of rates from 11 to $7-8$ percent which affect UL, dividends, other interest-sensitive products.
- No, hardly ever get any from clients. Generally get them from agents who complain that our 40th-year CSV is less than some other companies' 40th-year value given the same premium and death benefit.
- No. The number of such complaints have actually decreased over the past five years. While the exact reason for the decrease in such sales illustration complaints is unknown, we believe that both the agent and customer service representatives are doing a better job of explaining the surrender charges so that the customers are more aware of the implications of surrender charges.
- Yes, due to falling interest rates as well as changing tax legislation.
- Most complaints are handled by the agencies. We have an 800 number, but the volume of complaints and questions is not that large-maybe a few thousand on an in-force of 500,000 (that is, low percentage).
- Not significantly in relation to increase in volume.
- Not markedly.
- Yes, due to software systems that are now obsolete, product sold was interest-sensitive whole life which was sold when interest rates were much higher.
- Yes, although the number of complaints from consumers continues to be small.
- This is probably more from an increase in-force business and lower interest crediting rates than from poor illustrations, or improper sales concepts.
- Only because we write a lot more business than 5 years ago.
- Decreased.
E. Please use this space for any comments you'd like to offer regarding life insurance illustrations from the consumer's perspective.
- Regrettably we have let the ease of production push us in the direction of providing the consumer more and more data that clouds basic understanding of the policy being purchased. With the numbers based upon assumptions that are inconsistent between companies, this puts the focus on noncomparable possible values scores of years in the future. More properly, illustrations would provide clearer illustration of the product's main features with as few numbers (and pages) as is reasonably possible.
- 1. Producers, Home Office personnel, salespeople, all need to have a clear and concise understanding of the products they are selling. Consumers need to fully understand what they are buying. Better training and education of salespeople and insurance people is necessary. 2. Illustrations contain lots of numbers, not all people are numbers people and understand what the numbers represent. 3. Insurance terminology, what does "Vanish" mean, paid-up mean? That is, "if I paid 10 years of premiums on my Universal Life policy, then I will be paid up," is what people are told when they have an illustration that solved for a $10-$ year premium paying period to carry the policy to maturity. However, if rates decline, more premiums could be due to sustain the contract.
- We have a concern regarding illustrations of an income stream generated by policy cash values. In some cases that we have seen, the policy lapses within five years or less after the income has been paid. The assumption is that the insured will die before that (based on normal life expectancy). However, if insured lives and policy lapses, this triggers a significant taxable event. This (the tax implications) is not disclosed to the insured. In some cases, the insured is not informed that the policy could terminate prior to death.
- No gimmicks should be illustrated unless guaranteed and reserved for. The impact of lower interest rates needs to be more fully disclosed. The risks of crediting too high an interest rate need to be more fully explained. Perhaps, a comparison of an industry acceptable (probably not possible) index, such as Moody's AAA bonds less an assumed interest spread (profit margin), with the current rate would tend to bring more realistic rates into the marketplace. Today, my company's ULs are crediting 8 percent. This is probably a little too high. Yet, we are 75-100 basis points below most of our competitors. We think we can earn about 9 percent in today's market, but there are products out there crediting 9 percent. What gives?
- The majority of consumers find illustrations confusing and have no concept as to the long-term achievability of the numbers, let alone what they actually mean. Personally, I believe we need very strong guidelines regarding illustrations and what can be shown, either at the professional or legislative levels. Otherwise, consumers are likely to view them as little more than smoke and mirrors which will further damage the public's general view of the insurance industry.
- In-force projections should be provided at anniversaries, allowing the customer to see if the policy will behave as intended, based on new nonguaranteed elements and past premium payment patterns and cash value accumulations. In many instances, the consumer's attention is drawn to the current illustrated values without mention of the guaranteed values. Although the guaranteed values are required by regulation to be included in the illustration, the agents often fail to mention the fact that there are minimum guaranteed. The consumer should be informed of the "worstcase scenario," so that there are no misconceptions as to the accumulation of cash values. In other words, the agent should give equal time during the sales presentation to explaining what the minimum guarantees are and what effect they may have on the policy values.
- Illustration practices vary considerably from one company to the next, for example, beginning or end-of-year cash values? Beginning or end-of-year death benefit? How are internal rates of return calculated? This is particularly a problem in later years, when large dividends are typically paid, since the point in time illustrated can have a substantial impact on illustrated values. This is a key concern in highly competitive markets, such as the second-to-die marketplace.
- The main problem is that aggressive companies are illustrating values not likely to be paid. The illustrations of most mutual companies do not
have this problem. It is mostly a problem found in the UL illustration of a stock company. There is no easy solution, but the problem is getting worse, not better. The Annual Statement disclosures of dividends and other nonguaranteed elements are either not given to the consumer or the responses are not meaningful. Few companies state that their nonguaranteed elements are not based on realistic assumptions. Historic performance is useful, but many companies do not have good track records and new products may not be comparable. Dividend history IACs are subject to manipulation if noncomparable products are used or if very little of the "historical" product is still in-force. The only solution to the problem that I can foresee is to provide the client with an illustration using standard assumptions, in addition to the company's regular illustration. The standard assumptions used could be as follows: 1. assume no lapses and accumulate net premiums underlying cash values by: 2 . crediting an interest rate equal to 10 percent less actual investment expenses and priced for the spread of the product; the spread should be disclosed; 3. never charging mortality less than 100 percent of S/NS 75$80 \mathrm{~S} \& \mathrm{U}$ table; the company can disclose if current experience is better; 4. using a realistic expense assumption; 5. charging a defined profit margin. If these assumptions and accumulated premium less expense and mortality charges are used, the values are much less than the illustration. (The client should also ask more questions.)
- 1. Illustrations are only one piece of a sales/disclosure process and should not be used to select companies without considering such things as actual dividend history, financial strength, etc. 2. Illustration assumptions should be modified as soon as possible after new schedules of credits or charges are authorized. Additional Comment: In general, our company does not believe in letting distributors do "what-if" illustrations which: (a) assume future improvements in interest, mortality, expenses; (b) "solve" for loan or other transaction patterns which cannot be supported administratively. However, some producers do use the output from our illustrations as input to spreadsheet applications, massaging the data as they see fit. Although we are uncomfortable with this practice, we recognize that it is basically beyond our control.
- We believe that life insurance sales illustrations should be easy to understand and to read. In addition, they should provide complete disclosure regarding the assumptions that are used in the generation of the numbers.
- There should be enough information available for a consumer to figure out the risks of buying life insurance based on the illustration.
- Consumers are in a very vulnerable position. They don't look at illustrations until they are ready to buy. They are too often sold a vanishing premium illustration as a "paid-up" policy without understanding that it is really a source of PUAs or other type of use of policy values to carry the premium in the future. Carriers must recognize that the people who sell insurance products usually do not feel comfortable asking for a lifetime commitment of significant premiums, so they resort to overselling the possibility of a reprieve (via vanish) as a certainty. A new "lesson in life insurance" easy to understand and to explain should be part of every sales presentation. It should be worded in such a way that agents will want clients to see it rather than keep it from them.
- Nonguarantees too commonly seen; consumers end up depending on these nonguarantees for long term.
- A due diligence type of approach should be used to illustrate products for the consumer. Show all possible combinations of factors subject to change, from worst-case scenario to best-case scenario and some in betwcen.
- Illustrations should only be a part of the sales process. They should be fair and should provide the consumer with a sense of the range of values possible over the future from guaranteed to current scale. Excessive footnotes and mandated exculpatory working should be guarded against.
- The two-tier, superman and kicker abuses are the most flagrant. We'd like to see historical data included much like Mutual Fund hypotheticals.
- Computer projections have reduced life insurance sales to a ledger sale, not a needs sale, the higher ledger numbers or lower premium gets the sale. Insurance sales emphasize investment performance rather than protection, tax deferral, safety and needs satisfaction or completion. Illustrations have not done our business much good in the last five years. All illustrations are not alike but the customer can't tell the difference. We have to level the playing field.
- In order to protect themselves, companies list numerous disclosures and disclaimers. This coupled with the ability to show almost unlimited changes during the years illustrated, causes the client/prospect to be unsure of what he/she expects of the product and will often cause the prospect to delay making a decision. Illustrations need to be used as supportive material in the sales process rather than being used to sell future projected values.


## APPENDIX II <br> SAMPLE ILLUSTRATIONS

## EXHIBIT A: PAGE 1 OF 2

Ledger Illustration Prepared for Insured

| \$100,000 Traditional Life <br> Dividends used to purchase paid-up additional insurance |  |  |  |  |  |  | Male Age 45 Ns Initial Annual Premium $\mathbf{\$ 2 , 0 6 0 . 0 0}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yr | Total Dividend End Yr | Inc in <br> Total <br> Cash <br> Value | Guar <br> Cash <br> Value | PUA <br> Cash <br> Value <br> End Yr | Total <br> Cash <br> Value <br> End Yi | PUA <br> End Yr | $\begin{gathered} \text { Guar } \\ \text { Paid-Up } \\ \text { Insurance } \end{gathered}$ | Total <br> Death <br> Benefit <br> End Y: |
| 1 | 104 | 105 | 0 | 105 | 105 | 324 | 0 | 100,324 |
| 2 | 193 | 796 | 600 | 301 | 901 | 904 | 1,900 | 100,904 |
| 3 | 298 | 2,308 | 2,600 | 609 | 3,209 | 1,770 | 7,600 | 101,770 |
| 4 | 425 | 2,544 | 4,700 | 1,053 | 5,753 | 2,966 | 13,300 | 102,966 |
| 5 | 561 | 2,697 | 6,800 | 1,650 | 8,450 | 4,494 | 18,600 | 104,494 |
| 6 | 755 | 2,608 | 8,600 | 2,458 | 11,058 | 6,485 | 22,800 | 106,485 |
| 7 | 931 | 2,915 | 10,500 | 3,473 | 13,973 | 8,859 | 26,900 | 108,859 |
| 8 | 1,161 | 3,068 | 12,300 | 4,741 | 17,041 | 11,733 | 30,500 | 111,733 |
| , | 1,425 | 3,477 | 14,200 | 6,318 | 20,518 | 15,150 | 34,100 | 115,150 |
| 10 | 1,654 | 3,852 | 16,200 | 8,170 | 24,370 | 18,998 | 37,700 | 118,998 |
| 11 | 1,917 | 4,083 | 18,100 | 10,353 | 28,453 | 23,317 | 40,900 | 123,317 |
| 12 | 2,177 | 4,481 | 20,100 | 12,834 | 32,934 | 28,081 | 44,100 | 128,081 |
| 13 | 2,472 | 4,865 | 22,100 | 15,699 | 37,799 | 33,330 | 47,000 | 133,330 |
| 14 | 2,780 | 5,247 | 24,100 | 18,946 | 43,046 | 39,062 | 49,800 | 139,062 |
| 15 | 3,141 | 5,787 | 26,200 | 22,633 | 48,833 | 45,356 | 52,601 | 145,356 |
| 16 | 3,539 | 6,274 | 28,300 | 26,807 | 55,107 | 52,254 | 55,300 | 152,254 |
| 17 | 3,894 | 6,725 | 30,400 | 31,432 | 61,832 | 59,643 | 57,800 | 159,643 |
| 18 | 4,273 | 7,268 | 32,500 | 36,600 | 69,100 | 67,526 | 60,100 | 167,526 |
| 19 | 4,675 | 7,820 | 34,700 | 42,220 | 76,920 | 75,934 | 62,500 | 175,934 |
| 20 | 5,108 | 8,346 | 36,800 | 48,466 | 85,266 | 84,879 | 64,601 | 184,879 |
| 21 | 5,569 | 8,858 | 38,900 | 55,224 | 94,124 | 94,399 | 66,600 | 194,399 |
| 22 | 6,069 | 9,685 | 41,100 | 62,709 | 103,809 | 104,514 | 68,600 | 204,514 |
| 23 | 6,606 | 10,169 | 43,200 | 70,778 | 113,978 | 115,272 | 70,400 | 215,272 |
| 24 | 7,181 | 11,110 | 45,400 | 79,688 | 125,088 | 126,689 | 72,300 | 226,689 |
| 25 | 7,791 | 11,664 | 47,500 | 89,252 | 136,752 | 138,805 | 73,900 | 238,805 |

$5 \%$ interest adjusted cost indices for base plan only

|  | 10 yrs | $\underline{20 \mathrm{yrs}}$ |
| :--- | ---: | ---: |
| Surrender | 2.77 | -1.00 |
| Payment | 15.04 | 9.60 |

The dividend payable at the end of the first year is contingent upon payment of the second year's premium.
The amount of the dividend is affected by any policy loans outstanding. The dividend figures are based on the current scale assuming no loans. Dividends are not guaranteed. This policy is based on male rates.

EXHIBIT A: PAGE 2 OF 2

| \$100,000 Traditional Life |  |  |  |  |  |  | Male Age 45 Ns <br> al Annual Premium \$2,060.00 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dividend <br> $\mathrm{Y}_{\mathrm{r}}$ | $\substack{\text { Total } \\ \text { Dividend } \\ \text { End } \mathrm{Y}_{\mathrm{r}}}$ <br> Esed to | Inc in <br> Total <br> Cash <br> Value | $\begin{aligned} & \text { Guar } \\ & \text { Casb } \\ & \text { Calue } \end{aligned}$ | $\begin{gathered} \text { PUA } \\ \text { Cash } \\ \text { Callue } \\ \text { Ent } \\ \hline \end{gathered}$ | Total <br> Cash <br> Value <br> End Yr | PUA End $Y_{r}$ | $\begin{gathered} \text { Guar } \\ \text { Paid-Up } \\ \text { Insurance } \\ \hline \end{gathered}$ | Total Death Benefit End $\mathrm{Y}_{\mathrm{r}}$ |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | 8,452 | 12,63 | 49,600 |  | 149,386 | 1,650 |  |  |
|  | 9,163 | 13,487 | 51,800 | 111,073 | 162,873 | 165,286 | 77,200 |  |
| 8 | 9,939 | 14,518 | 53,900 | 123,491 | 177,391 | 179,753 | 78,600 | 279,753 |
| 29 | 10,763 | 15,099 | 55,900 | 136,590 | 192,490 | 195,128 | 79,900 | 295,128 |
| 30. | 11,647 | 16,379 | 57,900 | 150,969 | 208,869 | 211,440 | 81,200 | 311,440 |
| 1. | 12,582 | 17,230 | 59,800 | 166,299 | 226,099 | 228,746 | 82,400 | 328,746 |
| 32 | 13,561 | 18,435 | 61,700 | 182,834 | 244,534 | 247,072 | 83,500 | 347,072 |
| 33 | 14,601 | 19,366 | 63,500 | 200,400 | 263,900 | 266,489 | 84,500 | 366,489 |
| 34 | 15,710 | 20,708 | 65,300 | 219,308 | 284,608 | 287,052 | 85,500 | 387,052 |
| 35 | 16,898 | 22,142 | 67,100 | 239,650 | 306,750 | 308,827 | 86,500 | 408,827 |
| 36. | 18,162 | 23,569 | 68,800 | 261,519 | 330,319 | 331,876 | 87,400 | 431,876 |
| 37. | 19,420 | 24,771 | 70,500 | 284,590 | 355,090 | 356,182 | 88,300 | 456,182 |
| 38 | 20,754 | 26,273 | 72,100 | 309,263 | 381,363 | 381,805 | 89,100 | 481,805 |
| 39 | 22,050 | 27,749 | 73,600 | 335,512 | 409,112 | 408,662 | 89,800 | 508,662 |
| 40. | 23,376 | 28,963 | 75,100 | 362,975 | 438,075 | 436,792 | 90,500 | 536,792 |
| 41. | 25,783 | 31,551 | 76,500 | 393,126 | 469,626 | 467,450 | 91,100 | 567,450 |
| 42 | 27,428 | 32,935 | 77,800 | 424,761 | 502,561 | 499,718 | 91,700 | 599,718 |
| 43 | 29,156 | 34,453 | 79,100 | 457,914 | 537,014 | 533,699 | 92,300 | 633,699 |
| 44. | 30,925 | 36,929 | 80,300 | 493,643 | 573,943 | 569,368 | 92,800 | 669,368 |
| 45 | 32,816 | 38,671 | 81,600 | 531,014 | 612,614 | 606,873 | 93,400 | 706,873 |
| 46 | 34,765 | 40,821 | 82,800 | 570,635 | 653,435 | 646,245 | 93,800 | 746,245 |
|  | 37,015 | 44,130 | 84,100 | 613,465 | 697,565 | 687,741 | 94,400 | 787,741 |
| 48 | 39,162 | 46,752 | 85,500 | 658,817 | 744,317 | 731,206 | 95,000 | 831,206 |
| 49 | 41,697 | 51,240 | 87,000 | 708,557 | 795,557 | 776,926 | 95,500 | 876,926 |
| 50. | 44,756 | 54,901 | 88,600 | 761,858 | 850,458 | 825,415 | 96,100 | 925,415 |
| 51 | 48,705 | 61,336 | 90,500 | 821,294 | 911,794 | 877,450 | 96,800 | 977,450 |
| 52 | 54,142 | 68,526 | 92,600 | 887,720 | 980,320 | 934,442 | 97,600 | 1,034,442 |
| 53 | 61,299 | 76,481 | 94,700 | 962,101 | 1,056,801 | 998,030 | 98,300 | 1,098,030 |
|  | 70,944 | 88,115 | 96,900 | 1,048,016 | 1,144,916 | 1,070,496 | 99,100 | 1,170,496 |

$5 \%$ interest adjusted cost indices for base plan only
$\begin{array}{lrr} & \frac{10 \text { Yrs }}{} & \frac{20 \text { Yrs }}{} \\ \begin{array}{l}\text { Surrender }\end{array} & \frac{2.77}{-1.00} \\ \text { Payment } & 15.04 & 9.60\end{array}$
The dividend payable at the end of the first year is contingent upon payment of the second year's premium.
The amount of the dividend is affected by any policy loans outstanding. The dividend figures are based on the current scale assuming no loans. Dividends are not guaranteed.
This policy is based on male rates.

EXHIBIT B: PAGE 1 OF 5


Dividends based on Jan. 1991 scale that uses current interest, mortality and expense rates. Illustrative monthly income based on May 1991 settlement option rates. Illustrative figures are not guarantees or estimates for the future.

Initial Prem: Annual $\$ 1,245.00$; Semiann. $\$ 670.00$; Monthly $\$ 112.00$

## EXHIBIT B: PAGE 2 OF 5

| Plan: Whole Life |  |  |  | Amount of Insurance: $\mathbf{\$ 1 0 0 , 0 0 0}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Insured: Classification: Preferred Nonsmoker Age: 35 |  |  | ex: Male | Premium Mode: Annual |  |  |
| Basic Policy |  |  |  | Annual Pr | : $\$ 1,245.00$ |  |
| Annual dividends used to buy paid-up additional imsurance Yis Payable: Lifetime |  |  |  |  |  |  |
|  |  |  |  | - |  |  |
| End of | nual | Guaranteed | Illustrative | Paid-up | Paid-up | Death |
| Policy Year | Dividend | Cash Value | Cash Value* | Insurance $\dagger$ | Insurancet | Benefit $\ddagger$ |
| 1 | None | None | None | None | None | 100,000 |
| 2...... | 62 | 100 | 162 | 400 | 627 | 100,226 |
|  | 87 | 1,100 | 1,254 | 3,900 | 4,448 | 100,548 |
| 4 | 130 | 2,400 | 2,699 | 8,300 | 9,327 | 101,026 |
|  | 193 | 3,700 | 4,221 | 12,300 | 14,029 | 101,728 |
|  | 291 | 5,000 | 5,861 | 16,100 | 18,867 | 102,767 |
| 7. | 358 | 6,400 | 7,700 | 20,000 | 24,047 | 104,047 |
| 8. | 441 | 7,800 | 9,663 | 23,600 | 29,220 | 105,620 |
| 9 | 544 | 9,300 | 11,882 | 27,200 | 34,747 | 107,547 |
| 10 | 672 | 10,800 | 14,295 | 30,700 | 40,604 | 109,904 |
| 11. | 830 | 12,300 | 16,950 | 33,800 | 46,579 | 112,779 |
| 12 | 935 | 13,900 | 19,917 | 37,100 | 53,138 | 116,038 |
| 13 | 1,043 | 15,400 | 23,016 | 39,900 | 59,598 | 119,697 |
| 14 | 1,153 | 17,100 | 26,572 | 43,000 | 66,773 | 123,773 |
| 15. | 1,267 | 18,700 | 30,310 | 45,600 | 73,886 | 128,286 |
| 16 | 1,376 | 20,400 | 34,450 | 48,300 | 81,539 | 133,238 |
| 17 | 1,502 | 22,100 | 38,933 | 50,800 | 89,485 | 138,685 |
| 18. | 1,624 | 23,900 | 43,885 | 53,400 | 98,033 | 144,633 |
| 19. | 1,751 | 25,600 | 49,141 | 55,600 | 106,713 | 151,112 |
| 20. | 1,881 | 27,400 | 54,936 | 57,900 | 116,052 | 158,152 |
| 21. | 2,015 | 29,200 | 61,210 | 60,100 | 125,882 | 165,781 |
| 22. | 2,150 | 31,100 | 68,104 | 62,300 | 136,330 | 174,030 |
| 23 | 2,290 | 32,900 | 75,465 | 64,200 | 147,134 | 182,933 |
| 24 | 2,433 | 34,800 | 83,542 | 66,100 | 158,628 | 192,528 |
| 25 | 2,581 | 36,700 | 92,290 | 68,000 | 170,855 | 202,855 |
| 26 | 2,731 | 38,600 | 101,760 | 69,700 | 183,654 | 213,953 |
| 27. | 2,883 | 40,500 | 112,009 | 71,300 | 197,166 | 225,865 |
| 28 | 3,034 | 42,400 | 123,091 | 72,900 | 211,530 | 238,630 |
| 29. | 3,186 | 44,300 | 135,062 | 74,400 | 226,694 | 252,293 |
| Age 65. | 3,333 | 46,200 | 147,983 | 75,800 | 242,697 | 266,896 |
| 31. | 3,476 | 48,100 | 161,916 | 77,200 | 259,684 | 282,483 |
| 32. | 3,615 | 50,000 | 176,932 | 78,500 | 277,603 | 299,102 |
| 33. | 3,749 | 51,900 | 193,105 | 79,700 | 296,505 | 316,805 |
| 34 | 3,879 | 53,800 | 210,518 | 80,900 | 316,546 | 335,646 |
| 35...... | 4,010 | 55,700 | 229,254 | 82,100 | 337,793 | 355,692 |

EXHIBIT B: PAGE 3 OF 5

| Annual dividends used to buy paid-up additional insurance |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| End of Policy Year | Annual <br> Dividend | Guaranteed Cash Value | Illustrative <br> Cash Value ${ }^{\text {- }}$ | Guaranteed Paid-up Insurance $\dagger$ | Illustrative Paid-up Insurance $\dagger$ | IIlustrative <br> Death Benefii $\ddagger$ |
| 36 | 4,144 | 57,600 | 249,397 | 83,200 | 360,220 | 377,019 |
| Age 72§ | 4,279 | 59,500 | 271,027 | 84,400 | 384,104 | 399,703 |
| 38.... | 4,418 | 61,300 | 294,118 | 85,300 | 409,131 | 423,830 |
| 39 | 4,560 | 63,000 | 318,747 | 86,100 | 435,592 | 449,492 |
| 40 | 4,694 | 64,800 | 345,187 | 87,100 | 463,869 | 476,769 |
| 41 | 4,822 | 66,400 | 373,241 | 87,900 | 493,652 | 505,751 |
| 42 | 4,937 | 68,000 | 403,212 | 88,600 | 525,126 | 536,526 |
| 43 | 5,039 | 69,600 | 435,230 | 89,400 | 558,584 | 569,183 |
| 44 | 5,132 | 71,100 | 469,335 | 90,000 | 593,828 | 603,827 |
| 45 | 5,220 | 72,600 | 505,781 | 90,600 | 631,171 | 640,571 |
| 46 | 5,312 | 74,100 | 544,686 | 91,300 | 670,847 | 679,547 |
| 47 | 5,411 | 75,500 | 586,085 | 91,900 | 712,800 | 720,900 |
| 48 | 5,519 | 76,900 | 630,174 | 92,400 | 757,186 | 764,785 |
| 49 | 5,630 | 78,200 | 676,953 | 93,000 | 804,362 | 811,361 |
| 50 | 5,741 | 79,400 | 726,560 | 93,400 | 854,193 | 860,792 |
| 51 | 5,847 | 80,600 | 779,267 | 93,900 | 907,146 | 913,245 |
| 52 | 5,940 | 81,700 | 835,184 | 94,300 | 963,190 | 968,890 |
| 53 | 6,028 | 82,800 | 894,677 | 94,700 | 1,022,613 | 1,027,913 |
| 54 | 6,108 | 83,800 | 957,973 | 95,000 | 1,085,509 | 1,090,509 |
| 55 | 6,182 | 84,900 | 1,025,664 | 95,400 | 1,152,285 | 1,156,884 |
| 56 | 6,188 | 86,000 | 1,098,069 | 95,800 | 1,222,990 | 1,227,189 |
| 57 | 6,196 | 87,100 | 1,175,791 | 96,200 | 1,297,860 | 1,301,659 |
| 58 | 6,221 | 88,300 | 1,259,692 | 96,600 | 1,377,160 | 1,380,560 |
| 59 | 6,171 | 89,600 | 1,350,559 | 97,000 | 1,461,070 | 1,464,069 |
| 60 | 6,015 | 91,100 | 1,449,217 | 97,500 | 1,549,846 | 1,552,346 |
| 61 | 5,777 | 92,700 | 1,556,063 | 98,000 | 1,643,588 | 1,645,588 |
| 62 | 5,663 | 94,400 | 1,671,395 | 98,500 | 1,742,728 | 1,744,228 |
| 63. | 5,726 | 96,100 | 1,794,199 | 99,000 | 1,847,779 | 1,848,778 |

*Guaranteed cash value, cash value of additional insurance and any terminal dividend.
$\dagger$ Paid-up insurance available if you stop paying premiums and reduced paid-up insurance option is chosen. Illustrative paid-up insurance includes paid-up insurance bought by dividends. Any remaning optional benefits and riders end when paid-up option takes effect.
$\ddagger$ Benefit applicable to principal insured, includes basic insurance, additional insurance, any terminal dividend and any rider insurance value.
§Age at life expectancy, U.S. population life tables.
Dividends based on Jan. 1991 scale that uses current interest, mortality and expense rates. Illustrative figures are not guarantees or estimates for the future.
Explanatory notes form $\qquad$ and form $\qquad$ must be enclosed.

## EXHIBIT B: PAGE 4 OF 5

## BENEFITS THAT MAY BE AVAILABLE

Following are descriptions of benefits provided by riders that may be included with your policy. These benefits are subject to certain limitations and exclusions which are not described below. For full details, ask to see a specimen form.

DISABILITY WAIVER OF PREMIUMS BENEFIT. Provides that, if you become totally disabled as described in the rider, before your age 60 and your disability lasts for at least six months, you will not have to pay premiums while totally disabled. There is also a limited waiver benefit for total disability which occurs between the ages 60 and 65.

ACCIDENTAL DEATH BENEFIT. Provides additional insurance, usually equal to the face amount of insurance, if you die from an accident. An amount equal to twice the A.D.B. amount is paid if the accident occurred while you were a fare-paying passenger in a licensed public conveyance being operated by a common carrier for passenger service.
FAMILY INCOME BENEFIT. Provides a monthly income to your family if you die before the end of a specified period ( 10,20 or 30 years). The monthly income is paid for the balance of the period and is in addition to the amount payable under the basic policy. A similar income benefit on a spouse is also available.
ONE-YEAR TERM INSURANCE BENEFIT. Provides renewable and convertible level term insurance payable if you die before the end of the specified one-year period. This benefit is also available on a spouse.
10-YEAR LEVEL TERM INSURANCE BENEFIT. Provides renewable and convertible level term insurance payable if you die before the end of the specified 10 -year period. This benefit is also available on a spouse.
GUARANTEE TO ISSUE NEW INSURANCE WITHOUT EVIDENCE OF INSURABILITY. Guarantees you the right to buy a new policy on your life without evidence of insurability for an amount of insurance up to the specified option amount. The new policies may be purchased only on an option date.
CHILDREN'S TERM INSURANCE BENEFIT. Provides temm insurance on each covered child to the policy anniversary at the child's age 25 , or to the policy anniversary at the insured's age 65 if earlier. An insured child may obtain a new policy without evidence of insurability.
ONE YEAR COST OF LIVING TERM INSURANCE BENEFIT. Provides one-year temm insurance which varies annually to match yearly fluctuations as indicated by the CPI.
PAID-UP ADDITIONS RIDER. A permanent additional insurance rider that provides supplemental growing cash values. This rider also provides the potential for enhanced premium flexibility and for advancing the year when out of pocket premium payments are no longer required under the Accelerated Premium Payment plan, or when the policy can be fully paid up or matured for its face amount.
ACCELERATION OF POLICY BENEFITS FOR LONG-TERM-CARE RIDER. Provides for the acceleration payment of a portion of the death benefit for the long-term care of the insured. Such care can be provided either in a qualified convalescent facility or at home when the insured has a qualified disability. The benefit payments are made each month and continue as long as the insured remains disabled and the maximum benefit under the rider has not been paid. The size of the monthly payments and the maximum benefit are stated in the rider (subject to state approval).

## EXPLANATORY NOTES

ACCELERATION OF DEATH BENEFIT RIDER. Provides for a one-time discounted payment of all or a portion of the death benefit to the policyowner once the insured has been determined to be terminally ill with 12 months or less to live. The size of the benefit payments and the maximum benefit are stated in the rider. There are no premiums or fees for this rider (subject to state approval).
DIVIDEND INFORMATION. Dividends paid by ___ depend on future experience as to investment earnings, operating expenses, claims paid, and taxes. All of these factors vary so that dividend scales will change from time to time. The dividends shown in this proposal are an illustration of our current dividend scale and are not a guarantee or estimate of future results.
Terminal dividends may be paid on Whole Life, Life Paid Up at 95, and Life Paid Up at 98 policies. There are no terminal dividends payable on term life insurance plans.
ILLUSTRATIVE LIFE INCOME. Any illustrative life income figures shown in this proposal are based upon our life income plan rates currently in effect. These rates are not guarantees or estimates for payments starting in the future. After monthly life income payments begin, the amounts will be fixed.
TERM PLANS. Term Life insurance plans and term insurance riders provide insurance protection only. They do not provide cash or loan values.
The POLICY-LOAN provision provides for an adjustable policy loan interest rate that is charged daily at the rate we set from time to time. This rate will never be more than the maximum allowed by law and will not change more often than once a year on the policy anniversary. Loan interest is due at the end of each policy year. Interest not paid within 31 days after it is due will be added to the loan principal.
INTEREST-ADJUSTED INDEXES. These indexes, if shown in this proposal, provide a means for evaluating the comparative cost of the policy under stated assumptions. They can be useful in comparing similar plans of insurance, a lower index being better than a higher one.
Indexes are approximate because they involve assumptions, including the rate of interest used, the dividends being paid in cash and the continuation of current dividend scales. Indexes apply to the basic policy only. They exclude any optional riders such as accidental death.
"Total premiums less illustrative cash value," "total premiums less total dividends," 'net increase or decrease in business surplus," etc., should not be used in policy cost comparisons because they do not consider the effect interest could have on payments made at different times. They can sometimes be helpful for accounting purposes.
Any application for insurance will be subject to underwriting rules.

Hypothetical Policy lllustration

Proposed Insured: Society of Actuaries
Plan: Whole Life Policy
Basic Policy Amount: $\$ 100,000$
Dividend Option: Dividends used to purchase paid-up additions

| Pol $\mathrm{Y}_{5}$ | 1 <br> Total <br> Premiums Beg Year | 2 <br> Guaranteed <br> Cash Value <br> End Year | 3 <br> Paid-up <br> Additions <br> Cash Value <br> End Year | Total Cash Value End Year | 5 <br> Amount of Paid-up Additions End Year | 6 <br> Total <br> Death <br> Benefit <br> End Year | 7 <br> Total <br> Paid-up <br> Insurance <br> End Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1,910 |  | 81 | 81 | 281 | 100,281 |  |
| 2 | 3,820 | 114 | 178 | 292 | 595 | 100,595 | 977 |
| 3 | 5,730 | 1,824 | 295 | 2,119 | 950 | 100,950 | 6,834 |
| 4 | 7,640 | 3,587 | 443 | 4,030 | 1,379 | 101,379 | 12,534 |
|  | 9,550 | 5,403 | 639 | 6,042 | 1,916 | 101,916 | 18,127 |
|  | 11,460 | 7,274 | 893 | 8,167 | 2,585 | 102,585 | 23,644 |
| 7 | 13,370 | 9,195 | 1,380 | 10,575 | 3,857 | 103,857 | 29,555 |
| 8 | 15,280 | 11,165 | 2,127 | 13,292 | 5,741 | 105,741 | 35,876 |
| 9 | 17,190 | 13,183 | 3,162 | 16,345 | 8,247 | 108,247 | 42,627 |
| 10 | 19,100 | 15,243 | 4,518 | 19,761 | 11,391 | 111,391 | 49,826 |
|  | 21,010 | 17,125 | 6,213 | 23,338 | 15,155 | 115,155 | 56,923 |
| 12. | 22,920 | 19,036 | 8,195 | 27,231 | 19,345 | 119,345 | 64,285 |
| 13 | 24,830 | 20,981 | 10,477 | 31,458 | 23,951 | 123,951 | 71,912 |
| 14 | 26,740 | 22,959 | 13,089 | 36,048 | 28,989 | 128,989 | 79,835 |
| 15 | 28,650 | 24,971 | 16,062 | 41,033 | 34,478 | 134,478 | 88,082 |
|  | 30,560 | 27,013 | 19,445 | 46,458 | 40,477 | 140,477 | 96,709 |
| 17. | 32,470 | 29,082 | 23,273 | 52,355 | 47,005 | 147,005 | 105,742 |
| 18. | 34,380 | 31,171 | 27,586 | 58,757 | 54,091 | 154,091 | 115,210 |
| 19 | 36,290 | 33,275 | 32,427 | 65,702 | 61,770 | 161,770 | 125,154 |
| 20 | 38,200 | 35,386 | 37,834 | 73,220 | 70,063 | 170,063 | 135,593 |
| @65 | 38,200 57,300 | 35,386 56,455 | 37,834 135,040 | 73,220 191,495 | 70,063 195,710 | 170,063 295,710 | $\begin{aligned} & 135,593 \\ & 277,529 \\ & \hline \end{aligned}$ |
| Coverage | Amount |  | Annual Prem | M Prem | Monthly lncome |  |  |
|  |  |  |  |  |  | Amount |
| Insurance | \$100,000 |  |  | $\begin{array}{r} \$ 1,910.00 \\ \$ 74.00 \\ \$ 98.00 \\ \hline \end{array}$ | \$168.27 | 65 |  | \$548.00 |
| Waiver | \$100,000 |  | \$6.52 |  | 75 |  | \$1,750.00 |
| A. D. B. | \$100,000 |  | \$8.63 |  |  |  |  |

Dividends are not guaranteed and are subject to significant fluctuations. Changes in dividends will change all nonguaranteed values.

## EXHIBIT C: PAGE 2 OF 3

| Proposed Insured: Society of Aetuaries |  |  |  |  | Age 45 Male Nonsmoker |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dividend Option: Dividends used to purchase paid-up addilions |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  |  |  | Paid-up |  | Amount of | Total | Total |
|  | Total | Guaranteed | Additions | Total | Paid-up | Death | Paid-up |
|  | moms | Cash Value | Cash Value | Cash Value | Additions | Bencfit | Insurance |
| Poi Yt | Beg Year | End Year | End Year 3 | End Year | End Year | End Year | End Year |
| 21 | 40,110 | 37,501 | 43,831 | 81,332 | 78,967 | 178,967 | 146,528 |
| 22 | 42,020 | 39,621 | 50,497 | 90,118 | 88,568 | 188,568 | 158,060 |
| 23 | 43,930 | 41,746 | 57,878 | 99,624 | 98,890 | 198,890 | 170,216 |
| 24 | 45,840 | 43,878 | 66,030 | 109,908 | 109,965 | 209,965 | 183,040 |
| 25 | 47,750 | 46,017 | 75,007 | 121,024 | 121,828 | 221,828 | 196,570 |
| 26 | 49,660 | 48,155 | 84,883 | 133,038 | 134,541 | 234,541 | 210,867 |
| 27 | 51,570 | 50,282 | 95,736 | 146,018 | 148,187 | 248,187 | 226,017 |
| 28 | 53,480 | 52,385 | 107,652 | 160,037 | 162,858 | 262,858 | 242,106 |
| 29 | 55,390 | 54,446 | 120,724 | 175,170 | 178,667 | 278,667 | 259,246 |
| 30 | 57,300 | 56,455 | 135,040 | 191,495 | 195,710 | 295,710 | 277,529 |
| 31 | 59,210 | 58,408 | 150,656 | 209,064 | 214,031 | 314,031 | 297,008 |
| 32 | 61,120 | 60,306 | 167,642 | 227,948 | 233,677 | 333,677 | 317,737 |
| 33 | 63,030 | 62,158 | 186,077 | 248,235 | 254,691 | 354,691 | 339,769 |
| 34 | 64,940 | 63,974 | 206,031 | 270,005 | 277,098 | 377,098 | 363,139 |
| 35 | 66,850 | 65,762 | 227,590 | 293,352 | 300,945 | 400,945 | 387,903 |
| 36. | 68,760 | 67,518 | 250,860 | 318,378 | 326,318 | 426,318 | 414,145 |
| 37 | 70,670 | 69,237 | 275,951 | 345,188 | 353,335 | 453,335 | 441,988 |
| 38 | 72,580 | 70,902 | 302,999 | 373,901 | 382,169 | 482,169 | 471,597 |
| 39 | 74,490 | 72,496 | 332,130 | 404,626 | 412,999 | 512,999 | 503,147 |
| 40 | 76,400 | 74,010 | 363,445 | 437,455 | 445,961 | 545,961 | 536,774 |
| 41 | 78,310 | 75,446 | 397,046 | 472,492 | 481,157 | 581,157 | 572,586 |
| 42 | 80,220 | 76,811 | 433,029 | 509,840 | 518,653 | 618,653 | 610,653 |
| 43 | 82,130 | 78,121 | 471,245 | 549,366 | 558,189 | 658,189 | 650,723 |
| 44 | 84,040 | 79,395 | 511,839 | 591,234 | 599,828 | 699,828 | 692,871 |
| 45 | 85,950 | 80,656 | 555,004 | 635,660 | 643,640 | 743,640 | 737,177 |
| 46 | 87,860 | 81,933 | 600,951 | 682,884 | 689,654 | 789,654 | 783,681 |
| 47 | 89,770 | 83,261 | 649,945 | 733,206 | 737,878 | 837,878 | 832,404 |
| 48 | 91,680 | 84,683 | 702,296 | 786,979 | 788,255 | 888,255 | 883,303 |
| 49 | 93,590 | 86,251 | 758,418 | 844,669 | 840,706 | 940,706 | 936,316 |
| 50 | 95,500 | 88,008 | 818,661 | 906,669 | 895,083 | 995,083 | 991,307 |

Dividends are not guaranteed and are subject to significant fluctuations. Changes in dividends will change all nonguaranteed values.
See page 3 for footnotes, assumptions and explanations.

## EXHIBIT C: PAGE 3 OF 3


*This footnote pertains to column(s) 3, 4, 5, 6, 7:
Based on the 1991 dividend schedule. Dividends are not guaranteed. Due to new federal taxes and economic conditions including declining interest rates, dividends based on the 1992 dividend schedule are expected to be lower than those shown in the illustration. Transfer of policy ownership to a qualified pension or profit-sharing plan could result in a different dividend schedule. The first year dividend, although included in this illustration, is contingent on payment of the entire second year premium. The first year dividend is not used in the calculation of first year paid-up insurance and first year monthly life income.
This policy is available at issue with a policy loan rate of either $8 \%$ or an annually adjustable rate. This illustration assumes no policy loans. For the $8 \%$ policy, loans will affect dividends.
*This footnote pertains to column(s) 4, 6:
The components of this column are depicted separately in this illustration.
*This footnote pertains to the monthly income figures shown:
Based on total cash surrender value using the current rate which is not guaranteed.
*This footnote pertains to the monthly income figures shown: Monthly income shown assumes the right to commute unpaid payments has been waived.

This illustration does not recognize the time value of money and should not be used to compare policy costs.

|  | Policy Year |  |
| :--- | ---: | ---: |
|  | 10 | 20 |
| Life insurance surrender cost index | 4.48 | 0.45 |
| Life insurance net payment cost index | 16.02 | 10.64 |

The interest-adjusted cost comparison indexes provide two means of comparing the relative cost of similar plans of insurance issued by the same company or different companies. A low index number represents a lower cost than a higher one. These indexes reflect the time value of money by applying a 5 percent interest factor to policy premiums, dividends, and for the surrender cost index, the 10 and $20-y e a r ~ c a s h ~ v a l u e s . ~ T h e ~ d i v i d e n d s ~ u s e d ~ i n ~ c a l c u l a t i n g ~ t h e s e ~ i n d e x e s ~ a r e ~ b a s e d ~ o n ~ c u r r e n t ~ y e a r ' s ~$ scale and are not guarantees nor estimates of future dividends.

The indexes do not consider: (1) the value of the services of an agent or company; (2) the relative strength and reputation of the company and its actual dividend performance; or (3) differences in the policy provisions.

## EXHIBIT D: PAGE 1 OF 3

Based on $8.00 \%$ dividend interest rate, which is less than the current dividend interest rate
$\$ 100,000$ Life Plan
For Age 35 Male
Annual Prenium $\$ 1,533.00$
Dividends used to purchase paid-up additions

| End of Year | Insurance* | Dividend* | 3 <br> Annual Cash Outlay | 4 <br> Cash <br> Value Increase* | 5 <br> Total Payments | 6 <br> Cash Values |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Total* | Guaranteed |
| 1 | 100,343 | 70 | 1,533 | 70 | 1,533 | 70 | 0 |
| 2 | 100,971 | 134 | 1,533 | 1,215 | 3,066 | 1,285 | 1,078 |
| 3 | 101,886 | 204 | 1,533 | 1,336 | 4,599 | 2,622 | 2,201 |
| 4 | 103,072 | 276 | 1,533 | 1,466 | 6,132 | 4,088 | 3,371 |
| 5 | 104,522 | 354 | 1,533 | 1,603 | 7,665 | 5,692 | 4,588 |
| 6 | 106,223 | 434 | 1,533 | 1,748 | 9,198 | 7,440 | 5,852 |
| 7 | 108,177 | 521 | 1,533 | 1,906 | 10,731 | 9,346 | 7,165 |
| 8 | 110,365 | 610 | 1,533 | 2,071 | 12,264 | 11,418 | 8,528 |
|  | 112,778 | 703 | 1,533 | 2,246 | 13,797 | 13,664 | 9,942 |
| 10 | 115,407 | 800 | 1,533 | 2,435 | 15,330 | 16,099 | 11,411 |
| 11 | 118,248 | 902 | 1,533 | 2,633 | 16,863 | 18,732 | 12,933 |
| 12 | 121,285 | 1,007 | 1,533 | 2,846 | 18,396 | 21,579 | 14,515 |
| 13 | 124,519 | 1,120 | 1,533 | 3,073 | 19,929 | 24,652 | 16,156 |
| 14 | 127,869 | 1,211 | 1,533 | 3,289 | 21,462 | 27,942 | 17,860 |
| 15 | 131,337 | 1,309 | 1,533 | 3,520 | 22,995 | 31,463 | 19,629 |
| 16. | 134,919 | 1,411 | 1,533 | 3,766 | 24,528 | 35,229 | 21,466 |
| 17 | 138,629 | 1,526 | 1,533 | 4,029 | 26,061 | 39,259 | 23,370 |
| 18 | 142,469 | 1,648 | 1,533 | 4,309 | 27,594 | 43,569 | 25,341 |
| 19 | 146,446 | 1,780 | 1,533 | 4,608 | 29,127 | 48,177 | 27,380 |
| 20. | 150,564 | 1,923 | 1,533 | 4,924 | 30,660 | 53,101 | 29,486 |


| Premiums | Annual | Mon. |
| :---: | :---: | :---: |
| Insurance | 1,533.00 | 133.63 |
| Waiver | 41.00 | 3.57 |
| 100,000 Accidental Death | 74.00 | 6.4 |
| 75,000 Additional Purchas | 126.75 | 11.03 |
| Subject to underwriting limits |  |  |

*Dividends assume no luans; loans will reduce dividends. Illustrated dividends (1991 scale) reflect claim and expense experience and are not estimates or guarantees of future results. They may be larger or smaller than those illustrated. This illustration does not reflect that money is paid and received at different times. $8 \%$ loan provision.

## EXHIBIT D: PAGE 2 OF 3

Based on $8.00 \%$ dividend interest rate, which is less than the current dividend interest rate
$\$ 100,000$ Life Plan
For Age 35 Male
Annual Premium \$1,533.00
Dividends used to purchase paid-up addjtions

| $\begin{aligned} & \text { End } \\ & \text { of } \\ & \text { Year } \\ & \hline \end{aligned}$ | Insurance* | Dividend* ${ }^{2}$ | 3 <br> Annual <br> Cash <br> Outlay | 4 <br> Cash <br> Value <br> Increase* | Total <br> Payments | Cash Values |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Total* | Guaranteed |
| 21 | 156,566 | 2,881 | 1,533 | 5,269 | 32,193 | 58,370 | 31,215 |
| 22 | 162,932 | 3,139 | 1,533 | 5,632 | 33,726 | 64,003 | 32,963 |
| 23. | 169,668 | 3,412 | 1,533 | 6,017 | 35,259 | 70,021 | 34,731 |
| 24. | 176,788 | 3,702 | 1,533 | 6,428 | 36,792 | 76,450 | 36,519 |
| 25. | 184,303 | 4,010 | 1,533 | 6,865 | 38,325 | 83,315 | 38,328 |
| 26. | 192,241 | 4,344 | 1,533 | 7,329 | 39,858 | 90,644 | 40,153 |
| 27. | 200,624 | 4,705 | 1,533 | 7,822 | 41,391 | 98,467 | 41,993 |
| 28. | 209,486 | 5,097 | 1,533 | 8,347 | 42,924 | 106,814 | 43,843 |
| 29 | 218,863 | 5,523 | 1,533 | 8,901 | 44,457 | 115,716 | 45,695 |
| 30. | 228,783 | 5,982 | 1,533 | 9,486 | 45,990 | 125,202 | 47,545 |
| 31. | 239,271 | 6,469 | 1,533 | 10,103 | 47,523 | 135,305 | 49,391 |
| 32. | 250,340 | 6,981 | 1,533 | 10,749 | 49,056 | 146,055 | 51,233 |
| 33. | 261,997 | 7,513 | 1,533 | 11,427 | 50,589 | 157,482 | 53,071 |
| 34. | 274,247 | 8,064 | 1,533 | 12,132 | 52,122 | 169,615 | 54,907 |
| 35. | 287,096 | 8,635 | 1,533 | 12,865 | 53,655 | 182,480 | 56,741 |
| 36 | 300,570 | 9,239 | 1,533 | 13,625 | 55,188 | 196,105 | 58,567 |
| 37. | 314,701 | 9,881 | 1,533 | 14,410 | 56,721 | 210,516 | 60,378 |
| 38. | 329,536 | 10,571 | 1,533 | 15,217 | 58,254 | 225,733 | 62,162 |
| 39 | 345,130 | 11,315 | 1,533 | 16,050 | 59,787 | 241,784 | 63,908 |
| 40. | 361,519 | 12,099 | 1,533 | 16,897 | 61,320 | 258,681 | 65,607 |
| Premiums |  |  | Annual | Mon. |  |  |  |
| Insurance |  |  | 1,533.00 | 133.63 |  |  |  |
| Waiver .......... |  |  | 41.00 | 3.57 |  |  |  |
| 100,000 Accidental Death |  |  | 74.00 | 6.44 |  |  |  |
| 75,000 Additional Purchase . . . |  |  | 126.75 | 11.03 |  |  |  |
| Subject to underwriting limits |  |  |  |  |  |  |  |

*Dividends assume no loans; loans will reduce dividends. Illustrated dividends ( 1991 scale) reflect claim and expense experience and are not estimates or guarantees of future results. They may be larger or smaller than those illustrated. This illustration does not reflect that money is paid and received at different times. $8 \%$ loan provision.

Based on $8.00 \%$ dividend interest rate, which is less than the current dividend interest rate
$\$ 100,000$ Life Plan
For Age 35 Male
Annual Premium $\$ 1,533.00$
Dividends used to purchase paid-up additions

| $\begin{aligned} & \text { End } \\ & \text { of } \\ & \text { Year } \end{aligned}$ | Insurance* | Dividend* | 3 <br> Annual Cash Outlay | 4 <br> Cash <br> Value Increase* | Total Payments | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Cash Values |  |
|  |  |  |  |  |  | Total* | Guaranteed |
| 41 | 378,728 | 12,915 | 1,533 | 17,767 | 62,853 | 276,448 | 67,258 |
| 42 | 396,757 | 13,745 | 1,533 | 18,656 | 64,386 | 295,105 | 68,864 |
| 43 | 415,592 | 14,576 | 1,533 | 19,567 | 65,919 | 314,672 | 70,433 |
| 44 | 435,206 | 15,400 | 1,533 | 20,496 | 67,452 | 335,169 | 71,976 |
| 45 | 455,597 | 16,235 | 1,533 | 21,460 | 68,985 | 356,629 | 73,500 |
| 45 | 476,790 | 17,103 | 1,533 | 22,455 | 70,518 | 379,085 | 75,008 |
| 47 | 498,822 | 18,012 | 1,533 | 23,471 | 72,051 | 402,556 | 76,496 |
| 48 | 521,768 | 18,993 | 1,533 | 24,518 | 73,584 | 427,075 | 77,961 |
| 49 | 545,716 | 20,054 | 1,533 | 25,586 | 75,117 | 452,661 | 79,397 |
| 50 | 570,709 | 21,160 | 1,533 | 26,673 | 76,650 | 479,335 | 80,810 |
| 51 | 596,762 | 22,285 | 1,533 | 27,791 | 78,183 | 507,127 | 82,217 |
| 52 | 623,867 | 23,408 | 1,533 | 28,945 | 79,716 | 536,073 | 83,651 |
| 53 | 651,991 | 24,510 | 1,533 | 30,160 | 81,249 | 566,233 | 85,157 |
| 54 | 681,103 | 25,595 | 1,533 | 31,478 | 82,782 | 597,712 | 86,801 |
| 55 | 711,171 | 26,664 | 1,533 | 32,946 | 84,315 | 630,659 | 88,679 |
| 56 | 741,745 | 27,346 | 0 | 32,787 | 84,315 | 663,446 | 89,444 |
| 57 | 773,243 | 28,423 | 0 | 34,312 | 84,315 | 697,759 | 90,238 |
| 58. | 805,703 | 29,565 | 0 | 36,099 | 84,315 | 733,858 | 91,083 |
| 59 | 839,222 | 30,842 | 0 | 38,343 | 84,315 | 772,201 | 92,014 |
| 60 | 874,059 | 32,415 | 0 | 41,092 | 84,315 | 813,294 | 93,048 |
| 61 | 910,655 | 34,472 | 0 | 44,533 | 84,315 | 857,827 | 94,199 |
| 62 | 949,621 | 37,195 | 0 | 48,651 | 84,315 | 906,479 | 95,457 |
| 63 | 991,529 | 40,557 | 0 | 53,102 | 84,315 | 959,581 | 96,778 |
| 64 | 1,036,343 | 43,948 | 0 | 56,738 | 84,315 | 1,016,320 | 98,068 |
| 65 | 1,076,852 | 40,508 | 0 | 60,531 | 84,315 | 1,076,852 | 100,000 |
| Premiums |  |  | Annual | Mon. |  |  |  |
| Insurance |  |  | 3.00 | 133.63 |  |  |  |
| Waiver |  |  | 1.00 | 3.57 |  |  |  |
| 100,000 Accidental Death |  |  | 4.00 | 6.44 |  |  |  |
| 75,000 Additional Purchase . . . |  |  | 6.75 | 11.03 |  |  |  |
| Subject | underwritin | limits |  |  |  |  |  |

*Dividends assume no loans; loans will reduce dividends. Illustrated dividends (1991 scale) reflect claim and expense experience and are not estimates or guarantees of future results. They may be larger or smaller than those illustrated. This illustration does not reflect that money is paid and received at different times. $8 \%$ loan provision.

EXHIBIT E: PAGE 1 OF 4

Male Age 45
1,000,000 Whole Life
$\begin{array}{ll}\text { Preferred Nonsmoker } & 20,425.75\end{array}$
Dividends to Faid-Up Adds

| Age at Start of Year |  | Premium | Guaranteed |  | Current Dividends |  | Alternative Dividends |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total <br> Cash <br> Value | Total <br> Death <br> Benefit | Total <br> Cash <br> Value | Total <br> Death <br> Benefit | Total <br> Cash <br> Value | Total <br> Death <br> Benefit |
| 1 | 45 |  | 20,426 | 0 | 1,000,000 | 0 | 1,000,000 | 0 | 1,000,000 |
| 2 | 46 | 20,426 | 17,670 | 1,000,000 | 18,660 | 1,000,990 | 18,430 | 1,000,760 |
|  | 47 | 20,426 | 35,750 | 1,000,000 | 38,439 | 1,004,279 | 37,381 | 1,002,867 |
| 4 | 48 | 20,426 | 54,230 | 1,000,000 | 59,947 | 1,009,888 | 57,303 | 1,005,639 |
| 5 | 49 | 20,426 | 73,110 | 1,000,000 | 83,467 | 1,018,822 | 77,791 | 1,009,310 |
| 6 | 50 | 20,426 | 92,400 | 1,000,000 | 109,196 | 1,031,417 | 99,022 | 1,013,341 |
| 7 | 51 | 20,426 | 112,040 | 1,000,000 | 137,324 | 1,047,864 | 121,368 | 1,018,348 |
| 8 | 52 | 20,426 | 132,030 | 1,000,000 | 168,098 | 1,068,401 | 144,903 | 1,024,938 |
| 9 | 53 | 20,426 | 152,320 | 1,000,000 | 201,753 | 1,093,271 | 169,677 | 1,033,164 |
| 10 | 54 | 20,426 | 172,870 | 1,000,000 | 238,559 | 1,122,749 | 195,753 | 1,043,110 |
| 11 | 55 | 20,426 | 193,680 | 1,000,000 | 278,816 | 1,157,104 | 227,471 | 1,058,641 |
| 12 | 56 | 20,426 | 214,730 | 1,000,000 | 322,714 | 1,196,465 | 256,460 | 1,077,507 |
| 13 | 57 | 20,426 | 236,050 | 1,000,000 | 370,608 | 1,240,950 | 279,784 | 1,086,287 |
| 14 | 58 | 20,426 | 257,640 | 1,000,000 | 422,834 | 1,290,790 | 303,540 | 1,087,323 |
| 15 | 59 | 20,426 | 279,510 | 1,000,000 | 479,771 | 1,346,209 | 327,724 | 1,089,358 |
| 16 | 60 | 20,426 | 301,620 | 1,000,000 | 541,814 | 1,407,526 | 375,021 | 1,111,139 |
| 17 | 61 | 20,426 | 323,930 | 1,000,000 | 609,392 | 1,475,115 | 422,519 | 1,156,354 |
| 18 | 62 | 20,426 | 346,410 | 1,000,000 | 683,008 | 1,549,409 | 473,703 | 1,200,361 |
| 19 | 63 | 20,426 | 368,980 | 1,000,000 | 763,189 | 1,630,955 | 528,858 | 1,249,027 |
| 20 | 64 | 20,426 | 391,600 | 1,000,000 | 850,486 | 1,720,324 | 588,268 | 1,302,364 |
| 21 | 65 | 20,426 | 412,870 | 1,000,000 | 945,364 | 1,819,282 | 652,112 | 1,361,869 |
| 26 | 70 | 20,426 | 518,390 | 1,000,000 | 1,562,922 | 2,466,444 | 1,054,443 | 1,748,886 |

This illustration compares the cash values and death benefits that would be provided by the basic policy if dividends are used to purchase paid-up additions in each of the following future scenarios: 1. No dividends are ever paid, guaranteed values
2. The current dividends scale is maintained indefinitely
3. Dividends are paid based on the alternate dividend scale described in the footnotes to the following illustration.
This illustration is merely intended to demonstrate the effect of our current dividend scale and variations in the interest rate underlying that scale. It is not an illustration of the coverage you have selected. This illustration assumes that no premiums are paid in addition to the base policy premium.

## EXHIBIT E: PAGE 2 OF 4

Male Age 45
1,000,000 Whole Life
Preferred Nonsmoker
Vanishing Premium

| $\begin{aligned} & \text { Age at } \\ & \text { Stant } \\ & \text { of Year } \\ & \hline \end{aligned}$ |  | $\begin{gathered} \text { (1) } \\ \text { Annual } \\ \text { Outlay } \\ \hline \end{gathered}$ | $\begin{gathered} \text { (2) } \\ \text { Cum } \\ \text { Annual } \\ \text { Outlay } \end{gathered}$ | (3) <br> Total Divid | (4) <br> Guar Cash Value Yr End | $\begin{gathered} \text { (5) } \\ \text { Cash } \\ \text { Value } \\ \text { of Adds } \end{gathered}$ | $\begin{gathered} \text { (6) } \\ \text { Net Cash } \\ \text { Value } \\ \text { Yr End } \\ \hline \end{gathered}$ | (7) <br> Death Bencfit | (8) Compar Rate of Return |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 45 | 20,426 | 20,426 | 0 | 0 | 0 | 0 | 1,000,000 |  |
| 2 | 46 | 20,426 | 40,852 | 0 | 17,670 | 0 | 18,430 | 1,000,760 |  |
| 3 | 47 | 20,426 | 61,277 | 760 | 35,750 | 821 | 37,381 | 1,002,867 |  |
| 4 | 48 | 20,426 | 81,703 | 847 | 54,230 | 1,753 | 57,303 | 1,005,639 |  |
| 5 | 49 | 20,426 | 102,129 | 1,392 | 73,110 | 3,271 | 77,791 | 1,009,310 |  |
| 6 | 50 | 20,426 | 122,555 | 1,516 | 92,400 | 4,962 | 99,022 | 1,013,341 |  |
| 7 | 51 | 20,426 | 142,980 | 1,800 | 112,040 | 7,018 | 121,368 | 1,018,348 | 1.35 |
| 8 | 52 | 20,426 | 163,406 | 2,509 | 132,030 | 9,883 | 144,903 | 1,024,938 | 2.36 |
| 9 | 53 | 20,426 | 183,832 | 3,273 | 152,320 | 13,637 | 169,677 | 1,033,164 | 3.11 |
| 10 | 54 | 20,426 | 204,258 | 4,113 | 172,870 | 18,383 | 195,753 | 1,043,110 | 3.68 |
| 11 | 55 | 20,426 | 224,683 | 5,034 | 193,680 | 24,681 | 227,471 | 1,058,641 | 4.42 |
| 12 | 56 | 20,426 | 245,109 | 10,269 | 214,730 | 35,770 | 256,460 | 1,077,507 | 4.72 |
| 13 | 57 | 20,426 | 265,535 | 7,012 | 236,050 | 43,104 | 279,784 | 1,086,287 | 4.64 |
| 14 | 58 | 20,426 | 285,961 | 877 | 257,640 | 45,160 | 303,540 | 1,087,323 | 4.58 |
| 15 | 59 | 0 | 285,961 | 1,003 | 279,510 | 26,298 | 306,638 | 1,050,080 | 4.53 |
| 16 | 60 | 0 | 285,961 | 986 | 301,620 | 7,352 | 329,482 | 1,033,226 | 5.08 |
| 17 | 61 | 0 | 285,961 | 20,987 | 323,930 | 8,081 | 350,841 | 1,032,893 | 5.44 |
| 18 | 62 | 0 | 285,961 | 19,286 | 346,410 | 7,046 | 373,655 | 1,032,211 | 5.74 |
| 19 | 63 | 0 | 285,961 | 20,599 | 368,980 | 7,405 | 398,035 | 1,033,904 | 6.00 |
| 20 | 64 | 0 | 285,961 | 22,071 | 391,600 | 9,367 | 424,087 | 1,038,188 | 6.23 |
| 21 | 65 | 0 | 285,961 | 23,654 | 412,870 | 13,088 | 451,788 | 1,046,365 | 6.42 |
| 22 | 66 | 0 | 285,961 | 26,579 | 434,080 | 20,060 | 481,510 | 1,058,095 | 6.59 |
| 23 | 67 | 0 | 285,961 | 28,523 | 455,230 | 29,285 | 513,375 | 1,072,828 | 6.75 |
| 24 | 68 | 0 | 285,961 | 30,549 | 476,350 | 40,892 | 547,562 | 1,090,532 | 6,88 |
| 25 | 69 | 0 | 285,961 | 32,686 | 497,420 | 55,040 | 584,230 | 1,111,282 | 7.01 |
| 26 | 70 | 0 | 285,961 | 34,963 | 518,390 | 71,920 | 623,570 | 1,135,230 | 7.12 |
| 27 | 71 | 0 | 285,961 | 37,445 | 539,150 | 91,794 | 665,764 | 1,162,601 | 7.22 |
| 28 | 72 | 0 | 285,961 | 40,184 | 559,580 | 114,971 | 711,041 | 1,193,705 | 7.31 |
| 29 | 73 | 0 | 285,961 | 43,249 | 579,530 | 141,825 | 759,615 | 1,228,897 | 7.41 |
| 30 | 74 | 0 | 285,961 | 46,658 | 598,900 | 172,751 | 811,711 | 1,268,486 | 7.49 |

Please sec attached sheets with important footnotes.

## EXHIBIT E: PAGE 3 OF 4

| Summary at 20 Yrs: |  |  |
| :--- | :---: | ---: |
| Total Premiums: <br> (Less) Total Cash Value: <br> $\quad$ (Guaranteed) <br> (Value of Dividends) |  | 285,960 |
| Difference |  | 424,086 |
| Average difference per year | 32,600 |  |
| Average death benefit |  | $-138,126$ |
| CRR (1) | $1,034,086$ | $-6,906$ |
| $5 \%$ Interest-adjusted costs (2): | $6.22 \%$ |  |
| at 10 Years |  |  |
| at 20 Years | 5.65 |  |
| 5\% Interest-adjusted payments: | 4.05 |  |
| at 10 Years |  |  |
| at 20 Years | 18.74 |  |

## EXHIBIT E: PAGE 4 OF 4

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is $4.00 \%$.

All cash values shown are end-of-year values.
All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classificd as a modified endowment in the future.

Figures depending on dividends are neither cstimated nor guaranteed, but are based on a hypotherical dividend scale. This scale has the same factors as the 1991 dividend scale, except for the interest return. The interest return is based on assumed rates that ___ would credit, which may vary by policy year. These rates are shown at the end of these foomotes, and do not exceed our curent rate of $10.50 \%$.

Actual future dividends may be highe- or lower than those illustrated depending on the comparys actual future experience.

The cost of the above policy over a period of years cannot be determined without taking intu account the incerest that would have been carned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus nders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy ycar. Other yariables are possible. Your agent will define the rules upon request.
The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of $8.00 \%$. Dividends are affected by policy loans. To the extent the dividend scale is based on an interest rate greater than $7.00 \%$, in any given policy year the greater the amount of loan, the smaller the dividend.
(This does not apply to term, which has no loan value.)
The number of years of required cash outlays depends upon age at issue, policy class, face amount, and continuation of current dividend scale, and assumes no policy loans. This is not an automatic dividend option. Policy owner must request change of dividend option at policy ycar indicated. He may pay the balance of premium by surrendering a portion of paid up insurance.

This is not a paid-up policy, premiums are due and payable in all policy years.
(1) The comparative rate of return shown represents the rate, not considering the effect of taxcs, which the policyholder would have to earn on an adjusted scries of outlays to accumulate to the wat cash value at the end of the period. The adjusted series of outlays equals the actual outlay in each year less the cost of insurance protection for that year, which is based on the 1980 CSO Basic Table (K).
(2) Interest adjusted cost indexes are based on the policy excluding riders and are uscful in comparing policies of similar types.
Assumed dividend interest rate for non-loaned values:
year 1 thru year 1:10.00\%
year 2 thru year 2: $9.43 \%$
year 3 thru year $3: 8.50 \%$
year 4 thru year 4: $8.00 \%$
year 5 thru year 5: $7.00 \%$
year 6 thru year 10: $6.55 \%$
year 11 thru year 11: $8.51 \%$
year 12 thru year 12: $6.54 \%$
year 13 thru year 15: $4.00 \%$
year 16 thru year 16: $10.50 \%$
ycar 17 thru ycar 55 : $9.50 \%$

EXHIBIT F: PAGE 1 OF 2
Vanishing Premium Plan Prepared for Client
$\$ 1,000,000$
Male Nonsmoker, Age 35
Dividends buy PUA's for 9 year(s), thereafter dividends reduce premiums with excess applied to purchase PUA's Initial Annual Premium $\$ 9,375.00$

| Year | Vanish Premium |  |  |  |  |  | Full Pay |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash <br> Premium Due | Net Outlay | Total Cash <br> Value Increase | CV increase Less Net Payment | Total Cash Value | Total Death Benefit | $\begin{gathered} \text { Cash } \\ \text { Premium Due } \end{gathered}$ | Guaranted Cash Value Including Rider* | Total Cash Value | Total Death Benefit |
| 1. | 9,375 | 9,375 | 0 | -9,375 | 0 | 1,000,000 | 9,375 | 0 | 0 | 1,000,000 |
| 2. | 9,375 | 9,375 | 0 | -9,375 | 0 | 1,000,000 | 9,375 | 0 | 0 | 1,000,000 |
| 3 | 9,375 | 9,375 | 920 | $-8,455$ | 920 | 1,000,000 | 9,375 | 0 | 920 | 1,000,000 |
| 4 | 9,375 | 9,375 | 7,854 | $-1,521$ | 8,774 | 1,008,323 | 9,375 | 6,340 | 8,774 | 1,008,323 |
| 5... | 9,375 | 9,375 | 9,231 | -144 | 18,005 | 1,020,890 | 9,375 | 13,400 | 18,005 | 1,020,890 |
|  | 46,875 | 46,875 | 18,005 | $-28,870$ |  |  | 46,875 |  |  |  |
| 6 | 9,375 | 9,375 | 10,337 | 962 | 28,342 | 1,037,503 | 9,375 | 20,830 | 28,342 | 1,037,503 |
| 7 | 9,375 | 9,375 | 11,498 | 2,123 | 39,840 | 1,058,058 | 9,375 | 28,620 | 39,840 | 1,058,058 |
| 8 | 9,375 | 9,375 | 12,788 | 3,413 | 52,628 | 1,082,310 | 9,375 | 36,800 | 52,628 | 1,082,310 |
| 9 | 9,375 | 9,375 | 14,165 | 4,790 | 66,793 | 1,110,238 | 9,375 | 45,370 | 66,793 | 1,110,238 |
| 10... | 3,920 | 3,920 | 9,745 | 5,825 | 76,537 | 1,105,604 | 9,375 | 54,370 | 82,477 | 1,141,682 |
|  | 88,295 | 88,295 | 76,537 | -11,758 |  |  | 93,750 |  |  |  |
| 11. | 0 | 0 | 6,585 | 6,585 | 83,122 | 1,080,351 | 9,375 | 63,800 | 99,790 | 1,176,547 |
| 12. | 0 | 0 | 7,397 | 7,397 | 90,519 | 1,059,355 | 9,375 | 73,670 | 118,845 | 1,214,753 |
| 13 | 0 | 0 | 8,125 | 8,125 | 98,645 | 1,042,381 | 9,375 | 84,000 | 139,626 | 1,256,153 |
| 14 | 0 | 0 | 8,930 | 8,930 | 107,575 | 1,028,401 | 9,375 | 94,820 | 162,284 | $1,299,796$ |
| 15 | 0 | 0 | 9,775 | 9,775 | 117,350 | 1,017,319 | 9,375 | 106,120 | 186,935 | 1,345,680 |
|  | 88,295 | 88,295 | 117,350 | 29,055 |  |  | 140,625 |  |  |  |
| 16 | 0 | 0 | 10,723 | 10,723 | 128,074 | 1,009,040 | 9,375 | 117,950 | 213,776 | 1,393,805 |
| 17. | 0 | 0 | 11,689 | 11,689 | 139,762 | 1,003,470 | 9,375 | 130,280 | 242,911 | 1,444,194 |
| 18. | 0 | 0 | 12,724 | 12,724 | 152,486 | 1,000,473 | 9,375 | 143,110 | 274,508 | 1,496,842 |
| 19. | 0 | 0 | 13,805 | 13,805 | 166,291 | 1,000,005 | 9,375 | 156,430 | 308,711 | 1,551,864 |
| 20. | 0 | 0 | 14,956 | 14,956 | 181,247 | 1,001,946 | 9,375 | 170,230 | 345,695 | 1,609,264 |
|  | 88,295 | 88,295 | 181,247 | 92,952 |  |  | 187,500 |  |  |  |

This is an illustration and not a contract.
Dividends are not guaranteed and are based on the current scale.
Cash values and death benefits may vary depending on actual experience.
This illustration assumes that recommended premium deposits are always made.
This illustration is only valid if all pages are included.


## This is an illustration and not a contract.

Dividends are not guaranteed and are based on the current scale.
Cash values and death benefits may vary depending on actual experience.
This illustration assumes hat recommended premium deposits are always made.
(Name of company) does not give legal or tax advice. Please consult your professional tax advisor regarding any items which involve the interpretation of applicable tax law.
Because of long-term interest-rate trends, all policyholders should be aware that dividend scales at (name of company) and throughout the industry will likely be reduced at some point in the future. (Name of company) believes in providing full disclosure to our prospective policyholders, and we, therefore, suggest you consider obtaining additional illustrations to demonstrate the sensitivity of product values to potential reductions in dividends.
The term "vanish" does not mean that premiums are no longer due, but that the cash premium due reflects the payment of future gross annual premiums through the use of current dividends. If future dividends are reduced from the current, results of the vanish may differ from that illustrated.
Additional premium payments may be required if the current scale of dividends is reduced.
*Guaranteed values do not reflect any loans, surrenders or dividends from the policy.
Cash values are illustrated at the end of the year.
The actual beginning of year cash value will be lower when the dividends are surfendered to pay the premium.
This illustration is only valid if all pages are included.
This illustration assumes the surrender of paid-up values; these may be deemed as taxable income under I.R.C. sections 72(E) and 7702 and others. Please consult your professional tax advisor.
If this policy, in combination with any other insurance policies in-force or applied for, exceeds $\qquad$ dollars, special underwriting, reinsurance or commissioning may be required which could affect the premium and values illustrated.
The insured's tax bracket is $28 \%$.

## EXHIBIT G: PAGE 1 OF 4

Vanishing Premium Plan Prepared For

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Year | Age | Premium Due | PUAs Surr To Pay Premiums | Total Cash Value of PUAs | Cash <br> Premium Due | Total Cash Value Increase | CV Inctease Less Nei Payment | Total <br> Cash Value | Total Death Benefil Beg of $\mathrm{Y}_{\mathrm{r}}$ |
| 1. | 35 | 4,625 | 0 | 0 | 4,625 | 0 | -4,625 | 0 | 500,000 |
| 2. | 36 | 4,625 | 0 | 0 | 4,625 | 0 | -4,625 | 0 | 500,000 |
| 3...... | 37 | 4,625 | 0 | 0 | 4,625 | 3,735 | -890 | 3,735 | 500,000 |
| 4 | 38 | 4,625 | 0 | 55 | 4,625 | 4,545 | -80 | 8,280 | 500,336 |
| 5..... | 39 | 4,625 | 0 | 240 | 4,625 | 4,865 | 240 | 13,145 | 501,403 |
|  |  | 23,125 |  |  | 23,125 | 13,145 | -9,980 |  |  |
| 6. | 40 | 4,625 | 0 | 575 | 4,625 | 5,210 | 585 | 18,355 | 503,222 |
| 7 | 41 | 4,625 | 0 | 1,084 | 4,625 | 5,579 | 954 | 23,934 | 505,813 |
| 8. | 42 | 4,625 | 0 | 1,785 | 4,625 | 5,976 | 1,351 | 29,910 | 509,169 |
| 9. | 43 | 4,625 | 0 | 2,700 | 4,625 | 6,395 | 1,770 | 36,305 | 513,284 |
|  | 44 | 4,625 | 0 | 3,852 | 4,625 | 6,857 | 2,232 | 43,162 | 518,153 |
|  |  | 46,250 |  |  | 46,250 | 43,162 | -3,088 |  |  |
| 11...... | 45 | 4,625 | 0 | 5,269 |  | 7,338 | 2,713 | 50,499 | 523,793 |
| 12. | 46 | 3,144 | 2,583 | 2,915 | 561 | 3,796 | 3,235 | 54,295 | 512,615 |
| 13. | 47 | 2,013 | 2,013 | 1,028 | 0 | 4,488 | 4,488 | 58,783 | 504,263 |
| 14. | 48 | 984 | 984 | 88 | 0 | 5,685 | 5,685 | 64,468 | 500,350 |
|  | 49 | 91 | 91 | 0 | 0 | 6,772 | 6,772 | 71,240 | 500,001 |
|  |  | 57,108 |  |  | 51,436 | 71,240 | 19,804 |  |  |
| 16. | 50 | 0 | 0 | 650 | 0 | 7,770 | 7,770 | 79,010 | 502,379 |
| 17. | 51 | 0 | 0 | 1,929 | 0 | 8,638 | 8,638 | 87,649 | 506,772 |
| 18. | 52 | 0 | 0 | 3,771 | 0 | 9,443 | 9,443 | 97,091 | 512,711 |
| 19. | 53 | 0 | 0 | 6,138 | 0 | 10,207 | 10,207 | 107,298 | 519,866 |
|  | 54 | 0 | 0 | 9,025 | 0 | 10,946 | 10,946 | 118,245 | 528,061 |
|  |  | 57,108 |  |  | 51,436 | 118,245 | 66,809 |  |  |

This proposal is valid only if all pages are included.

EXHIBIT G: PAGE 2 OF 4
Guaranteed Ledger Proposal Prepared for

| \$500,000 |  |  |  | Male Nonsmoker, Age 35 |
| :---: | :---: | :---: | :---: | :---: |
| Initial Annual Premium | \$4,625.00 |  |  |  |
| Year | Total Premium Due | Total Gur Value | Total Guar Death Benefit | Total <br> Guar Paid-up Insurance |
|  | 4,625 | 0 | 500,000 | 0 |
|  | 4,625 | 0 | 500,000 | 0 |
|  | 4,625 | 3,735 | 500,000 | 23,000 |
|  | 4,625 | 8,225 | 500,000 | 48,500 |
|  | 4,625 | 12,905 | 500,000 | 72,500 |
|  | 23,125 |  |  |  |
| $\begin{gathered} 6 \ldots \ldots \ldots \\ 7 \ldots \ldots \\ 8 \ldots \ldots \\ 9 \ldots \ldots \\ 10 \ldots \ldots \end{gathered}$ | 4,625 | 17,780 | 500,000 | 95,500 |
|  | 4,625 | 22,850 | 500,000 | 117,500 |
|  | 4,625 | 28,125 | 500,000 | 138,500 |
|  | 4,625 | 33,605 | 500,000 | 158,500 |
|  | 4,625 | 39,310 | 500,000 | 177,500 |
|  | 46,250 |  |  |  |
| $\begin{aligned} & 11 \ldots \ldots \ldots \\ & 12 \ldots \ldots \ldots \\ & 13 \ldots \ldots \ldots \\ & 14 \ldots \ldots \ldots \\ & 15 \ldots \ldots \ldots \end{aligned}$ | 4,625 | 45,230 | 500,000 | 196,000 |
|  | 4,625 | 51,380 | 500,000 | 213,500 |
|  | 4,625 | 57,755 | 500,000 | 230,000 |
|  | 4,625 | 64,380 | 500,000 | 246,000 |
|  | 4,625 | 71,240 | 500,000 | 261,000 |
|  | 69,375 |  |  |  |
|  | 4,625 | 78,360 | 500,000 | 275,500 |
|  | 4,625 | 85,720 | 500,000 | 289,000 |
|  | 4,625 | 93,320 | 500,000 | 302,500 |
|  | 4,625 | 101,160 | 500,000 | 315,000 |
|  | 4,625 | 109,220 | 500,000 | 326,500 |
|  | 92,500 |  |  |  |

This proposal is valid only if all pages are included.

## EXHIBIT G: PAGE 3 OF 4

## IMPORTANT INFORMATION ABOUT THIS PROPOSAL

(Name of company) has a reputation for its financial integrity and for providing solid, long-term value to our policyholders. In keeping with that tradition, we encourage our clienis to fully examine and understand the assumptions used in a life insurance proposal. We have provided the following information to help you make an informed purchase decision.
This proposal is not a contract; we recommend that you refer to your policy for a complete explanation of your policy benefits.
GUARANTEES
Only those premiums and values labeled as "guaranteed" in this proposal will be contractually guaranteed in your policy.
DIVIDENDS
Illustrated dividends, and all values depending on illustrated dividends, are based on the July 1990 dividend scale. They are neither guarantees nor estimates of future dividends.
The first dividend is dependent upon payment of the first premium due in the second year.
PREMIUM
Premiums due, when reduced by dividends, may vary substantially from the illustrated premiums due, depending on the actual dividends paid in future years.
VANISHING PREMIUMS
The policy illustrated requires that premiums be paid each year without limitation. However, it is possible that at some future date, dividends, and if necessary, the surrender of paid-up additions may become sufficient to pay current and future premiums due. The proposal shows this by indicating a time when premiums "vanish."
If actual dividends are lower than illustrated, you would have to pay premiums beyond the date at which this proposal shows that premiums might "vanish." For policies where premiums have already "vanished," future premiums could be required.
LOANS AND SURRENDERS
The dividends shown in this proposal reflect the loans and loan interest rates as illustrated. Actual policy dividends will vary according to actual loan interest rates and loan activity.
This proposal is valid only if all pages are included.

## EXHIBIT G: PAGE 4 OF 4


#### Abstract

TAXATION This proposal may not fully reflect your actual tax or accounting situation. We suggest that you consult your professional advisors regarding the interpretation of current and proposed tax laws and accounting principles. The individual's illustrated tax bracket is $28 \%$. PROPOSAL DESIGN Internal Rates of Return on death have been calculated assuming that death takes place: (1) at the beginning of the year, and (2) at the end of the year (prior to the payment of the dividend). The two figures which result, represent the range of returns that will be delivered by the policy (based on the current dividend scale), depending on when during the year the insured dies. Internal Rates of Return on death are illustrated on a Traditional and Aggressive basis. While both assume that death occurs at the end of the policy year, the Aggressive basis makes the further assumption that the end of year dividend has been credited. ALTERNATE PROPOSALS In light of past interest rate trends, you should be aware that dividend scales at any company, including (name of company) could be reduced at any point in the future. Values illustrated are sensitive to changes in the dividend scalc. If you wish to assess the sensitivity of the values illustrated to a drop in our current scale, you should review a second proposal prepared using a dividend scale lower than the scale currently being credited.


I have received and reviewed four pages of this proposal, including footnotes. I also understand the implications of the above information on premium amounts and values illustrated.

Policyowner (For Trust: this should be signed by the Trustee)

## Date

Presented by:
Agent
Date

This proposal is valid only if all pages are included

## EXHIBIT H

Abbreviated Payment Plan Results

| Policy Year | Results Based on the Current Dividend Scale |  |  | Results Based on a Dividend Interest Rate 1\% Less Than Current Scale |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yearly Payment | Total CSV* | Total DB* | Yearly Payment | Total CSV* | $\begin{aligned} & \text { Total } \\ & \text { DB }^{*} \end{aligned}$ |
| 1..... | 1,340 | 0 | 100,000 | 1,340 | 0 | 100,000 |
| 2 | 1,340 | 303 | 100,000 | 1,340 | 303 | 100,000 |
| 3 | 1,340 | 1,434 | 100,543 | 1,340 | 1,424 | 100,543 |
| 4 | 1,340 | 2,638 | 101,188 | 1,340 | 2,606 | 101,143 |
| 5 | 1,340 | 3,923 | 101,934 | 1,340 | 3,853 | 101,797 |
| 6 | 1,340 | 5,537 | 102,788 | 1,340 | 5,412 | 102,506 |
| 7 | 1,340 | 7,302 | 103,886 | 1,340 | 7,100 | 103,405 |
| 8 | 1,340 | 9,420 | 105,268 | 1,340 | 9,119 | 104,525 |
| 9 | 1,340 | 11,717 | 107,116 | 1,340 | 11,290 | 106,054 |
| 10 | 1,340 | 14,207 | 109,241 | 1,340 | 13,626 | 107,800 |
| 11 | 1,340 | 16,845 | 111,638 | 1,340 | 16,076 | 109,758 |
| 12 | $\dagger$ | 18,252 | 109,968 | 1,340 | 18,706 | 111,738 |
| 13 | $\dagger$ | 19,772 | 108,590 | $\dagger$ | 20,090 | 109,938 |
| 14 | $\dagger$ | 21,411 | 107,472 | $\dagger$ | 21,568 | 108,374 |
| 15 | $\dagger$ | 23,171 | 106,604 | $\dagger$ | 23,142 | 107,030 |
| 16 | $\dagger$ | 25,060 | 105,955 | $\dagger$ | 24,818 | 105,881 |
| 17 | $\dagger$ | 27,087 | 105,528 | $\dagger$ | 26,598 | 104,921 |
| 18 | $\dagger$ | 29,256 | 105,313 | $\dagger$ | 28,487 | 104,143 |
| 19 | $\dagger$ | 31,579 | 105,305 | $\dagger$ | 30,490 | 103,539 |
| 20 | $\dagger$ | 34,061 | 105,496 | $\dagger$ | 32,610 | 103,098 |
| Age |  |  |  |  |  |  |
| 65 75 | + | 68,968 | 127,876 | $\dagger$ | 59,968 | 114,754 |
| 75 | $\dagger$ | 138,623 | 186,933 | $\dagger$ | 108,585 | 150,087 |

*The Abbreviated Payment Plan uses dividend results to limit the number of premiums paid in cash. Results are not guaranteed. See Form $\qquad$ for details on how the Abbreviated Payment Plan works. Refer to the following "Full" Pay Ledger for a complete schedule of premium payments. $\dagger$ Based on the dividend scale reflected, which is not guaranteed, no out-of-pocket cash outlay is required. Premiums are assumed to be paid by application of dividend credits. A reduction in the dividend scale could require you to make additional out-of-pocket cash outlays in one or more of these years.

EXHIBIT I: PAGE 1 OF 2
Universal Life

| Prepared for: Male Client Issue Age: 35/Male Nonsmoker Specified Amt: $\$ 100,000$ DB Option: ASpecified Amount Prepared by: |  |  | Pianned Premium: $\$ 700.00$ <br> Premium Mode: Annual <br> Add'l First-Year Premium $\$ 0.00$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Age | Annualized Premium | Current $8.50 \%$ |  |  | Hllustrative $7.00 \%$ |  |  | Guaranteed 4.00\% |  |  |
|  |  |  | Account Value | $\begin{aligned} & \text { Cash } \\ & \text { Value } \end{aligned}$ | Death Benefit | Account Value | Cash <br> Value | Death Benefit | Account Value | Cash Value | Death Bencfit |
| 1. | 36 | 700 | 559 | 0 | 100,000 | 550 | 0 | 100,000 | 458 | 0 | 100,000 |
| 2. | 37 | 700 | 1,155 | 471 | 100,000 | 1,128 | 444 | 100,000 | 918 | 234 | 100,000 |
| 3. | 38 | 700 | 1,795 | 1,119 | 100,000 | 1,740 | 1,064 | 100,000 | 1,380 | 704 | 100,000 |
| 4. | 39 | 700 | 2,482 | 1,814 | 100,000 | 2,387 | 1,719 | 100,000 | 1,845 | 1,177 | 100,000 |
| 5.. | 40 | 700 | 3,218 | 2,559 | 100,000 | 3,070 | 2,411 | 100,000 | 2,308 | 1,649 | 100,000 |
| Total |  | 3,500 |  |  |  |  |  |  |  |  |  |
| 6. | 41 | 700 | 4,009 | 3,471 | 100,000 | 3,794 | 3,256 | 100,000 | 2,768 | 2,230 | 100,000 |
| 7. | 42 | 700 | 4,858 | 4,446 | 100,000 | 4,558 | 4,146 | 100,000 | 3,222 | 2,810 | 100,000 |
| 8. | 43 | 700 | 5,772 | 5,492 | 100,000 | 5,369 | 5,089 | 100,000 | 3,669 | 3,389 | 100,000 |
| 9. | 44 | 700 | 6,754 | 6,611 | 100,000 | 6,227 | 6,084 | 100,000 | 4,105 | 3,962 | 100,000 |
| 10. | 45 | 700 | 7,812 | 7,812 | 100,000 | 7,137 | 7,137 | 100,000 | 4,529 | 4,529 | 100,000 |
| Total |  | 7,000 |  |  |  |  |  |  |  |  |  |
| 11. | 46 | 700 | 8,951 | 8,951 | 100,000 | 8,102 | 8,102 | 100,000 | 4,937 | 4,937 | 100,000 |
| 12. | 47 | 700 | 10,180 | 10,180 | 100,000 | 9,126 | 9,126 | 100,000 | 5,328 | 5,328 | 100,000 |
| 13. | 48 | 700 | 11,506 | 11,506 | 100,000 | 10,214 | 10,214 | 100,000 | 5,698 | 5,698 | 100,000 |
| 14. | 49 | 700 | 12,938 | 12,938 | 100,000 | 11,372 | 11,372 | 100,000 | 6,044 | 6,044 | 100,000 |
| 15. | 50 | 700 | 14,486 | 14,486 | 100,000 | 12,603 | 12,603 | 100,000 | 6,362 | 6,362 | 100,000 |
| Total |  | 10,500 |  |  |  |  |  |  |  |  |  |
|  | 51 | 700 | 16,158 | 16,158 |  |  | 13,911 | 100,000 | 6,646 | 6,646 | 100,000 |
| 17. | 52 | 700 | 17,963 | 17,963 | 100,000 | 15,301 | 15,301 | 100,000 | 6,888 | 6,888 | 100,000 |
| 18. | 53 | 700 | 19,912 | 19,912 | 100,000 | 16,777 | 16,777 | 100,000 | 7,079 | 7,079 | 100,000 |
| 19. | 54 | 700 | 22,018 | 22,018 | 100,000 | 18,344 | 18,344 | 100,000 | 7,209 | 7,209 | 100,000 |
| 20. | 55 | 700 | 24,293 | 24,293 | 100,000 | 20,010 | 20,010 | 100,000 | 7,264 | 7,264 | 100,000 |
| Total ...... |  | 14,000 |  |  |  |  |  |  |  |  |  |
| 25. | 60 | 700 | 40,361 | 40,361 | 100,000 | 29,793 | 29,793 | 100,000 | 6,065 | 6,065 | 100,000 |
| 30. | 65 | 700 | 65,295 | 65,295 | 100,000 | 42,594 | 42,594 | 100,000 | 799 | 799 | 100,000 |
| Total . . . . . |  | 21,000 |  |  |  |  |  |  |  |  |  |

The current rate is 8.50 percent for years $1-20$, and 9.50 percent for years thereafter.

EXHIBIT I: PAGE 2 OF 2

| Prepared for: Male Client Issue Age: 35/Male Nonsmoker Specified Amt: $\$ 100,000$ DB Option: NSpecified Amount Prepared by: |  |  | Planned Premium: $\$ 700.00$ <br> Premium Mode: Annual <br> Add'l First-Year Premium: $\$ 0.00$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Age | Total Premium | Summary of Values |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Current $8.50 \%$ |  |  | Illustrative 7.00\% |  |  | Guaranteed 4.00\% |  |  |
|  |  |  | Account Value | Cash <br> Value | Death Benefit | Account Value | Cash <br> Value | Death <br> Benefit | Account Value | Cash <br> Value | Death Benefit |
| 1 | 36 | 700 | 559 | 0 | 100,000 | 550 | 0 | 100,000 | 458 | 0 | 100,000 |
| 10. | 45 | 7,000 | 7,812 | 7,812 | 100,000 | 7,137 | 7,137 | 100,000 | 4,529 | 4,529 | 100,000 |
| $20 \ldots$ | 55 | 14,000 | 24,293 | 24,293 | 100,000 | 20,010 | 20,010 | 100,000 | 7,264 | 7,264 | 100,000 |
| 25. | 60 | 17,500 | 40,361 | 40,361 | 100,000 | 29,793 | 29,793 | 100,000 | 6,065 | 6,065 | 100,000 |
| $30 \ldots$ | 65 | 21,000 | 65,295 | 65,295 | 100,000 | 42,594 | 42,594 | 100,000 | 799 | 799 | 100,000 |
|  |  |  | 5\% Interest-Adjusted Cost Indexes |  |  |  |  |  | Monthly Income @ 65, 10 Yrs Certain and Life |  |  |
|  |  |  | Surrender Cost |  |  | Net Payment Cost |  |  |  |  |  |
|  |  |  | 10 th Yr |  | 20 th Yr | 10th Yr |  | 20 h Yr |  |  |  |
| Guarantced Values <br> $7.00 \%$ Illustrative Values <br> $8.50 \%$ Current Values |  |  | $\begin{aligned} & 3.58 \\ & 1.60 \\ & 1.09 \end{aligned}$ |  | 4.91 |  |  | 7.00 |  | 5 |  |
|  |  |  | 1.24 |  |  | 7.00 |  | 381 |  |
|  |  |  | 0.01 |  |  | 7.00 |  | 584 |  |

Cost indexes are useful only for comparison of the related costs of similar policies. Charges for additional benefits have been removed from these indexes. The guaranteed columns reflect a guaranteed interest rate of $4.00 \%$ and guaranteed cost of insurance rates. Illustration for use in the state of _-. Initial guideline premiums: Net single 15,176 Net level 1,333
Maximum annual premium that complies with 7-pay test
3,981
Columns other than guaranteed show valucs based on current cost of insurance rates and the interest rate indicated, and these columns are not guaranteed. Current interest rate is determined monthly.
Using planned premiums this policy will terminate in policy year 31 based on guaranteed values.

Universal Life Accumulation Proposal Prepared for

| $\$ 250,000$ <br> Initial Annual Premium | Malc Nonsmoker, Age 45 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$2,131.54 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Age | Planned <br> Annua! <br> Premium | Guaranteed @ 5.5\% |  |  | Current @ 7.80\% (9.40\% ${ }^{\text {e }}$ ) |  |  | Assumed @ 7.55\% (9.06\%**) |  |  |
|  |  |  | Policy Value | Cash Value | Death Benefit | Policy Value | $\begin{aligned} & \text { Cash } \\ & \text { Value } \end{aligned}$ | Death <br> Benefit | Policy Value | Cash <br> Value | Death <br> Bencfit |
| 1. | 45 | 2,132 | 1,459 | 0 | 250,000 | 1,498 | 0 | 250,000 | 1,493 | 0 | 250,000 |
| 2. | 46 | 2,132 | 2,510 | 0 | 250,000 | 3,069 | 454 | 250,000 | 3,056 | 441 | 250,000 |
| 3. |  | 2,132 | 3,550 | 935 | 250,000 | 4,698 | 2,083 | 250,000 | 4,673 | 2,058 | 250,000 |
| 4. | 47 | 2,132 | 4,573 | 1,958 | 250,000 | 6,392 | 3,777 | 250,000 | 6,349 | 3,734 | 250,000 |
|  | 49 | 2,132 | 5,569 | 2,954 | 250,000 | 8,134 | 5,519 | 250,000 | 8,068 | 5,453 | 250,000 |
|  |  | 10,658 |  |  |  |  |  |  |  |  |  |
| 6. | 50 | 2,132 | 6,532 | 4,178 | 250,000 | 9,928 | 7,574 | 250,000 | 9,832 | 7,479 | 250,000 |
| 7. | 51 | 2,132 | 7,443 | 5,351 | 250,000 | 11,766 | 9,674 | 250,000 | 11,634 | 9,542 | 250,000 |
| 8. | 52 | 2,132 | 8,283 | 6,453 | 250,000 | 13,669 | 11,839 | 250,000 | 13,494 | 11,663 | 250,000 |
| 9. | 53 | 2,132 | 9,034 | 7,465 | 250,000 | 15,623 | 14,054 | 250,000 | 15,396 | 13,827 | 250,000 |
| 10. | 54 | 2,132 | 9,668 | 8,360 | 250,000 | 19,748 | 18,441 | 250,000 | 19,375 | 18,068 | 250,000 |
|  |  | 21,315 |  |  |  |  |  |  |  |  |  |
| 11. | 55 | 2,132 | 10,162 | 9,116 | 250,000 | 21,985 | 20,939 | 250,000 | 21,529 | 20,483 | 250,000 |
| 12. | 56 | 2,132 | 10,487 | 9,703 | 250,000 | 24,344 | 23,559 | 250,000 | 23,793 | 23,008 | 250,000 |
| 13. | 57 | 2,132 | 10,623 | 10,100 | 250,000 | 26,814 | 26,291 | 250,000 | 26,154 | 25,631 | 250,000 |
| 14. | 58 | 2,132 | 10,538 | 10,276 | 250,000 | 29,399 | 29,137 | 250,000 | 28,614 | 28,352 | 250,000 |
| 15. | 59 | 2,132 | 10,189 | 10,189 | 250,000 | 32,101 | 32,101 | 250,000 | 31,175 | 31,175 | 250,000 |
|  |  | 31,973 |  |  |  |  |  |  |  |  |  |
| 16. | 60 | 2,132 | 9,745 | 9,745 | 250,000 | 35,162 | 35,162 | 250,000 | 34,075 | 34,075 | 250,000 |
| 17. | 61 | 2,132 | 8,949 | 8,949 | 250,000 | 38,345 | 38,345 | 250,000 | 37,075 | 37,075 | 250,000 |
| 18. | 62 | 2,132 | 7,728 | 7,728 | 250,000 | 41,626 | 41,626 | 250,000 | 40,151 | 40,151 | 250,000 |
| 19. | 63 | 2,132 | 5,997 | 5,997 | 250,000 | 44,942 | 44,942 | 250,000 | 43,233 | 43,233 | 250,000 |
| 20. | 64 | 2,132 | 3,656 | 3,656 | 250,000 | 55,895 | 55,895 | 250,000 | 53,465 | 53,465 | 250,000 |
|  |  | 42,631 |  |  |  |  |  |  |  |  |  |

This illustration is only valid if all pages are included.

## EXHIBIT J: PAGE 2 OF 5



This illustration is only valid if all pages are included.

| $\$ 250,000$ <br> Initial Annual Premium $\mathbf{\$ 2 , 1 3 1 . 5 4}$ Total Deposit at Issue $\mathbf{\$ 2 . 1 3 1 . 5 4}$ |  |  | Male Nonsmoker, Agc 45 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Age | Planned Anoual Premium | Guaranted @ 5.5\% |  |  | Current @ 7.80\% (9.40\%*) |  |  | Assumed @ 7.55\% (9.06\%**) |  |  |
|  |  |  | Policy Value | $\begin{aligned} & \text { Cash } \\ & \text { Value } \end{aligned}$ | Death Bencfit | Policy Value | Cash Value | Death Bencfit | Policy Value | $\begin{aligned} & \text { Cash } \\ & \text { Value } \end{aligned}$ | Death Benefit |
| 41. | 85 | 2,132 | 0 | 0 | 0 | 220,565 | 220,565 | 250,000 | 156,316 | 156,316 | 250,000 |
| 42. | 86 | 2,132 | 0 | 0 | 0 | 237,856 | 237,856 | 250,000 | 161,000 | 161,000 | 250,000 |
| 43. | 87 | 2,132 | 0 | 0 | 0 | 257,169 | 257,169 | 270,027 | 165,724 | 165,724 | 250,000 |
| 44. | 88 | 2,132 | 0 | 0 | 0 | 277,744 | 277,744 | 291,631 | 170,525 | 170,525 | 250,000 |
|  | 89 | 2,132 | 0 | 0 | 0 | 299,668 | 299,668 | 314,651 | 175,617 | 175,617 | 250,000 |
|  |  | 95,919 |  |  |  |  |  |  |  |  |  |
| 46.....$47 \ldots \ldots$$48 \ldots .$.$49 \ldots$.$50 .$. | $\begin{aligned} & 90 \\ & 91 \\ & 92 \\ & 93 \\ & 94 \end{aligned}$ | 2,132 | 0 | 0 | 0 | 323,008 | 323,008 | 339,159 | 181,113 |  | 250,000 |
|  |  | 2,132 | 0 | 0 | 0 | 348,339 | 348,339 | 362,273 | 187,203 | 187,203 | 250,000 |
|  |  | 2,132 | 0 | 0 | 0 | 375,921 | 375,921 | 387,199 | 194,136 | 194,136 | 250,000 |
|  |  | 2,132 | 0 | 0 | 0 | 406,029 | 406,029 | 414,150 | 202,045 | 202,045 | 250,000 |
|  |  | 2,132 | 0 | 0 | 0 | 508,350 | 508,350 | 513,433 | 250,060 | 250,060 | 252,561 |
|  |  | 106,577 |  |  |  |  |  |  |  |  |  |
| 51...... <br> $52 \ldots \ldots$. <br> $53 \ldots \ldots$. <br> $54 \ldots \ldots$. | 95969798 | 2,132 | 0 | 0 | 0 | 550,145 | 550,145 | 550,145 | 271,078 | 271,078 | 271,078 |
|  |  | 2,132 | 0 | 0 | 0 | 595,199 | 595,199 | 595,199 | 293,683 | 293,683 | 293,683 |
|  |  | 2,132 | 0 | 0 | 0 | 643,768 | 643,768 | 643,768 | 317,994 | 317,994 | 317,994 |
|  |  | 2,132 | 0 | 0 | 0 | 696,125 | 696,125 | 696,125 | 344,141 | 344,141 | 344,141 |
|  |  | 115,103 |  |  |  |  |  |  |  |  |  |

This illustration is only valid if all pages are included.

## EXHIBIT J: PAGE 4 OF 5

## IMPORTANT INFORMATION ABOUT THIS PROPOSAL

(Name of company) has a reputation for financial integrity and for providing solid, long term value to its policyholders. In keeping with that tradition, we encourage our clients to fully examine and understand the assumptions used in a life insurance illustration. We have provided the following information to help you make an informed purchase decision.
This proposal is not a contract; we recommend that you refer to your policy for a complete explanation of your policy benefits.
GUARANTEED COLUMN ASSUMPTIONS
Only those values labeled as "guaranteed" in this proposal will be contractually guaranteed in your policy.
Guaranteed values reflect the guaranteed cost of insurance charges which are not subject to change. Guaranteed values are illustrated using a guaranteed interest rate of $4 \%$ at any time and $5.5 \%$ over the life of the policy. CURRENT CÓLUMN ASSUMPTIONS
Current values are illustrated using a current interest rate of $7.8 \%$ and are based on current cost of insurance charges, which are subject to change.
Additional interest is credited at the end of every 10 th year and will be equal to $30 \%$ of the unborrowed interest credited during the previous 10 years. The additional interest feature is guaranteed. The additional interest feature affects the current values in the following manner:
$\left.\begin{array}{lcccc}\text { Year } & 10 & 20 & 30 & 40 \\ \text { Amount } & \$ 2,105.37 & \$ 7,620.01 & \$ 17,163.83 & \$ 31,712.05\end{array}\right) \$ 69,324.55$

## EXHIBIT J: PAGE 5 OF 5

## ASSUMED COLUMN ASSUMPTIONS

Assumed values are illustrated at an assumed interest rate of $7.55 \%$ and are based on current cost of insurance charges, which are subject to change.
Additional interest is credited at the end of every 10th year and will be equal to $30 \%$ of the unborrowed interest credited during the previous 10 years. The additional interest feature is guaranteed. The additional interest feature affects the assumed values in the following manner:

| Year | 10 | 20 | 30 | 40 | 50 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Amount | $\$ 2,020.11$ | $\$ 7,164.21$ | $\$ 15,513.62$ | $\$ 25,417.76$ | $\$ 38,886.11$ |

**The interest rate, credited from purchase, required to produce equivalent cash values every 10 th year is $9.06 \%$.
POLICY LOANS AND PARTIAL WITHDRAWALS
No policy loans or partial withdrawals of the cash surrender value are shown on this proposal. CASE DESIGN ASSUMPTIONS
Your policy is illustrated on an assumed policy value basis.
You should carefully review the full proposal including the section entitled "Important Information About This Proposal."
I have received and reviewed all five pages of this proposal, including the section entitled "Important Information about This Proposal.,'

Policyowner (For Trust: this should be signed by the Trustee)

## Date

| Presented by: | $\overline{\text { Agent }}$ |
| :--- | :--- |

EXHIBIT K: PAGE 1 OF 4
Universal Life Ledger

| Prepared For: Confidential |  |  |  | Male Age 45 Nonsmoker |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Presented By: |  |  |  |  |  | Specified Amount: |  |  | \$2,000,000.100 |
| Policy: (Option 1) |  |  |  |  |  | Annual Premium: |  |  | \$17.760.00 |
| For Issue In: |  |  |  |  |  | Additional Payment: |  |  | \$0.00 |
| Illustration Date: 05/2790 |  |  |  |  |  | Accelerated Benctit Rider: |  |  | No |
| $\begin{aligned} & \text { End } \\ & \text { of } \\ & \text { Year } \end{aligned}$ |  | Premium <br> Outlay <br> for <br> Year | Loan or Withdrawal | Policy Values Based On: Guar Min 4.5\% Interest Guar Max Insurance Cost Guar Max Expense Charges |  |  | Policy Values Based On: Assumed $8.50 \%$ Interest Current Insurance Cost Current Expense Charges |  |  |
|  | Agc |  |  | Cash <br> Value | Surrender Value | Death Benefit | $\begin{aligned} & \text { Cash } \\ & \text { Value } \end{aligned}$ | Surrender Value | Death <br> Benefit |
| 1 | 46 | 17,760 | 0 | 10,717 | 0 | 2,000,000 | 12,668 | 0 | 2,000,000 |
| 2 | 47 | 17,760 | 0 | 21,405 | 0 | 2,000,000 | 26,001 | 0 | 2,000,000 |
| 3 | 48 | 17,760 | 0 | 32,034 | 0 | 2,000,000 | 40,044 | 4,524 | 2,000,000 |
| 4 | 49 | 17,760 | 0 | 42,564 | 7,044 | 2,000,000 | 54,867 | 19,347 | 2,000,000 |
| 5 | 50 | 17,760 | 0 | 52,917 | 17,397 | 2,000,000 | 70,504 | 34,984 | 2,000,000 |
| 6 | 51 | 17,760 | 0 | 63,056 | 30,792 | 2,000,000 | 86,998 | 54,734 | 2,000,000 |
| 7 | 52 | 17,760 | 0 | 72,836 | 44,124 | 2,000,000 | 104,316 | 75,604 | 2,000,000 |
| 8 | 53 | 17,760 | 0 | 82,110 | 56,950 | 2,000,000 | 122,466 | 97,306 | 2,000,000 |
| 9 | 54 | 17,760 | 0 | 90,748 | 69,140 | 2,000,000 | 141,458 | 119,850 | 2,000,000 |
| 10 | 55 | 17,760 | 0 | 98,550 | 80,494 | 2,000,000 | 161,405 | 143,349 | 2,000,000 |
| 11 | 56 | 17,760 | 0 | 105,348 | 90,844 | 2,000,000 | 183,337 | 168,833 | 2,000,000 |
| 12 | 57 | 17,760 | 0 | 110,943 | 99,991 | 2,000,000 | 206,540 | 195,588 | 2,000,000 |
| 13 | 58 | 17,760 | 0 | 115,184 | 107,784 | 2,000,000 | 231,141 | 223,741 | 2,000,000 |
| 14 | 59 | 17,760 | 0 | 117,869 | 114,021 | 2,000,000 | 257,265 | 253,417 | 2,000,000 |
| 15 | 60 | 17,760 | 0 | 117,686 | 118,390 | 2,000,000 | 285,016 | 284,720 | 2,000,000 |
| 16 | 61 | 17,760 | 0 | 117,298 | 117,298 | 2,000,000 | 314,512 | 314,512 | 2,000,000 |
| 17 | 62 | 17,760 | 0 | 113,321 | 113,321 | 2,000,000 | 345,893 | 345,893 | 2,000,000 |
| 18 | 63 | 17,760 | 0 | 108,179 | 108,179 | 2,000,000 | 379,285 | 379,285 | 2,000,000 |
| 19 | 64 | 17,760 | 0 | 97,497 | 97,497 | 2,000,000 | 414,819 | 414,819 | 2,000,000 |
| 20 | 65 | 17,760 | 0 | 82,400 | 82,400 | 2,000,000 | 452,473 | 452,473 | 2,000,000 |
| 21 | 66 | 17,760 | 0 | 62,142 | 62,142 | 2,000,000 | 491,371 | 491,371 | 2,000,000 |
| 22 | 67 | 17,760 | 0 | 35,964 | 35,964 | 2,000,000 | 532,896 | 532,896 | 2,000,000 |
| 23 | 68 | 17,760 | 0 | 2,940 | 2,940 | 2,000,000 | 577,332 | 577,332 | 2,000,000 |
| 24 | 69 | 17,760 | 0 | 0 | 0 | 0 | 625,151 | 625,151 | 2,000,000 |
| 25 | 70 | 17,760 | 0 |  |  |  | 675,964 | 675,964 | 2,000,000 |
| 26 | 71 | 17,760 | 0 |  |  |  | 729,812 | 729,812 | 2,000,000 |
| 27 | 72 | 17,760 | 0 |  |  |  | 787,592 | 787,592 | 2,000,000 |
| 28 | 73 | 17,760 | 0 |  |  |  | 849,474 | 849,474 | 2,000,000 |
| 29 | 74 | 17,760 | 0 |  |  |  | 915,423 | 915,423 | 2,000,000 |
| 30 | 75 | 17,760 | 0 |  |  |  | 985,932 | 985,932 | 2,000,000 |
| 31 | 76 | 17,760 | 0 |  |  |  | 1,061,726 | 1,061,726 | 2,000,000 |
| 32 | 77 | 17,760 | 0 |  |  |  | 1,143,828 | 1,143,828 | 2,000,000 |
| 33 | 78 | 17,760 | 0 |  |  |  | 1,233,488 | 1,233,488 | 2,000,000 |
| 34 | 79 | 17,760 | 0 |  |  |  | 1,332,277 | 1,332,277 | 2,000,000 |
| 35 | 80 | 17,760 | 0 |  |  |  | 1,442,078 | 1,442,078 | 2,000,000 |

This is an illustration, not an offer of insurance.

## EXHIBIT K: PAGE 2 OF 4

| $\begin{gathered} \mathrm{End}^{\text {of }} \\ \text { Year } \end{gathered}$ | Age | Premium Oullay for Year | Loan or Withdrawa | Policy Values Based On Guar Min $4.5 \%$ Interest Guar Max Insurance Cost Guar Max Expense Charges |  |  | Policy Values Based On: Assumed $8.50 \%$ Interest Current Insurance Cost Current Expense Cluarges |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Cash } \\ \text { Value } \end{gathered}$ | Surrender Value | $\begin{aligned} & \begin{array}{c} \text { Death } \\ \text { Benfit } \end{array} \end{aligned}$ | $\begin{gathered} \text { Cash } \\ \text { Value } \\ \hline \end{gathered}$ | Sumender Value | $\begin{gathered} \text { Death } \\ \text { Benefit } \end{gathered}$ |
| 36 | 81 | 17,760 | 0 |  |  |  | 1,565,432 | 1,565,432 | 2,000,000 |
| 37 | 82 | 17,760 | 0 |  |  |  | 1,705,588 | 1,705,588 | 2,000,000 |
| 38 | 83 | 17,760 | 0 |  |  |  | 1,865,937 | 1,865,937 | 2,000,000 |
| 39 | 84 | 17,760 | 0 |  |  |  | 2,047,057 | 2,047,057 | 2,149,410 |
| 40 | 85 | 17,760 | 0 |  |  |  | 2,243,819 | 2,243,819 | 2,356,010 |
| 41 | 86 | 17,760 | 0 |  |  |  | 2,457,378 | 2,457,378 | 2,580,247 |
| 42 | 87 | 17,760 | 0 |  |  |  | 2,689,068 | 2,689,068 | 2,823,521 |
| 43 | 88 | 17,760 | 0 |  |  |  | 2,940,417 | 2,940,417 | 3,087,438 |
| 44 | 89 | 17,760 | 0 |  |  |  | 3,213,092 | 3,213,092 | 3,373,746 |
| 45 | 90 | 17,760 | 0 |  |  |  | 3,508,903 | 3,508,903 | 3,684,349 |
| 46 | 91 | 17,760 | 0 |  |  |  | 3,829,808 | 3,329,808 | 4,021,299 |
| 47 | 92 | 17,760 | 0 |  |  |  | 4,181,260 | 4,181,260 | 4,348,510 |
| 48 | 93 | 17,760 | 0 |  |  |  | 4,566,618 | 4,566,618 | 4,703,617 |
| 49 | 94 | 17,760 | 0 |  |  |  | 4,989,645 | 4,989,645 | 5,089,438 |
| 50 | 95 | 17,760 | 0 |  |  |  | 5,454,605 | 5,454,605 | 5,509,151 |

This is an illustration, not an offer of insurance.

EXHIBIT K: PAGE 3 OF 4

| Prepared For: Confidential <br> Presented By: <br> Policy: (Option 1) <br> For Issuc in: <br> Illustration Date: 05/27/90 |  |  | Male Age 45 Non-Smoker |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Specified Amount: |  |  |  | \$2,000,000.00 |
|  |  |  | Annual Premium: |  |  |  |  |
|  |  |  |  | Additio | Payment: |  | $\$ 17,760.00$ $\$ 0.00$ |
|  |  |  | Accelerated Benefit Rider: |  |  |  |  |
| End of Year |  | Total Premiums Paid | Total <br> Loans/ Withdrawals | Guaranteed <br> Basis (4.50\%) |  | Assumed Basis ( $8.50 \%$ ) |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  | Surrender | Death | Surrender | Death |
|  | Age |  |  | Value | Benefit | Value | Benefit |
| 1 | 46 | 17,760 | 0 | 0 | 2,000,000 | 0 | 2,000,000 |
| 2 | 47 | 35,520 | 0 | 0 | 2,000,000 | 0 | 2,000,000 |
| 3 | 48 | 53,280 | 0 | 0 | 2,000,000 | 4,524 | 2,000,000 |
| 4 | 49 | 71,040 | 0 | 7,044 | 2,000,000 | 19,347 | 2,000,000 |
| 5 | 50 | 88,800 | 0 | 17,397 | 2,000,000 | 34,984 | 2,000,000 |
| 10 | 55 | 177,600 | 0 | 80,494 | 2,000,000 | 143,349 | 2,000,000 |
| 15 | 60 | 266,400 | 0 | 118,390 | 2,000,000 | 284,720 | 2,000,000 |
| 20 | 65 | 355,200 | 0 | 82,400 | 2,000,000 | 452,473 | 2,000,000 |
| 50 | 95 | 888,000 | 0 |  |  | 5,454,605 | 5,509,151 |

The first-year basic annual premium including riders is: $\$ 17,760.00$.
WARNING! TAX NOTICE: This illustration makes no representation or guarantees as to the tax treatment of life insurance transactions. The tax rules are complex and subject to change. This illustration is intended to comply with the rules limiting the amount of premiums (DEFRA) to meet the tax definition of life insurance. Loans or withdrawals may be taxable if premiums exceed allowances set forth under the law. The DEFRA and TAMRA premium limits are stated below only for the initial insurance amount. Any policy change would change these limits:

DEFRA Single Premium Limit DEFRA Annual Premium Limit TAMRA Annual Premium Limit
\$418,425.53
\$35,638.30
\$91,960.00

The information contained in this illustration is not intended to be legal or tax advice. Advice must be obtained from applicant's own counsel.
This is an illustration, not an offer of insurance.

EXPENSE DEDUCTIONS: An expense deduction is made from each premium paid on the policy. The present deduction is $3.5 \%$ on policies with attained specified face amount less than $\$ 1,000,000$, and $2.5 \%$ on policies of $\$ 1,000,000$ or above. These percentages may be changed by the company at any time but can never exceed $6 \%$. In addition, a monthly expense deduction is assessed against policies with attained specified amount less than $\$ 1,000,000$. This charge is $\$ 5$ on policies berween $\$ 25,000$ and $\$ 99,999$, and $\$ 3.50$ on policies between $\$ 100,000$ and $\$ 999,999$.

CASH AND SURRENDER VALUE DEFINITIONS: Cash value is the policy value before the application of surrender charges. Surrender value is the policy value less any applicable surrender charges, withdrawals and outstanding loans. It is the amount actually available upon policy surrender.

PERSISTENCY BONUS, INSURANCE COSTS, EXPENSES AND INTEREST RATES: The current and assumed interest rate accumulations include an annual one half percent persistency bonus after the 10th year. The present insurance costs, expense charges and interest rates are subject to change by the company at any time. It may credit excess interest which may vary from time to time under a pattern that depends upon the date of premium payments. Variation may be caused by such factors as: investment income, expenses, mortality and withdrawal experience under this series of Universal Life policies.

GUARANTEED BASIS: The expense charges and cost of insurance are illustrated at the maximam allowed. The guaranteed minimum rate of interest on policy cash values is $4.5 \%$.

Loan amount is increased, each year, by the interest due on the loan. Premium payment in excess of the basic premium will be applied to reductions of any loan. The death benefit shown is the "net" after loans or withdrawal amounts. Interest on loans will be charged in advance at $8 \%$ and will be capitalized on the policy anniversary date, policy termination or loan repayment.

Values illustrated are end of year values. Premium payments, loans and withdrawals are assumed io occur at the beginning of the policy year.

| Indices | Guaranteed |  | Assumed |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 10 year | 20 year | 10 year | 20 year |
| Surrender cost: | 5.83 | 7.69 | 3.45 | 2.36 |
| Net payment: | 8.88 | 8.88 | 8.88 | 8.88 |

Indexcs assume the time value of moncy to be 5 percent. An explanation of the cost indexes is provided in the "Life Insurance Buyer's Guide."

This is an illustration, not an offer of insurance.

EXHIBIT L: PAGE 1 OF 3

| Issut Age: 35 Male Nonsmoker Select In |  |  |  |  | Initial Face Amount: St00,000 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Initial Annual Premium: 5923 |  | 5923.0 | Initial Death Benefit Option: A Level Amount |  |  |  |  |  |
| $\begin{gathered} \hline \text { End } \\ \text { of } \\ \text { Year } \\ \hline \end{gathered}$ | Agc | $\begin{aligned} & \text { Gross } \\ & \text { Annual } \\ & \text { Outlay } \end{aligned}$ | Projected 8.00\% |  |  | Minimum Guarantee 4.50\% |  |  |
|  |  |  | Account Value ${ }^{\circ}$ | Cash Surt Value | Death <br> Bencfit | Account Value" | Cash Surr Value | Death <br> Benefit |
| 1. | 36 | \$923 | 48 | 0 | \$100,000 | \$0 | \$0 | \$100,000 |
|  | 37 | 923 | 806 | 0 | 100,000 | 549 | 0 | 100,000 |
| 3. | 38 | 923 | 1,633 | 756 | 100,000 | 1,152 | 275 | 100,000 |
| 4 | 39 | 923 | 2,532 | 1,655 | 100,000 | 1,764 | 887 | 100,000 |
| 5. | 40 | 923 | 3,508 | 2,631 | 100,000 | 2,384 | 1,507 | 100,000 |
|  | 41 | 923 | 4,562 | 3,732 | 100,000 | 3,008 | 2,177 | 100,000 |
|  | 42 | 923 | 5,698 | 4,914 | 100,000 | 3,636 | 2,851 | 100,000 |
|  | 43 | 923 | 6,919 | 6,180 | 100,000 | 4,266 | 3,527 | 100,000 |
|  | 44 | 923 | 8,230 | 7,538 | 100,000 | 4,896 | 4,204 | 100,000 |
|  | 45 | 923 | 9,774 | 9,774 | 100,000 | 5,605 | 5,605 | 100,000 |
| 11. | 46 | 923 | 11,406 | 11,406 | 100,000 | 6,249 | 6,249 | 100,000 |
| 12 | 47 | 923 | 13,173 | 13,173 | 100,000 | 6,889 | 6,889 | 100,000 |
| 13 | 48 | 923 | 15,087 | 15,087 | 100,000 | 7,525 | 7,525 | 100,000 |
| 14 | 49 | 923 | 17,163 | 17,163 | 100,000 | 8,153 | 8,153 | 100,000 |
| 15. | 50 | 923 | 19,853 | 19,853 | 100,000 | 8,980 | 8,980 | 100,000 |
| 16 | 51 | 923 | 22,394 | 22,394 | 100,000 | 9,614 | 9,614 | 100,000 |
| 17 | 52 | 923 | 25,492 | 25,492 | 100,000 | 10,372 | 10,372 | 100,000 |
| 18 | 53 | 923 | 28,979 | 28,979 | 100,000 | 11,147 | 11,147 | 100,000 |
| 19 | 54 | 923 | 32,920 | 32,920 | 100,000 | 11,939 | 11,939 | 100,000 |
| 20. | 55 | 923 | 37,355 | 37,355 | 100,000 | 12,748 | 12,748 | 100,000 |
| 21. | 56 | 923 | 41,646 | 41,646 | 100,000 | 13,308 | 13,308 | 100,000 |
| 22 | 57 | 923 | 46,320 | 46,320 | 100,000 | 13,817 | 13,817 | 100,000 |
| 23 | 58 | 923 | 51,412 | 51,412 | 100,000 | 14,264 | 14,264 | 100,000 |
| 24 | 59 | 923 | 56,960 | 56,960 | 100,000 | 14,641 | 14,641 | 100,000 |
| 25 | 60 | 923 | 63,002 | 63,002 | 100,000 | 14,933 | 14,933 | 100,000 |
| 26. | 61 | 923 | 69,584 | 69,584 | 100,000 | 15,124 | 15,124 | 100,000 |
| 27 | 62 | 923 | 76,752 | 76,752 | 100,000 | 15,191 | 15,191 | 100,000 |
| 28 | 63 | 923 | 84,531 | 84,531 | 106,509 | 15,106 | 15,106 | 100,000 |
| 29 | 64 | 923 | 92,880 | 92,880 | 115,172 | 14,837 | 14,837 | 100,000 |
| 30. | 65 | 923 | 101,861 | 101,861 | 124,271 | 14,351 | 14,351 | 100,000 |
| 31. | 66 | 923 | 111,619 | 111,619 | 133,943 | 13,612 | 13,612 | 100,000 |
| 32 | 67 | 923 | 122,206 | 122,206 | 145,425 | 12,579 | 12,579 | 100,000 |
| 33 | 68 | 923 | 133,694 | 133,694 | 157,759 | 11,205 | 11,205 | 100,000 |
| 34. | 69 | 923 | 146,162 | 146,162 | 171,010 | 9,433 | 9,433 | 100,000 |
| 35. | 70 | 923 | 159,697 | 159,697 | 185,249 | 7,185 | 7,185 | 100,000 |
| 36. | 71 | 923 | 174,394 | 174,394 | 200,553 | 4,357 | 4,357 | 100,000 |
| 37 | 72 | 923 | 190,407 | 190,407 | 215,160 | 814 | 814 | 100,000 |
| 38 | 73 | 923 | 207,870 | 207,870 | 230,736 | $\dagger$ | $\dagger$ | $\dagger$ |
| 39 | 74 | 923 | 226,935 | 226,935 | 247,359 |  |  |  |
| 40. | 75 | 923 | 247,772 | 247,772 | 265,116 |  |  |  |


| Issue Age: 35 Male Nonsmoker Select Initial Annual Premium: $\$ 923.00$ Riders: None |  |  | Initial Face Amount: $\$ 100,000$ <br> Initial Death Benefit Option: A Level Amount |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { End } \\ \text { of } \\ \text { Year } \\ \hline \end{gathered}$ |  | Gross <br> Annual Outlay | Projected $8.00 \%$ |  |  | Minimum Guarantee 4.50\% |  |  |
|  | Age |  | Account Value* | Cash Sum Value | Death <br> Benefit | Account <br> Value* | Cash Surr Value | Death <br> Benefit |
| Summary |  |  |  |  |  |  |  |  |
| Y | 10 | \$9,230 | \$9,774 | \$9,774 | \$100,000 | \$5,605 | \$5,605 | \$100,000 |
| Y | 15 | 13,845 | 19,853 | 19,853 | 100,000 | 8,980 | 8,980 | 100,000 |
| Y | 20 | 18,460 | 37,355 | 37,355 | 100,000 | 12,748 | 12,748 | 100,000 |
| A | 65 | 27,690 | 101,861 | 101,861 | 124,271 | 14,351 | 14,351 | 100,000 |
| A | 75 | 36,920 | 247,772 | 247,772 | 265,116 | $\dagger$ | $\dagger$ | $\dagger$ |
| 5.00\% Interest-Adjusted Indexes |  |  |  | Surrender |  |  | Net Payment |  |
|  |  |  |  | 10 Ye | 20 |  | 10 Years | 20 Years |
| Proje |  |  |  | 1.83 |  |  | 9.23 | 9.23 |
| Guar | teed |  |  | 4.99 |  |  | 9.23 | 9.23 |

The current cost of insurance depends upon the premium payment pattern and the account value amount, and may increase or decrease accordingly.
GUARANTEED VALUES: Based on guaranteed interest, expense, and cost of insurance rates. The guaranteed interest rate is $75 \%$ of the 90 day CD rate, Chemical Bank of New York, but in no event less than $4.50 \%$.
PROJECTED VALUES: Based on the projected interest rate, current expense and cost of insurance which are subject to change. Current interest rates are declared quarterly.
Projected and Guaranteed Values include guaranteed added interest credits on unborrowed values as follows: $0.25 \%$ at the end of year 10 , an additional $0.25 \%$ at the end of year 15 , and $0.125 \%$ at the end of years 17, 18, 19 and 20 . The interest will be credited retroactively from the date of issue and prospectively while the policy is in force. Cash values equal to any outstanding loan balance will earn interest at $4.5 \%$.
*Account Values subject to a graded surrender charge if policy is wholly or partialty surrendered in first nine years.
$\dagger$ The Payments shown are not sufficient to maintain a policy in force under these assumptions.
The policy matures at age 100 on a projected basis with an Account Value of $\$ 2,093,184$.
This is an illustration, not a contract.
This illustration has been checked against federal tax laws.
This illustration has been checked against the 7 -pay test.

## EXHIBIT L: PAGE 3 OF 3

Net Gain Analysis

Illustration for: Your Client Provided by:

Age 35
Death Benefit: 100,000
Initial Premium: 923
(shown in thousands of dollars)

*See attached proposal illustration from
for details and guarantees.

Illustrates total cash accumulation based on current interest rate. Net gain represents cash growth in excess of cumulative payments made into the policy. Net gain at age $65,74,171$. Net gain at age $75,210,852$.

## EXHIBIT M: PAGE 1 OF 4

## A Living Benefit Universal Life Plan

Living Benefit Universal Life Plan, described below, is one of the most versatile and comprehensive life insurance programs available.

Most of us realize the need to provide additional dollars for our families in the event of our premature death. However, in today's world of improved technology, the main concern has changed from "What if I die prematurely?" to "What if I survive a serious illness?"

- "How do I pay for expenses not covered by health insurance?"
- "How do I pay for rehabilitation expenses?"
- "How do I make up for lost income?"

The solution to this new problem is " $\qquad$ " With this innovative program, we will pay you a Living Benefit upon confirmed diagnosis of one of several specified conditions. You do not have to die to collect!

Covered Conditions:

- Heart atlack
- Stroke
- Life Threatening Cancer
- Renal Failure
- Coronary Heart Surgery

Here Is How It Works

- You will receive $\$ 25,000$ upon diagnosis of one of the specified catastrophic illnesses.
- If you die after receiving this Living Benefit, your beneficiaries will receive an additional $\$ 75,000$.
- However, should you never experience one of these conditions, your beneficiaries will receive $\$ 100,000$ tax-free and probate-free upon your death, plus any additional supplemental benefits.

Thank you for considering our exciting new Living Benefit plan. We hope you will agree that this program offers the highest degree of protection and peace of mind for you and your loved ones.

EXHIBIT M: PAGE 2 OF 4

LIVING BENEFIT UNIVERSAL LIFE ILLUSTRATION
Policy Summary

| Scx: Male | Age: $\mathbf{3 5}$ | Premium Classification: | Standard |
| :--- | ---: | :--- | ---: |
| Prepared by: |  | Date: | $05 / 13 / 91$ |
| Total Death Benefit: | $\$ 100,000$ | Death Benefit Option: | 1 |
| Specified Amounr: | $\$ 75,000$ | Planned Payment Period: | 60 years |
| Accelerated Benefit: | $\$ 25,000$ | Coverage Period: | 60 years |
| Planned Annual Premium: | $\$ 705.53$ | Mode of Payment: | Annual |
| Initial Supp'l Premium: | $\$ 0.00$ | Total Modal Premium: | $\$ 705.53$ |

The annual deduction for $\mathbf{\$ 2 5 , 0 0 0}$ Accelerated Death Benefit: $\mathbf{\$ 7 6 . 8 2}$

| Age | Total Premium to Date | Total Withdr. to Date | Projected Values at $8.00 \%$ Interest |  |  | Guaranteed Values at $5.00 \%$ Interest |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Accum. <br> Value | Surrend. Value | Death Benefit | Accum. Value | Surrend. Value | Death <br> Benefit |
| 36 | 705 | 0 | 390 | 26 | 100,000 | 375 | 26 | 100,000 |
| 37 | 1,411 | 0 | 886 | 161 | 100,000 | 758 | 60 | 100,000 |
| 38 | 2,116 | 0 | 1,410 | 670 | 100,000 | 1,144 | 446 | 100,000 |
| 39 | 2,822 | 0 | 1,963 | 1,208 | 100,000 | 1,532 | 835 | 100,000 |
| 40 | 3,527 | 0 | 2,555 | 1,783 | 100,000 | 1,920 | 1,222 | 100,000 |
| 41 | 4,233 | 0 | 3,189 | 2,419 | 100,000 | 2,305 | 1,642 | 100,000 |
| 42 | 4,938 | 0 | 3,866 | 3,109 | 100,000 | 2,684 | 2,056 | 100,000 |
| 43 | 5,644 | 0 | 4,580 | 3,835 | 100,000 | 3,055 | 2,462 | 100,000 |
| 44 | 6,349 | 0 | 5,343 | 4,608 | 100,000 | 3,415 | 2,857 | 100,000 |
| 45 | 7,055 | 0 | 7,652 | 6,925 | 100,000 | 5,410 | 4,887 | 100,000 |
| 46 | 7,760 | 0 | 8,640 | 7,868 | 100,000 | 5,827 | 5,339 | 100,000 |
| 47 | 8,466 | 0 | 9,694 | 8,922 | 100,000 | 6,228 | 5,775 | 100,000 |
| 48 | 9,171 | 0 | 10,811 | 10,038 | 100,000 | 6,610 | 6,192 | 100,000 |
| 49 | 9,877 | 0 | 12,005 | 11,228 | 100,000 | 6,969 | 6,586 | 100,000 |
| 50 | 10,582 | 0 | 13,277 | 12,493 | 100,000 | 7,300 | 6,951 | 100,000 |
| 51 | 11,288 | 0 | 14,632 | 14,353 | 100,000 | 7,599 | 7,320 | 100,000 |
| 52 | 11,994 | 0 | 16,074 | 15,865 | 100,000 | 7,857 | 7,648 | 100,000 |
| 53 | 12,699 | 0 | 17,609 | 17,470 | 100,000 | 8,066 | 7,926 | 100,000 |
| 54 | 13,405 | 0 | 19,242 | 19,172 | 100,000 | 8,215 | 8,145 | 100,000 |
| 55 | 14,110 | 0 | 23,404 | 23,404 | 100,000 | 11,587 | 11,587 | 100,000 |
| 65 | 21,165 | 0 | 55,054 | 55,054 | 100,000 | 14,581 | 14,581 | 100,000 |
| 70 | 24,693 | 0 | 80,001 | 80,001 | 117,802 | 2,714 | 2,714 | 100,000 |
| 95 | 42,331 | 0 | 422,989 | 422,989 | 452,219 | * | * | * |


| Intcrest Adjusted Cost Indices (@5 percent) | Current Basis |  | Guaranteed Basis |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 10 Year | 20 Year | 10 Year | 20 Year |
| Net Payment Cost Index: | 7.05 | 7.05 | 7.05 | 7.05 |
| Surrender Cost Index: | 1.81 | 0.31 | 3.35 | 3.71 |
| Federally Legislated Guideline Single Premium is Federally Legislated Guideline Level Premium is |  |  | $\begin{aligned} & \$ 20,369.44 . \\ & \$ 1,532.15 . \end{aligned}$ |  |

*Based on guaranteed values, policy coverage would terminate during policy year 36 unless planned periodic premiums are increased at that point. Additional contributions that increase the death benefit of the policy may require evidence of insurability.

## NOTES TO THE UNIVERSAL LIFE ILLUSTRATION

Values are illustrated and based on premiums shown in the Total Premiums column of the Ledger Printout and are subject to policy provisions. Guaranteed values are calculated using the maximum cost of insurance factors that would be contained within the policy and a minimum guaranteed interest rate of $5.0 \%$. Projected values are calculated using projected cost of insurance factors, and a current nonguaranteed interest rate of $8.00 \%$, with an additional nonguaranteed persistency bonus of $.5 \%$ of additional interest beginning in the sixth policy year. The current interest rate and projected cost of insurance factors are not guaranteed and may be changed by the company. Your actual values under the insurance program may change with variations in the interest rates, cost-of-insurance factors (mortality risk charges), and frequency, timing, and amount of your premium payments. As plan values may change in the future due to these factors, subsequent and similar illustrations may be furnished to you upon request.

Projected costs of insurance factors are based upon our current estimations of future mortality experience and are not guaranteed,

The amourt of actual cash value available upon surrender of this coverage is subject to a surrender charge as described in your issued policy. During the first policy year, the amount of such charge would be $\$ 363.75$. Charges for subsequent policy years are shown on Page 1 of this proposal as the difference between accumulation value and surrender value.

In the event of a policy loan, interest at the rate of $7.4 \%$ would be due annually in advance. The current rate of interest being credited to policy values impaired by policy loans is $6.0 \%$
After the first policy year, withdrawals can be made against the net surrender value of the policy for a $\$ 25$ administrative charge, as long as the amount is at least $\$ 500$. After the withdrawal is made, at least $\$ 500$ must remain in the surfender value. Withdrawals decrease the death benefit of the policy by the amount withdrawn.

Premium contributions, loans, and withdrawals are illustrated as of the beginning of the year. All other amounts are shown as of the end of the year.

Death benefits are shown as being reduced by any applicable withdrawals or loans. Any increases in coverage requested by the policyholder may require evidence of insurability, and are subject to the appropriate cost of insurance deductions.

## EXHIBIT M: PAGE 4 OF 4

A corridor amount of coverage, designed to comply with the current tax code, must be maintained in order for the coverage to enjoy favorable tax treatment. As such, any single premium, or other substantial additional premium tendered, or any request for a reduction in coverage that would violate the requirements of the tax code may result in the loss of this favorable tax treatment. The tax status of this policy as it applies to the owner of this contract should be reviewed each year.

Every effort has been made to comply with current tax law. However, due to the complexities and frequent changes in the tax code, premium patterns illustrated may not comply with all federal limitations. The content of this illustration should not be interpreted as assurance that premium tests have been satisfactorily met. In the event actual premiums received may adversely affect tax treatment, the policyowner will be notified. For complete information, it is recommended that a qualified tax advisor be consulted.

An explanation of the intended use of the cost indices is provided in the Life Insurance Buyer's Guide. Such indices are useful only for the comparison of the relative costs of two or more similar policies. These indices have been calculated using the interest adjusted method with an assumed interest rate of $5 \%$.
At the end of the 10th policy year, $\$ 1,500.94$ was returned to the projected accumulation value by the UL- $300+$ Plus.

UL- $300+$ Plus is subject to guidelines which are numerous and complex. Please consult the policy form for complete details and information. Projected cost-of-insurance factors are based upon our current estimations of future mortality experience and are not guaranteed.

The schedule of premiums illustrated on this proposal would qualify the policy for the UL-300 + Plus return of mortality bonus through the 60th year, assuming there were no loans or withdrawals which violated the UL-300 + Plus guidelines. (See the policy for full details.)

This illustration includes an accelerated benefit rider which will pay a pre-death benefit for the conditions outlined in the policy. If the benefit is not paid sooner, it will be included as a death benefit.

## EXHIBIT N

Statement of Certificate (Policy) Cost and Benefit Information Yearly Renewable Term Illustration


Cost Comparison Indexes-Based on $5.00 \%$ Interest

|  | $\frac{10 \text { Years }}{}$ | $\frac{20 \text { Ycars }}{2.82}$ |
| :--- | :---: | :---: |
| Life Insurance Surrender Cost Index | 2.02 | 2.82 |

An explanation of the intended use of these indexes is provided in the buyer's guide.
*This May 30, 1991 illustration is based on the assumptions shown. Columns marked with an * are neither guarantees nor estimates. Actual experience may be different.

## EXHIBIT O

Protector Illustration
Policy Summary


The rates shown for the first 10 years are guaranteed. The re-entry rates shown are not guaranteed and are subject to evidence of insurability. The rates shown under the re-entry columns assume that you elect to re-enter and meet the necessary qualifications.
This proposal is for illustration purposes only and is not a contract.

## EXHIBIT P: PAGE 1 OF 2

| Illustration for: Sample output for SOA |  |  |  |  |  | Age: 55 Male Nonsmoker 55 Female Nonsmoker |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Provided by: |  |  |  |  |  |  |  |  |  |
| Coverage Summary: Amount 1,000,000 |  |  |  | To Agc 100 |  | Annual Premium 15,550.00 Annualized Premium $15,550.00$ <br> Total $15,550.00$ $15,550.00$ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Age | $\begin{array}{\|c\|} \hline \text { End } \\ \text { of } \\ \text { Year } \\ \hline \end{array}$ | Annual Premium | Total <br> Annual <br> Dividend | PUA Amount | PUA <br> Cash <br> Value | Gtd <br> Cash <br> Value | Total <br> Cash <br> Value | Total Reduced Paid-up | Total <br> Death <br> Benefit |
| 56 | 1 | 15,550 | 0 | 0 | 0 | 0 | 0 | 0 | 1,000,000 |
| 57 | 2 | 15,550 | 0 | 0 | 0 | 15,980 | 15,980 | 66,797 | 1,000,000 |
| 58 | 3 | 15,550 | 290 | 1,150 | 290 | 32,710 | 33,000 | 130,865 | 1,001,150 |
| 59 | 4 | 15,550 | 702 | 3,794 | 1,008 | 50,210 | 51,218 | 192,768 | 1,003,794 |
| 60 | 5 | 15,550 | 1,314 | 8,489 | 2,376 | 68,500 | 70,876 | 253,278 | 1,008,489 |
| 61 | 6 | 15,550 | 2,095 | 15,601 | 4,596 | 87,580 | 92,176 | 312,899 | 1,015,601 |
| 62 | 7 | 15,550 | 3,166 | 25,815 | 8,002 | 107,470 | 115,472 | 372,535 | 1,025,815 |
| 63 | 8 | 15,550 | 4,533 | 39,722 | 12,948 | 128,160 | 141,108 | 432,904 | 1,039,722 |
| 64 | 9 | 15,550 | 6,327 | 58,191 | 19,934 | 149,620 | 169,554 | 494,968 | 1,058,191 |
| 65 | 10 | 15,550 | 8,523 | 81,883 | 29,456 | 171,850 | 201,306 | 559,596 | 1,081,883 |
| 66 | 11 | 15,550 | 10,679 | 110,172 | 41,587 | 194,790 | 236,377 | 626,207 | 1,110,172 |
| 67 | 12 | 15,550 | 13,334 | 143,866 | 56,935 | 218,430 | 275,365 | 695,807 | 1,143,866 |
| 68 | 13 | 15,550 | 16,404 | 183,437 | 76,041 | 242,730 | 318,771 | 768,981 | 1,183,437 |
| 69 | 14 | 15,550 | 19,872 | 229,244 | 99,452 | 267,680 | 367,132 | 846,266 | 1,229,244 |
| 70 | 15 | 15,550 | 22,897 | 279,724 | 126,879 | 293,240 | 420,119 | 926,215 | 1,279,724 |
| 71 | 16 | 15,550 | 26,207 | 335,039 | 158,732 | 319,350 | 478,082 | 1,009,095 | 1,335,039 |
| 72 | 17 | 15,550 | 29,901 | 395,535 | 195,501 | 345,860 | 541,361 | 1,095,275 | 1,395,535 |
| 73 | 18 | 15,550 | 33,854 | 461,264 | 237,576 | 372,740 | 610,316 | 1,184,955 | 1,461,264 |
| 74 | 19 | 15,500 | 38,259 | 532,648 | 285,476 | 399,780 | 685,256 | 1,278,568 | 1,532,648 |
| 75 | 20 | 15,550 | 42,869 | 609,635 | 339,469 | 426,790 | 766,259 | 1,376,086 | 1,609,635 |
| 76 | 21 | 15,550 | 47,730 | 692,271 | 399,850 | 453,630 | 853,480 | 1,477,654 | 1,692,271 |
| 77 | 22 | 15,550 | 53,094 | 781,040 | 467,156 | 480,190 | 947,346 | 1,583,871 | 1,781,040 |
| 78 | 23 | 15,550 | 58,773 | 876,085 | 541,744 | 506,380 | 1,048,124 | 1,694,981 | 1,876,085 |
| 79 | 24 | 15,550 | 64,778 | 977,569 | 623,989 | 532,170 | 1,156,159 | 1,811,291 | 1,977,569 |
| 80 | 25 | 15,550 | 70,952 | 1,085,415 | 714,089 | 557,500 | 1,271,589 | 1,932,815 | 2,085,415 |
| 81 | 26 | 15,550 | 77,331 | 1,199,631 | 812,221 | 582,290 | 1,394,511 | 2,059,658 | 2,199,631 |
| 82 | 27 | 15,550 | 84,460 | 1,321,034 | 919,040 | 606,400 | 1,525,440 | 2,192,678 | 2,321,034 |
| 83 | 28 | 15,550 | 92,112 | 1,450,102 | 1,034,897 | 629,650 | 1,664,547 | 2,332,371 | 2,450,102 |
| 84 | 29 | 15,550 | 100,736 | 1,587,939 | 1,160,518 | 651,840 | 1,812,358 | 2,479,853 | 2,587,939 |
| 85 | 30 | 15,550 | 109,742 | 1,734,829 | 1,296,096 | 672,890 | 1,968,986 | 2,635,495 | 2,734,829 |

## EXHIBIT P: PAGE 2 OF 2

| Illustration for: |  | Sample ourput for SOA |  |  |  | Age: 55 Male Nonsmoker 55 Joint Equal Age |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUMMARY |  |  |  |  |  |  |  |  |  |
|  | End | Accum. | tal |  | PUA | Grd | al | Total | al |
|  | of | Annual | Annual | PUA | Cash | Cash | Cash | Reduced | Death |
| Age | Year | Premium | Dividend | Amount | Value | Value | Value | Paid-up | Benefit |
| 65 | 10 | 155,500 | 8,523 | 81,883 | 29,456 | 171,850 | 201,306 | 559,596 | 1,081,883 |
| 70 | 15 | 233,250 | 22,897 | 279,724 | 126,879 | 293,240 | 420,119 | 926,215 | 1,279,724 |
| 75 | 20 | 311,000 | 42,869 | 609,635 | 339,469 | 426,790 | 766,259 | 1,376,086 | 1,609,635 |
| 85 | 30 | 466,500 | 109,742 | 1,734,829 | 1,296,096 | 672,890 | 1,968,986 | 2,635,495 | 2,734,829 |
| 95 | 40 | 622,000 | 229,832 | 3,788,710 | 3,338,184 | 846,190 | 4,184,374 | 4,749,103 | 4,788,710 |
| 100 | 45 | 699,750 | 279,958 | 5,363,390 | 5,363,390 | 1,000,000 | 6,363,390 | 6,363,390 | 6,363,390 |


|  |  | Interest Adjusted Indices @ 5.00\% |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 10 Year 20 Year |  |  |
| Surrender Cost Index |  | 0.49 |  |  |
| Net Payment Index |  | 13.51 |  |  |
| Equivalent Level Annual Dividend |  | 2.04 |  |  |
|  | Guaranteed Values |  | Current Values |  |
|  | Life Only | 10 Yr. Cert. | Life Only | 10 Yr. Cert. |
| Monthly Income at Age 65 | 1,147.96 | 1,074.06 | 1,898.32 | 1,797.66 |

Dividends buy paid-up additions to age 100.
Dividends in this illustration are based on the current dividend scale and are neither guaranteed nor estimated for the future.
Issue of this policy at the rates illustrated is subject to underwriting approval.
Based on an initial seven pay premium of $35,900.00$. This policy is not a modified endowment contract.
The death benefit shown is paid upon the second death. No insurance benefits other than the optional 1 st-death term rider are payable at the first death. Age shown is based upon the joint equal age and is not necessarily the age of either insured.

## EXHIBIT Q: PAGE 1 OF 15



## EXHIBIT Q: PAGE 2 OF 15

| Policy Year | (1) <br> Annual Outlay | (2) <br> Cum <br> Annual Outlay | (3) <br> Total <br> Divid | (4) <br> Face <br> One <br> Year <br> Term | (5) <br> Face <br> Amt <br> of <br> Adds | (6) <br> Face Amount R/Adds | (7) <br> Guar <br> Cash <br> Value <br> Yr End | (8) <br> Cash <br> Valus <br> of <br> Adds | (9) <br> Nel <br> Cash <br> Value <br> Yt End | (10) <br> Death <br> Benefit <br> Begin <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 | 0 | 101,192 | 26,045 | 404,003 | 86,298 | 9,700 | 278,850 | 66,579 | 375,244 | 1,000,000 |
| 27 | 0 | 101,192 | 27,738 | 390,821 | 99,479 | 9,700 | 290,505 | 78,306 | 399,737 | 1,000,000 |
| 28 | 0 | 101,192 | 29,508 | 377,266 | 113,035 | 9,700 | 301,890 | 90,728 | 424,687 | 1,000,000 |
| 29 | 0 | 101,192 | 31,372 | 363,345 | 126,955 | 9,700 | 312,930 | 103,830 | 449,997 | 1,000,000 |
| 30 | 0 | 101,192 | 33,327 | 349,069 | 141,231 | 9,700 | 323,590 | 117,587 | 475,563 | 1,000,000 |
| 31 | 0 | 101,192 | 35,320 | 334,482 | 155,818 | 9,700 | 333,870 | 131,951 | 501,295 | 1,000,000 |
| 32 | 0 | 101,192 | 37,303 | 319,659 | 170,641 | 9,700 | 343,815 | 146,849 | 527,153 | 1,000,000 |
| 33 | 0 | 101,192 | 39,249 | 304,677 | 185,624 | 9,700 | 353,485 | 162,215 | 553,114 | 1,000,000 |
| 34 | 0 | 101,192 | 41,130 | 289,587 | 200,714 | 9,700 | 362,990 | 178,013 | 579,247 | 1,000,000 |
| 35 | 0 | 101,192 | 42,933 | 274,416 | 215,885 | 9,700 | 372,445 | 194,243 | 605,680 | 1,000,000 |
| 36 | 0 | 101,192 | 44,660 | 259,115 | 231,186 | 9,700 | 382,005 | 210,997 | 632,674 | 1,000,000 |
| 37 | 0 | 101,192 | 46,330 | 243,546 | 246,755 | 9,700 | 391,855 | 228,469 | 660,609 | 1,000,000 |
| 38 | 0 | 101,192 | 47,944 | 227,511 | 262,789 | 9,700 | 402,210 | 246,944 | 690,004 | 1,000,000 |
| 39 | 0 | 101,192 | 49,533 | 210,678 | 279,622 | 9,700 | 413,320 | 266,892 | 721,606 | 1,000,000 |
| 40 | 0 | 101,192 | 51,146 | 192,540 | 297,761 | 9,700 | 425,390 | 288,985 | 756,356 | 1,000,000 |
| 41 | 0 | 101,192 | 52,898 | 172,264 | 318,036 | 9,700 | 438,465 | 314,221 | 795,356 | 1,000,000 |
| 42 | 0 | 101,192 | 54,932 | 148,797 | 341,503 | 9,700 | 452,535 | 343,844 | 839,807 | 1,000,000 |
| 43 | 0 | 101,192 | 57,251 | 120,446 | 369,854 | 9,700 | 467,410 | 379,609 | 890,963 | 1,000,000 |
| 44 | 0 | 101,192 | 59,454 | 85,401 | 404,900 | 9,700 | 483,205 | 422,708 | 948,338 | 1,000,000 |
| 45 | 0 | 101,192 | [58,557 | 55,198 | 435,102 | 9,700 | 500,000 | 463,236 | 1,005,349 1 | 1,000,000 |

Please see attached sheets with important footnotes

| Summary at 20 yrs |  |  |
| :---: | :---: | :---: |
| Total Premiums: |  | 101,191 |
| (Less) Total Cash Value: |  | 241,501 |
| (Guaranteed) | 206,035 |  |
| (Value of Dividends) | 35,466 |  |
| Difference |  | -140,310 |
| Average Difference per Year |  | -7,015 |
| Average Death Benefit | 1,006,626 |  |
| 5\% Interest-Adjusted Costs(1): |  |  |
| At 10 Years | 3.85 |  |
| At 20 Years | -1.76 |  |
| 5\% Interest-Adjusted Payments: |  |  |
| At 10 Years | 16.64 |  |
| At 20 Years | 10.11 |  |

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is $4.00 \%$.

All cash values shown are end-of-year values.
All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on the 1991 dividend scalc.
Actual future dividends may be higher or lower than those illustrated depending on the company's actual future experience.
The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.
Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance al a discount rate equivalent to an annual rate of $8.00 \%$. Dividends are affected by policy loans. Under current economic conditions, in any given policy year the greater the amount of loan, the smaller the dividend. (This does not apply to economix term, which has no loan value.)
The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

The death benefit is payable only when both insureds have died.
The target additional amount shown in this illustration is only available if PUA/PUI payments and OYT premiums illustrated are paid. If payments are not made, the target amount may be reduced.
The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.

The initial number of years of cash outlays shown in this illustration may be less than the required number because of the manner in which the illustration was requested. If so, additional cash outlays will be required in later years.

The number of years of required cash outlays depends upon ages at issue, smoking classifications, policy class, face amount, and continuation of current dividend scale and one-year term rates, and assumes no policy loans. This is not an automatic dividend option. Policyowner must request change of dividend option at policy year indicated. He may pay the balance of premium by surrendering a portion of paid up insurance. This is not a paid-up policy; premiums are due and payable in all policy ycars.
(1) Interest-adjusted cost indexes are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insureds' estates, legal adviec should be obtained from qualified counsel.

EXHIBIT Q: PAGE 4 OF 15


EXHIBIT Q: PAGE 5 OF 15

| Policy Ycar | (1) <br> Net Premium | (2) <br> Total <br> Divid | (3) <br> Face <br> Amt <br> of <br> Adds | (4) Face Amount R/Adds | (5) <br> Face <br> One <br> Year <br> Term | (6) Cost of Div Term Ins | (7) OYT <br> Cost <br> per Thousnd | (8) <br> Guat <br> Cash <br> Value <br> Yr End | (9) <br> Ne: <br> Cash <br> Value <br> Yr End | (10) <br> Death <br> Bencfit <br> Begin <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 9,619 | 15,536 | 152,053 | 11,080 | 336,867 | 1,920 | 5.70 | 218,445 | 339,509 | 00 |
| 22 | 9,619 | 17,096 | 175,256 | 11,080 | 313,665 | 2,309 | 7.36 | 230,735 | 371,135 | 1,000,000 |
| 23 | 9,619 | 18,693 | 199,686 | 11,080 | 289,235 | 2,736 | 9.46 | 242,920 | 404,220 | 1,000,000 |
| 24 | 9,619 | 20,325 | 225,301 | 11,080 | 263,620 | 3,192 | 12.11 | 255,010 | 438,781 | 1,000,000 |
| 25 | 9,619 | 21,981 | 252,083 | 11,080 | 236,837 | 3,650 | 15.41 | 267,000 | 474,886 | 1,000,000 |
| 26 | 9,619 | 23,696 | 280,406 | 11,080 | 208,514 | 3,872 | 18.57 | 278,850 | 512,826 | 1,000,000 |
| 27 | 9,619 | 25,508 | 310,524 | 11,080 | 178,396 | 3,968 | 22.24 | 290,505 | 552,810 | 1,000,000 |
| 28 | 9,619 | 27,463 | 342,837 | 11,080 | 146,084 | 3,868 | 26.48 | 301,890 | 595,128 | 1,000,000 |
| 29 | 9,619 | 29,606 | 377,913 | 11,080 | 111,008 | 3,478 | 31.33 | 312,930 | 640,196 | 1,000,000 |
| 30 | -9,619 | 31,966 | 416,504 | 11,080 | 72,416 | 2,670 | 36.87 | 323,590 | 688,573 | 1,000,000 |
| 31 | 9,619 | 34,508 | 459,511 | 11,080 | 29,410 | 1,268 | 43.13 | 333,870 | 741,047 | 1,000,000 |
| 32 | 9,619 | 37,222 | 506,858 | 11,080 | 0 | 0 | 50.15 | 343,815 | 797,713 | 1,017,938 |
| 33 | 9,619 | 40,077 | 557,018 | 11,080 | 0 | 0 | 57.96 | 353,485 | 857,467 | 1,068,097 |
| 34 | 9,619 | 42,988 | 609,994 | 11,080 | 0 | , | 66.53 | 362,990 | 920,515 | 1,121,07. |
| 35 | 9,619 | 45,928 | 665,750 | 11,080 | 0 | 0 | 75.86 | 372,445 | 987,131 | 1,176,829 |
| 36 | 9,619 | 48,897 | 724,243 | 11,080 | 0 | 0 | 85.87 | 382,005 | 1,057,668 | 1,235,32.3 |
| 37 | 9,619 | 51,903 | 785,430 | 11,080 | 0 | 0 | 96.51 | 391,855 | 1,132,573 | 1,296,509 |
| 38 | 9,619 | 54,916 | 849,210 | 11,080 | 0 | 0 | 107.77 | 402,210 | 1,212,380 | 1,360,290 |
| 39 | 9,619 | 57,941 | 915,475 | 11,080 | 0 | 0 | 119.59 | 413,320 | 1,297,819 | 1,426,555 |
| 40 | 9,619 | 61,005 | 984,115 | 11,080 | 0 | 0 | 131.95 | 425,390 | 1,389,652 | 1,495,195 |
| 41 | 9,619 | 64,208 | 1,055,110 | 11,080 | 0 | 0 | 144.79 | 438,465 | 1,488,467 | 1,566,190 |
| 42 | 9,619 | 67,668 | 1,128,555 | 11,080 | 0 | 0 | 159.22 | 452,535 | 1,594,696 | 1,639,635 |
| 43 | 9,619 | 71,257 | 1,204,386 | 11,080 | 0 | 0 | 174.27 | 467,410 | 1,707,351 | 1,715,465 |
| 44 | 9,619 | 73,970 | 1,281,495 | 11,080 | 0 | 0 | 189.89 | 483,205 | 1,820,682 | 1,792,575 |
| 45 | 9,619 | 69,914 | 1,352,788 | 11,080 | 0 | 0 | 350.00 | 500,000 | 1,936,764 | 1,863,868 |

Please sce attached sheets with important footnotes
Summary at 20 Yrs
$\begin{array}{lr}\text { Total Premiums: } & 197,383 \\ \text { (Less) Total Cash Value: } & 309,312\end{array}$
(Less) Total Cash Value:
(Value of Dividends) 103,277
Difference

$$
-111,929
$$

Average Difference per Year
Average Death Benefit 206,035
103,277

5\% Interest-Adjusted Costs(1):
At 10 years
5.31
At 20 Years $\quad 1.85$

5\% Interest-Adjusted Payments:

| At 10 Years | 18.10 |
| :--- | :--- |
| At 20 Years | 13.72 |

This illustration is based on the plan, face amount, dividend option and underwriting class specified by the agent. However, results based on dividends are based on a modified scale. The interest rate factor of this dividend scale is assumed to be a level $8.00 \%$, but other components of this scale are identical with the 1991 dividend scale. This illustration is intended to show what term insurance amounts and costs would be if the dividend scale decreases materially due to a reduction in interest rates.
Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these gurantees is $4.00 \%$.
All cash values shown are end-of-year values.
All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.
The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.
Figures depending on dividends are neither estimated nor guaranteed, but are based on a hypothetical dividend scale.
Actual future dividends may be higher or lower than those illustrated depending on the company's actual future experience.
The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.
Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end-of-year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.
The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of $8.00 \%$. Dividends are affected by policy loans. To the extent the dividend scale is based on an interest rate greater than $7.00 \%$, in any given policy year the greater the amount of loan, the smaller the dividend.

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

The death benefit is payable only when both insureds have died.
The target additional amount shown in this illustration is only available if PUA/PUI payments and OYT premiums illustrated are paid. If payments are not made, the target amount may be reduced.
The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death bencfit may not be maintained.
(1) Interest-adjusted cost indexes are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insureds' estates, legal advice should be obtained from qualified counsel.


EXHIBIT Q: PAGE 8 OF 15

| Policy Year | (1) <br> Total <br> Divid | (2) <br> Net Premium | (3) <br> Cum <br> Premium | (4) Face One Year Term | (5) Face Amt of Adds | (6) <br> Face <br> Amount <br> R/Adds | $\begin{aligned} & \text { (7) } \\ & \text { Guar } \\ & \text { Cash } \\ & \text { Value } \\ & \text { Yr End } \end{aligned}$ | (8) Cash Value of Adds | $\begin{gathered} \text { (9) } \\ \text { Net } \\ \text { Cash } \\ \text { Value } \\ \text { Yr End } \end{gathered}$ | (10) <br> Inct in <br> Total <br> Cash <br> Value | (11) Cum Premium Less Value | (12) <br> Death <br> Benefit <br> Begin <br> Year | (13) <br> Net Paid Up Insur |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 | 66,892 | 10,119 | 263,098 | 0 | 802,903 | 22,737 | 323,270 | 666,508 | 1,034,506 | 96,492 | -771,408 | 1,325,640 | 1,339,531 |
| 27 | 73,603 | 10,119 | 273,217 | 0 | 898,207 | 23,339 | 333,885 | 758,879 | 1,139,177 | 104,671 | -865,960 | 1,421,547 | 1,449,390 |
| 28 | 80,984 | 10,119 | 283,336 | 0 | 1,001,244 | 23,931 | 344,175 | 860,341 | 1,252,651 | 113,474 | -969,315 | 1,525,175 | 1,567,342 |
| 29 | 89,135 | 10,119 | 293,455 | 0 | 1,112,772 | 24,513 | 354,050 | 971,684 | 1,375,631 | 122,980 | - 1,082,176 | 1,637,285 | 1,694,231 |
| 30 | 98,163 | 10,119 | 303,575 | 0 | 1,233,669 | 25,085 | 363,485 | 1,093,740 | 1,508,872 | 133,241 | -1,205,298 | 1,758,755 | 1,830,911 |
| 31 | 108,035 | 10,119 | 313,694 | 0 | 1,364,762 | 25,650 | 372,475 | 1,227,349 | 1,653,173 | 144,301 | -1,339,479 | 1,890,411 | 1,978,213 |
| 32 | 118,745 | 10,119 | 323,813 | 0 | 1,506,854 | 26,206 | 381,050 | 1,373,416 | 1,809,445 | 156,272 | -1,485,632 | 2,033,060 | 2,136,954 |
| 33 | 130,291 | 10,119 | 333,932 | 0 | 1,660,728 | 26,755 | 389,250 | 1,532,855 | 1,978,641 | 169,196 | -1,644,709 | 2,187,483 | 2,307,991 |
| 34 | 142,711 | 10,119 | 344,051 | 0 | 1,827,194 | 27,298 | 397,155 | 1,706,746 | 2,161,905 | 183,264 | -1,817,854 | 2,354,492 | 2,492,138 |
| 35 | 155,997 | 10,119 | 354,170 | 0 | 2,007,020 | 27,834 | 404,855 | 1,896,215 | 2,360,466 | 198,561 | -2,006,295 | 2,534,853 | 2,690,265 |
| 36 | 170,210 | 10,119 | 364,289 | 0 | 2,201,011 | 28,364 | 412,455 | 2,102,596 | 2,575,768 | 215,303 | -2,211,479 | 2,729,375 | 2,903,256 |
| 37 | 185,412 | 10,119 | 374,409 | 0 | 2,409,997 | 28,888 | 420,085 | 2,327,391 | 2,809,448 | 233,679 | -2,435,039 | 2,938,885 | 3,131,944 |
| 38 | 201,610 | 10,119 | 384,528 | 0 | 2,634,750 | 29,406 | 427,910 | 2,572,396 | 3,063,474 | 254,027 | -2,678,947 | 3,164,156 | 3,377,144 |
| 39 | 218,855 | 10,119 | 394,647 | 0 | 2,876,014 | 29,919 | 436,130 | 2,839,711 | 3,340,171 | 276,697 | -2,945,524 | 3,405,932 | 3,639,680 |
| 40 | 237,238 | 10,119 | 404,766 | 0 | 3,134,524 | 30,425 | 444,940 | 3,131,872 | 3,642,313 | 302,142 | -3,237,547 | 3,664,950 | 3,920,428 |
| 41 | 256,945 | 10,119 | 414,885 | 0 | 3,411,088 | 30,926 | 454,415 | 3,451,559 | 3,972,737 | 330,424 | -3,557,852 | 3,942,014 | 4,220,658 |
| 42 | 278,491 | 10,119 | 425,004 | 0 | 3,706,959 | 31,420 | 464,535 | 3,801,630 | 4,334,303 | 361,566 | -3,909,299 | 4,238,379 | 4,541,819 |
| 43 | 302,195 | 10,119 | 435,123 | 0 | 4,023,623 | 31,907 | 474,905 | 4,182,860 | 4,727,330 | 393,027 | -4,292,207 | 4,555,530 | 4,885,220 |
| 44 | 327,970 | 10,119 | 445,243 | 0 | 4,362,547 | 32,388 | 484,975 | 4,592,150 | 5,147,674 | 420,344 | -4,702,432 | 4,894,934 | 5,249,301 |
| 45 | 352,851 | 10,119 | 455,362 | 0 | 4,722,363 | 32,862 | 500,000 | 5,023,131 | 5,588,517 | 440,843 | -5,133,155 | 5,255,225 | 5,588,517 |

Please see attached sheets with important footnotes
Summary at 20 yrs

| Total Premiums: |  | 202,383 | 5\% Interest-Adjusted Costs(1): |  |
| :---: | :---: | :---: | :---: | :---: |
| (Less) Total Cash Valuc: |  | 559,266 | At 10 Years | -4.86 |
| (Guaranteed) | 255,440 |  | At 20 Years | -8.28 |
| (Value of Dividends) | 303,826 |  | 5\% Interest-Adjusted Payments: |  |
| Difference |  | -356,883 | At 10 Years | 15.97 |
| Average Difference per Year |  | -17,844 | At 20 Years | 6.44 |
| Average Death Benefit | 1,012,351 |  |  |  |

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is $4.00 \%$.

All cash values shown are end of year values.
All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on the 1991 dividend scale.

Actual future dividends may be higher or lower than those illustrated depending on the company's actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivaient to an annual rate of $8.00 \%$. Dividends are affected by policy loans. Under current economic conditions, in any given policy year the greater the amount of loan, the smaller the dividend. (This does not apply to economix term, which has no loan value.)

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

The net paid up insurance shown is the amount that can be purchased with the end of year net cash value (remainder after loan has been repaid). Since repayment of the loan at this time may have tax consequences, you should consult your agent for alternatives.

Results in this illustration assume death of a specified insured in a certain policy year. Should death occur before or after that specified year, results will be different.

The death benefit is payable only when both insureds have died.
The target additional amount shown in this illustration is only available if PUA/PUI payments and OYT premiums illustrated are paid. If payments are not made, the target amount may be reduced.

The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.
(1) Interest-adjusted cost indices are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insureds' estates, legal advice should be obtained from qualified counsel. In __this illustration must be accompanied by the following supplemental illustrations.

## EXHIBIT Q: PAGE 10 OF 15



EXHIBIT Q: PAGE 11 OF 15

| Policy Year | (1) <br> Net Premium | (2) <br> Total <br> Divid | (3) <br> Face <br> Am: <br> of <br> Adds | (4) <br> Face <br> Amount <br> R/Adds | (5) <br> Face <br> One <br> Year <br> Term | (6) <br> Cost <br> of Div <br> Term <br> Ins | (7) OYt Cost Per Thousnd | $\begin{gathered} \text { (8) } \\ \text { Guar } \\ \text { Cash } \\ \text { Value } \\ \text { Yr End } \\ \hline \end{gathered}$ | $\begin{gathered} \text { (9) } \\ \text { Net } \\ \text { Cash } \\ \text { Value } \\ \text { Yr End } \end{gathered}$ | (10) <br> Death <br> Bencfit <br> Begin <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 10,119 | 15,842 | 154,969 | 20,602 | 324,428 | 1,849 | 5.70 | 218,445 | 347,792 | 1,000,000 |
| 22 | 10,119 | 17,452 | 178,891 | 21,332 | 299,777 | 2,206 | 7.36 | 230,735 | 380,617 | 1,000,000 |
| 23 | 10,110 | 19,104 | 204,175 | 22,044 | 273,782 | 2,590 | 9.46 | 242,920 | 415,028 | 1,000,000 |
| 24 | 10,119 | 20,797 | 230,806 | 22,739 | 246,455 | 2,985 | 12.11 | 255,010 | 451,069 | 1,000,000 |
| 25 | 10,119 | 22,520 | 258,805 | 23,418 | 217,776 | 3,356 | 15.41 | 267,000 | 488,842 | 1,000,000 |
| 26 | 10,119 | 24,311 | 288,569 | 24,083 | 187,348 | 3,479 | 18.57 | 278,850 | 528,664 | 1,000,000 |
| 27 | 10,119 | 26,209 | 320,399 | 24,733 | 154,868 | 3,444 | 22.24 | 290,505 | 570,790 | 1,000,000 |
| 28 | 10,119 | 28,263 | 354,757 | 25,369 | 119,873 | 3,174 | 26.48 | 301,890 | 615,568 | 1,000,000 |
| 29 | 10,119 | 30,522 | 392,294 | 25,994 | 81,712 | 2,560 | 31.33 | 312,930 | 663,488 | 1,000,000 |
| 30 | 10,119 | 33,019 | 433,870 | 26,606 | 39,524 | 1,457 | 36.87 | 323,590 | 715,208 | 1,000,000 |
| 31 | 10,119 | 35,721 | 480,087 | 27,208 | , | 1, 0 | 43.13 | 333,870 | 771,289 | 1,007,295 |
| 32 | 10,119 | 38,609 | 529,199 | 27,799 | 0 | 0 | 50.15 | 343,815 | 830,431 | 1,056,999 |
| 33 | 10,119 | 41,586 | 581,247 | 28,381 | 0 | 0 | 57.96 | 353,485 | 892,803 | 1,109,629 |
| 34 | 10,119 | 44,623 | 636,237 | 28,954 | 0 | 0 | 66.53 | 362,990 | 958,620 | 1,165,192 |
| 35 | 10,119 | 47,691 | 694,134 | 29,519 | 0 | 0 | 75.86 | 372,445 | 1,028,168 | 1,223,653 |
| 36 | 10,119 | 50,792 | 754,895 | 30,075 | 0 | 0 | 85.87 | 382,005 | 1,101,813 | 1,284,970 |
| 37 | 10,119 | 53,934 | 818,475 | 30,623 | 0 | 0 | 96.51 | 391,855 | 1,180,021 | 1,349,098 |
| 38 | 10,119 | 57,084 | 884,773 | 31,163 | 0 | 0 | 107.77 | 402,210 | 1,263,344 | 1,415,937 |
| 39 | 10,119 | 60,248 | 953,677 | 31,695 | 0 | 0 | 119.59 | 413,320 | 1,352,544 | 1,485,372 |
| 40 | 10,119 | 63,455 | 1,025,073 | 32,218 | 0 | 0 | 131.95 | 425,390 | 1,448,409 | 1,557,291 |
| 41 | 10,119 | 66,805 | 1,098,939 | 32,733 | 0 | 0 | 144.79 | 438,465 | 1,551,554 | 1,631,672 |
| 42 | 10,119 | 70,423 | 1,175,374 | 33,237 | 0 | 0 | 159.22 | 452,535 | 1,662,428 | 1,708,611 |
| 43 | 10,119 | 74,174 | 1,254,308 | 33,732 | 0 | 0 | 174.27 | 467,410 | 1,780,011 | 1,788,040 |
| 44 | 10,119 | 77,010 | 1,334,587 | 34,217 | 0 | 0 | 189.89 | 483,205 | 1,898,323 | 1,868,804 |
| 45 | 10,119 | 72,800 | 1,408,823 | 34,691 | 0 | 0 | 350.00 | 500,000 | 2,019,496 | 1,943,515 |

Please see attached sheets with important footnotes

| Summary at 20 yrs |  |  |
| :--- | ---: | ---: |
| Total Premiums: |  | 202,383 |
| (Less) Total Cash Value: |  |  |
| $\quad$ (Guaranteed) | 206,035 | 316,505 |
| $\quad$ (Value of Dividends) | 110,470 |  |
| Difference |  | $-114,122$ |
| Average Difference per Year |  | $-5,706$ |
| Average Death Benefit | $1,004,646$ |  |

$\begin{array}{ll}5 \% \text { Interest-Adjusted Costs(1): } & \\ \text { At } 10 \text { Years } & 5.31 \\ \text { At } 20 \text { Years } & 1.85\end{array}$
5\% Interest-Adjusted Payments:

| At 10 Years | 18.10 |
| :--- | :--- |
| At 20 Years | 13.72 |

This illustration is based on the plan, face amount, dividend option and underwriting class specified by the agent. However, results based on dividends are based on a modified scale. The interest rate factor of this dividend scale is assumed to be a level $8.00 \%$, but other components of this scale are identical with the 1991 dividend scale. This illustration is intended to show what term insurance amounts and costs would be if the dividend scale decreases materially due to a reduction in interest rates.

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is $4.00 \%$.

All cash values shown are end of year values.
All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on a hypothetical dividend scale.

Actual future dividends may be higher or lower than those illustrated depending on the company's actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus riders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other variables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of $8.00 \%$. Dividends are affected by policy loans. To the extent the dividend scale is based on an interest rate greater than $7.00 \%$, in any given policy year the greater the amount of loan, the smaller the dividend.

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

The death benefit is payable only when both insureds have died.
The target additional amount shown in this illustration is only available if PUA/PUI payments and OYT premiums illustrated are paid. If payments are not made, the target amount may be reduced.

The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.
(1) Interest-adjusted cost indices are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insureds' estates, legal advice should be obtained from qualified counsel.
In ___ this illustration must be accompanied by the following supplemental illustrations.

EXHIBIT Q: PAGE 13 OF 15


EXHIBIT Q: PAGE 14 OF 15

| $\begin{gathered} \text { Pol- } \\ \text { icy } \\ \text { Year } \end{gathered}$ | (1) <br> Annual Outlay | (2) <br> Cum <br> Annual <br> Outlay | (3) <br> Total <br> Divid | (4) <br> Fact <br> One <br> Year <br> Term | (5) <br> Face <br> Amt <br> of <br> Adds | (6) Face Amount R/Adds | (7) <br> Guar <br> Cash <br> Value <br> Yr End | (8) <br> Cash Value of Adds | (9) Net <br> Cash <br> Value <br> Yi End | (10) <br> Death <br> Benefit <br> Begin <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 | 0 | 101,192 | 42,424 | 168,105 | 320,816 | 11,080 | 323,270 | 266,429 | 625,424 | 1,000,000 |
| 27 | 0 | 101,192 | 45,835 | 124,805 | 364,115 | 11,080 | 333,885 | 307,727 | 678,389 | 1,000,000 |
| 28 | 0 | 101,192 | 49,612 | 76,499 | 412,422 | 11,080 | 344,175 | 354,454 | 736,493 | 1,000,000 |
| 29 | 0 | 101,192 | 53,847 | 22,023 | 466,897 | 11,080 | 354,050 | 407,747 | 800,787 | 1,000,000 |
| 30 | 0 | 101,192 | 58,644 | 0 | 527,276 | 11,080 | 363,485 | 467,492 | 871,081 | 1,038,356 |
| 31 | 0 | 101,192 | 63,932 | 0 | 593,181 | 11,080 | 372,475 | 533,451 | 947,099 | 1,104,260 |
| 32 | 0 | 101,192 | 69,650 | 0 | 665,014 | 11,080 | 381,050 | 606,094 | 1,029,314 | 1,176,094 |
| 33 | 0 | 101,192 | 75,788 | 0 | 743,160 | 11,080 | 389,250 | 685,880 | 1,118,228 | 1,254,240 |
| 34 | 0 | 101,192 | 82,368 | 0 | 828,018 | 11,080 | 397,155 | 773,351 | 1,214,441 | 1,339,098 |
| 35 | 0 | 101,192 | 89,377 | 0 | 919,959 | 11,080 | 404,855 | 869,058 | 1,318,608 | 1,431,038 |
| 36 | 0 | 101,192 | 96,851 | 0 | 1,019,378 | 11,080 | 412,455 | 973,659 | 1,431,498 | 1,530,458 |
| 37 | 0 | 101,192 | 104,821 | 0 | 1,126,684 | 11,080 | 420,085 | 1,087,901 | 1,553,983 | 1,637,764 |
| 38 | 0 | 101,192 | 113,290 | 0 | 1,242,255 | 11,080 | 427,910 | 1,212,665 | 1,687,120 | 1,753,335 |
| 39 | 0 | 101,192 | 122,284 | 0 | 1,366,456 | 11,080 | 436,130 | 1,348,992 | 1,832,163 | 1,877,536 |
| 40 | 0 | 101,192 | 131,855 |  | 1,499,653 | 11,080 | 444,940 | 1,498,143 | 1,990,610 | 2,010,732 |
| 41 | 0 | 101,192 | 142,109 | 0 | 1,642,259 | 11,080 | 454,415 | 1,661,477 | 2,163,974 | 2,153,339 |
| 42 | 0 | 101,192 | 153,338 | 0 | 1,794,946 | 11,080 | 464,535 | 1,840,495 | 2,353,757 | 2,306,026 |
| 43 | 0 | 101,192 | 165,713 |  | 1,958,514 | 11,080 | 474,905 | 2,035,706 | 2,560,021 | 2,469,594 |
| 44 | 0 | 101,192 | 179,180 | 0 | 2,133,738 | 11,080 | 484,975 | 2,245,697 | 2,780,326 | 2,644,818 |
| 45 | 0 | 101,192 | 192,057 |  | [2,319,778 | 11,080 | 500,000 | 2,467,205 | 3,010,808 | 2,830,857 |

Please see attached sheets with important footnotes

| Summary at 20 yrs |  |  |
| :--- | ---: | ---: |
| Total Premiums: |  | 101,191 |
| (Less) Total Cash Value: |  |  |
| $\quad$(Guaranteed) | 255,440 | 381,726 |
| $\quad$ (Value of Dividends) | 126,286 |  |
| Difference |  | $-280,534$ |
| Average Difference per Year |  | $-14,026$ |
| Average Death Benefit | $1,010,208$ |  |
| 5\% Interest-Adjusted Costs(1): |  |  |
| At 10 Years | -4.86 |  |
| At 20 Years | -8.28 |  |
| 5\% Interest-Adjusted Payments: |  |  |
| At 10 Years | 15.97 |  |
| At 20 Years | 6.44 |  |

Guaranteed cash values as shown on this illustration are only available if all premiums have been paid. The annual rate of interest underlying the computation of these guarantees is $4.00 \%$.

All cash values shown are end of year values.
All illustrations for individual life insurance products are tested for the possibility of classification as a modified endowment for the purposes of federal income taxation. This test applies to policies entered into after June 20, 1988 and may not be used for policies in force before that date.

The illustrated outlays shown on this illustration would not cause it to be classified as a modified endowment. This test is not a guarantee that a particular policy will not be classified as a modified endowment in the future.

Figures depending on dividends are neither estimated nor guaranteed, but are based on the 1991 dividend scale.

Actual future dividends may be higher or lower than those illustrated depending on the company's actual future experience.

The cost of the above policy over a period of years cannot be determined without taking into account the interest that would have been earned had the premiums been invested rather than paid to the insurer.

Net death benefit on all permanent plans means the face amount plus siders, if any, plus the end of year dividend less policy loans. A full dividend is not generally paid upon death during the policy year. Other yariables are possible. Your agent will define the rules upon request.

The policy loan interest rate shown on your illustration is payable in advance at a discount rate equivalent to an annual rate of $8.00 \%$. Dividends are affected by policy loans. Under current economic conditions, in any given policy year the greater the amount of loan, the smaller the dividend. (This does not apply to economix term, which has no loan value.)

The illustration is calculated assuming that the policy split option is included. The policy split option is included in a policy if it insures two lives married to each other. Your agent can supply details on the importance of this feature and details regarding its exercise.

Results in this illustration assume death of a specified insured in a certain policy year. Should death occur before or after that specified year, results will be different.

The death benefit is payable only when both insureds have died.
The target additional amount shown in this illustration is only available if PUA/PUI payments and OYT premiums illustrated are paid. If payments are not made, the target amount may be reduced.

The death benefits in this illustration, particularly in the later policy years, are sensitive to the schedule of PUA or PUI deposits as well as the current dividend scale. If the schedule of deposits is not maintained, or the dividend scale is decreased, the death benefit may not be maintained.

The number of years of required cash outlays depends upon ages at issue, smoking classifications, policy class, face amount, and continuation of current dividend scale and one year term rates, and assumes no policy loans. This is not an automatic dividend option. Policy owner must request change of dividend option at policy year indicated. He may pay the balance of premium by surrendering a portion of paid-up insurance. This is not a paid-up policy; premiums are due and payable in all policy years.
(1) Interest-adjusted cost indices are based on the policy excluding riders and are useful in comparing policies of similar types.

While it may be possible to exclude the proceeds of this policy from the insureds' estates, legal advice should be obtained from qualified counsel.

## APPENDIX III <br> SUMMARY OF COMMENTS ON THE PRELIMINARY REPORT

The Task Force received a number of comments on the preliminary report, both in writing and at the open forums. These comments are summarized below. The Task Force carefully reviewed these comments in the development of our conclusions. Copies of all correspondence will be made available to the AAA and CIA for their consideration.

## Applicability to variable life

Several commenters noted that the alternatives identified were not appropriate for variable life policies.

The Task Force agreed that our report focused on the illustration practices for general account policies. The first section was changed to exclude variable life policies from the scope of our research, other than as an alternative illustration model.

## Define the problem and the role of the actuary

Several commenters suggested the need to define the problems with illustrations at an earlier point in the report and the role of the actuary in solving these problems.

The Task Force agreed and added these points to the first section.

## Research methodology

Many commenters suggested that our research should include consumer interviews or focus groups.

The Task Force discussed this approach with market researchers associated with LIMRA. They indicated that focus groups would tell us how they think they should have used illustrations during the sales process, as opposed to how the illustration was actually reviewed and considered by the buyer. For this reason, we did not pursue this methodology.

## What data should be on the illustration

One commenter noted that our Task Force does not define the data that every consumer should have available on the illustration.

The Task Force used current regulations to define a starting point. We recommended changes as we deemed necessary and appropriate.

## Valuation

One commenter suggested that the underlying problem in the U.S. is its conservative valuation procedures.

The Task Force believes the revision of valuation procedures is beyond the scope of our research.

## Concerns with current practices

Several commenters brought what they considered unique or questionable illustration practices to our attention to ensure that the final report would encompass these practices.

The Task Force considered these comments in developing our conclusions.

## Alternatives to Type B usage

Many commenters agreed with the conclusion that illustrations cannot be used for Type B analysis in today's environment. Those who disagreed argued that consumers require a tool to measure relative performance. Among their comments were:

- It should be possible to provide reasonable estimates of future performance based on credible assumptions
- Sensitivity analysis or the range approach should help the consumer determine variation
- Illustrations are the best indicator until some better measure is developed.

The Task Force acknowledges that a methodology for measuring and comparing products should be developed. We have added a recommendation that the SOA continue research in this area. We strongly support sensitivity analysis and the use of reasonable, credible assumptions, but that still does not address the variation among companies regarding relative conservatism in the choice of underlying assumptions.

## Concerns with alternative practices

Many commenters pointed out concerns and problems with the suggested alternatives in the areas of implementation, helpfulness to the consumer, and potential for abuse.

The Task Force considered these comments in restructuring the alternatives and developing conclusions on each.

## Disclosure and standards

Many commenters stated a preference for solutions involving improved disclosure or standards of practice, rather than increased regulation. Some even provided sample disclosures for the illustration.

These comments will be passed on to the CIA and AAA for their consideration in developing an implementation plan for changes to illustration practices.

## Limited control by actuaries

Several commenters noted that the illustration practices are set by company management, with input from the actuaries. Further, neither the actuaries nor management are present when the agent meets with the buyer. Therefore, there is little that actuaries can effectively do to change industry practices.

The Task Force acknowledges the fact that the role of the actuary in the illustration process does not provide our profession with complete control. However, the actuary has a role in identifying shortcomings of current practices for management and others, and in developing appropriate and ethical standards of practice for the profession.

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[^0]:    *Opinions expressed herein are those of the Task Force for Research on Life Insurance Sales Illustrations and of the Committee for Research on Social Concerns. This report docs not purport to represent the views of the Society of Actuaries or of its Board of Governors.
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[^1]:    *NASD Manual-Investment Company Securities, Para. 5286(5).

