

# RECORD OF SOCIETY OF ACTUARIES 1976 VOL. 2 NO. 2

## REPORT OF THE SPECIAL COMMITTEE ON VALUATION AND NONFORFEITURE LAWS

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ROBERT N. HOUSER, CHARLES F. B. RICHARDSON.

This is intended to be largely an open discussion of the "Report on Actuarial Principles and Practical Problems with Regard to Nonforfeiture Requirements," but will include a summary of written responses to the Report, developments on the regulatory scene, and recent work of other committees studying nonforfeiture or related areas.

MR. ARDIAN C. GILL: I would like to explain briefly why the committee went about things the way we did and how we reached some of our conclusions. At least two of us here, Tom Eason and myself, were on panels held at the Spring meetings of the Society in 1972 at which nonforfeiture and valuation laws were discussed. Nearly every participant in that discussion said that the nonforfeiture laws were badly in need of repair. The comments on valuation at that time tended to lean toward a problem with the level of interest rates.

When Tom Bowles became president that fall he took up the question of appropriate committees and decided that the Society should take the lead in this case and not wait for the NAIC to ask us to do our studies. The following spring, he appointed Henry Unruh as Chairman, and John Gardner and myself as Vice-Chairman, of a Special Committee on Valuation and Nonforfeiture Laws.

At that point the valuation problems with regard to interest were making their way through the state legislatures and some relief was in sight, so the committee elected to start with nonforfeiture. We spent a great deal of time wrestling with the basics with radical approaches ranging from no cash values required at all to cash values required but not guaranteed, to an accumulation of some percentages of gross premiums. We started with a clean slate. We listened to everyone who felt that his approach was in some way superior to what we have.

Wherever we turned we kept foundering on the question of equity, just what it was. I think all of us abandoned what we had believed in the past or at least seriously questioned what we believed to be truisms. Among those questioned was the belief that the asset share is the true measure of policyholder equity. I think it was John Gardner who finally put it into focus for us and pointed out that there are different views of equity. We, as a group, could not decide which was the correct one. It would be up to the regulator to tell the companies just what was appropriate.

We came back to asset shares as the best measure of an equitable value. But this was not so much a matter of deep-felt principle as recognition of the practicalities of the situation. If the departing policyholder is not made whole for his own contributions, then a continuing policyholder must pick up the balance. The company certainly is not going to be the balancing item in the long run. With this practical view of what policyholders can expect, the asset share becomes the best measure of the result with which the policyholder and the company are satisfied. Most of the conclusions in the 1937 Guertin report flow from this realization. So I suppose we should not have been surprised that we ended up pretty much where Guertin and his committee did.

Our report was taken up almost immediately by the NAIC and by the ALIA. These two groups have been active in the annuity area in particular because of the current interest in IRA's and because the legislators of various states are interested in nonforfeiture regulation of annuities. The subject of valuation has heated up considerably and the Society is now deciding how to get its arms around the manifold problems in that area.

MR. ROBERT N. HOUSER: I will concentrate my remarks on two specific subjects. One of these is annuity nonforfeiture values, while the other is valuation.

For a long time, there were very few state requirements insofar as annuity nonforfeiture values are concerned. I think about four states had some kind of regulation, and these were not very stringent. So why the current interest in regulating annuity nonforfeiture values? I would suggest several reasons for it. One has to do with the relatively recent development of the split-life policy. We learned how easy it was to approximate an ordinary life policy by putting together a package of reducing term coverage and a build-up of cash values under a retirement annuity contract. We also discovered that, for the annuity contract, there really were no meaningful minimum cash value requirements.

Perhaps the biggest reason for current interest in annuity nonforfeiture value regulation is simply the fact that retirement annuities have suddenly become quite popular. With the rise in interest rates that are being credited on this type of contract and with the new popularity of HR10 and IRA accounts, we are suddenly selling large numbers of retirement annuities. A somewhat different problem stems from the development and growing popularity of flexible premium annuity contracts. These contracts, by their very nature, create problems of equity that do not exist with fixed premium annuity contracts. These are at least a few of the reasons for the increasing interest in regulation of annuity nonforfeiture values.

At least three states -- Utah, Indiana and Tennessee -- have recently developed new laws or regulations for annuity nonforfeiture values. Furthermore, there is active work going on in this area by an ALIA Subcommittee and also by an NAIC Technical Subcommittee. These groups are both trying to develop model regulations for nonforfeiture values in deferred annuity contracts. There is an urgency for them to get this job done before too many states develop their own laws or regulations.

The Unruh Committee in its report dealt with nonforfeiture values in deferred annuity contracts. In the interest of time, I will not go into details but will only mention the highlights of this section of the report. The report recommended that there be required minimum nonforfeiture values in deferred annuity contracts. This, in itself, was a significant step. A second recommendation was that these minimum nonforfeiture values include cash values "in normal circumstances." The Committee did not spell out what might be abnormal circumstances where perhaps cash values should not be required. The report also recommended that there be a single set of minimum nonforfeiture values. These minimum values would be based on the accumulation of specified net premiums at a specified interest rate.

The Unruh report does not spell out in detail what loadings should be deducted from gross premiums to get these net premiums. It also does not recommend the particular interest rate to be used, although it does mention

3% as possibly appropriate. The report talks about differences in loading between first year and renewal years. It also talks about differences in loading between annual premium and single premium contracts. However, it leaves to others the job of filling in these details in a model law or regulation.

The report also discussed what might be done about flexible premium annuity contracts. This subject came up rather late in the Committee's study and represents a very difficult problem. The Committee suggested three possible ways of solving the problem, but did not really recommend one over the others. One approach would be to require use of a level loading for all contract years in arriving at minimum nonforfeiture values. This would be fine if the company actually operated that way, but could involve a severe surplus strain if the company had higher first year expenses than renewal expenses, as is typically the case. Another approach mentioned in the report is the idea of setting the loadings in terms of total premiums paid to date without regard to the particular year in which the premium payments are made. The third approach mentioned in the report was the so-called open policy concept. Under this approach, the contract is initially treated like a level premium annuity contract. Then, when and if a premium increase occurs, there is additional loading permitted on the amount of the increase. These are the highlights of the Unruh recommendations insofar as deferred annuities are concerned.

An ALIA Subcommittee, formed to grapple with the specific problem of annuity nonforfeiture value regulation, was off and running before the ink was dry on the Unruh report. This group has been working very hard and is quite close to a final recommendation. They appear to have picked up most of the recommendations from the Unruh report -- that there be minimum nonforfeiture value requirements; that there be a single set of minimum values; and that these values be defined as the accumulation of net premiums based on a minimum interest rate and specified set of maximum expense loadings. They did enlarge somewhat upon the Unruh report by spelling out certain conditions under which cash surrender values would not be required in annuity contracts. They also adopted the so-called open policy concept to handle flexible premium annuities.

The NAIC Technical Subcommittee which is tackling the joint problems of valuation and nonforfeiture value regulation is already at work on the annuity nonforfeiture value problem. They have been in close touch with the ALIA Subcommittee so that there has been a free interchange of ideas. Something will likely come out of the hopper in the very near future in the form of a recommended model law or regulation. I would emphasize here that the ALIA and NAIC reports have not yet been completed so are still subject to change.

The second subject is valuation. Why the current interest in valuation matters? I can remember back to the time when surplus adequacy was kind of an academic matter. In our own company we undertook a study of surplus some years ago and could easily have reached the conclusion that we actually did not need any surplus at all since it had never gone down in our company's history. Every year the company's surplus kept getting bigger and bigger. About the only legitimate concern seemed to be that our company's surplus was as big, relatively, as anyone else's. Those happy days seem to have disappeared. In our own company we have actually seen the Mandatory Securities Valuation Reserve wiped out and statement surplus go down as a result

of stock market declines. Thus, we can no longer say that questions of surplus adequacy are purely academic.

There are companies -- maybe not many, but some -- who have real solvency problems. This, at least in magnitude, is a relatively recent development in our industry. I was at a meeting of company presidents just a few weeks ago where they were asked to list what they considered to be the number one problem for their particular company. What the majority listed as their primary concern was the pricing problem. They have seen profit margins disappear with inflation and increasingly competitive pricing. I picked up the feeling that they are not so confident their actuaries know what they are doing. In any event, this erosion of traditional profit margins was a very real concern on their part.

A few years ago the NAIC developed some so-called "early warning tests." They were looking for signs that companies were beginning to get in trouble before they actually reached the insolvency point. These tests have since gone through an evolution. I think there are twelve of them now. It is rather interesting that none of the twelve tests deals with the absolute level of surplus or of reserves. The reason, obviously, is that such tests would be meaningless unless there is some sort of uniformity in reserve bases for the various companies.

I think the idea that the stronger companies can ignore the solvency problems facing weaker companies has pretty much gone out the window with the development of state guarantee laws. If some company goes bust, you can guess who is going to have to step in and pay the cost for any losses involved. Thus, the question of company solvency is a matter of concern for all companies.

In the Unruh report there is a statement that, insofar as nonforfeiture values are concerned, equity is in the eye of the beholder. This implies that there is not any absolute measure of what true equity is. I would suggest, however, that solvency is not in the eye of the beholder. Solvency is a very real and concrete thing. There should be some specific way to determine whether a company is really in a solid financial state or whether it is bordering on the stage of insolvency. Thus, I think the matter of solvency is a very down-to-earth type of problem.

What is being done about this problem? There is an ALIA Task Force that is off and running. Its full title is the ALIA Task Force on Actuarial Aspects of Valuation Problems. There is also the same NAIC Technical Subcommittee referred to previously which deals with both valuation and nonforfeiture value problems. The NAIC Subcommittee is assisted by three industry advisory committees: one on life valuation, one on accident and health valuation, and one on accident and health nonforfeiture values. Society members are involved in all of these activities. Nevertheless, the Society as a body is not currently at work on valuation problems. That is really the purpose behind the formation of the Society's special valuation planning committee announced by President Bragg.

The Unruh Committee, at its inception, was given the double challenge of coming up with recommendations on what should be done in the valuation area and in the nonforfeiture value area. For various reasons, the committee opted to attack the matter of nonforfeiture values first. By the time they were near the end of that project and considering tackling the valuation problem, some of the committee members were a little bit weary in well-doing.

I know I was. They had been working for several years on the problem of nonforfeiture values and did not particularly relish the idea of spending another two or three years working on valuation problems. Furthermore, they felt that a valuation study committee might well have a somewhat different membership than the Unruh Committee -- perhaps some people with a better background in the valuation area or in risk theory. In any event, they did ask that they be discharged from responsibility for working on valuation problems. Nevertheless, if you will read the introduction to the Unruh report, you will see that they recommended the Society undertake a study of valuation problems in cooperation with other groups studying the problem.

The valuation planning committee that I am chairing does not have the responsibility for making the valuation study but only of recommending whether and how such a study should be made. Our committee is attempting to put together a list of the basic questions that need answering in the valuation area. Once these questions are decided, how is the best way to get needed answers? What type of research or study would help us to get these answers? Furthermore, what portion of this research would be appropriate for the Society to tackle? How should the Society's role in this research project differ from that of the ALIA or NAIC who are also working on the problem? What type of committee structure would be best for the Society if it were to undertake a valuation study? Could such a study be broken down into pieces so that several groups could work on the project at the same time? Finally, how could the Society's work on valuation problems be tied in with the work these other groups are doing on valuation problems?

Our committee has met only once to date, but we did not take long to arrive at the conclusion that we do feel the Society can and should play a vital role in this study. We are now trying to define what that role should be so as to come up with a specific recommendation that can be given to the Board of Governors. Obviously, it would then be up to the Board to act on this recommendation in whatever way they felt appropriate.

Have you ever asked yourself the question, what really is an appropriate level of surplus? In this regard I am not talking about statement surplus but rather about realistic surplus based on realistic reserves. How is your answer affected by the various risks to which the company is exposed? What is the company's vulnerability to cash flow problems, and how can it best protect itself against this type of problem? What about the company's vulnerability to asset loss? Obviously, the company's solvency cannot be guaranteed by focusing only on the liability side of the balance sheet. More companies have probably failed from asset problems than from inadequate reserves. What about other special risks facing the company? For example, what is the company's exposure to loss in the volatile health insurance field? How does this impact on the level of surplus or reserves needed to insure solvency?

I think there is some real fundamental research and study needed in the valuation area. I see the Society as playing a significant role in this type of study. I see the NAIC and ALIA as concentrating primarily on the solution to current valuation problems with less emphasis on fundamental research or longer range type valuation studies. I would conclude by saying that a lot of work needs to be done on valuation problems in general, and any contribution you can make to solving these problems would be most welcome.

MR. THOMAS F. EASON: Actuaries and their employers may be expected to take a lively interest in the Report when its conclusions begin to appear in draft legislation. About a dozen discussions were received in time to summarize at this meeting. The Special Committee does not intend to respond to discussions since this was not part of its charge.

Material covered at this meeting may be likened to an iceberg tip. Time does not allow a review of the many favorable comments received on the Report.

Mrs. Linda B. Emory's review of the Report in the March, 1976, issue of The Actuary is an important part of the Society's discussion. She is disappointed that the committee did not recommend allowing the use of an assumed increase in the cost-of-living index so that minimum nonforfeiture values could be determined at issue. In discussing multiple track and open policies, she suggests broader authority for the proposed single national review body.

Mrs. Emory believes it appropriate to increase interest rates along with expense allowance changes in order that both would more closely approximate asset share calculations. She closed her discussion by reiterating the committee's view (pages 13, 36, 37, 53 and 57) that additional flexibility is needed in developing and marketing new products which provide protection against erosion of insurance coverage due to inflation.

Mr. Spencer Koppel discussed various ramifications of the open policy proposals (Conclusion 9).

Mr. Gary Corbett favored us with two pages of well-written discussion, and I shall only take time to summarize his main point. Mr. Corbett finds the Report's support for the prospective method convincing. He would like to have more emphasis on the paragraph of Section VIII which begins, "It is desirable that all factors entering the adjusted premium calculation be brought close to experience..." (Mr. Corbett's discussion is reprinted in full following Mr. Eason's summaries.)

Although no formal discussion has been submitted, the committee is aware of the initial views of the ALIA Actuarial Committee, chaired by Mr. Richard S. Miller. This ALIA Committee finds itself in substantial agreement with roughly 25 of the Report conclusions. Further study in a number of areas has been discussed:

1. Concern was expressed over the proposal for broad regulatory powers to approve experimental policy designs (Conclusion 9). The desirability of uniform regulation was stressed.
2. The Board of ALIA is understood to have recommended development of new mortality tables with separate tables by sex.
3. An ALIA Subcommittee on Annuity Nonforfeiture Regulation has already made extensive proposals for minimum annuity nonforfeiture values.

It is understood that the ALIA Actuarial Committee and staff will be deeply involved in the future.

Mr. William H. Blake, Jr. suggests several propositions in connection with minimum nonforfeiture values for deferred annuities:

1. The basis should be flexible, allowing a choice of (a) level or front-end sales charges, (b) per-account or percent-of-premium administrative fees, and (c) level or high early interest guarantees.
2. Premium taxes, which vary by state and tax-qualified status, should be separately stated from other charges. Only the net payments should be used in determining minimum values.
3. The artificial distinction between group and individual annuities should be eliminated.
4. Tables of minimum guaranteed values should be replaced by an adequate disclosure system.

Mr. John Haynes Miller was critical of requiring cash values on annuity contracts. It seems to Mr. Miller that, if the insurer and insured desire to enter into a contract which will maximize the ultimate return at the expense of liquidity, this should not be prohibited.

One discussion arose from a member of the Canadian Institute. Mr. Sidney H. Cooper expressed a number of views which run counter to the United States requirements and common Canadian practice. He commented on questions of asset valuation, cash flow, and solvency (mentioned on page 1 of the Report). Mr. Cooper thinks it is a proper concern of the regulatory authorities to ensure that withdrawing policyholders are given reasonable treatment and that their rights on withdrawal, including the nature of any guarantees which may or may not exist, are clearly set out in the contract and proposal material. He believes this requirement can, however, be achieved by laying down regulations regarding contractual paid-up values, with the proviso that cash values shall be reasonably determined in relation to the contractual paid-up values, having regard to the financial conditions obtaining at the time of surrender.

Mr. Lester Moskowitz offered a number of observations. The committee recommended that renewable and convertible term policies should be viewed uniformly as a series of short-term policies for nonforfeiture purposes (Conclusion 19). He pointed out that various states have reached different conclusions in the valuation area. He referred to possible inconsistencies in the committee's views on (1) the proper mortality to be used for nonforfeiture insurance options (page 51), and (2) the level of minimum cash values for substandard insurance (page 43). Also, he pointed out some of the practical problems in implementing Conclusion 9 including possible conflicts of interest for Society members who might become involved in the process of reviewing experimental policy designs for regulators.

The present Standard Laws are silent on the proper treatment of actuarial functions other than curtail functions. Mr. William Harold Phillips added his feeling that minimum nonforfeiture laws should permit continuous functions without an actuary being required to go through all kinds of gyrations to prove that his values meet minimum requirements.

MR. GARY CORBETT: This Report is extremely well written and persuasive of the Committee's recommendations. I know the latter characteristic to be true since the Report convinced me, long an advocate of a retrospective approach employing minimum interest rates and requiring the crediting of minimum percentages of gross premiums, of the superiority of the traditional prospective net premium approach - at least for level premium life insurance.

I was privileged to have the opportunity to review the draft Report, prior to publication, and was thus able to suggest a number of changes, mostly minor, many of which were included in the final Report. However, some of my suggestions were not accepted and they form the basis of what follows.

I believe my most significant disagreement with the Committee to be one of degree and emphasis but it is on such a vital subject that it may well constitute a disagreement of substance and of principle. In Section VIII (pp. 19-20) the Committee concludes "It is desirable that all factors entering the adjusted premium calculation be brought close to experience, for only in this way will the result be reasonably related to asset shares. While we are using the term loosely, asset shares are a logical measure of whether a departing policyholder will affect the cost of continuing policyholders and to what degree. So long as this objective is valid, factors close to experience will help achieve this objective." This conclusion is key to my accepting the Report and its stated preference for prospective over retrospective methods. I believe that nonforfeiture values must be based on asset shares - a retrospective concept. As the Report states, prospective methods will approximate asset shares only if the factors entering the adjusted premium calculation approximate those experience factors used in deriving asset shares.

My concern is that the Committee itself did not accept this conclusion in all respects. Reasons for my concern are:

- (1) In the paragraph quoted above, the adjective "desirable" rather than "necessary" was chosen; and
- (2) this conclusion does not appear in the list of the thirty considerations and conclusions in Section I (p. 7). My suggestion that it be added was not accepted by the Committee.

On the other hand, a suggestion to eliminate references in Sections XIII and XV to 4½% being a "relatively high interest rate for cash values" was accepted. Also, for Single Premium Life (p. 54) a "conceivably higher" rate than 6% was accepted. All in all, I am not sure where the Committee landed on the subject of using close-to-experience factors in the adjusted premium formulas.

On the assumption that valuation and nonforfeiture factors would not be tied together, I see no reason for nonforfeiture factors to contain substantial margins for adverse contingencies. To insist on such margins will tend to increase gross premiums and to increase the cost to continuing policyowners. For example, very attractively-priced single-premium life insurance policies could be offered today if companies were permitted to base cash values on interest rates approximating 8% grading down to 6% or 5%, or even lower, over 10 to 20 years.

Because of the desirability of permitting cash values to be calculated on the basis of relatively current experience factors, it would be best for such factors, particularly interest, to be set by regulation and not by statute, even though the general method to be used in calculating nonforfeiture values would be in statute form. State insurance departments could then respond more rapidly to changes affecting the choice of such factors. Again, I will emphasize that these comments apply only to nonforfeiture regulation and not to valuation.

I have two miscellaneous comments. In Section V the Committee listed seven



primary concerns. I suggested an eighth: present nonforfeiture laws have resulted in gross premiums being charged that are higher than necessary to fund benefits and to provide equitable treatment to withdrawing policyholders. The extreme example is the single-premium life insurance situation already mentioned.

My last comment concerns the statement in Section XIII (pp. 39-40) that "modernizing" factors will result in reduced cash values but increased nonforfeiture insurance benefits. This seems to me a highly desirable situation. Equity is not violated if only insurance nonforfeiture benefits are provided. Also, cash introduces an element of investment antiselection that could threaten the solvency of companies if interest rates were to rise substantially. This problem, not addressed by the Committee, is of particular import for single-premium, life or annuity contracts.

I do not mean to appear overly-critical of the Committee's work. The quality of research, thought and exposition entering into the Report is excellent. With most of the Report I am in complete agreement. I appreciate the opportunity to discuss these few areas, hopefully minor, where I continue to disagree.

MR. CHARLES F. B. RICHARDSON: An important step was taken at the NAIC meeting last June which resulted in the Technical Subcommittee becoming a permanent NAIC Committee, rather than a temporary Task Force. In due time, this will be the body to which State insurance departments will refer technical questions regarding the interpretation of the Standard Nonforfeiture Law and the Standard Valuation Law as they apply to unusual forms of policy. Undoubtedly, from time to time, the NAIC Subcommittee in turn will wish to seek technical advice from the appropriate Society committee. This should result in greater uniformity of treatment in the various states.

The NAIC Subcommittee is working closely with the Society of Actuaries Committee to arrive at recommendations for changes in the Standard Nonforfeiture Law and there is agreement on many of the Unruh Committee's recommendations. Some of the more important conclusions on which there is agreement are the following:

- (1) The adjusted premium method has worked well and should be retained, but the expense allowances should be based on net premiums to simplify the formulas.
- (2) The expense formula needs to be revised by reducing the per \$1,000 factor and increasing the percentage of premium component.
- (3) The effect of inflation on first year expense allowances does not appear to be substantial.
- (4) The NAIC Technical Subcommittee should be established as a central reference source for questions regarding valuation and nonforfeiture value regulation.
- (5) A specific test is needed to define the level of trivial values which should not be required and this will also determine what extension should be made in exempting term policies from providing cash values.
- (6) Term riders should be treated as separate policies under a severability principle.

- (7) The present linkage between the reserve and cash value interest rates should be abolished.
- (8) Guaranteed paid-up insurance options should be those purchased by the cash value on any interest rate at least as high as that used for cash values, and higher mortality should be permitted for extended term values.
- (9) Minimum cash value requirements for deferred annuities should be introduced based on retrospective accumulations of gross premiums.

Some matters need further exploration and the following are some of the questions which the Society Committee has been requested to study further:

- (1) An analysis is needed of the question as to whether there should be any relationship between minimum nonforfeiture values and the minimum valuation standard. The prevailing view is that there should be none.
- (2) The effect of the proposal that expense allowances should be based on levelized net premiums rather than the first adjusted premium is to be tested on a number of different types of policies with increasing or decreasing premiums.
- (3) Examples of life-cycle and cost-of-living policies are to be tested.
- (4) Work has been started on the development of new mortality tables using separate tables for male and female lives. This is one of the more urgent items. Presumably, the same table will be used for minimum values and for valuation. The uniform age setback is no longer valid or acceptable to the feminist movement. Nonforfeiture standards will probably be on the curtate basis at age nearest birthday. Any margins built into this table should be such that reserves will not be less than the reserves required if there were no margin.
- (5) Tests of possible criteria to establish triviality of values will be made, based both on a percentage of reserves and on a multiple such as two or three times the net level premium. It is agreed that trivial values should not be required.
- (6) The several types of deposit term plans are to be further studied because the method proposed in the Society Report breaks down under the type of plan under which the deposit is not paid out at the end of the term.
- (7) Substantial progress has been made in the matter of minimum values to be required under deferred annuities and it is agreed that controls in this area are badly needed. The approach will be a retrospective accumulation of percentages of the gross premium, with a policy fee deduction and possibly a premium collection charge, accumulation being at 3% interest. The widespread use of flexible premium contracts forces a retrospective approach.
- (8) A study of the effect on gross premiums of cash value scales based on different expense formulas is to be made to determine what would be the effect of adopting an expense formula that might not cover the full excess of first year over renewal expenses.

- (9) Further tests of the proposal that changes in amount of coverage after the tenth year should not be taken into account will be made on the basis of the current expense formula and a proposed new formula, for various plans with increasing or decreasing coverage.
- (10) The NAIC Committee obtained extensive, up-to-date functional cost data based on the LOMA Intercompany Studies and is considering new expense formulas which would involve a much higher factor for the percentage of premium portion and a per \$1,000 factor reduced to \$5 or \$10. It was found that, in the past 35 years, there has been a very substantial change in the portion of expenses that depend on the number of policies, average size having increased over seven times and the proportion of non-medical business having increased dramatically. The result is that the proportion of first year expense which varies by size of policy or by amount is greatly reduced and the expense formula needs substantial changes.

If it were concluded that minimum nonforfeiture requirements should have no relationship to minimum valuation standards, except that the reserve would never be less than the guaranteed cash value, the necessary changes in these requirements could be finalized in the near future. It is my belief that minimum values should be based on interest rates much higher than 4%, possibly 5% or even 6%. If minimum reserve standards were based on a graded interest scale, for example, 6% for ten years, 5% for the next ten years and 4% thereafter, the structure would make possible substantial margins at longer durations to cope with fluctuations in asset values. This would permit substantial reductions in gross premiums which are not possible now because of deficiency reserves that arise under the present obsolete reserve standards.

The questions involving contingency reserves for investments and insurance operations, and minimum surplus requirements, so ably discussed by a panel at the October 1975 meeting, obviously need much more research. However, substantial increases in the interest rates under the Standard Valuation Law are urgently needed if our business is to compete in the marketplace with other types of financial institutions. The pressure of current interest rates has become evident in the special treatment now given to DA group annuity funds under the New Money Theory. There are other types of funds with substantial interest guarantees which must also be dealt with. In my view, these urgently needed changes cannot await the long-term research needed on the contingency reserve and surplus problems. The present structure has the effect of maintaining premiums at unnecessarily high levels and is not in the public interest. It is resulting in more and more twisting by advocates of "buy term and invest the difference." These are my own views and not necessarily those of the NAIC Committee.

I am sure that John Montgomery, Chairman of the NAIC Committee, would want me to express our sincere appreciation for the splendid cooperation we are receiving from the Society and from the Industry in attempting to resolve the many complicated problems that need to be dealt with in revising this most important law to meet current conditions.

Note: The following comments were part of a report of the (C3) Subcommittee of the NAIC to its parent committee at a meeting in June 1976. This report indicates disagreement with Conclusion 14 which follows:

"A six-year age setback for determining whole life cash values for females would reasonably approximate the results using a separate female table (p. 42)."

The (C3) Subcommittee's disagreement apparently rests on political rather than actuarial grounds. The sections headed "...Needing further work..." must typically be interpreted to mean the (C3) Subcommittee wished to see examples of individual cases where the Society Committee's conclusions derived from principles or general reasoning. The Society Committee has agreed to analyze individual cases as requested by the (C3) Subcommittee.

The Society of Actuaries Special Committee on Valuation and Nonforfeiture Laws prepared a "Report on Actuarial Principles and Practical Problems with Regard to Nonforfeiture Requirements" dated October 1975 and published by the Society of Actuaries, January 1976. The NAIC (C3) Life Technical Subcommittee on Valuation and Nonforfeiture Value Regulation is reviewing this report and working with the Society Committee to clarify or obtain more information with respect to certain conclusions of that Report and the facts presented in the Report to support these conclusions. Of the thirty comments and conclusions presented in that Report, the NAIC Technical Subcommittee believes that half of them merit immediate inclusion in proposals for revision of the Standard Nonforfeiture Value Legislation, and only one (the use of a six-year age setback for female rates and values) with which there was total disagreement. Of the remaining fourteen, there is substantial agreement but a need for further work by the Society Committee on eight conclusions, and further work by some other group on four more conclusions. One conclusion contained suggestions for further study for which the NAIC Technical Subcommittee has now considered and given direction to. One comment was not really in the nature of a conclusion which would require action. The Report of the Society of Actuaries Committee is a major contribution and deserves a vote of commendation from the NAIC.

The activities of the NAIC Technical Subcommittee with respect to the Society of Actuaries Report as of the date of the June 1976 meeting of the NAIC is given below in the following sections (The numbered conclusions shown are numbered according to the order shown in the Society of Actuaries Committee Report):

#### A. Comments Concerning the Conclusion of the Report

1. **With Substantial Agreement**  
Conclusions 1, 2, 4, 5, 7, 10, 18, 19, 21, 22, 23, 24, 25, 27 and 28 of the Report.
2. **With Substantial Agreement but Needing Further Work by the Society Committee**  
Conclusions 3, 6, 8, 9, 16, 17, 20 and 26 of the Report.
3. **Needing Further Work by Some Other Group**  
Conclusions 11, 12, 13 and 29 of the Report.
4. **Other Conclusions**  
Conclusions 14 and 15 of the Report.

B. Special Projects for Further Consideration by the Society of Actuaries Committee on Nonforfeiture Value Regulation

1. Effect of various scales of minimum cash values on zero profit non-participating gross premiums.
2. Tests involving flagrant examples of plans which take advantage of the present legislation.
3. Examples of the operation of various triviality tests.
4. Other topics related to minimum nonforfeiture value legislation.

MR. THOMAS A. DeSELM: On page 29 of its report, the Committee accepts the principle that two plans with identical benefits and identical premium paying periods should have identical expense allowances. If Split Life Term and Annuity policies are combined in the ratio of \$100 of Term insurance to \$1 of Annuity premium, the expense allowance will exceed the net level premium, thus permitting a zero first year cash value.

The Committee recommendation for annuities that at least 60% of the first year gross premium be accumulated for cash value purposes provides a much higher cash value. Furthermore, if conventional Ordinary Life policies were subject to the same standards (even after subtracting the cost of the insurance) very few existing policies would meet the minimum cash value test. It seems to me that Annual Premium Deferred Annuities should have the same minimum cash values as an Ordinary Life policy with the same premium and the same cash value on the Annuity starting date.

One solution might be to base minimum cash values for all types of policies (annuities, life insurance, health insurance, etc.) on the same standards as for annuities, with a deduction for the accumulated cost of insurance. This would require first year cash values on almost every policy which is quite a departure from current practice.

Minimum cash values for Ordinary Life policies issued at age 75 and under are zero at the end of the first policy year. The cost of placing the insurance in force is a major factor in that zero first year cash value. It only seems fair that Annual Premium Deferred Annuities should have a minimum first year cash value of zero to allow a similar level of selling expense for Annual Premium Deferred Annuities and Ordinary Life insurance.

The fairest nonforfeiture requirements that I can think of might be to require minimum paid-up annuities to be based on the standards outlined in the ALIA proposal of April 14, and then calculate a cash surrender value for that paid-up annuity using an interest rate 1% greater than the rate used to calculate the paid-up annuity. This would provide equality of cash surrender and paid-up annuity values on the maturity date and still allow a reasonable surrender charge in the event of early surrender. This is identical to the recommendation in Section D of the ALIA Report except that minimum cash values would not be based on Section B - only minimum paid-up values.

On a different subject, Deposit Term policies should be subject to the same test of triviality as other policies. For example, the Eight Year Deposit Term Plan with a \$7.50 deposit, a \$15.00 pure endowment, and a death benefit of \$1,015, never has a minimum cash value greater than 1% of the face amount. On page 44, the Committee proposed three or four percent as a test of triviality.

MR. GILL: Many of the items discussed were, of course, recommendations by the ALIA Committee, particularly, 60% first year annuity value, thought to be on the low side by some of us.

MR. EASON: I think the inconsistency Mr. DeSelm has illustrated in the Section on annuity values may reflect a problem that we experienced. I believe it would be fair to say that the Special Committee, in its recommendations on annuities, has attempted to institutionalize the approach that many companies, but certainly not all, follow in paying annuity commissions that are much less than you typically pay on ordinary life. Mr. Richardson has pointed out that there are consumer complaints, very frequent ones, I gather, where companies are paying commission rates on the order of 75% on annual premium deferred annuities with cash values reduced proportionately.

We simply took this problem in hand and went with the indirect approach which either limits commissions or forces companies to experience surplus strains on annuities which they may have been able to avoid in the past. That may or may not be wise.

I am sorry we did not take time to discuss deposit term earlier. Perhaps the discussion from Mr. Burnett Halstead will be further developed in Chicago. Plans of this type are a particular problem. Other approaches than that suggested in the Committee report were discussed, although I think the Special Committee was concerned about the commission levels here also. The expense limitations in the present law permit things that certainly are not in the mainstream. For example, you may have seen a National Underwriter last week with a small advertisement on one page that said, "Deposit Term, 200% Commission."

MR. GILL: In direct response to Mr. DeSelm's remark, it was the committee's intention to have tests of triviality apply to every plan. So they certainly would apply to deposit term.

MR. RICHARDSON: I am extremely unhappy with retirement annuities which have a zero first year cash value, and so is the public.

MR. JOHN C. MAYNARD: In Chapter IV of the Report under the heading "Unexplored Territory," the question is asked "Should nonforfeiture values be guaranteed at all?" In asking the question, the Committee was probably questioning the need for minimum values in the form of guaranteed cash values. The question is a legitimate one because it is quite possible to have guaranteed paid-up insurance values without guaranteed cash values, and designed in such a way as to be fair to the policyholder.

Reserve liabilities are usually calculated so that the minimum for each policy is the guaranteed cash value. Although uncommon, it would be possible to calculate liabilities by introducing withdrawal rates and guaranteed cash values. Under either method, reserve liabilities are anchored by guaranteed cash values when interest rates change. It could happen that surrenders and policy loans increase strongly at a time when interest rates are high and market values of assets are low. Under these conditions, there could be a greater reduction in asset values than liabilities and this could endanger the solvency of the company. To avoid this situation is a reason for not having guaranteed cash values on business in force.

To understand the magnitude of the problem, it helps to think of the effect of investment experience on the company. Investment income is used to build

reserves and cash values and to provide for the excess interest portion of dividends. How are capital gains and losses dealt with? Since surrenders are more likely to be high when interest rates are high than when they are low, guaranteed cash values should provide for the long-term average gain or loss which is a net capital loss. However, if surrenders and increases in loans together with interest rates are all high, the capital losses at that time will exceed the long-term average which is built into the guaranteed cash values, and will have to be borne by surplus funds and future dividends and other margins on policies remaining in force. This equation only becomes precarious if rates of withdrawal are high, interest rates are high, and the back-up strength is low. For a given company at a given time, there may exist combinations of high market interest rates and critical rates of withdrawal which would bring the company to insolvency.

It would be worthwhile if tests of this kind could be made in the light of present and probable future conditions. Among these conditions is the known fact that interest rates can be very high. The results of these tests would help to reveal the effect of cash values and withdrawal rates on solvency. Of course, if tests showed that the possibility of insolvency existed, there would be little which could be done immediately because cash values and premiums are fixed on business in force. In the view of this writer, this would not be a valid reason for not making the tests.

The reasoning on cash values is not new. Aspects of it were referred to in "Reports and Statements on Nonforfeiture Benefits and Related Matters," the text which preceded the Guertin legislation.

- (1) On page 74, reference is made to an allowance for depreciation of security values in the calculation of surrender values. When making their studies, the actuaries could not know that interest rates would increase so strongly in the thirty years which followed.
- (2) On pages 97-100, consideration is given to surrender dividends which adjust for conditions at time of surrender.
- (3) On page 217, reference is made to "Panics and Cash Values," a paper by M. A. Linton (TASA XXXIII, p. 365).

The experience in the U.K. in the past few years is interesting. At the end of 1974, some government bonds were yielding 17% in the market and equity values were down to 35% of their values two years earlier. Domestic life companies usually do not have guaranteed cash values and they came through a difficult statement period by reducing both assets and liabilities as they are permitted to do under U.K. rules. At about the same time, one unusual U.K. company failed. In the previous five years, this company had written large amounts of single premium deferred annuities with guaranteed cash values to meet a tax situation. When interest rates increased, the deferred annuity policyholders were advised by brokers to surrender their policies and replace them with new policies at lower premium rates. Many of them took this advice, to the detriment of the company.

Guaranteed cash values will not affect solvency if rates of withdrawal and rates of growth in policy loans do not increase to high levels. This has not happened in North America in the vicissitudes of the century. During the Great Depression years there was an increase, but it did not prove to be serious. This has been the record because life insurance policyholders have

valued their insurance protection and have not been prepared to let it go except in emergencies. In this they have been abetted by permanent field forces. While the persistence of life insurance policies may well continue, it is not possible to be so optimistic about single premium deferred annuities. These contracts are a form of investment and contractholders will have no benefit in the form of insurance to deter surrender and reinvestment when interest rates increase. For these contracts, it is very difficult to justify guaranteed cash values.

When we look to the future, there are strong and understandable pulls to continue guaranteed cash values in nonforfeiture laws in the United States. In the first place, in the minds of many persons, guaranteed cash values are an almost essential feature of permanent ordinary insurance. In the second place, it would be a very large task to develop new theory, legislation, and practice based on paid-up benefits. Before these pulls win the tug-of-war, further analysis should take place.

MR. GILL: The Canadian law does not require you to guarantee cash values and yet the companies have done so. You suggested that tradition is behind this practice. Is there any move in Canada to change practice?

MR. MAYNARD: I am not aware of any. You have to remember always that the Canadian population is smaller than the United States. There is a large identity between insurance businesses in the two countries, resulting generally in common sales forces and common practice. I would not be surprised if some move were made. The reason I say this is that the Canadian companies who do business in the United Kingdom are under considerable pressure at this point. I referred earlier to the solvency problems which have arisen in that country. But if any companies have been pressed harder than domestic British Companies, it is because they have carried over guaranteed cash values on the business they do in the United Kingdom. This creates a strain under the new British rules which require that assets follow market value closely whereas liabilities have a floor under them equal to the cash value. You can see that those rules are certainly difficult for Canadian companies.

MR. LLOYD K. FRIEDMAN: The committee recommended that a renewable term policy not be considered as a single continuous policy, but that each separate renewal be treated separately. That is fine if it really is a renewable term policy; but this could encourage single policies in the guise of a renewable term policy. I believe the committee's decision could be better justified if it had not made the recommendation about triviality. If, in fact, a policy is a renewable term policy, any cash value or reserves produced would be trivial and could be excluded on that grounds. It should not be necessary to have the special provision because, if the company is issuing an increasing premium arrangement over a period of years, the policy should be treated as a whole, especially for reserves.

MR. EASON: I am not at all sure that the problem is the same for valuation and nonforfeiture. Let us concentrate on nonforfeiture for a minute. The report (page 47) recognizes that you can look at a renewable term policy in either way, as a long-term policy with increasing premiums or a series of short-term policies. We struggled with that because we understood that, just because you have a clause that says a policy is renewable, most renewable policies really do work like increasing premium term to the final expiry age. We tried to imagine ways that you could write a regulation or revisions in the law to handle something that purports to be one thing and actually is



another. We concluded that this could not be handled in the law. The regulators will need to have a sharp eye out for those contracts that purport to be one thing but are really merchandised and administered as something else. Interestingly enough, one of the members of Charlie Richardson's NAIC committee sent me a letter recently that described a policy issued by a burial society. It was a 15 year renewable term that was apparently being sold without any cash values and yet the premiums were such that it looked exactly like a term to 65. Thus there are potential abuses here.

MR. GILL: We might discuss the triviality test further. The NAIC asked us if we could eliminate the current exception for term policies and just test them under the triviality rule. A number of tests were performed. We found age-duration cells where cash values probably should not be required but would be if you did not have a specific exception for term in addition to the triviality test.

One of the big problems in our committee, was how to assess the Guertin committee's position that expense allowances should accommodate a company with high expenses, referred to as the "marginal" company. Should minimum values be based on expense allowances that are the average of the industry or possibly on expenses reflecting the experience of the best company?

MR. RICHARDSON: My own feeling has been, that, in this age of consumerism, it is probably not feasible politically to take the position the Guertin committee did that you need an expense formula that will cope with the worst managed company, using the highest expense factors.

MR. GILL: That is a good point. I would point out, however, that there are two consumers: those who drop their policies and those who keep them. As we outlined in the report, if a company pays too much to the departing policyholders, then the continuing policyholders pick up the loss.

MR. EASON: One of the late written discussions chastised the committee for failing to make specific expense recommendations. Others have complimented the Special Committee for not taking a position on what expense levels are appropriate. I think the committee was right not to take a position, and I believe that unfolding events will prove the case. In the first place, the committee did not have the expertise of a Charlie Richardson who has a tremendous background in expense analysis. We did not see an expedient way to get the numbers which were needed. In the second place, the philosophical question as to whether to use (a) the average company, or (b) the marginal stock company, or (c) the well run company, has such a tremendous impact that all of the best possible numbers do not lead to an obvious choice. The regulators, the commissioners, and the public (or anyone else who cares to comment on this) will make that choice. To have been specific on this point in the report would have been an expenditure of time that we spent more wisely on other subjects.

Perhaps this would be as good a time as any to say that I do not believe that actuaries should leave this entire matter to others. I have publicly agonized over the relative lack of truly competent actuarial personnel in the insurance departments. The departments will have difficulty evaluating the report. The commissioners will have difficulty understanding the opinions of the few, relatively unskilled actuaries upon whom they must rely. I certainly hope that the people in this audience and the other members of the Society will find ways of helping people understand the real issues now that the report is out.

MR. HOUSER: I do not think there is any way to put together any regulation or law but what someone can find a way to beat it. You need to have some way of dealing with that. I do not think you can hamstring companies who are trying to offer honest products by trying to put in a law that is going to catch any and all deviations. I think there has to be some type of flexibility in the regulatory process.

MR. RICHARDSON: Let me give you the prize example of what I have seen. I have only been in the department now for about 18 months and have been shocked at some of the stuff I have seen. There was one remarkable juvenile policy that I discovered. It had an enormous deferred, decreasing term benefit starting at age 21 and disappearing at age 45 which effectively wiped out all the values.

MR. GILL: The committee's recommendation to ignore changes in amount after the first ten policy years will pretty much cure abuses of that type.