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CURRENT REGULATORY TOPICS AFFECTING LIFE INSURANCE AND ANNUITY PRODUCT DEVELOPMENT

Moderator: HOWARD H. KAYTON. Panelists: ROBERT BLAKE, WILLIAM CARROLL, DOUGLAS DOLL, RICHARD A. SWIFT. Recorder: JAMES M. CARR

1. What is being considered by the NAIC Technical Staff Actuarial Group?

2. What is being considered by the NAIC Dynamic Interests and Related Matters Technical Advisory Committee?

3. What is being considered by the ACLI Actuarial Committee?

4. What is being considered by other Society of Actuaries committees?

5. What impact could these changes have on product development?

This session will include discussion of the "Report of the Task Force on Smoker/Non-Smoker Mortality."

MR. HOWARD H. KAYTON: This session on current regulatory topics affecting life insurance and annuity product development is being sponsored by the Special Interest Section on Individual Life Insurance Annuity Product Development. I am Howard Kayton, Treasurer of that Section and Moderator of this Open Forum.

We have four speakers today. Our first speaker is Doug Doll, FSA, Consultant with Tillinghast Nelson & Warren in Florida. Doug is a member of the Society of Actuaries' Smoker/Non-Smoker Task Force with the responsibility of developing temporary valuation standards for smoker and non-smoker policies. An exposure draft of that Committee's Report has been distributed to all members of the Society.

MR. DOUGLAS DOLL: Early last year, the NAIC Technical Advisory Committee on Dynamic Interest and Related Matters, on behalf of the NAIC Technical Staff Actuarial Group, asked the Society of Actuaries (SOA) to gather information about smoker/non-smoker mortality. The objective was to gather information to develop interim valuation standards.

The Society formed the Task Force on Smoker/Non-Smoker Mortality. The chairman is Pete Marion from State Mutual Life. The other three members are: Bud Webber from Phoenix Mutual, Mel McFall from Lincoln National, and myself.

Since our charge was to gather information, we compared and contrasted experience of the five companies whose non-smoker experience was published in the Record or the Transactions. Part 1 and Appendix A of our exposure draft summarized the results. We attempted to highlight the differences in the various companies' studies. These differences should be kept in mind when comparing the experience.

A significant difference among the companies' studies is the characteristics of the smoker group. For two companies, the smoker group essentially is all smokers. For the other three companies, the smoker group has a number of non-smokers which did not qualify for non-smoking status due to age, plan, policy, or year of issue.

Last December, the Executive Committee of the Society amended its charge to include a division of the 1980 CSO table into smoker/non-smoker components. We were asked to develop interim scaling factors producing better valuations than not recognizing the smoker/non-smoker differentials at all.

The split of the 1980 CSO was performed using a procedure described in the State Mutual smoker/non-smoker paper. Two assumptions are required. The first is the proportion of smokers and non-smokers in the population. The second is the ratio of smoker to non-smoker mortality. With these two assumptions, we can solve for separate tables which represent a split of the aggregate table. The assumptions used are based on the company experience studies described in Part 1 of the Report and from population data in the 1979 Surgeon General's Report. The assumed proportion of smokers is slightly smaller than population proportions. For males, the assumed proportion is 12% at age 15, increasing to 45% at age 35, then decreasing to 10% for ages 95 and above. To get the ratio of smoker/non-smoker mortality, we first adjusted some of the ratios in the published experience studies. Recall that a couple of companies had non-smokers included in the smoker group. We estimated the mortality ratios of the true smokers from the non-smoker mortality, the aggregate mortality ratios, and the assumed proportion of smokers. For males, the assumed ratio of smoker/non-smoker mortality is 1.5 at age 15, increasing to 2.5 at age 45, decreasing to 1.0 for ages 95 and above. The assumptions for females have similar patterns as those for males but at lower levels.

The assumptions were used to split the 1980 CSO basic table into smoker/non-smoker components. For a valuation basis, margins must be added. We considered using the 80 CSO margin formula but concluded that using the actual 80 CSO margins for both smokers and non-smokers would be more appropriate. This ensured that the weighted average smoker/non-smoker rates would duplicate the 80 CSO.

This is a quick overview of the work we performed. The Exposure Draft shows the derivation of the four tables, male smoker, male non-smoker, female smoker, and female non-smoker. To get the scaling factors shown in Table 1, we merely divided the loaded smoker/non-smoker rates by the corresponding 80 CSO rates.

The Report contains sample premiums and reserves on a smoker/non-smoker basis. Interestingly, we found that smoker/non-smoker reserves, when averaged together, are not the same as reserves calculated using aggregate mortality. This is true even if the distribution of smokers and non-smokers is the same as assumed. An analysis of why this is so is given in Appendix I of the Report.

The exposure draft has been presented to the NAIC Technical Advisory Committee, the NAIC Technical Staff Actuarial Group (TSAG), and the Executive Committee of the SOA. The initial reactions have been positive. Current plans are for the tables to be considered at the June NAIC meeting and possibly adopted as alternative valuation standards in December.

What will be the effects of having smoker/non-smoker tables for valuation standards? Some persons have the impression that deficiency reserves will disappear. For a given company, this may or may not be true. For some companies, the decrease in non-smoker deficiency reserves will be more than offset by an increase in smoker deficiency reserves.

One use for smoker/non-smoker rates may be as a basis for maximum cost of insurance rates for Universal Life. A couple of states have problems with calling smokers substandard for this purpose. Smoker/non-smoker tables permit higher charges for smokers. On the other hand, the charges for non-smokers would be reduced. I have been told that John Montgomery is going to split the 1958 CSO into smoker/non-smoker components using the same methodology as we used for the 80 CSO. These tables may be used as standards for Universal Life cost of insurance rates in California. Of course, a final use for the smoker/non-smoker tables would be for basic cash values and reserves.

A number of questions have been raised about how these tables should be used. For example, a company has a non-smoker policy and an aggregate policy. Should the aggregate policy be valued using an aggregate table or a smoker table, recognizing that actual sales probably will be mostly to smokers? These are difficult questions. Fortunately, the Task Force was not asked to address such questions. My personal opinion is that we are moving toward a situation similar to what exists in Canada, where the actuary has more flexibility in choosing his valuation mortality tables.

The Exposure Draft has been distributed to all Society members for comments. We emphasize that our charge was to produce interim standards better than not recognizing any differences at all. Not much data exists for insured lives. The data that does exist is mixed. For example, at ages 20-29, the ratio of smoker/non-smoker mortality was less than one for Phoenix Mutual, about four for Home Life, and seven for State Mutual. The differences at higher ages were smaller but still present. State Mutual's ratios of smoker to non-smoker mortality decreased by age for all ages. On the other hand, Sun Life's ratios increased to about age 60, then decreased.

We believe the Task Force used procedures which are appropriate, given the limited availability of data and time. Thus, the Report is not the definitive statement with regard to separate valuation standards for smokers and non-smokers. Rather, it is an attempt to quickly produce interim standards, appropriate for use until more data becomes available. (Realistically, this will not occur for a few years.) We on the Task Force would like to ask you to keep this in mind when you send us your comments.

MR. KAYTON: At the Chicago meeting, Jack Bragg expressed some criticism of your tables. Would you care to comment?

MR. DOLL: Jack had four general criticisms regarding the Task Force's tables. He has developed his own set of smoker/non-smoker tables, both basic tables and tables with margins. His tables differed significantly from the Task Force Tables both with regards to the proportion of smokers in the population and with regards to the ratio of smoker to non-smoker mortality. Our response is that the Task Force Tables are based upon assumptions derived from several companies' experience, which varied widely, plus population experience. The composite assumptions derived do not match any company's specific study very well but in the aggregate are not unreasonable.

Another criticism is that the same dollar loading was used for both smoker and non-smoker tables instead of the same loading formula. We tried using the formula and found that the resulting margins were not much different than the aggregate margins. For this reason, and because we were constrained to have our weighted smoker/non-smoker tables duplicate the 1980 CSO tables, the same loading was used for the smoker and non-smoker tables.

The final criticism is that the report suggested the same ten year selection factors be used for both smokers and non-smokers and that this is not appropriate. We felt that using the same selection factors for both smokers and non-smokers was a reasonable assumption to make particularly since the available smoker/non-smoker data did not permit a detailed construction of separate selection factors.

MR. JAMES M. CARR: I have received written remarks from John Bragg and W.A. Keltie of Bragg and Associates which they intended to present to this session but found themselves unable to do so. Doug has accurately stated their general criticisms. In support of their criticism of the assumed proportion of smokers to non-smokers and the ratio of smoker to non-smoker mortality, a couple of tables were submitted comparing experience of Sun Life of Canada to the Task Force Assumptions.

Of the insurance experience examined by the Task Force, over 50% of the exposure was contributed by the Sun Life of Canada. The following table compares the proportion of non-smokers contributed by the Sun Life as compared to the values derived by the Task Force:

Proportion of Non-Smokers

	Male		Female	
Age	Sun Life	Task Force Report	Sun Life	Task Force Report
-19	50.9%	66.5%	60.0%	74.6%
20-29	50.9	59.5	58.1	66.6
30-39	52.4	55.0	65.0	63.0
40-49	52.0	58.3	71.1	65.2
50-59	51.7	63.8	73.1	70.7
60-69	55.4	71.7	80.0	81.2

The differences average 20% for males and 10% for females.

The ratios of the levels of smoker mortality to non-smoker mortality were derived from published insurance company statistics and at higher ages from the Surgeon General's Report. The values chosen by the Task Force are substantially different from Sun Life experience. Sun Life contributed more data than the other four companies combined and their contribution is "pure" since:

(a) the insurance applicants answer to the smoking question was recorded by a medical doctor or a para-medical examining nurse. Neither had any commission interest in the policy applied for.

(b) the answer to the smoking question had no bearing on the rate basis on which the policy was issued.

(c) there was no reference in the application or the declaration in the resulting policy to smoking habits.

The difference between the Sun Life experience and the Task Force assumptions are quite significant, as the following table will show:

Ratio of Smoker to Non-Smoker Mortality

Age	Male Sun Life	Male Task Force Report
35	1.51	2.24
50	1.80	2.45
65	2.25	1.68
75	2.16	1.35

The difference averages 40%.

Using the Sun Life experience above, the derived non-smoking basic C.S.O. rate would be increased by 25% at age 35, 13% at age 50, and decreased by 31% at age 65.

MR. KAYTON: Bob, would you comment on the effect this might have on Canadian valuation?

MR. ROBERT BLAKE: The valuation actuary in Canada has a much greater choice of mortality tables to use. It is only up to him to satisfy himself and the Superintendent of Insurance that the valuation table is appropriate to the circumstances. This table could be another useful valuation standard, although some actuaries have used split tables already, such as the Bragg tables or on an ad hoc basis.

MR. KAYTON: Our next speaker is Dick Swift who is a principal with Towers, Perrin, Forster & Crosby in Minneapolis. Dick will comment on the unisex issue.

MR. RICHARD A. SWIFT: To begin with, I would like to provide a brief overview on current unisex legislation being considered. The primary bills that have been introduced are HR 100 in Congress and S372 in the Senate. This legislation is referred to as the "fair insurance practice act", and these bills are very similar. They require unisex rates for all insurance. This includes both new business and existing business. The retroactive provision requires a "topping up" of benefits to the level of the favored sex. As an example, for individual life this means increasing the death benefits of male insureds, and increasing the surrender values on female permanent plans. There are other bills that include unisex legislation at both the federal and state levels. I heard that Montana has passed unisex legisltion which will go into effect in 1985.

The principal concern of the industry is the retroactivity in the federal legislation. Many companies may become insolvent or substantially impaired if the legislation as proposed, is made law. Pension plans, particularly public plans, would also have substantial problems.

Bill Carroll has provided some figures determined from ACLI's recent survey of 153 U.S. life insurance companies. The estimated increase in liabilities for these companies was over $14 billion dollars. Of the 153 companies, 24 would be insolvent and an additional 28 would lose over 50% of their net worth if retroactivity is required. Approximately 51% of the net worth of the 153 companies would need to be transferred to liabilities.

Thus, if HR100 and S372 are passed as written, we can expect insolvency or impairment of many life insurance companies. This would result in increased costs for many because the cost of the insolvencies must be supported by solvent companies and/or government. Thus, it seems unlikely that the bills will be passed without substantial changes in the retroactivity requirements.

What is the current industry position? Industry groups including the ACLI, HIA and the NALC are opposing the bills. Initially the ACLI board voted to support unisex rates for new business _if_ retroactivity was dropped. However, on May 11th, an emergency member meeting of the ACLI voted overwhelmingly to fight the pending unisex legislation. There is also a Committee for Fair Insurance Rates whose members include 14 companies that were active in changing the ACLI position. Barbara Lautzenheiser is very active on this committee.

Following the change in the ACLI position, some legislators responded angrily to the ACLI revised position, including the following quote from one Congressman: "...none of us could have foreseen the desperate and selfish pressure that would be brought by the insurance industry". There is obviously a large gap between the industry and legislators position.

The outcome of this may well be the end of sex differentiation in insurance premium rates. Unisex rating will certainly destroy the concept of _cost_ base pricing currently in use in the insurance industry. For many companies, the effect may be an overall increase in the price of insurance charged the customer. Companies will likely use conservative estimates of the male/female mix of business in determining mortality and morbidity rates for pricing. Premium rates for female life insureds will most certainly be increased. Will there be an offsetting decrease in male premium rates? Similarly with disability, will female rates be decreased significantly, or male rates simply be increased? It seems quite possible that, at least initially, the total premiums charged by the industry will be somewhat greater under unisex.

Future pricing of life insurance on a unisex basis should not pose any particular problem for actuaries. Mortality tables can be developed or derived on a combined unisex basis. A table reflective of the company's male/female mix can be utilized in calculating premium rates. Mortality tables on a unisex basis will surely be developed with different rates for smokers and non-smokers.

Unisex rates for annuities and health insurance can also be developed. However, it is disturbing to many actuaries that in pricing these policies, we will be introducing inequities since we will have to ignore statistical data that show that women live longer than men and thus, should pay less for life insurance and more for annuities and also that morbidity costs for women are greater than for men at most ages.

If unisex is passed, reserves and nonforfeiture values for ordinary insurance will likely need to be developed on a unisex table. Thus, the 1980 CSO table may be revised to a unisex table, with smoker and non-smoker mortality rates being developed using the methods described by Doug.

The final outcome of the unisex legislation is obviously unknown at this time. However, there is certainly a strong possibility that unisex rating will be forced upon us. Thus, it is my opinion that it would be prudent for a life company to postpone doing large product development projects until there is a clearer indication of what the outcome will be.

MR. KAYTON: Thank you Dick. Our next speaker is Bob Blake who is Associate Actuary for Fidelity Life Assurance Company here in Vancouver. Bob is going to speak on Canadian regulatory topics.

MR. BLAKE: Unisex Mortality Tables are starting to be heard of in Canada. In the Manitoba Government Green Paper on Pension Reform dated the 28 of February 1983, recommendation 15 is "that Unisex Mortality Tables should be used in the calculation of pensions and pension options for the member and surviving spouse; that all employees be required to contribute equally to buying the same pension benefits, and that women be entitled to the same pension benefits as men upon retirement (other factors such as salary, history, and service being equal)." This, incidentally, was presented as a "low-cost" proposal. This is not yet the law. If implemented, it is likely to cause the most difficulty for money purchase pension plans, which frequently shop the individual annuity market.

Valuation constraints by legislation have been greatly loosened by changes to the law in 1978. In Canada, prescribed mortality tables and interest rates are largely a thing of the past. To paraphrase the law, the Canadian Valuation Actuary, subject to the approval of the Superintendent of Insurance, may choose rates of interest, mortality, accident, sickness or other contingencies that are, in his opinion, appropriate to the circumstances of the Company and the policies in force. Regulatory valuation considerations have a much more limited effect on product development in Canada than in the U.S.

Where the authorities have recently affected product development in Canada is in a different area entirely, that of Taxation of Policyholders. Since 1968, the proceeds of disposition of life insurance policies and annuities have been taxed to the extent that they exceeded the adjusted cost basis. Disposition means surrender, maturity, or sale of the policy, or since 1978, a policy loan. The adjusted cost basis has been premiums less dividends and repayment of policy loans, and could be increased by premiums for Term Riders and other benefits like Waiver of Premium, Accidental Death, Guaranteed Insurability and others.

Under new legislation, taxation of policies has been extended. The tax on disposition has remained, but the adjusted cost basis will be reduced by an annual cost of insurance factor, and will no longer include minor benefits. Term Riders will be treated as separate policies. Consequently, there may be less loading up of permanent policies to avoid this type of taxation, and generally higher taxable income upon disposition.

More importantly, the government wishes to collect some of its income early. A new classification of policies has been introduced, and these non-exempt policies will be taxed while they are in force. Taxable income will be credited every year, or every three years at the option of the policyholder. The bench mark for exemption is the exemption test or E.T. policy. This little creature is, after 20 Years, a paid-up endowment at age 85. Before 20 Years it is a policy with a cash value equal to:
(N ÷ 20) x the 20th year value, where N = the policy duration.

If the accumulating fund, which is the full preliminary term reserve of the policy, based on cash value interest and mortality for participating policies and premium interest and mortality for non-participating policies, with a cash value floor, exceeds the E.T. policy value on the same basis at any time, the policy is non-exempt. In effect, any endowments maturing before age 85 and most whole life policies with fewer than 20 premiums, become non-exempt. Single Premium Whole Life plans, especially those sold in situations where the policy loan interest was deductible, have become much less attractive under the new legislation. High early cash value policies with annual premiums have been re-examined in light of the E.T. policy. Indexing of over 8% could make a policy non-exempt. Some universal life plans have been set up in such a way that premiums will not be paid if the plan would become non-exempt. Others allow an increase in the sum assured so as to keep the policy exempt. This could, of course, reduce the marketability of such plans and also reduce the premium income from such plans.

This taxation regime may not be entirely disadvantageous. The taxable income for life insurance policies is investment income and the first $1,000 of investment income in each year is exempt from taxation. On smaller non-exempt policies the amounts of taxable income are minimal, and will also be deducted from the taxable amount at disposition. Also, replacement of cash values of policies by a new Single Premium Whole Life policy will be less attractive.

The same taxation of accrued income will apply to Deferred Annuities. Formerly, the tax applied only on disposition, and if the proceeds purchased an Immediate Annuity in the same company the interest and capital elements of the income were split on a level basis, further deferring taxable income.

The new rule taxes accrued interest on a 1 or 3 Year interval, and the ability to split income on a level basis has been restricted to level payment annuities to annuitants aged 60 and over. Formerly deferral of taxation on annuities tended to offset in competition the lower yield available because of commission. This advantage has been lost and hence a large part of the market for such plans. In general, these changes will apply only to new life insurance policies, but will apply to deferred annuities already in force. Generally, the effect of the legislation has been a deterioration in the life insurance companies' ability to attract a share of the savings dollar. For example, a LIMRA survey of 22 Life Companies showed that in 1981 31.2% of deferred annuity premiums in Canada were on a non-registered basis, purchased quite frequently as a means to defer tax. This reduced to 18.5% in 1982, when the effects of the legislation began, and could decrease further in 1983.

Coupled with the above, another large source of annuity premiums has been lost since 1981. This is the Income Averaging Annuity contract. With this

plan, unusual amounts of income such as capital gains, sale of good will, recaptured depreciation and income from artistic activity or from sports could be used to purchase an annuity for life or a term certain, redistributing the income into years with marginal tax rates much lower. When the maximum marginal rate was reduced to 50%, this was felt by the government to be an unnecessary provision, and hence it was dropped. According to the same LIMRA survey referred to earlier, in 1981 Income Averaging Annuities accounted for over 36% of total Immediate Annuity premiums. This is all gone now.

Finally, a possibly encouraging development. In the last budget, in April 1983, the ISIP was born. This scheme, the Indexed Security Investment Plan, will enable investors in Canadian common stock to avoid taxation on capital gains that are assumed to reflect inflation. Each month the cost of such stocks used to calculate capital gains will be increased with the CPI. Only 25% of capital gains in the fund, whether realized or not, will be taken into income. The rest will be deferred. If capital losses result, 25% may be applied against any income. Without an ISIP, use of capital losses in determination of taxable income is restricted. Life Insurance companies will be able to sell ISIP's. They may be used in any products that currently are supported by segregated funds based on common stocks; such as Variable Life Insurance and Annuities.

MR. KAYTON: Thank you Bob. Our next speaker is Bill Carroll. Bill is an actuary on the staff of the ACLI with responsibilities in the valuation and nonforfeiture areas. Bill serves as staff actuary to the ACLI committee that developed the ACLI proposal that became the 1980 amendment.

MR. WILLIAM CARROLL: Thank you very much, Howard. This morning I will report on the status of the NAIC's 1980 amendments to the standard valuation and nonforfeiture laws in the United States and briefly describe some of the current regulatory topics which could affect individual life insurance and annuity product development.

As most of you know, the 1980 amendments make important changes in both the actuarial methods and in the interest and mortality standards used to determine minimum reserves and minimum nonforfeiture benefits. As of last year end, the amendments had been enacted in 39 states. So far this year, there have been 5 additional enactments, bringing the total to 44.

As for the other six states, bills have passed both houses and are on the governors' desks, if not already signed, in Nevada and Ohio. In Delaware and Illinois the legislation has passed at least one house and in the other two states, Alaska and Maine, legislation has been introduced. Plans have also been made to introduce this legislation in the District of Columbia. If everything goes as expected, these amendments should be law in nearly every state by the end of 1983. For the purposes of product development, these laws should be taken as a given.

In late July or early August, the ACLI will publish a general bulletin listing the states where these amendments have been enacted. The bulletin will also give the statutory calendar year interest rates calculated according to the 1980 amendments from the monthly averages, ending June 30, 1983, of Moody's Corporate Bond Yield Average.

Only two states have deviated from the NAIC model in such a way that compliance with the model does not necessarily assure compliance with state law.

Wyoming, which was the first state to pass these amendments, left out the system for automatically updating the interest rate standards in its 1981 bill. Also missing were the parts of the model that deal with deposit type products and regulate uniform progression of cash values. In 1983, these shortcomings have been corrected by additional legislation. However, there is still one key difference between Wyoming law and the model. In Wyoming, the 1980 CSO Table and the other new standards for life insurance are mandatory by January 1, 1985, not 1989, as in the model.

The other state which deviated from the model in such a way that compliance with the model does not necessarily assure compliance with state law is, of course, New York. Under the 1980 amendments to the NAIC Model Standard Valuation Law, there are two formulas for determining the statutory valuation interest rates. The more liberal one, for most annuities and guaranteed interest contracts, gives full weight to the reference interest rate and the other one, for life insurance and certain annuities and guaranteed interest contracts, gives only half weight to the portion of the reference interest rate in excess of nine percent.

The New York version of the NAIC Model permits the more liberal formula only if certain conditions are met. In order for a company to use the more liberal formula in New York, the New York law requires that the company submit an opinion of a qualified actuary that the reserves, and the assets held by the company in support of such reserves, makes good and sufficient provision for the liabilities. The opinion must be accompanied by a memorandum describing the calculations made in support of the opinion and the assumptions used in the calculations. To my knowledge, this represents the first time that the law has specifically required an actuary to consider the asset side of the balance sheet in forming an opinion about the reserves.

The New York Department has adopted a set of illustrative guidelines for use by actuaries in complying with these special requirements. These guidelines are set forth in the Department's Circular Letter No. 33, dated December 31, 1982.

This completes my report on the status of these amendments and important state deviations. Next, I will cover five topics currently being considered by the NAIC's Technical Staff Actuarial Group (TSAG).

The current TSAG agenda contains over 20 topics that could affect life insurance and annuity product development. In selecting a few to include in my remarks, I excluded issues related to universal life and variable life since these topics are covered elsewhere on the program. I also excluded topics covered by the other members of the panel.

I. Plan-By-Plan Election of Operative Dates Under Standard Nonforfeiture Law For Life Insurance

When these amendments were being developed by the NAIC, the discussion centered around substantive questions. There was no detailed discussion of exactly when and how these changes would become effective for life

insurance. January 1, 1989 was chosen as the latest possible operative date and the traditional wording was incorporated into the Model.

Near the end of 1981, after 17 states had enacted the Model, people began to ask whether a company could elect to use the new standards for one new plan at a time, or whether a company had to go on to the new standard for all of its currently issued life insurance at the same time.

It was not surprising, therefore, that for an initial period the various states enacting these amendments gave different responses to the question of whether companies would have to convert their entire portfolios of plans to the new standards all at once or whether a piecemeal implementation would be permissible. In order to achieve an element of uniformity, the NAIC, at its December 1982 meeting, adopted an actuarial guideline that would permit a plan-by-plan election subject to certain rules.

As of this date, a general consensus, along the lines of the NAIC guideline, has developed among the states. Of the 39 states that enacted the Model through December 1982, Virginia appears to be the only state that requires that a company convert its entire portfolio at one time. So far, there is no evidence of a problem developing with any of the states that have enacted the legislation this year.

II. Policies With Cash Values Greater Than Reserves

One of the most controversial subjects on the TSAG agenda, is the question of what the valuation law requires for a life insurance policy which has cash values at one or more durations which are in excess of the minimum statutory reserves calculated for the plan without regard to those cash values.

A wide range of individual opinions have been expressed. At one end of the spectrum it has been argued that the cash values can be ignored in the reserve calculation and any excess of cash values over reserves set up as a liability as such excess arises. At the other extreme, it has been suggested that an additional reserve be established at the issue date of the policy so that the total reserve is sufficient together with future net valuation premiums, not in excess of the corresponding gross premiums, to mature the policy for its cash value at any duration.

There is no consensus on this question. Last year I reported that a professional actuarial committee that advises TSAG had held out some hope for a solution. That has proved to be a false hope. At the March 1983 meeting of TSAG, the Technical Advisory Committee told the regulators that the Committee was unable to reach a consensus on whether the law requires pre-funding of any amount by which the cash value exceeds the reserve, or whether the law merely requires a company to hold an additional reserve as such excess arises.

III. Valuation and Nonforfeiture Interest Rate Differentials

When the Standard Valuation and Nonforfeiture Laws were amended in 1976, the minimum standards for most life insurance policies were based on interest rate of 4 1/2 percent for the valuation of reserve liabilities and 5 1/2 percent for nonforfeiture values. Prior to this, no differential had existed between these two standard rates and companies had almost

always based reserves and nonforfeiture values on the same interest rates. This new aspect of the standard laws raised questions concerning the application of these laws to policies with reserves and nonforfeiture values based on different interest rates.

Proposed guidelines have been developed. They cover the manner in which the Standard Valuation Law and the Standard Nonforfeiture Law for Life Insurance, as amended in 1980, govern the choice of the interest rate or rates used in the various situations covered by these laws.

At its March meeting, TSAG adopted these guidelines with the exception of one controversial section.

The guidelines, as adopted, do no more than restate the current law. However, they do call attention to the fact that the nonforfeiture law now permits companies to grant higher amounts of paid-up nonforfeiture benefits by using higher interest rates in the calculation than are required and subsequently calculate the surrender value of those nonforfeiture benefits using the same interest rates.

The section which the regulators deleted dealt with the question of whether the standard valuation law requires that the reserves during the premium-paying period reflect the value of potential paid-up nonforfeiture benefits when the reserve for such benefits would exceed the normal premium-paying reserve.

For example, on the 1980 CSO Table, using continuous functions, for a $1,000 whole life policy issued to a male aged 35, at duration 25, the CRVM reserve at 6% is $311.35. The minimum cash value, calculated 7 1/2%, at that duration is $262 and it provides $748.34 of reduced paid-up insurance.

The point of this example, and the source of the problem, is that the reserve, at 6%, for the reduced paid-up insurance is $312.20, $.85 more than the reserve for the premium-paying policy. The question which the regulators have not been able to resolve is whether that 85-cent difference, and other similar differences, need to be recognized in the reserves for policies in a premium-paying status.

I must apologize for the trivial, but not necessarily misleading, example. However, it does illustrate an important point. Those who argue that no pre-funding is required by the law frequently point to the trivial nature of the potential excess. Those who argue for pre-funding point to special plan designs where the amounts are significant.

IV. Minimum Cash Values For Individual Annuities

Under the Standard Nonforfeiture Law for Individual Annuities and the existing NAIC guidelines it is possible to use a constant surrender charge at all durations. However, a temporary surrender charge or one that decreases by duration can result in values that are less than the minimum standards even though they are greater than values of a comparable annuity with a constant surrender charge.

The ACLI has formed a Task Force to study the nonforfeiture anomaly which exists when surrender charges are temporary or declining and to develop a recommendation. In order to save time, TSAG has asked that any proposal be sent directly to its Technical Advisory Committee.

V. *Life Insurance Without Guaranteed Cash Values*

As a result of high interest rates experienced in recent years, some concern has been expressed over the requirement in the United States for guaranteed cash values in life insurance policies.

A proposal that would permit policies to be issued without cash surrender values has been presented to TSAG. Paid-up nonforfeiture benefits would still be required.

The ACLI recently formed a Task Force to study this topic. Initially, the Task Force plans to focus on evaluating the cost differential which could result from the elimination of a requirement for cash surrender values.

Of interest, is the fact that legislation similar to the proposal being discussed by TSAG was introduced, and subsequently died, last year in Nebraska.