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STANDARD VALUATION LAW

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Recorder: CLARK P. MANNING, JR.

- Current status of the proposed revisions
- Role of the valuation actuary
- Guidelines to be followed by the valuation actuary
- Form of the opinion and memorandum
- Use of cash flow and other testing
- Measurement of company solvency
- Role of the mandatory securities valuation reserve (MSVR)
- Regulatory considerations
- Potential future developments

MR. CLARK P. MANNING, JR.: The purpose of this panel discussion is to discuss the proposed revisions to the Standard Valuation Law. Our panelists have all been actively involved in the development of the proposed revisions. Don Sondergeld is an Executive Vice President and Chief Financial Officer for Mutual Benefit Life Insurance Company. He was a member of the Special Advisory Committee to the NAIC. He also serves on the Joint Committee on the Valuation Actuary, the Life Committee of the Actuarial Standards Board, and the ACLI Actuarial Committee. He will be providing us with a summary of the June 1989 report of the Advisory Committee and will also provide us with an update of subsequent developments. Frank Irish is a Senior Vice President and the Corporate Actuary for John Hancock. He has been General Chairperson of the Society's Continuing Education Committee and has continued to serve on various continuing education committees. He will provide us with a perspective of the proposed revisions to the Standard Valuation Law from a corporate actuarial point of view. Bob Callahan is the Chief of the Actuarial Bureau of the New York State Insurance Department. He is an influential member of the NAIC Life and Health Actuarial Task Force. Bob is going to provide us with a regulatory perspective of the proposed revisions to the Standard Valuation Law and with some personal opinions regarding the development of the valuation actuary concept.

Over the last 30 years there has been considerable change to the uniform risk profile once enjoyed by the insurance industry. A combination of relaxed underwriting and new product choices for consumers, such as guaranteed investment contracts, select and ultimate term insurance, and interest-sensitive products have combined to increase the degree of risk assumed by insurers. Profit margins have steadily declined. The problems in the junk bond market and many new forms of investments have highlighted the potential for greater variations in the level of asset default risk.

To further complicate the situation, there are some innovative guarantees being offered that are difficult to evaluate from a risk perspective. Yet we have essentially the same valuation concepts today that existed at the beginning of the century. Historically, minimum valuation reserves have been based on conservative assumptions to accommodate all insurers, regardless of risk profile. No incentive was provided for managing or controlling risk. All companies, regardless of their risk profile, have been treated alike. During the last ten years or so, there has been a great deal of theoretical work within the actuarial profession that has focused on valuation and solvency issues. Most of this work has been on the C-3 or the asset liability mismatch risk, and there is now general agreement that there is a clear correlation between the level of mismatch present and the amount of valuation reserves or surplus that will be required to assure that obligations can be matured. Similar relationships have been demonstrated for the asset default and the mortality risks.

Several actions have been taken during the last ten years in response to this changing environment. The 1980 amendments introduced a process of reflecting underlying risk using dynamic interest rates segmented by product type and guarantee characteristics. Indexed interest-sensitive products require an actuary's opinion that was established by an actuarial guideline issued by the NAIC, with the Academy following with a standard of practice. Another actuarial guideline established the notion that cash-flow testing is appropriate. New York has been a regulatory leader with cash-flow analysis with respect to annuities. When the 1980 amendments were adopted in New York, annuity provisions were changed to designate one set of annuity interest rates on a safe harbor basis, but a higher set of interest rates could be used to test and satisfy the superintendent that those higher interest rates result in reserves that are still adequate, considering the company's asset structure. This became known as Regulation 126. A California statute has been enacted which gives the insurance department authority to ask for an analysis to be done with respect to reserves in terms of cash-flow testing or other ways satisfactory to the department. Illinois has formed a committee that is examining the possible implementation of cash-flow testing.

In 1987, a committee was formed with the charge to develop a conceptual framework for a new valuation law. The group was cochaired by Bob Maxon and Carl Ohman. The group was very large and was attempting to undertake the monumental task of totally rewriting the valuation law and setting forth the associated standards of practice. The committee was unable to reach a consensus, and, accordingly, the cochairmen concluded that they could not respond to their charge within the original time frame, and the committee was disbanded.

The current Special Advisory Committee on the Standard Valuation Law was appointed by John Montgomery and is chaired by John Tweedie at the Metropolitan. The current committee was given the narrow charge of defining the testing responsibilities of a valuation actuary who would submit an opinion on valuation reserves. It was envisioned that the current law would be retained and amendments would be made only to the extent necessary to support implementation of the testing responsibility. The report of the Special Advisory Committee was submitted in June 1989. It included a rather simple amendment to the Standard Valuation Law and a regulation that would implement this

amendment. The regulation, in turn, would rely on standards of practice as promulgated by the Actuarial Standards Board.

Don Sondergeld will now give a discussion on the Tweedie Committee Report and on developments that have occurred since June 1989.

MR. DONALD R. SONDERGELD: As was indicated, I was a member of the Tweedie Committee, and I still serve on other committees related to this valuation actuary movement. As was indicated, the Tweedie Committee's final report was made to the NAIC Actuarial Task Force in June 1989. The report made recommendations regarding changes in the Standard Valuation Law and also developed model regulations. Much has happened since that report was published, and the following items will be covered in my remarks. I will:

- o Provide some background
- o Summarize the contents of the June 1989 Tweedie Committee Report
- o Discuss developments that have occurred since then.

BACKGROUND

The NAIC Life and Health Actuarial Task Force had a number of advisory committees providing input on possible changes in the Standard Valuation Law, but John Montgomery appointed the current Special Advisory Committee, or the Tweedie Committee, with the following charge:

> The committee will develop a draft of a model law and accompanying regulations that would require each company to submit an acceptable opinion by a qualified actuary, supported by an appropriate memorandum describing the basis of such opinion, as to the adequacy of certain specified reserves, and the assets supporting such reserves. This draft will be available for discussion in May 1989.

This Special Advisory Committee was referred to as the Tweedie Committee, as John Tweedie, at that time Senior Vice President and Chief Actuary of Metropolitan Life, was the chairman. In addition, Dick Minck of the ACLI and Roy Woodall of the National Association of Life Companies (NALC) provided input on the views of a broader group of companies, particularly smaller companies. Also, appropriate committees of the American Academy of Actuaries and the Society of Actuaries were kept informed of the Tweedie Committee's deliberations.

This Advisory Committee's initial thinking was expressed to the public in many forms. These included presentations and meetings of the Society of Actuaries in June and October 1988 and the Valuation Actuary Symposium in September 1988. A preliminary report was given to the NAIC Life and Health Actuarial Task Force in December 1988 and to the Board of Directors of the Academy in December 1988. Copies of all final minutes and various drafts were sent to an extensive mailing list for comment. The ACLI sent copies of this preliminary report to its membership in January 1989.

In addition, the Life Committee of the Actuarial Standards Board had been observing the progress being made and has already begun developing standards of practice for use

by the valuation actuary. A final report of the Tweedie Committee was submitted to the NAIC Life and Health Actuarial Task Force at its June 1989 meeting. It was then approved by the NAIC for exposure the following week. Although I will come back to this, let me tell you what was in the Tweedie Report.

The charge to the Tweedie Committee and the focus of this report was an effort to make more meaningful the role of the valuation actuary with respect to the valuation process and, in particular, the adequacy of statutory reserves and the assets that support them. The Tweedie Committee's recommendations related to certain changes in the Standard Valuation Law and additional regulations. Let me comment on three items: 1) the appointment of the valuation actuary; 2) the actuary's opinion on the adequacy of statutory reserves; and 3) the confidential report by the actuary to management which documents the actuarial work supporting the opinion.

APPOINTMENT OF A VALUATION ACTUARY

The valuation actuary must be officially appointed within a structured protocol.

The valuation actuary must be a Member of the American Academy of Actuaries.

The valuation actuary must meet qualification standards of the American Academy of Actuaries and must refer to such standards in his or her opinion.

ACTUARIAL OPINION ON RESERVE ADEQUACY

The valuation actuary must provide an opinion on the reserves in the annual statement and the assets supporting them.

The actuarial opinion is with respect to adequacy of reserves and supporting assets, not on current or future company solvency per se. The suggested framework for the standards of practice is structured to assume the ultimate test is a multiscenario cash-flow test, but provides a basis on which a cash-flow test would not be necessary. Some additional relief from multiscenario cash-flow testing was suggested for small companies.

A qualified opinion must be so stated in a structured manner.

In executing the work and preparation of the opinion, the valuation actuary must follow the standards of practice promulgated by the Actuarial Standards Board.

The valuation actuary can only be held liable to management and to the regulators.

The proposed regulation specifically provides for opportunity for the NAIC to define a basis for small companies to be exempt from certain aspects of the opinion regulation.

The reserves are not presumed to cover catastrophes, rather reasonable deviations in experience.

A full-blown revision of the MSVR is not included as part of this proposal. However, a limited modification to the MSVR is recommended, which in certain cases will permit a reduction in the MSVR to help set up additional reserves. More comprehensive changes

that the Committee believes should be made when the MSVR is completely overhauled were discussed in an appendix, so that those changes are not lost with respect to the efforts of others who are addressing the issue of the MSVR's future.

As an aside, the NAIC is currently planning a quick fix to the bond component of the MSVR to be effective with the 1990 annual statement. This will partially address current concerns auditors and regulators in all industries have on asset quality.

CONFIDENTIAL REPORT TO MANAGEMENT

The valuation actuary must prepare a memorandum for management documenting the work which supports the opinion.

The valuation actuary's memorandum is prepared for the company and confidentiality at the company's discretion is provided by the proposed law, except where the Academy needs it for the disciplinary process, or it is required in defense of a lawsuit.

The memorandum is available within the scope of confidentiality to the regulator. If the valuation actuary's memorandum fails to meet the standards provided by the regulations, the Insurance Commissioner may engage a qualified actuary, at the expense of the company, to review the opinion and prepare a memorandum required by the Commissioner.

OTHER DEVELOPMENTS

Some other developments that have occurred are a September 1989 letter from the ACLI and National Association of Life Underwriters (NALU) to the NAIC Life and Health Actuarial Task Force, the September 1989, December 1989 and March 1990 meetings of the NAIC Life and Health Actuarial Task Force, a March 1990 meeting of the Life Committee of the Actuarial Standards Board, and an April 1990 meeting of the ACLI Actuarial Committee.

The September 15, 1989 letter from the ACLI and NALU dealt with the "Smaller Company Considerations" of the Tweedie Committee Report. The letter recommended that:

1. Companies with less than $20 million in assets be exempt from the regulation as it relates to the multiscenario cash-flow testing.

2. Companies worth $20-100 million in assets would be exempt subject to meeting specified limitations as to growth and product mix, provided that there had not been a change in control at a company during the current year.

3. Companies with $100-500 million in assets would need to furnish an opinion only every three years, provided the limitations applicable to companies with $20-100 million of assets are met.

There have been a number of Life and Health Actuarial Task Force meetings of the NAIC since June 1989. In September 1989, as a result of discussions of the Tweedie Committee Report, Larry Gorski, Life Actuary for the Illinois Department of Insurance,

and Bob Callahan, on our panel, Chief of the Actuarial Valuation Bureau in New York, were given the charge to come up with a revised draft that would address various concerns raised at that September meeting.

In December 1989 and March 1990, the NAIC Actuarial Task Force made a number of changes in the recommendations included in the Tweedie Committee Report. Here are what I consider the major changes or additions to the recommendations previously outlined for the law and the regulation. First the law:

- It was made clear that the required actuarial opinion applies to all business in force.

- The commissioner can provide, by regulation, a transition period for establishing any higher reserves than may be required by the new law.

- The Tweedie Committee Report indicated the actuarial opinion shall be based on standards adopted by the Actuarial Standards Board and on additional standards consistent therewith that the insurance commissioner may prescribe by regulation. The words consistent therewith have been deleted.

- The insurance commissioner will be enabled, by law, to issue regulations defining disciplinary action against actuaries.

There also have been changes made in the proposed regulations:

- They are now also applicable to the fraternal benefit societies.

- The term qualified actuary has been changed to *appointed actuary*. I personally prefer the word *anointed*.

- Added to the regulation is a requirement that such actuary or appointed actuary be appointed by or retained "by the authority of the board of directors of the company."

- It has been made clear that exemption from cash-flow testing does not mean there is also an exemption from providing an actuarial opinion. The wording of the opinion is appropriately modified.

- A transition period for setting up additional reserves required by the new law is December 31 following the second year in which the regulation is promulgated.

- For small companies, the form of exemption from cash-flow testing has been changed somewhat. The current proposal would require an opinion from all companies. Certain companies meeting criteria as to size of business and asset mix would be exempt from an opinion based on asset adequacy analysis. However, these exempt companies would provide an opinion that their reserves meet statutory requirements.

LIFE COMMITTEE OF THE ACTUARIAL STANDARDS BOARD
The Life Committee of the Actuarial Standards Board released an exposure draft on the actuarial standard of practice on "when to do cash-flow testing." The Life Committee will be meeting in June 1990 to finalize its recommendations to the Actuarial Standards Board for adoption of a standard, taking into consideration the comments it has received on the exposure draft. At a meeting in March 1990 of the Life Committee, a number of members began thinking of multiscenario cash-flow testing as a subset of sensitivity testing rather than a basic principle or requirement. So the standard of practice on when to do cash-flow testing would include examples of when multiscenario cash-flow testing is appropriate, as well as examples of when such testing is not necessary.

ACLI ACTUARIAL COMMITTEE
On April 11, 1990, the ACLI Actuarial Committee developed a recommendation on whether the small company exemption for multiscenario cash-flow testing should be extended to companies with over $500 million in assets. This question was raised by John Montgomery of the California Insurance Department. The recommendation will go to its parent, the ACLI Legislative Committee. In a nutshell, the ACLI Actuarial Committee had no objection to exemptions for companies with over $500 million in assets, but questions the need for such exemptions in light of anticipated standards of practice where the degree of analysis and testing undertaken by the valuation actuary would be governed by the risk characteristics of the business. It was also noted that the rationale for the exemption for small companies was largely expense driven.

Assuming the final standard of practice on when to do cash-flow testing is released by the Actuarial Standards Board prior to the December 1990 NAIC meeting, it may influence the need for rules applicable to companies of more than $500 million in assets being considered for an exemption from this multiscenario cash-flow testing.

WHERE ARE WE GOING?
I expect changes in the model valuation law will be adopted at the December 1990 NAIC meeting. However, it will then take three to five years for all of the states to change their laws, as not all state legislatures meet every year and there is a backlog of legislation to deal with. Without strong support from the industry through the ACLI and from professional actuaries, there is some question that many states would pass the model even in that time frame. Although it is possible the accompanying model regulations may be also adopted in December 1990, there is less urgency. Therefore, the model regulations that will accompany this legislation may not be adopted by the NAIC until June 1991. Although progress continues to be made on this important topic, the process is a very slow one.

MR. FRANK S. IRISH: It probably will be a long time, Don, before the recommendations of the Special Advisory Committee do fully come into effect, and it may seem a little premature to talk about the impact on the practice of actuaries, but nevertheless that is what I am going to talk about. I think that it is worthwhile to remember that the report of the Special Advisory Committee in many respects codifies what are already existing trends in the world of the valuation actuary. So the issues I am going to talk about I think are live issues for today's actuary, as well as for tomorrow's.

First of all, one stated principle in the Special Advisory Committee report is that the focus of reserves should be on the noncatastrophic risk. What this means is that one will never want reserves to be so strong as to survive completely a severe catastrophe or so strong that the company will never take a loss on its in-force business under any conceivable circumstances. To put the matter in terms of probabilities, one might feel that it is wise to manage insurers so that the probability of solvency over the future life of the in-force business is, let us say, 99.5%, but one would not want reserves alone to have a 99.5% adequacy. The surplus should bear some of the burden.

On the other hand, reserves should definitely have a probability greater than 50%. As the report of the Special Advisory Committee says, this means that there should be a substantially better than even chance that cash flow will be sufficient in the aggregate to mature the underlying contractual obligations and related costs. Clearly we all already agree that reserves should be better than a 50% standard of probability, but less than 100%. Is there any need to be more precise than that? I have heard some actuaries say, for example, that 90% would be a reasonable standard. We all know the dangers, discomforts, and pitfalls of trying to set up such a definite standard in an area where the uncertainties are great and the underlying probability distributions are by no means clear. Is there, then, any advantage to the practicing actuary in trying to have such a precise quantification? Yes, I think there is.

First of all, the actuary is going to have to defend his actions to his own management. If he has to defend a need for higher reserves and couch his defense in such vague terms as "substantially better than even chance" or "moderately adverse circumstances," he may not have the credibility that he should have. He might prefer to have a more definitive rationale. Of course, what he is really going to do in a situation is to reference the Actuarial Standards Board and the actuarial literature as his authority. Will they be more specific about how conservative reserves have to be? We shall see.

Incidentally, there is one type of risk for which actuarial reserves may not have to be conservative, and that is the risk of asset default. Up until now, most practicing actuaries have considered it correct to reflect the expected or average level of capital gains in the valuation interest rate (on a somewhat conservative basis, of course). For a portfolio of bonds and mortgages, this expectation is certainly negative; for example, building in a 20 basis point default expectation on a portfolio of high quality bonds. Reserves are not expected to absorb a catastrophic level of defaults. That is the function of the free surplus, but reserves are expected today to absorb a moderately adverse level of defaults.

There is an increasing tendency today, however, to think of the MSVR as absorbing the default level that was once the responsibility of the actuarial reserves. New York Regulation 126 was recently revised to incorporate this concept. The Special Advisory Committee, whose report we are discussing here, also advocates this concept for the Standard Valuation Law. In both cases, there are some limits on what the actuary can do. Essentially, there must be a demonstration that the MSVR is sufficient to cover the present value of expected defaults under moderately adverse circumstances.

Some of the more radical proposals for the MSVR go even further and would require that the MSVR be completely adequate to cover the present value of future defaults. If

this were to come to pass, the valuation actuary could rely, in the full professional sense of the word *rely* on the MSVR to be adequate and could ignore the question of C-1 risk in setting up reserves. From the viewpoint of a company actuary, there are advantages and disadvantages in these trends.

One theoretical disadvantage is that actuarial reserves will take on a slightly different meaning than they now have -- a meaning which may vary according to circumstances. If the actuary is relying in whole or in part on the MSVR to absorb expected levels of defaults, can he still say that he is certifying the soundness of reserves "and the adequacy of the assets which support them"? That is a theoretical question, but in a more practical vein let me point out that the MSVR is now treated as a surplus by the agencies that rate insurance companies for soundness, regardless of the fact that the annual statement treats it as a liability. Under these new trends that I am speaking about, the MSVR would no longer be properly thought of as surplus, since the actuary is relying on it, in part, for the soundness of reserves.

On a good side, this could lead to a welcome division of responsibility in which the valuation actuary no longer needs to profess a knowledge of the default risk. Those who have had to carry out cash-flow testing (under Regulation 126, for example), or other types of testing of the appropriate level of valuation interest rates, will know how much effort and confusion goes into the determination of default. If this effort could be focused as part of the determination of the MSVR, then it would become the subject of an entirely new professional specialty with, one hopes, the same kind of professional standards and literature that support the valuation actuary.

The MSVR would cease to be a mechanistic and poorly understood kind of quasi-reserve (which I think is a good characterization of it today) and would become an authoritative measure of C-1 risk. As a corollary, the MSVR would have to be viewed as, at least in part, representing a true liability. As it happens, the original Special Advisory Committee proposal contained an MSVR which was partly liability and partly surplus. Its attitude or its proposal was that, to the extent that the MSVR provides for the default risks, it would be redundant to also include consideration of such risks in analyzing reserves. Let me just point out, once again, if that is the attitude you take towards the MSVR, then the MSVR becomes a liability in the true sense of the word.

As you know, and as I think Don mentioned, the proposals for the MSVR were, at the last minute, uncoupled from the report and left for a successor task force to delve into. This stratagem will make it easier to proceed with the debate about the Standard Valuation Law, but it seems clear that the valuation actuary will ultimately not be able to do his job unless the debate about the MSVR is resolved. The setting of actuarial reserves and the setting of the MSVR have now become too closely intertwined to try to proceed with one and not proceed with the other.

Let me move on to another principle of practice that has been stated by the Special Advisory Committee. The type and intensity of testing depends on the nature of the risk. It is worth emphasizing that there are several types of reserve testing, because some of the valuation actuary literature seems to be written from the viewpoint that cash-flow testing is the only kind of testing there is. Don already spoke about the emphasis that

there seems to be on cash-flow testing. It is my feeling that the cash-flow testing is appropriate only where a C-3 risk is the predominant one, and I perceive that Regulation 126 also reflects this feeling.

Some of the other types of reserve testing that should be part of the actuary's arsenal are the types of testing done when mortality or morbidity risks are the principal problem. This typically involves an emphasis on the demonstration that experience assumptions are adequate and is less of a modeling problem than an exercise in judgment and knowledge about the company's own experience and the experience of others and the impact of changed conditions. Sometimes, the use of sensitivity testing might come into play, as in testing whether a lapse is a factor that should be taken into account, for example, or whether selective lapsation could impact mortality experience -- a process that could be significant in projecting AIDS mortality. There are also the types of reserve run-off tests that are very commonly done to test the adequacy of claim reserves.

Becoming increasingly important in all of this is the old-fashioned concept of gross premium valuation. Obviously, one important thing about this is the explicit recognition of expenses in the reserve testing process. I think that is probably something that we are not as familiar with as we should be. Of course, cash-flow testing itself is one kind of gross premium valuation. It is done in a gross premium valuation format, but there are many other types of gross premium valuations. As a matter of fact, whenever we suspect that the reserve assumptions established at issue are inadequate, we tend to use this mode. An important example of this is where experience assumptions have deteriorated since issue.

A key element in all of this is the question of intensity of testing. The actuary is going to have to be more explicit about which situations require multiscenario testing and which ones can be analyzed with a single scenario; which circumstances require a complete model and which require merely a confirmation that valuation assumptions are adequate; how deeply it is necessary to scrutinize company experience, and so forth. We have little guidance on this subject at present, but it will be forthcoming, I think.

The Special Advisory Committee report did not change any of the legal minimums, but it does put more burden of proof on the valuation actuary to decide if more than the minimum is required. There is not very much detail in the report itself that tells the valuation actuary how to go about this. It does say that standards should be developed to guide the actuary and that the Actuarial Standards Board is probably the best way to go about this.

Standards to be followed by the opining actuary would be those developed by the Actuarial Standards Board of the American Academy of Actuaries. That is all very well, but in learning about these standards and in educating themselves about all the new techniques that must be used to comply with the standards, valuation actuaries face a major continuing education challenge. In other words, it is very clear that the standards are going to be brief and that merely reading the standards is hardly enough to know how to go about this new job. It is good to see, therefore, that continuing education on this subject, as on many others, is receiving greater attention in our profession.

What are some of the educational materials that are available to the actuary today on this subject? First of all, there are the annual valuation actuary symposia and a rather complete record of these is usually published. I have the volumes from 1985, the Chicago meeting, 1986 in Washington, and 1988 in Toronto, and there is a lot of good material in there. The 1987 Symposium Proceedings, which was held in Dallas, I am told is out of print. However, there is a significant portion of the 1987 meeting that is included as part of the Fellowship study notes. I am told that the proceedings from the 1989 Symposium, which was in Philadelphia, are in the process of being printed now. If you want to look ahead to a continuing education activity, the next symposium on the valuation actuary will be in November 1990 in Denver.

Next most important, in my opinion, is the *Valuation Actuary Handbook*, which was published in 1987. It is an attempt to organize the available material, including chapters on how to do cash-flow testing, on modeling, and on the legal and organizational implications of the valuation actuary concept. Also, the valuation study notes, particularly for course 443, are another well-organized source for the actuary who wants to keep up with this field.

The preceding short list makes up a good, concentrated body of material that the actuary might well use as a base for his own education. There are, of course, other publications of interest, such as the Society's *Transactions* and the Section journal called *The Financial Reporter*, but these are naturally less concentrated than what I have already cited.

I will remind you that a continuing education requirement for the valuation actuary is already in effect as of 1990. The requirement is 12 hours of continuing education per year. This is not dependent on whether the new law is adopted or not. It is already in effect. The actuary is advised to keep a written record of continuing education activities in case he is ever challenged on his qualifications.

Now let us consider another proposed new requirement -- the requirement for a memorandum. A qualified actuary shall prepare a memorandum describing the analysis. Such memorandum shall be made available for examination by the Commissioner, but shall not be considered a record of the insurance department. This describes a concept, the actuarial memorandum, with which some actuaries are still unfamiliar.

The first thing one might notice is the attempt to keep this memorandum confidential, while still making it available for regulatory purposes. I am not sure how this might work out in practice, but I think it is good that the attempt is being made. It is worth noting why confidentiality is so important. It is because the actuarial memorandum is not supposed to be just boilerplate, but should contain real information about company operations, data on lapse and mortality experience, on plans and operating policy, and on expense analysis. In the end, the memorandum should show just how sound the company's reserves are.

Let us see what some of the more interesting items in the memorandum are, and this is not intended to be a complete list. A sort of table of contents is in the Special Advisory Report. These are the few items that I want to discuss as being of particular significance

to the practicing actuary. One is sources of data. In addition to the reliance on others for listings of policies and reserves, the actuary will have to discuss the sources of information about assets and asset maturities, call provisions, benefit-flow projections, and expense allocations, among other things. In most larger companies, the actuary writing the memorandum will have to get his data from many different departments, particularly in companies organized as profit centers and also from the investment department, which is almost always a separate organizational area.

Second is valuation basis or actuarial assumptions. This is a pretty familiar area. Note that the development of expense assumptions is an important aspect of this, and something we are not used to dealing with in a valuation context.

Third is investment assumptions. This means learning about investment policy, particularly about quality and duration of reinvestments, and it will frequently turn out that these things are not too well-documented, so the actuary will have to develop the kind of documentation and support that needs to go into an actuarial memorandum.

Fourth is testing methodology, showing whether one chose to use cash-flow testing or some other form of sensitivity testing and whether one chose to do a gross premium valuation for some blocks of business.

Fifth is the rationale for type and intensity of testing. The actuary will have to defend his choice of methods and even defend the intensity level of his testing.

Sixth is criteria for asset adequacy. Here we enter, I think, a truly unknown area. Essentially, the actuary is going to have to reveal his standards for determining that the reserves are adequate. At the very least, the actuary will have to display numerical results of his testing. Perhaps he will have to further disclose exactly what he does consider the dividing line between sound and unsound reserves.

In closing, let me discuss the problem of timing of reserve testing. It might seem natural that the valuation actuary would work from year-end data in developing his gross premium valuation or cash-flow testing or whatever, but actually it is very difficult to do reserve testing in the tightly scheduled January and February time period. It is almost impossible for the actuary to suddenly discover, several weeks after year-end, that he should set up extra reserves, the annual statement having already been closed by that date. It seems clear to me that the actuary should try to do his testing before year-end, and this means that he is going to have to use in-force and asset data, which are as of a date prior to the valuation date. Methods have to be developed to insure that the conclusions are still valid at the valuation date. This would be one good area for development in the actuarial literature and a problem that might well be addressed by those who set standards.

MR. ROBERT J. CALLAHAN: I decided to treat the topic from my personal viewpoint as a regulator. Believe me, there are other regulators who also disagree with me, not just the industry people.

STANDARD VALUATION LAW

Since the NAIC received the Tweedie Committee Report in June 1989 and exposed it for comment, I assume that each of you has read it or at least are familiar with its contents. If you are not, I think you got a pretty good summary earlier. The report is the end product of approximately 20 years of discussion and is limited to what may be practical at this time. It does not replace the current valuation law, but superimposes a requirement for an actuarial opinion as to the reserves and supporting assets.

The report melds various interests. Some large companies view the actuarial analysis as an aid for preventing insolvencies. Even if large companies are in no danger of insolvency, they have an interest in the image of the life insurance industry and in the solvency of other insurers, since they bear some of the cost of state guaranty funds in the case of insolvency of other insurers.

The Board of Directors of the ACLI, in 1986, endorsed the valuation actuary concept and this year has endorsed the Tweedie Committee's proposed revisions. Some small companies have been concerned about the added expense with no relief from the expense of current reserve calculations and have sought some exemption. The Board of Directors of the American Academy of Actuaries has voted to actively pursue the gist of the proposals, while recognizing the concerns of regulators.

In an impassioned plea for Academy Board support, one actuary noted that, unless the law is changed to require an actuarial opinion by a qualified actuary, accountants may take over the responsibility for valuation. Some consulting actuaries look upon the requirements as a bonanza for more fees. Others see the added responsibilities as exposing the actuaries to lawsuits.

The Dingell Committee, in its report on the insurance industry, examined four property and casualty companies which went insolvent and two companies which were near failures. The report stressed the need for independent audits and for reserve certification by qualified actuaries. Thus, one might feel that the regulators would be remiss if they did not require an actuarial opinion for life insurance companies based on cash-flow testing of income and outgo. Actuaries do have special talents. Actuaries are insurance mathematicians.

Statutory accounting has worked well over the years, but statutory reserves could be deficient, especially in view of today's interest-sensitive products, the volatility of the investment market, and the active trading of assets and withdrawals from or cash surrender of contracts. With today's lightning fast mainframe and microcomputers, programs have been developed for analyses of cash flows under a variety of assumptions.

At this time it is not practical to eliminate the current reserve requirements due to their use in calculating company tax and due to the current lack of trust or confidence in individual actuaries in setting the amount of reserves. Thus, for the time being, it may be best to provide for an exemption from cash-flow testing for small companies. (This will reduce some of the potential work for actuaries.) Nonetheless, we will still require an actuarial opinion of all companies, but for the small companies based on less rigorous testing.

It may be possible to arrive at an agreement on the revisions to the Standard Valuation Law in time for adoption by the NAIC in December 1990. To do this, the law will leave the controversial areas to a regulation. Most likely, agreement will not be reached in time for adoption of the regulation this year. It could be noted that there are some differences among the regulators, as well as between the regulators and the special advisory group.

The regulators have had a chance to comment and offer input on various versions before the final report in June 1989, as well as after receiving the report, and some changes have been made. Nonetheless, the report reflects mainly the concern of the companies and the actuaries and, in my opinion, has gone too far to protect the opining actuary from lawsuits, while enhancing the actuarial profession and expanding the work for actuaries.

Of the following unresolved or unfinished topics, the last four items, in particular appear to excessively protect the opining actuary:

- The C-1 investment risk of default and the use of the MSVR
- Small company accommodation
- Standards
- Appropriate versus good and sufficient
- Accountability
- Discipline
- Confidentiality

THE C-1 RISK

For many years there have been various diverse opinions as to 1) whether the actuary should be obligated to consider the effects of the quality of the assets; 2) the notification by the ACLI to the actuarial profession that the profession should develop the techniques to consider the effects; 3) whether the actuary can simply rely on the MSVR being sufficient; and 4) whether the MSVR should be fully funded at all times by a combination of reserves and of surplus.

At present, agreement appears to have been reached to allow the MSVR assets to be used to the extent of the C-1 risk and to consider default costs based on recommendations of investment experts. This is similar to New York's Regulation 126. This may call for a revision of the classifications and the normal reserve accumulation factors for the MSVR. In fact, there is a committee now working, headed by Terry Lennon of New York, with a large advisory group that hopes to come up with new classifications and categories by June 1990, in time for adoption for the 1990 Annual Statement. I have been assigned to draft a section of the regulation on the C-1 risk.

SMALL COMPANY ACCOMMODATION

The Tweedie Report left accommodations for small company for others. A joint ACLI/NALC committee was appointed and worked up a proposal which was presented to the NAIC Actuarial Task Force in October 1989. Some of the elements appeared somewhat complex. At Larry Gorski's urging, John Montgomery worked up new criteria, but his criteria, when applied to the 1989 annual statements, exempted very few companies. His work sheets were turned over to the joint ACLI/NALC advisory group in March 1990, for its further consideration and counterproposal. It is likely that an acceptable compromise can be reached and exposed for comment by all interested parties.

THE STANDARDS

Section 3(d) of the proposed amendment to the Standard Valuation Law, as currently drafted, states:

> Such opinion shall be based on standards adopted from time to time by the Actuarial Standards Board and on such additional standards as the Commissioner may by regulation prescribe.

We are currently awaiting those standards. To date, many of the Actuarial Standards Board standards have been very general. There is a need for regulators to specify some details. I personally feel that we should await the promulgation of the final Actuarial Standards Board standards for cash-flow testing before we finalize the regulation. I have heard that there may be further delays in the current proposed considerations on when to do cash-flow testing. There may be further delays in promulgating them in final form, as there is debate going on as to the extent to which cash-flow testing should be done for participating life insurance. But we may well need to supplement such standards, and, before we can add any supplemental requirements, we must first see those standards.

APPROPRIATE VERSUS GOOD AND SUFFICIENT

Section 3(a) of the proposed amendment, with reference to reserves, uses the phrase "make appropriate provision for the company's obligations." The current statement of actuarial opinion attached to page one of the annual statement contains the phrase "good and sufficient." Actuaries are currently using such phrasing, and this in spite of not all doing cash-flow testing. I had my assistant go through the annual statement actuarial opinions in my office, and I asked him whether the actuaries are using the phrase "good and sufficient." He said, "Yes, each and every one of them." I said, "Do they qualify their opinions?" "No, but they are using the phrase." However, for the new requirements, the actuaries have objected to the use of the term "good and sufficient." Perhaps some may explain that "appropriate" means good and sufficient based on scenarios tested, providing for reasonable deviations in experience. However, recently one actuary specifically stated he was not making an opinion as to good and sufficient, but only stating that the reserves are appropriate. In view of the ambiguity of the word "appropriate," I have recommended reconsideration of this phrase and am prepared to oppose any amendment unless this Section 3(a) is revised.

ACCOUNTABILITY

Section 3(g) of the proposed amendment to the Standard Valuation Law states:

> Except in cases of fraud or willful misconduct, the qualified actuary shall not be liable for damages to any person (other than the insurance company and the commissioner) for any act, error, omission, or conduct with respect to the actuary's opinion.

Some people could refer to the current proposed revisions as the "Full-Time Employment for Actuaries Act." The actuaries want the work, but they are afraid of lawsuits. I hope that this does not excuse sloppy or incompetent work. However, if the actuary makes an error or omission or a decision based on results, he still might be sued for fraud or willful misconduct. I believe the actuary should be held responsible for his work and perhaps should make additional tests to support his decision. If he feels uneasy about stating an opinion, then he should so qualify his decision. Some actuaries, however, may hesitate to issue a qualified opinion for fear that such qualifications may be the cause of the downfall of the insurer. Perhaps the actuaries may need professional liability insurance. I would not oppose the amendments to the NAIC Standard Valuation Law based on this provision, but I would not recommend its adoption by New York.

DISCIPLINE

Section 3(h) of the proposed amendment to the Standard Valuation Law, as currently drafted, states:

> Disciplinary action by the Commissioner shall be defined in a regulation.

This will help to reach agreement on the law while still working on the regulation. There are some current differences of opinion among the regulators whether this should be in a separate regulation dealing with disciplinary action against officers of a company or in the regulation on the actuarial opinion and memorandum. I favor putting something in the actuarial opinion and memorandum regulation. Since a qualified actuary must be a member in good standing of the American Academy of Actuaries, some action can be taken by the Academy. If the cloak of confidentiality is granted, the Academy would not be in a position to police adherence to its standards, unless the company management or a regulator referred a case to the Academy. The regulators cannot force the Academy to act, nor should the regulator shirk his responsibility. I favor something that is in New York's Regulation 126 with reciprocity among the states.

CONFIDENTIALITY

Currently, this is a very important issue, so much so that one individual said it would be a deal breaker if confidentiality were not granted. Section 3(k) of the proposed amendment to the Standard Valuation Law, as currently drafted, states:

> Any memorandum in support of such opinion and any other material provided by the company to the Commissioner in connection therewith, shall be kept confidential by the Commissioner and shall not be made public and shall not be subject to subpoena, other than for the purpose of defending any action seeking damages from any person by reason of any action required by this section or by regulations promulgated hereunder; provided, however, that such memorandum or other material may otherwise be released by the commissioner (a) with the written consent of such company or (b) to the

> American Academy of Actuaries upon request stating that such memorandum or other material is required for the purpose of professional disciplinary proceedings and setting forth procedures satisfactory to the Commissioner for preserving the confidentiality of such memorandum or other material.

Some state laws now permit confidentiality for very limited reasons. Public employees, in most states, are held accountable to the public for their actions, and hence there are laws permitting access to public records and documents filed with state agencies. In New York, confidentiality of insurance department records are governed by Regulation 71 based on Section 87(d) of the Public Officers' Law. Our Regulation 126 has a cross reference to Regulation 71. (This is by citing Section 241.6 of Title 11.) Regulation 126 alerts the insurers that, if an insurer wants confidentiality of the actuarial memorandum accompanying the actuarial opinion, it should so request at the time it submits the memorandum. According to the law, the Department may deny access to records or portions thereof, under Section 87(d), that "are trade secrets or are maintained for the regulation of commercial enterprise which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Perhaps some parts of the memorandum do qualify for confidentiality. I do not feel the entire memorandum qualifies.

In a particular case, on a different subject a couple of years ago, after the requester of information appealed the cloak of confidentiality, about 80% of the document was released and 20% was lined out. While I feel that confidentiality has been exaggerated and we are not obligated to grant confidentiality, we have respected requests for confidentiality. Our most recent revisions to the regulation call for each page to be clearly stamped "Confidentiality Requested." This is to eliminate the danger of inadvertent release of material for which confidentiality has been requested. However, if the requester of information appeals, we will probably have to sit down at that time to determine which parts are truly confidential and which are not.

In many cases, the approved or filed contract forms and the annual statements, which are public documents, contain more information than what some of the actuarial memorandum contains as far as product description and asset description. The description of the scenario testing is almost a textbook description. The investment policy may qualify for confidentiality. Perhaps the results of the different scenario testing may be embarrassing or subject to misinterpretation.

Why is there need for confidentiality? Will the company and the actuary be more open if they know that release will be limited? Will a cloak of confidentiality hide poor quality work? Will a cloak of confidentiality hide ineptness on the part of the regulator? Will a cloak of confidentiality hide collusion between a particular company and a regulator?

Initially, when the actuarial memorandum started in New York, very few insurers requested confidentiality. It was my understanding that initially these insurers exchanged their memorandums. However, for 1989, 51 licensed life insurance companies out of 97 submitting memorandums requested confidentiality; 15 accredited life reinsurers out of 29; two fraternal benefit societies out of eight.

Let me say that in the case of one insurer, which initially did not request confidentiality, we had examined its assumptions each year. Then my assistant felt uncomfortable with assumptions that I had accepted, and he advised the company to request confidentiality lest we be embarrassed. The company did request confidentiality, but said it intended to do so anyway. I would rather that it had not requested confidentiality and that the assumptions could have been made public.

In another case, some may wonder how we can accept the results. Confidentiality of the memorandum has been requested. I am uneasy about some of the assumptions, but am constrained by the cloak of confidentiality from seeking advice on an informal basis.

The focus of public scrutiny by peers and possible disclosure can act as effective regulatory tools. I frankly feel that New York's present law hits a balance between openness and confidentiality. I do not recommend any change in New York law.

I would not oppose the adoption of the amendments to the NAIC Standard Valuation Law based on the provisions of confidentiality, but I would oppose any such provisions being adopted by New York. There are other members on the NAIC Actuarial Task Force who feel the same as I do.

Should the criteria for the number one profession be high pay, short hours, no stress, no responsibility, with no fear of being sued or held liable for one's work? Or should the criteria include accepting responsibility for one's work, even if that may mean the possibility of being sued?

MR. WALTER S. RUGLAND: The whole objective of this proposed change is to create a more meaningful role for the actuary to play in life insurance company statutory reporting.

Why is this needed? The current approach does not create a good result in reporting to regulators the economic health of the company. What we have today is solvency tests, not a communication vehicle for regulators with respect to whether the company will be around in the future. This proposal asks the actuary to take on a role of examining reserve levels, as opposed to participating in a solvency test.

To obtain any support for this type of proposal (as was pointed out by all three speakers), management must benefit, the actuarial profession must benefit, and the regulators must benefit. The support of all three is needed.

The effect of not making the changes proposed is 1) there will be no increased actuarial role in valuation; 2) we will continue to not measure or report risk profiles in companies; and 3) we probably will end up with more of the same, and you can extrapolate the trends as you wish.

I have some specific additions to Bob Callahan's comments. I agree with Bob that we need to help define the word *appropriate*. I am prepared to replace it with "adequate" when it is used in the context of the opinion proposed. "Good and sufficient" has been of concern to many of us, but we have said that since we're not looking at assets we can

give a "good and sufficient" opinion. With this proposal we would give an opinion based on assets, and "good and sufficient" may be more than we are able to say.

A word about the liability of the actuary. The actuary would be responsible and liable for the work done; liability would be restricted to the people who asked for the work, the company, and extended to the people who use the work, i.e., the regulators. The actuary would be protected from people who do not have a direct interest in the work, those third parties who hire class action people as advisers. The purpose for the protection is to allow the actuary to provide the appropriate work product to people who need to know, and to protect the actuary from people who think there is a deep pocket. In addition, to the extent that the actuary is subject to any potential penalty, it would preserve those funds for the guaranty funds and, in the end, company policyholders.

Now, let us consider confidentiality. We are trying to get all three parties together to agree to put the proposal in place. It became obvious to those of us on the Tweedie Committee that one of the points that had to be addressed was that the actuary would be working for management and able to provide management with strong and valuable information, while producing the same for regulators. The same report should be available to both parties. In order to assure this, the solution was confidentiality of the report.

Freedom of information statutes supersedes all regulations with regard to confidentiality. However, a specific statute, in most states, supersedes the freedom of information statute. The proposal by statute protects the actuary's report with regard to freedom of information requests. The company can still release it, the regulator can request that the company release it, and the company can comply, and it also is available for disciplinary procedures.

The objective here is to have the companies and the actuaries and the regulators support the entire proposal in concert. If one of the group believes the report should be confidential, the other two need to accept that concern. Two of the three parties need to somehow get together to support the basic concerns of the third party. The proposed Standard Valuation Law change is ready to implement. It needs the support of all of us.

MR. CALLAHAN: I realize that if you had a law that would specifically state the memorandum is confidential, that would take precedence. I said I would not oppose the revisions to the NAIC Standard Valuation Law, but I would oppose such provision being adopted by New York. I feel our present law or rules as far as confidentiality hits a reasonable balance.

MR. RUGLAND: I think that is the basic approach -- if the NAIC has a model, each state would be able to modify that model the way it would want to, and that is what you would do in New York.

MR. CALLAHAN: Right, but we have seen a good many memorandums, and, believe me, I feel that the major portion of the content of those memorandums would not qualify for confidentiality under our present law.

MR. RUGLAND: The important thing is to make sure that the companies support this change rather than debate, I think, on what would get stricken out and what would not. That is the only issue as I see it.

MR. CALLAHAN: I have stated any number of times that I have felt that the insurance industry is a self-regulating industry. We have had any number of requests over the past few years for copies of the opinions and memorandums of various companies. Gradually, more and more companies have requested confidentiality. I frankly feel it was better on an open basis where there was some peer review. Let me say that as a public employee, I am held accountable. Let me say that at times there are rumors which go about that claim there is collusion between public officials and the companies that they regulate. I feel that it would be far better if the records were open than if the records were closed.

Let me say to you that there was a situation a couple of years ago where one major company got a group universal life contract accepted for use out of state, and a similar filing for a different domestic company was not accepted by the Department for use out of state. The policy examiner claimed the reason he was willing to accept the one but not the other was that he was satisfied as far as the actuarial concerns on the one, but not on the other. When we had a meeting with the second company, I made it very clear that the actuarial bureau did not send any memorandum to the policy examiner clearing the one company's actuarial aspects, and that I was not opposed to the other company's actuarial aspects. When the thing came out in the open, it was not being held up by the actuaries. The actuaries were not favoring the one company over another company.

Now, I also note that last year one actuary called me up and said that he saw another company's memorandum regarding a particular block of business, a block of business that the company hoped to sell, and the company looking to sell it said that it satisfied New York's Regulation 126 as far as the assets and liabilities. The company also, at the end of the projection, compared the book value of the assets with the book value of the liabilities, which happened to be pay out annuities and structured settlements. The company knew that I had been saying publicly that at the end of the projection period the market value of the assets, based upon the interest scenario, should be compared against the market value of the assets using the ending interest rate of the scenario. In this particular case, when we looked into it, it appeared as though, as far as that particular block went, there should have been comments raised by the individual reviewing it. However, the company's memorandum was still acceptable in the aggregate because of excesses on other blocks of business that offset the deficiencies on this particular block. I, frankly, like to have the review by the peers. I favor it.

MR. RUGLAND: I understand that, and I think it is a good position. The risk is that we are not going to get the other support, and that is what we need to keep in mind.