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### INSURANCE REGULATION AND LEGISLATION

Moderator: JOHN O. MONTGOMERY. Panelists: CHARLES GREELEY, HOWARD H. KAYTON, VIRGIL D. WAGNER

MR. JOHN O. MONTGOMERY: The title of this concurrent session covers such a broad area that it could conceivably be the title of an entire special session of the Society of Actuaries. Even the topics listed in the program under this session are of such a magnitude that several of them could in themselves be the subject of a separate concurrent session, therefore we shall cover them as rapidly as possible in our presentations so that more time will be available for discussion.

First I would like to review briefly a recent history of activities within the National Association of Insurance Commissioners. As a result of discussions by the NAIC Task Force on Early Warning Tests in 1973 the problem of surveillance of the adequacy of reserves was attacked in two ways. First, NAIC was asked to adopt a procedure for the certification of adequacy of policy reserves for life and health insurance companies by an actuary. Second, another task force was selected to review the regulation of life insurance reserves and nonforfeiture values. In the seven years since that time this second task force has expanded its activities to reviewing reserve and nonforfeiture value requirements for all lines of life and health insurance and has become a separate technical subcommittee of the National Association of Insurance Commissioners analogous to the Blanks Subcommittee but responsible primarily for matters of actuarial concern for life and health insurance regulation. Some notable achievements of this Subcommittee are:

- The 1976 Amendments to the Standard Valuation and Nonforfeiture Laws.
- A series of actuarial guidelines with respect to the interpretations of the laws.
- A guideline on health insurance premium increases which is intended to bring some form of standardization of that process.

The original Task Force on early warning tests has also expanded its role to include work in developing profitability reports and analysis of cash flow and liquidity of assets for life and health insurance companies and surveillance reports on the internal consistency of life insurance company operations. These latter two forms of reports are still in their developmental stage.

The three panelists for this session are Virgil Wagner of the American Council of Insurance and a member of the Advisory Committee to the NAIC on Profitability tests, for Life & Health Insurers, Charles Greeley of the Metropolitan and Chairman of the Advisory Committee to the NAIC on development of dynamic valuation and nonforfeiture value legislation and Howard Kayton of the Security First Group who is also a member of the Advisory Committee on dynamic valuation and nonforfeiture value legislation. Mr. Wagner will present the basic features, other than the dynamic features,

of the amendments to the valuation and nonforfeiture laws which will be proposed for adoption this year and also will give a brief review of the activities of the NAIC Task Force on Early Warning, Surveillance and Profitability Reports. Mr. Greeley will present the development of dynamic valuation and nonforfeiture value legislation. Mr. Kayton will present the guidelines and the SEC impact on annuities and Guaranteed Investment Contracts.

Before they begin I would like to remind you that the exposure draft of the current revisions to the Standard Valuation and Nonforfeiture Laws is to be submitted to the NAIC at its June 1980 meeting next week and that it is intended to propose the final draft of this legislation for adoption at the December 1980 meeting of the NAIC.

MR. VIRGIL D. WACNER: I will be discussing two general subject areas with you this afternoon. First, I will briefly cover three subjects which are being considered by the NAIC Task Force on Life and Health Financial Ratios and Profitability. These three subjects are profitability tests for life insurers, early warning tests of liquidity and cash flow, and surveillance of consistency of operations. Next, I will broadly outline proposed amendments to the Standard Valuation and Nonforfeiture Laws.

The NAIC Task Force on Life, Accident and Health Financial Ratios and Profitability is the expanded successor to the Task Force on Early Warning Tests. This Task Force has developed the early warning tests which are compiled in the NAIC central office and are used to spot companies with potential problems. Incidentally, the program of early warning testing is now referred to as IRIS, for Insurance Regulatory Information System.

Approximately two years ago, the Task Force was charged with the development of profitability tests for life insurance companies. As you may know, reports on profitability of fire and casualty companies have been distributed for over five years now. These reports include ratios of income to premium, assets, and net worth. Also, an extensive report is made of profitability by line and by state as well as summaries by line and by company group giving financial statistics along with market share information. The statutory results for the fire and casualty companies are adjusted to GAAP results by an approximate method, an approximation which could not reasonably be made for life insurance companies.

The reason given for requestion the information is the considerable confusion about the real profits of life insurance companies. The regulators and others are frequently asked by legislators, consumer groups, and the press for the profitability to compare to other industries or, at least, to dollars of life insurance revenue. Since the statutory statement of income was not really designed as a profitability measure, and industry result isn't available.

As a first charge, the Task Force was asked to develop information for 1979 by line and by state for A & H insurance, as was already being done for fire and casualty companies. This result should be published later this year. It is basically a summary of information on accident and health insurance found on the state page of the annual statement.

In addition to A & H by line and by state, overall profitability results for life companies were to be developed on a statutory basis and development of profitability results on an approximate GAAP basis was to be investigated. An advisory committee has been working with the task force to help achieve these objectives.

The task force and advisory committee have debated the definition of life insurance company profitability and have found a generalized answer to be illusive. One criterion is that the basic data must come from the statutory statement. Also, a measurement must be found which is meaningful for the large variety of companies and product line which exist, i.e. for both stocks and mutuals, life and A & H, group and individual, permanent forms, term, industrial, etc. Additional criteria are ability to relate the resulting measure to consumer costs, ease of comparison to similar indexes of other industries, and ability to produce the measure by line of business with reasonable accuracy.

The task force is considering a number of ratios to be used as profitability tests. I won't give you detail on each one being considered, but generally they involve ratios of statutory net income, in some cases adjusted for capital gains and losses or reserve changes due to change in valuation basis, to various bases (denominators). These bases are mean net worth, assets, total income, insurance operating income, premiums and deposits and a basis called earned revenue which is calculated by subtracting the increase in reserves from either premium income or total income. The task force and advisory committee have generally agreed that any income base for a life insurance company must include investment income because of the way premiums are calculated.

The advisory committee, in a paper submitted to the Task Force, discusses the criteria for profitability tests outline above and concludes that the most meaningful test would be gain from operations to total revenue. The advisory committee ratio would exclude income not properly assigned to a line of business by assigning that income to a corporate account. The corporate account items would be excluded from both the numerator and the denominator of the ratio. The advisory committee does not believe a ratio to net worth or to assets is a proper reflection of profitability for a life insurance company. The advisory committee also believes the so-called "Earned Revenues" test (revenues less increase in policy reserves) to be theoretically incorrect, and even if correct, to pose problems of practical application and comprehension by the users.

The thinking of the task force is probably to report a number of ratios. While this solves the problem of settling on a "best", it may tend to further confuse rather than enlighten users as to the profitability of life insurance companies.

Full discussion of the advisory committee paper at a joint meeting with the task force was deferred until September largely because of another matter which the task force has been asked to consider. That was a request to develop ratios as part of the early warning system (IRIS) which could spot companies which have a potential liquidity or cash flow problem. The report being considered is a "Withdrawal Vulnerability Report". This report would compare key elements of cash outflow resulting from voluntary withdrawals to the level of cash flow and liquid assets. To reduce the number of

calculations, companies would be categorized with respect to proportion of business written as ordinary life insurance, individual annuities, and group annuities. The reports would then be tailored to the particular category. For example, a report for a company primarily in ordinary life insurance would show increases in policy loans and in surrenders of cash values and other funds along with the cash flow and liquid assets taken from the annual statements. An exceptional value would be set where a pre-determined percentage increase in the outlfow items would exhaust cash flow and liquid assets.

The details of these reports have not yet been worked out for each category, however, some tests of this general nature will likely become a part of the IRIS system.

The third area of improved early warning data being discussed by the task force is labeled Surveillance of Consistency of Operations. Its stated purpose is "to determine that each line of business is operated so that it is self-supporting over a reasonable period of time and does not have to be continually subsidized by the operations results of another line of business". The general approach is to require, as a supplement to the annual statement, an analysis which shows ratios of actual to expected results from mortality or morbidity, required interest, terminations, expenses, and other gains not otherwise included. Other data needed for more detailed analysis would also be included in supplements. One step in this direction was taken for 1980 where you will find a new item in Exhibit 9 called "Tabular Interest on Policy Funds". Its purpose is to provide information to compare the investment earnings of the company to required interest on both life and health insurance reserves which use an assumed rate of interest.

## Proposed Amendments to the Standard Valuation and Nonforfeiture Benefit Laws.

When I speak of proposed amendments to the Standard Valuation and Nonfor-feiture Laws, I am speaking of proposals to be presented to the NAIC Life Insurance Subcommittee by the Life, Accident and Health Insurance Technical Subcommittee. That presentation will be made at next week's meeting of the NAIC in Derver to expose to Commissioners and to the public. Adoption of the amendments is expected at the December 1980 Meeting and would hence be dubbed the 1980 Amendments.

The proposed amendments to the laws have been characterized as the most comprehensive and important proposed changes to the standard laws since the work of the Guertin Committee which led to the 1944 Standards Laws. The amendments would change the standard law in four major areas:

- Changes in interest rates. One proposal would establish a system which would automatically update the statutory valuation and life insurance nonforfeiture interest rates which apply to new business each year. An alternative proposal would merely increase all current valuation rates and life insurance nonforfeiture rates by 1/2 percentage point.
- 2. Adopt a new mortality table (Table K) for ordinary life insurance,

- Change the excess initial expense allowance in the Standard Nonforfeiture Law for Life Insurance, and
- Other changes relating to the calculation of reserves and nonforfeiture benefits.

The proposal represents a cooperative effort which transcends the efforts of any one organization or group. The new ordinary mortality table was developed by the Society of Actuaries' Special Committee to Recommend New Mortality Tables, The changes in the excess initial expense allowance in the formula in the Standard Nonforfeiture Law for Life Insurance were developed by C.F.B. Richardson, a member of the NAIC technical task force, and the many technical improvements in that law were largely developed by a Special Committee of the Society of Actuaries on Valuation and Nonforfeiture Laws (Unruh Committee). The system for automatically updating the interest rates — the "dynamic" interest method — and the draft legislations were developed by the American Council of Life Insurance. Charles Greeley, whom you will be hearing from shortly, has been involved in more than one of these groups, so I will defer further identification and recognition to him.

Also, Charlie will give you the blow by blow on the dynamic interest proposal, so I will not say anything more about that proposal per se. However, I would like to expand my earlier comment on the alternaive proposals for changes in the interest rates.

The dynamic proposal, (the proposal for a system which automatically adjusts the interest rate) was presented to the Technical Subcommittee by the ACLI in December of 1979. The proposal was discussed in detail at a concurrent session of the SOA's annual meeting in October of that same year. The Technical Subcommittee decided to form an industry advisory committee to assist it in further analysis of this proposal. Charles Greeley became the chairman of that committee.

The Technical Subcommittee wanted to present a package of amendments for exposure at the June meeting, hardly time for the advisory committee to complete a report, yet the Subcommittee felt that such an important proposal should have the benefit of review by a broad cross-section of the actuarial profession, and wanted the advisory committee's input. Hence, the Technical Subcommittee decided to make a dual proposal with respect to interest rates for exposure in June. It is hoped that the advisory committee will complete its review so that any remaining problems with the dynamic proposal can be ironed out in time for its proposed adoption in December. If not, the static proposal would be submitted for adoption.

The alternative proposal, as I indicated, would increase valuation interest rates by 1/2 percentage point. Nonforfeiture interest rates for life insurance would likewise be increased by 1/2 percentage point.

The next major area for proposed amendments is the adoption of Table K the new valuation mortality table for ordinary life insurance.

Since the Commissioners 1958 Standard Ordinary Mortality Table (1958 CSO) was adopted, there has been a dramatic reduction in mortality rates among

standard Ordinary insured lives. As a result, changes in the theoretically appropriate amounts of minimum reserve and nonforfeiture values are indicated. As was the case when the 1958 CSO Table replaced the 1941 CSO Table deficiency reserves have become a problem due to the level of mortality underlying the 1958 CSO Table compared to current mortality rates. The Society of Actuaries' Special Committee to Recommend New Mortality Tables has concluded that it is time to replace the 1958 CSO Table in the laws, and it has prepared a new table (Table K) for that purpose.

Table K has separate mortality rates for male and female lives. This represents a departure from the present situation, in which reserves and nonforfeiture values for female lives are commonly based on a male age several years less than the insured's actual age. This approach can be only approximately accurate. Now that a significantly larger percentage of ordinary life insurance purchases are on female lives and there is increased sophistication and precision in life insurance classification and pricing, it is felt that separate mortality rates for the two sexes are justified and appropriate.

This table has been discussed in detail at recent Society meetings so we will not go into it further in this session, other than to say it will be proposed as the new 1980 Commissioners table.

The third area of change is the excess initial expense allowance in the Standard Nonforfeiture Law for Life Insurance. This proposal adopts the recommendations set out by C.F.B. Richardson in his paper published in the Transactions of the Society of Actuaries, Vol. XXIX, 1977, p. 209. Briefly, the proposed amendments would change the excess initial expense allowance in the formula to reduce the minimum nonforfeiture values for most permanent policies. For level-premium whole life insurance the formula for computing the excess initial expense allowance would be changed from 65% of the adjusted premium plus \$20 per \$1000 to 125% of a net level nonforfeiture premium plus \$10 per \$1000. For non-level-premium policies, the proposal would make the initial expense allowance much less dependent on the size of the first-year premium than it otherwise would be, thereby increasing the minimum nonforfeiture values for high first-year premium policies.

The fourth major area I identified was simply "Other Changes". These included changes in the text to essentially accommodate those thirty points identified and listed in the report of a special committee of the Society of Actuaries on Valuation and Nonforfeiture Laws (Unruh Committee). This report has been discussed at various Society meetings. The thirty points listed in the Summary of Conclusions of that report and can be found in the Transactions of the Society of Actuaries, TSA Vol. XXVII, 1975, p. 549. We do not have time to go through these again today; however, I will highlight some of the major changes in the proposed Standard Valuation and Nonforfeiture Laws.

First, the adjusted premium method is retained, but it would be based on an expense allowance related to a nonforfeiture net premium rather than to the adjusted premium itself. This removes the circularity and complexity from the formula, expecially in the case of non-level premium policies. The excess initial expense allowance would be based on levelized net premiums rather than on the first year premium only. This will produce

identical excess initial expense allowances for policies with identical benefits and identical premium paying periods. The equivalent level amount would be based on the first ten years under the policy and would be an average amount of insurance. This recognizes that initial per \$1000 underwriting expenses are most logically related to amounts of insurance in the early years.

In case of multi-track policies, the initial expense allowance would be based on the automatic track, with a similar approach used for life-cycle or "open" policies. Complete exposition of nonforfeiture values in a policy table would not be required for these types of policies. Other provisions relative to special policy types would (1) treat term riders or spouse's term insurance under a family policy as separate policies under a severability principle, (2) treat renewable and convertible term policies as a series of short term policies (not a change), and (3) treat the deposit of a deposit term or deposit whole life policy as an integral part of the plan.

While the changes recognize and accommodate certain special product types, a provision in the proposed amendments to the Standard Nonforfeiture Law would facilitate approval of and promote flexibility of product designs for which minimum nonforfeiture values cannot meaningfully be determined under the law. To do this, the commissioner would promulgate the minimum values and benefits required for such policies where certain conditions are met.

Another new provision would provide that if the commissioner determines that the initial expense allowances are inappropriate, taking into account the pattern of the actual expenses that are to be incurred by any plan of mass merchandised permanent life insurance, then he may require such higher minimum cash values and paid-up nonforfeiture benefits as would be appropriate for the pattern of expenses. Mass merchandised permanent life insurance has not yet been defined.

One of the most significant parts of the proposal is the amendment to the Standard Nonforfeiture Law for Life Insurance relating to policies for which the present value of the guaranteed benefits portion of the adjusted premium exceeds the present value of the guaranteed benefits on any ampiversary. These policies would be treated, for thepurpose of determining the minimum adjusted premiums and present values as of such anniversary or any time prior thereto, as if the policy matured on such anniversary.

A corollary proposal is an amendment to the Standard Valuation Law which would revise the statement of the Commissioner's Reserve Valuation Method for life insurance. The proposed method is similar to the Commissioner's Annuity Reserve Valuation Method. Under it, the minimum reserve for each policy year would be expressed as the greatest of the respective excesses of the present values of future benefits up to the end of each future policy year over the present values of future modified premiums to the end of such policy year.

A provision is included relating to minimum nonforfeiture standards for policies for which the company has the right to change the premium charged based on its estimates of future experience. Under the proposed provision, the adjusted premiums and the resulting minimum nonforfeiture

benfits would be calculated on the basis of level premiums. However, if the policy contains two premium scales, an illustrated scale and a guaranteed scale, adjusted premiums would be calculated based on each scale. In this case, the cash surrender value for each year would be the greater of the two produced by application of the law to the two sets of adjusted premiums.

Additional technical provisions would exempt policies which never give rise to nonforfeiture values in excess of 2 1/2% of the death benefit at any duration and would extend the term insurance exemption to policies with a term of twenty years or less expiring before age 71. Policy or contract fees may be eliminated from the gross premium in determining nonforfeiture value net premiums provided these fees are referenced in a statement of the method used to calculate minimum nonforfeiture values. Certain inconsistencies are eliminated and flexibilities provided with respect to nonforfeiture insurance options.

Finally, the commissioner is given the permission to adopt new mortality tables prospectively which have been adopted by the NAIC. This would avoid the need for periodic legislation to keep mortality tables up to date.

With that I will conclude my very brief treatment of a number of subjects.

MR. CHARLES GREELEY: The two most recent major changes to the NAIC Model Valuation and Nonforfeiture Laws were approved in 1972 and 1976, both primarily motivated by the necessity to increase valuation interest rates. the dynamic concept is designed to achieve automatically the necessary interest rate changes of the future — both up and down.

In summary, the 1972 amendments increased the maximum interest rates for valuation and nonforfeiture to 4% for individual life insurance. The minimum standards for individual annuities were revised to reflect the 1971 IAM Table along with 6% interest for single premium immediate annuities and 4% for other individual annuities, while minimum standards for group annuities were changed to the 1971 GAM Table and 6% interest. The 1972 amendments were finally enacted in all 50 states only after more than six years had elapsed!

The 1976 amendments were more extensive than the 1972 amendments, including the following interest rate changes:

- 1. The interest rate for calculating minimum nonforfeiture values was increased from 4% to 5½% for annual premium life insurance and to 6½% for single premium life insurance.
- 2. The interest rate for calculating minimum reserves for individual life insurance was increased from 4% to  $4\frac{1}{2}$  for annual premium insurance and to  $5\frac{1}{2}\%$  for single premium insurance.
- 3. The interest rate for calculating minimum reserves for group annuities was increased from 6% to  $7\frac{1}{2}\%$
- 4. The interest rate for calculating minimum reserves for individual single premium deferred annuities was increased from 4% to 5½%.

5. The interest rate for calculating minimum reserves for all other individual deferred annuities was increased from 4% to  $4\frac{1}{2}\%$ .

The 1976 amendments included several other important changes. The linkage between nonforfeiture value requirements and valuation requirements was partially severed. The concept of deficiency reserves was replaced by new language requiring that "minimum reserves" reflect any so-called premium deficiencies. The maximum age setback permitted for females became six years. A nonforfeiture law for deferred annuities was enacted, based on a retrospective accumulation of net considerations. The valuation law was also modified to accommodate flexible premium annuity contracts.

Nearly four years after the 1976 amendments were adopted by the NAIC there still remain half-a-dozen states or so which have not enacted these amendments.

Based on the experience with the last two sets of amendments, it is a time-consuming task to get model legislation enacted in all 50 states. Clearly, this situation is not conducive to getting uniform supervision from the states - some states enacted the 1972 amendments later than some other states enacted the 1976 amendments. It has been a restraining factor against the insurance industry's being able to compete with other financial institutions for the savings dollar. To the extent that product changes occur which make the standard laws inapplicable or inappropriate, regulatory supervision over such new products is hampered until suitable legislation can be approved. All of these problems would be lessened by a dynamic interest rate mechanism.

Now, I'd like to describe how the dynamic interest rate proposal was derived. First, an index of market place long-term interest rates was chosen with a high degree of correlation with the industry's historical trend of new money rates, namely, Moody's Index of Yields on Seasoned Public Utility Bonds. Starting with this reference rate index and the cash flow pattern of each insurance product, supportable valuation interest rates were derived by matching available investment income and required interest for reserves under several scenarios as to future new money rates. The valuation interest rate selected (actually the weighting factor used to derive it) was based on the worst of the scenarios, introducing an additional measure of conservatism, since some products benefit from a scenario that hurts others.

As the index changes over time, valuation interest rates for new issues would change accordingly. It would not be necessary to go to the 50 legislatures every four years or so, as has been recent practice.

The question has arisen whether the resultant interest rates are sufficiently conservative for all products. In my opinion, they are. I would first point to the above conservatism in the testing. Second, when interest rates fall, the dynamic maximum valuation interest rates for new issues will also decline. The current static version is in effect less conservative in this regard, since enactment by the 50 states is required to lower maximum valuation interest rates. Third, the proposal only seeks to automate those changes in interest rate levels that would otherwise

have been made through periodic legislation. If the dynamic proposal had been implemented in December 1976, the resulting valuation interest rates would not have differed greatly overall from those rates actually approved.

For example, the dynamic proposal would have produced maximum valuation interest rates in 1977 for individual life insurance policies (both annual and single) of 5%. The rates in the existing law are \$L\frac{1}{2}\%\$ for annual premium life and \$5\frac{1}{2}\%\$ for single premium life. The interest rate for corresponding nonforfeiture values would have been \$6\frac{1}{2}\%\$, compared with \$5\frac{1}{2}\%\$ for annual premium life and \$6\frac{1}{2}\%\$ for single premium life in the existing law. For immediate annuities the dynamic proposal would have produced a maximum \$7-3/4\%\$ rate for 1977, in comparison with the \$7\frac{1}{2}\%\$ rate actually used. For deferred annuities, the dynamic proposal makes no distinction between group and individual, but does introduce a division into three issue age brackets (under \$45\, 45-54\, 55\) and over). In 1977, the dynamic rates would have been \$\frac{1}{2}\%\$, and \$7\frac{1}{2}\%\$, respectively - compared with current rates of \$4\frac{1}{2}\%\$ for individual single premium deferred annuities, \$5\frac{1}{2}\%\$ for individual single premium deferred annuities and \$7\frac{1}{2}\%\$ for all group annuities.

Similarly, the proposed dynamic interest rates under current conditions do not differ greatly from those static interest rates which would otherwise be proposed based on current conditions. For example, for life insurance policies issued in 1981, the dynamic interest rate proposal would result in a maximum valuation interest rate of 5.50%.

If the dynamic interest rate concept were not to be included in the 1980 amendments, it is certain that significant static increases would be sought by the industry to more effectively compete for both individual savings and group pension fund accumulations.

The proposed laws also cover contracts where current laws are silent - specifically guaranteed interest contracts. The proposal would require valuation reserves for such contracts based on the length of the period during which interest rates are guaranteed, and whether payment is guaranteed at the lower of book value or market value.

Regarding the choice of the reference rate index, the question has arisen why not use an index based on insurance company earnings. It is not practical to use an "inside" index, because such a measure of insurance company investment earnings would not be available in a timely manner for year—end valuations. However, it may be possible to use a broader based outside index such as Moody's Seasoned Corporate Bond Composite.

In conclusion, the dynamic concept is not intended to significantly alter the level of conservatism for reserves or nonforfeiture values. Rather it is intended to achieve automatically those interest rate change that would otherwise be included in 1980 Amendments, 1984 Amendments, etc.

MR. HOWARD H. KAYTON:

### NAIC GUIDELINES

Sometime in 1977 the NAIC (C) Committee Technical Task Force on Valuation and Nonforfeiture Value Regulation (the only NAIC group having numerically more words in its title than members of its group) began referring to

"Actuarial Guidelines." For those of you unfamiliar with this concept, the purpose of a guideline is to give the members of the NAIC the benefit of the thinking of the NAIC Actuarial Task Force, without going through the laborious task of legislation in each of the 50 or so state governments.

After the passage of the 1976 Amendments to the Standard Valuation and Nonforfeiture Laws, several issues arose which needed clarification. Rather than interrupt the process of legislative approval then under way, the Task Force experimented with the concept of guidelines. These guidelines, if accepted by the NAIC, would be consistent with the NAIC goal of promoting uniform regulation, without necessarily bringing very technical issues before the legislators. (Those of you attended the June 1979 NAIC Meeting may remember Ted Becker's aborted attempt to read the text of a guideline regarding acceptable approximations for continuous functions. His presentation was terminated shortly after his first integration symbol.) These regulations would be helpful to insurance company actuaries in knowing how the state insurance department actuaries would interpret the laws; would be helpful to insurance department actuaries in states not represented on the task force; and finally, would be helpful to field examiners if, as planned, they became a part of the Examiners' Handbook.

With this in mind, the first 4 guidelines found their way to posterity by inclusion in the Proceedings of the December 1977 NAIC meeting. The four guidelines, which have since gotten into the Examiners' Handbook are:

- 1. Deficiency Reserves this clarifies that the 1976 amendments are a change in method of reserving not a change in basis, and identifies the valuation standard as that on date of issue.
- 2. Reserving for Group Guaranteed Interest Contracts this is essentially the "nationalization" of the annual New York bulletin on this subject, which had since been also adopted by the California Insurance Department. It stated for the first time, a standard applicable to group GIC's for funds received in 1976 and subsequent. This permitted the discounting of guaranteed accumulations of funds at rates as high as 1/2% below the net new money rate credited by the company on group annuity funds, or if lower, a rate 1% below the average such rate for the industry in the prior year.
- 3. Nonforfeiture Value for Deferred Annuities having Surrender Charges - the interpretation clarifies the wording in the annuity nonforfeiture law that might have left doubt as to the legality of such a surrender charge.
- 4. Minimum Reserves for Renewable Term this permits the separation of reserves into each successive renewal period, and also permits the calculation of term reserves by subtracting the present value of gross premiums, if lower than net premiums, from the present value of benefits in determining term reserves. It is a follow-up to a memorandum originating in the Texas Insurance Department.

Sometime after these guidelines were developed, John Montgomery submitted to the task force a set of 16 interpretations which constitute "no change from interpretations previously rendered and is intended to be used as a

reference by insurers writing such business in the State of California." This was submitted with the suggestion that they be used as a basis for further guidelines. Several persons objected to the statement that it is not a change from previously rendered interpretations, since such interpretations had never been published.

Three of the less controversial interpretations; (1) acceptable approximation for continuous functions, (2) use of joint mortality and (3) use of pure endowments in determining Equivalent Level Amounts, have since become recommended guidelines and are making their way into the Examiners' Handbook. A fourth guideline, pertaining to valuation of Annuities for states that have not enacted the 1976 amendments, had been proposed to the (C) Committee, but was not recommended by that Committee because of the need for further research, particularly with respect to a possibility that such guideline would be applied retroactively to those states that have passed the 1976 amendments. The guideline is now in a state of suspense.

This leaves 8 remaining California interpretations. These were to have been discussed at the C(4) meeting in Tampa in April, but were not. They are scheduled for discussion at Saturday's meeting in Denver. Interpretations pertain to such matters as group permanent, premium deposit funds, age-last-birthday policies, use of continuous functions in nonforfeiture calculations, valuing riders, and application of CARVM to prior issues For those interested, watch the exciting pages of the NAIC Proceedings for further announcements.

One last guideline that I want to refer to is the Guideline for Filing of Rates for Individual Health Insurance Forms. This guideline has been adopted by the NAIC, but will not be a part of the Examiners' Handbook. Instead, it is likely to become a model regulation, and in fact, is being considered as a revision of Ruling 127.

This guideline should be really helpful in promoting uniformity in the filing of health insurance rate increases. It includes examples of loss ratio tests, definition of reasonable loss ratios, and checklists for filing of rates, both for new products and for rate increases.

#### SEC ACTIVITIES

A recent area of activity at the SEC concerns the reappearance of the "wrap-around" annuity. One of the situations that led to the reversal by the IRS of its position on the investment annuity was the widespread advertising of the investment annuity as a "wrap-around" annuity which permits deferring taxes on income from CD's and Savings and Loan accounts. That advertising highlighted the tax savings on the investment, and did almost ignore the annuity aspect of the contract.

Recently several companies have introduced variable annuities designed for similar purposes. These contracts have taken various forms ranging from individual separate accounts for each policyholder held and owned by the insurance company, to group contracts issued to savings & loans, who simply earmarked accounts as assets of the insurance company, to general account assets invested in savings & loan CD's and earmarked for the annuity contract holders.

Earlier this year, a small Arkansas company filed a registration of such a product with the SEC. Meanwhile, several other companies have been preparing to enter the market without registration, relying instead on the opinion of counsel that their particular product need not be registered. Unfortunately, there are several companies already marketing this product without registration and judging from the advertising I have seen, we may be going the investment annuity route again, complete with possible shutdown by the IRS.

In the meantime, one of the companies, which is not yet in the business because it did not yet have the desired IRS Private Letter Ruling, filed its contract in one state (California). That state's insurance department promptly sent a copy of the entire filing to the SEC on a for-your-information basis. The SEC reviewed the filing, and had some questions about the possible need for registration. They found the opinion of counsel on which the insurance company was relying to be less than explicit. Said counsel has had at least two opportunities to explain in detail to the SEC why he felt the product did not have to be registered. At last report, the SEC was looking deeply into this company's filing, and is questioning the validity of the opinion of counsel.

Finally, I understand that one of the SEC's regional offices may be preparing an enforcement action against an unregistered Savings and Loan variable annuity. I believe that we are just hearing the start of a lot of activity in this area.

MR. MONTGOMERY: Before we begin the discussion, there are a few points for which information was not available at the time of preparation of the written discussions. First, concerning the definition of "mass merchandising", a proposal is before the NAIC to use the definition of wholesale and franchise insurance from the California Code and including all business written as mail order business. The second point is that the determination of a select and ultimate mortality table to accompany Table K will avoid a great many of the problems of Table K for term insurance and the proposed amendments to the standard laws. A third item concerns the Accident and Health Guidelines. It is my understanding the the Utah Department is in the process of considering adoption of those guidelines as a regulation. California has no authority over regulating the reasonableness of premiums charged for the benefits provided with respect to disability income insurance benefits; so legislation will be required in California to cover all lines of health insurance. As a last point the guideline concerning the valuation of individual single premium deferred annuities is being proposed for adoption at the June 1980 NAIC meeting.

MR. GIBBS: I would like to ask about the liquidity and cash flow tests of the early warning system. Questions had been raised about possible cash flow problems, even though policies had no cash values. Fortunately, after discussing the situation, Mr. Montgomery was kind enough to write those states which had been concerned as a result of being notified of a cash flow problem to correct the mistaken impression that there was a problem. What is planned in the future to recognise such situations where the tests are not applicable?

MR. MONTCOMERY: The tests were hastily devised and did not take account of the specific situation of annuities with only a paid-up annuity option and no cash surrender option. A letter has been sent to all commissioners

- stating the facts which should take care of the problem. In the future similar situations may arise since in an emergency it is not always possible to consider all possible variations.
- MR. GRUBBS: In the actuarial certification of the annual statement a Member of the Academy is presumed to be a "qualified" actuary, but a Fellow of the Society or the Casualty Actuarial Society does not have the same presumption. Is there any possibility that the NAIC will change the presumption to include the Fellows of the other organizations.
- MR. MONTGOMERY: It took two years to get the present defintion, and I am not certain that the NAIC will be considering such a change soon.
- MR. McCLELLAND: Is it the presumption that cash values should be higher on "mass marketed" policies?
- MR. MONTGOMERY: The presumption is that the expense allowances for ordinary insurance may be too high for mass marketing. Possibly this will mean higher cash values.
- MR. EVANS: Since some companies have excess first year expense far in excess of 125% of net premiums plus \$10/1000, could companies perhaps have the option of justifying higher expense allowances; thereby promoting equity between withdrawing and persisting policyholders in addition to allowing consumers a wider selection of products?
- MR. WAGNER: The allowances have already been uniform. If there have been any discussions about allowing differences I have not heard of any.
- MR. GREELEY: I can give you information about the Unruh Committee deliberations. In developing the factors we were thinking primarily of an average company's expense. To have lower cash values would be what some would consider adverse to the consumers interests. For example an annuity with premium of \$1000.00 requires a cash value the first year of \$600 to \$700, while a life policy requires nothing at the end of the first and \$200 or so the second year for the same premium. This is low from the simplistic point of view of the consumer. To allow higher expenses would permit even lower values. The Unruh Committee and subsequent NAIC committees felt that the present values are low enough, if anything too low.
- MR. KUNESH: The 1976 amendments were not clear in defining group annuity contracts. I have two questions. How many states, other than New York have a minimum reserve requiring an excess interest component for unallocated group annuity funds and two, does the guideline apply only to unallocated group annuity funds or does it apply also to allocated group annuity unit credit type contracts?
- MR. MONTGOMERY: California also has adopted Actuarial Guideline II as a procedure for the valuation of group deposit administration funds with interest rate guarantees.
- MR. LOUIS GARFIN: This is to describe my understanding of the applicability of Actuarial Guideline II as to allocated versus unallocated deposit administration funds.

According to its terms, this guideline is applicable only to group deposit administration funds with interest rate guarantees.

Various versions of deposit administration fund contracts are used for allocated funds as well as for unallocated funds.

An unallocated fund is commonly used in connection with a defined benefit pension plan. The fund is accumulated over time based on calculations designed to be sufficient to provide retirement benefits to eligible participants. However, prior to retirement no part of the fund is identified with any particular participant. At the time of retirement, funds may be withdrawn and used to purchase retirement annuities. Under the IPG version, annuities are not purchased from the insurance company but benefit payments are made directly from the fund. Even in this case, no part of the fund is identified with an individual except to the extent that amounts are withdrawn periodically for the payment of benefits promised under the plan.

Allocated funds are frequently used in connection with profit sharing plans, incentive savings plans and defined contribution pension plans. For these applications, specific amounts accumulated within the deposit fund may be identified with individual participants under the plan. Vesting provisions as to amounts contributed by an employer may vary and some identified amounts may revert to the fund in the event of early terminations. However, the basic structure is a group deposit administration fund.

There may be interest rate guarantees on future contributions under either of these types of deposit administration funds, and it would appear that the terms of Actuarial Guideline II are general enough to be applicable in either case.

It is my understanding that IRA and Keogh plans are also sometimes funded in the framework of a group deposit administration fund. If the contract is appropriately designed as a group DA fund, the only distinction from the allocated funds described above might be that all of the contributions come from the individual participants in some cases. If there are continuing interest guarantees, the guideline would seem to apply to such contracts as well. One reason is that it is not always known to the insurance company whether or not, or the extent to which, a given plan is contributory.

MR. MONTGOMERY: Annuities written under group contracts which are considered individual annuities within the definition incorporated in the Standard Nonforfeiture Law For Individual Deferred Annuities should be valued according to the Commissioners Annuity Reserve Method.

MR. HUBBARD: I have a question about the nonforfeiture law on individual group annuities. As discussed the standard is a retrospective accumulation however there are also provisions discounting the maturity value. The intent was apparently not to preclude other type of annuities. The product has changed and now there are all types of surrender charges. These companies cannot comply with the discounted maturity value option. Apparently, they can comply by increasing the surrender charge. Under the nonforfeiture law is anything being considered to update that law for the new products?

- MR. CREELEY: The law was written before these new products existed. It is difficult to provide a law covering future products. For example, New York made changes in their law. Probably the law was not visionary enough. Nothing is likely to be done this year, but something probably should be done.
- MR. MONTGOMERY: One of the purposes of bringing these matters to the attention of the Society's members is to encourage submission of these problems. It would be most helpful to submit them in writing to the Chairman of the C4 Technical Subcommittee of the NAIC so that they can be put on the agenda for consideration by that group.
- MR. CHRISTIANS: With additional disclosure requirements and trends to deregulation, why do we need a nonforfeiture regulation at all. As to Early Warning tests, is it possible that the NAIC will require the company to show projections of future results.
- MR. GREELEY: I do not know if we need a nonforfeiture law at all. It is based on whether the public when it buys insurance coverage knows what it is doing. You can have all the disclosure in the world and people still do not know if they are buying whole life or term insurance. Possibly a well educated purchaser can discriminate between policies with or without cash values but I feel the time is not ripe for this yet. There have been many questions about the effectiveness of disclosure material. Generally, the public is not interested in the details. Like other products the purchaser trusts the seller as to the product.
- MR. KAYTON: The Federal government has gone to considerable lengths in cost disclosure. The general result seems to be that it does not help the buying public but is very helpful to the competition.
- MR. MONTGOMERY: It is only necessary to be in the regulation and examination areas a short period of time to realize how necessary nonforfeiture value legislation is. Without it, there would be an absolute jungle with many more pitfalls for both the unwary consumer and for companies with inadequate technical advice. As to the early warning tests over the future years additional tests will be developed and some additional information might be requested, possibly even some form of projection.
- MR. GILCHRIST: For nearly a century now in the life business persistency has not been considered an insurable hazard. Accordingly there should be no gain or loss to the company when a policyholder withdraws. As the Guertin Committee indicated this requires cash values approximating the policyholders contribution. Nonforfeiture values are therefore essential to avoid gambling with persistency rates.
- MR. CHAMBERIAIN: I have a historical comment as to the circularity problem of the standard nonforfeiture laws. I showed the report of the committee to Mr. Paul Montgomery my former associate. Mr. Montgomery was a member of the original committee which reviewed the standard nonforfeiture law. He is now 95 years old. He urged the committee to base the factor on the net level premium, but lost by one vote. He was delighted that the present committee's approval vindicated his original position.

MR. CREELEY: I am delighted to hear this. When the report was first given to the New York Actuarial Club, Mr. Guertin said he saw no reason why any of the details should be changed.

MR. MONTGOMERY: A number of important changes to the Annual Statement Blank are to be considered at the NAIC meeting next week. I will ask Mr. Wagner to review them.

MR. WAGNER: A proposal to simplify the annual statements has been under development by a task force during the last two years. They will be exposed at the June meeting. The procedure has been to look at the various schedules trying to eliminate those things which are in the nature of work sheets, e.g.—development from cash to accrual basis accounting. Consisent with this is a proposal to eliminate page 6, as being unnecessary. Reinsurance information will be consolidated into one exhibit. These are the highlights. The minimum time schedule provides for consideration in June with possible adoption in December for inclusion in the 1981 Blanks agenda. If approved there and again in June 1981 by the full NAIC, it could be effective for 1981 Statement.

MR. MONTGOMERY: The simplified blank will be a great improvement in making possible a rapid glance at the financial condition of a company. Unfortunately it will not show many of the details needed to verify the consistency of the information shown. Unless these details are made available in some form of supplement to the simplified blank many of the surveillance procedures long used by regulators will be destroyed and the chance would increase that an insureres progress towards either insolvency or inequitable treatment of one line business as compared to another might go unnoticed.

In conclusion, there are many aspects of regulation not covered by these discussions for the sake of time. Concerning the proposals for amendments to the standard valuation and nonforfeiture laws not discussed were the proposed changes on non-level premium and benefit policies. Mr. Harold Singh had some written comments on this topic which he presented to me after the session had concluded. I believe they are important enough to be presented here.

MR. HAROLD SINGH: My major concern is that this proposal produces unrealistically high reserves for certain type policies. These increases in reserves would directly result in increased cost to the consumer and also weaken our competitive position relative to other institutions. It would also appear the this proposal would eliminate a number of worthwhile products because of excessive deficiency reserve requirements. Below are my reasons for opposing these recommendations.

1. The recommendation attempts to recognize "the greatest of the respective excesses of guaranteed benefits...." and then proceeds to assign 100% probability to its occurence! In many cases, this is unrealistic - many policies may lapse before "the maximum benefit date" occurs, or if the policyholder was able to recognize the "maximum benefit date" (e.g. duration with the most negative reserves) he may have not desire to elect a benefit at that date. It does seem ludicrous to assume 100% election rate at the "maximum benefit date" when significant experience can demonstrate that actual utilization is less than 10% in most cases.

- 2. On the subject of negative reserves, the existing Standard Valuation Law prohibits a life insurance company from taking credit in their annual statement for negative reserves. The law refers "to the excess, if any, of the present value of future benefits less the present value of future premiums," (See paper by Walter Menge presented in 1946 RAIA Page 260.) The proposal to change the standard Valuation law seems redundant at least to the extent the intention is to avoid negative reserves.
- 3. Some interesting conclusions can be inferred from the Amendments.
  - (a) Assuming the reserves for extended term exceeds the basic reserves at every duration (5½% basic reserves versus ½½% extended term), would it be necessary to seek out the duration where the maximum excess occur and assume 130% of 1958 CSC (1958 CET) mortality for all the policyholders; i.e. all policyholders will experience 130% of mortality even though no antiselection exists when all policyholders elect this option.
  - (b) A split life plan assumes the ability to exchange the insured. Should we seek out the age at which the most deficient reserves occur and assume all new insureds will be at that exact age?
  - (c) Negative reserves occur where future net premiums more than cover future benefits. Under the proposed methods, the net premium increases can cause deficiency reserves. The proposal has therefore developed a theory which implies "even if the future premiums more than cover future benefits, an additional short term future premium (deficiency premium) is necessary.

I think dozens of similar examples can be found which will produce similar questionable results.

- 4. On certain forms of decreasing term insurance (20 and 25 years periods) and other term insurance widely sold in the Industy, adoption of the segmentation concept raises questions about the proper treatment of these reserves under the Federal income tax laws. If application of the segmentation technique shows a break at 13 years, for example, can the reserve be classified as "term of more than 15 years?" The Federal tax ramifications need to be explored more thoroughly.
- 5. Reserves are required to be adequate in aggregate and one is led to believe that current techniques are successful based on the last 70 years of actual experience. This new proposal considers short term adequacy and does indeed pose interesting questions. However, overly conservative reserves does not appear to be the answer. Possibly, a more reasonable approach would be to develop some mechanism where a short term solvency test must be demonstrated using appropriate probabilities, in situations of doubt.

6. Finally, I think it is clear that calculation of reserves will be more complicated. In particular, the dynamic segmentation may include some expensive changes in Occidental's reserving system, but probably this will be insignificant when compared to the expense of the small companies with little actuarial support or limited computer availability.

While the major reason for my objection is based on the requirement of assuming 100% certainty of exercising a policy right at the "maximum liability date", I do recognize some policy benefits are designed such that 100% election will take place, e.g. 8th year pure endowment on deposit life, then it behoves the actuary to reserve appropriately for such benefit subject to the revew of the commissioner. In such circumstances it is clear that this benefit will always be exercised and proper recognition becomes absolutely necessary. But a blanket approach, such as proposed will have far reaching effects across a wide range of products and is therefore not the answer.

I would find myself supporting the principles outlined in the propsal if the valuation were to reflect probabilities of anti-selection e.g. valuation methods such as gross premium valuation, GAAP valuation, Canadian valuation. However, I strongly maintain that the principles do not make sense on the valuation method that does not recognize probabilities other than the probability of death, unless excessive over-reserving becomes the guiding principles.

Turning briefly to the non-forfeiture proposal, I am not a proponent of a need for a minimum cash value (this is probably due to my Canadian background) I see no reason why cash value cannot be considered a separate benefit with an associated price and policyholder can discriminate among policies between premium versus cash values and weight these with their needs. Instead, regulatory efforts should be spent on proper disclosure of the absence or presence of cash values. This will tend to create a more competitive situation among the industry which will be to the benefit of the consumer.

Further, if it is desirable to require uniform grading of cash values, why not apply such grading requirements to all policies? Why apply these requirements just to the deposit term/deposit whole life products?

Also, the change submitted in the standard nonforfeiture law seems to run directly contrary to the Unruh Committee (1976) which recommended that nonforfeiture values of less than \$25 per thousand face mount cannot be required. How can both changes in the same package be justified?

Finally, these proposals have not had adequate exposure unlike the new mortality table, the Unruh Committee recommendations, the dynamic interest proposal which have all been subject to thorough debate and criticism. There may be unforeseen consequences of these amendments and I strongly suggest that more reasonable time be allowed for review, examination and exploration of possible consequences.

MR. MONTGOMERY: Mr. Singh's comments are well taken and will be considered carefully by the NAIC Technical Subcommittee. It is hoped that the development of a select and ultimate mortality table will ease some of the problems

he has presented. The argument that the requirement of higher nonforfeiture value will increase the cost of insurance is one that has been around since Elizur Wright first required such values. It still resolves into considertions of equity between surrendering and continuing policyholders.