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### ROLE OF THE VALUATION ACTUARY IN UNITED STATES, CANADA, AND UNITED KINGDOM

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- o Overview of the valuation actuary's role in each country
- o Product development implications in each country
- o Actuarial profession implications in each country
- o Implications for regulators in each country
- o Implications for insurance company management in each country

MR. ROBIN LECKIE: The role of the valuation actuary is on the leading edge of the developing accountability of actuaries in all professional capacities. It is undergoing greater changes than product design. Pricing and the relationship of assets and liabilities are the ultimate responsibilities of the valuation actuary. It is appropriate, in the currently volatile circumstances of our overall economy, that there will either be no more insurance company insolvencies, or if there are, that those can't be attributed to neglect by actuaries.

The panelists are going to talk about the role of the valuation actuary in three countries: the United Kingdom (U.K.), the United States (U.S.), and Canada. In the U.K. the appointed actuary (the British official name for valuation actuary), has what I would call a higher level of accountability than in the U.S. or Canada. He must render an opinion on the company's solvency position. There is a much heavier reliance on management and on the actuary for the integrity of the insurance business. The U.K., however, has fewer regulatory requirements than the U.S. or Canada. We North Americans could learn a lot from a discussion of how things are done in the U.K. In any case, the appointed actuary is truly a watchdog position.

In the U.S., the valuation actuary has, up to this point in time, been responsible for an opinion only on company liabilities. There has been much concern about the lack of attention to other cash flows that could impair the solvency of the company. Recently, the Joint Committee on the Role of the Valuation Actuary in the United States, chaired by Mr. Gary Corbett, presented recommendations to the Society of Actuaries

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and the American Academy of Actuaries. Those have been a major topic of discussion ever since, and we are going to hear more about them this morning.

In Canada, the valuation actuary also must give an opinion on company liabilities. Prescribed methods for forming that opinion were significantly restructured in 1977. The valuation actuary was then required to give an opinion derived by assumptions appropriate to the circumstances of the company, rather than by specified valuation standards. That means the actuary must look at asset cash flows and the ability of the company to meet its future obligations.

We have three distinguished individuals on the panel this morning. Mr. Allen Loney is Actuarial Vice President of Canada Life Insurance Company in Toronto. Mr. Loney grew up in the U.K. and was an Appointed Actuary until 1981, Mr. Walter Rugland is an insurance consultant and is Chairman of the NAIC Special Working Committee on the Actuarial Opinion. Also he was a member of the Joint Committee on the Role of the Valuation Actuary in the United States. In my opinion, he is one of the leading experts on the role of the U.S. valuation actuary. Mr. Dick Crawford is President and Chief Executive Officer (CEO) of Maritime Life Insurance Company in Halifax. He does not work as a valuation actuary, but is Chairman of the Canadian Institute of Actuaries Committee on the Broadened Role of the Valuation Actuary in Canada.

MR. D. ALLEN LONEY: It is a great pleasure to have the opportunity to address you this morning and to participate in the discussion of one of the most important issues facing our profession today.

Since 1981, I have been Actuarial Vice President at Canada Life Insurance Company. In this capacity, I am responsible for actuarial functions in all of the countries the company conducts business in, namely Canada, the U.S., the U.K. and Ireland. Between 1971 and 1981 I had various positions in the company's U.K. and Irish divisions. Perhaps most relevant to this discussion, I was the Appointed Actuary of Canada Life's U.K. subsidiary for three years up to 1981. I will describe the role of the Appointed Actuary as it is practiced in the U.K. Mainly, I will try to get across to you the essence of the professional responsibilities of the appointed actuary in the U.K.--in other words what is expected of him. Now and then, I will relate the U.K. situation to what is emerging in Canada and the U.S.

Some background about the U.K. is appropriate. Prior to 1970 the amount of regulation of financial reporting was minimal. The watchwords were "freedom with disclosure." The marketplace was almost entirely dominated by long established, prudently managed companies. The nature of products changed only gradually. Most business was participating; guaranteed cash values were a rarity, and very importantly, few managements were subject to unreasonable pressures from dominant shareholders. By today's standards the scene was tranquil.

As the 1970s began, several trends emerged to upset this tranquility:

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- o A number of auto insurance companies failed. The circumstances of the failures made people question whether the traditional "freedom with disclosure" approach was adequate.
- o The sale of variable type policies expanded enormously. That is, policies where a major portion of each premium was invested in a unitised fund that was separate from the company's general account, and where the policyholder's eventual proceeds depended directly on the price of the units. Some contracts, though, included guaranteed maturity values at the end of ten or twenty years regardless of the level of the underlying units at that time.
- o These unitised policies were primarily sold by newly formed companies, which very often were subsidiaries of financial companies, many of them incorporated offshore. Of course, that in itself is not a bad thing. However, it meant that a new factor emerged, namely, major shareholders with entrepreneurial and marketing strengths but with unseasoned managements including inexperienced actuaries.
- o Many of the new companies also sold large quantities of single premium deferred annuities of the type known in Canada as Accumulators and in the U.S. as SPDAs. They offered generous guaranteed cash values. Since guaranteed values were virtually unknown in the U.K. at that time, the dangers of this type of product were not properly appreciated.
- o Britain's economy boomed as the government implemented an expansionist monetary policy following the discovery of significant oil reserves in the North Sea. The stock market rose sharply. Sales of life insurance products soared.

Explosive forces were at work in the British life insurance industry in the early 1970s, and in 1974 the bottom fell out from under the stock and bond markets. Between January and December, 1974, the main stock index fell from 400 to 150 and the main bond index fell from 120 to 85. Some two dozen life insurance offices faced immediate financial peril. Some were rescued by well-established concerns. Most of the damage was done by the single premium deferred annuities with cash values, but some companies had invested far too greatly in a single asset which proved unreliable.

This mess ended a 100-year period during which insolvency was unheard of in the U.K. life insurance industry. There was an urgent need for remedial action. Some of the major problems which had become evident and which the regulators, the actuaries and the industry sought to remedy were:

- o the weak position of the actuary, particularly where there was a dominant shareholder;
- o the too-light granting of options, with inadequate attention to pricing and reserving;

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- o the granting of guaranteed surrender values without proper appreciation of their potential threat to solvency;
- o the practice of following investment policies for assets which are not related to corresponding liabilities;
- o the practice of establishing reserves without taking proper account of the assets;
- o the failure to properly appreciate the impacts of their business volume and sales costs.

New laws and regulations on insurance company financial reporting were passed. I will highlight some of the major points, beginning with the annual statement. This became, in effect, the annual solvency test. In Britain, there is no published yardstick analogous to either GAAP or statutory earnings. Thus one of the early warnings of trouble, namely a deteriorating income statement, is not present.

The admissible assets of the company are divided into the Stockholders Fund, if appropriate, and the Long Term Business Fund. What is required is an annual demonstration that the assets of the Long Term Business Fund exceed the liabilities by a required margin. The required margin is based on arbitrary rules and, for conventional business, is of the order of 4-5 percent of the liabilities. The assets are recorded at market value, and there are regulations governing admissibility so that too much of the fund is not concentrated in a particular asset.

The law requires the company's board of directors to name an appointed actuary who will periodically determine the amount of liabilities. Any change in the appointment must be promptly communicated to the regulators. The appointed actuary must be a Fellow of the Institute or Faculty of Actuaries and must have attained the age of 30.

The determination of the liabilities "shall be made on actuarial principles and shall make proper provision for all liabilities on prudent assumptions with regard to relevant factors." The regulations also require that due attention be paid to the nature of the assets with regard to the liabilities, and that, for annual premium business, the valuation is of a modified net premium nature. Additionally, the reserve cannot be less than the guaranteed cash value, negative values must be eliminated and no allowance can be made for surrender or lapse if that serves to reduce the liability.

The only detailed restraint on the actuary's choice of valuation assumption is that the weighted valuation interest rate must be no greater than 92.5 percent of the current rate of income on assets at market value. Also, investments expected to be made after three years hence shall be assumed not to earn more than 7.2 percent interest. The actuary must sign an opinion that the reserves make proper provision for future liabilities in the context of the assets.

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In the U.K., the regulatory restraints on an actuary's freedom are marginally greater than in Canada, but much less than in the U.S. However, regulatory restraints are only part of the story. The role of the appointed actuary in the U.K., is shaped more by responsibilities and duties which his profession places on his shoulders. And it is this that is really at the core of the regulatory system emerging in the U.K.

The British Institute of Actuaries has drawn up guidelines "which indicate a framework within which the profession expects appointed actuaries to work at all times." That is a direct quote from page 41 of the current handbook. The next sentence reads: "Failure to do so, in the absence of special reasons to justify the departure, will be regarded as prima facie evidence of unprofessional conduct." Also:

A potential appointed actuary who has not previously worked closely with his predecessor has a professional duty to consult him to discover whether there are any professional reasons he should not accept the appointment.

He is regarded by his profession as being in a special position in that:

- (a) he is appointed and remunerated by the company, and at same time
- (b) he has responsibilities and obligations to the Department of Trade and Industry by reason of his statutory duties which arise from the Department's supervisory functions aimed at the protection of policyholders.

It is seldom that these aspects of the appointment conflict. If they do, however, it is the duty of the appointed actuary to advise the company as soon as he believes that a course of action is being, or is proposed to be, followed which seems likely to lead him to withhold subsequent actuary's certificates in the normal form. It is also his duty, if the company persists in following such a course of action, to so advise the Department of Trade and Industry, after informing the company.

These guidelines are very tightly binding and are issued by one of the two actuarial bodies from which appointed actuaries can be drawn. The other body is the Faculty of Actuaries in Scotland, whose members are expected to follow the same guide. I would suggest to you that the explicitness of these guidelines places the appointed actuary in the U.K. in a very different position from the valuation actuary in either the U.S. or Canada.

Perhaps I should mention at this point that the Department of Trade and Industry is the government body responsible for supervising the insurance industry in the U.K. They receive advice from the Government Actuary's Department, the body which the appointed actuary would consult if serious difficulties arose.

The appointed actuary is in a "two hats" situation which requires considerable wisdom and judgment. Recognizing that the appointed

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actuary has no executive authority (although in another capacity he may), the guidelines insist "he must have a right of access to the Board of Directors and this must be explicit from the inception of his appointment." I should point out that the appointed actuary normally reports directly to the company's CEO (who may also be an actuary).

There is some support for this lonely professional as he struggles to wear his "two hats." The guidelines state that a special responsibility is owed to the appointed actuary by any other actuary who is a board member. Such other actuary is required to assist the board to a full understanding of actuarial issues and he is cautioned not to act in such a way as to diminish the status of the appointed actuary.

More support comes from the regulators, the Government Actuary's Department, which is strongly staffed with senior actuaries. Mr. Edward Johnston, the Government Actuary who heads the Department, spoke at the Society of Actuaries' annual meeting in Toronto last year and I am quoting here from his presentation: "In the contacts with the company they (that is his senior actuaries) need to take a line which will strengthen rather than undermine the position of the appointed actuary. Where they are in a position to put the screw onto management, that screw needs to be put on in the form of 'what is your actuary's advice?' If necessary, we actually get a letter signed by the actuary saying what that advice is. We then generally apply the screw to see that management complies with the advice. That's an ideal which one can't always attain, but that sort of approach from the regulators is, I think, necessary in order to enable the appointed actuary to carry out his difficult job."

The professional guidelines provide support for the appointed actuary in other ways. They deal with quite a number of tricky points in an unequivocal way. Because of the judgmental nature of much of the appointed actuary's work, the guidelines cannot define how each part of his duties should be performed. However, they do give the actuary a set standard to which he must conform, and to which he knows his competitors must conform.

They give strong advice to any appointed actuary who becomes doubtful about the proper course of action. In the face of a potentially significant problem, he is advised to seek help from his professional body by approaching the Honorary Secretary. This is because the appointed actuary will not necessarily be a senior person. The ability to consult a senior member of the profession in total confidence, without his company being aware of the consultation, is highly valuable.

So far I have described the implications of the appointed actuary's role for the actuarial profession and for regulators. I now want to develop the management implications of the role vis-a-vis product development and other aspects of the company's operations such as investments.

I have already referred to the difficulty of the appointed actuary's position, whether he be carrying out his regular duties, sitting as a member of his company's management committee or perhaps as a board member. The proper ordering of these regular relationships is most

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important because it is here that operating plans which may later prove fatal are conceived and developed. Examples of such are unsoundly priced products, overfast expansion plans and chancy investment strategies. Therefore, it is here that the appointed actuary can work to prevent problems. No amount of diligent valuation work later on can do other than describe the degree of disaster if the appointed actuary agrees to strategies which pose severe threats to the solvency of the company. Later liaison with the regulators can only limit the damage done, since confidence lost from the financial community can only rarely be regained. Many times--perhaps most times--insolvency occurs because of poor judgment and defective practices. I don't think the appropriateness of that remark is restricted to one country or continent and, I think we would all agree that prevention is preferable to diagnosing an illness, so let us now look more closely at the appointed actuary's position as he seeks to keep his company free from sickness and healthily participating in business.

The appointed actuary is statutorily required to make a valuation every twelve months. However, the profession requires him to make sure that the position would be satisfactory if a valuation were made at any time. I think that this is very important. It makes it clear that the appointed actuary's role is continuous, is concerned with the here and now, and that he is not a mysterious visitor who only appears at midnight on December 31. It emphasizes the prospective as well as the retrospective aspect of actuarial responsibility.

The guidelines go on to say that the financial position of the company is affected, among other things, by:

- o the premium rates for new and existing business.
- o the nature of the new and in-force contracts, particularly the guarantees.
- o the existing investments and continuing investment policy.
- o the marketing plans and, in particular, the expected volumes and costs of sales.

Relevant information must be made available to the appointed actuary. A prospective appointed actuary must make sure that the need for such information is fully understood by the company and that suitable arrangements are made for this information to be forthcoming.

The guidelines also require that the appointed actuary satisfy himself on the following points, in order to protect the position of the policyholders and, if necessary, to indicate to the company the limits and constraints for such protection:

- o Premium rates and policy conditions should be sufficient to enable the company to meet emerging liabilities taking into account among other things, the level of the company's surplus and the policyholders' dividend expectations. Also, he should consider the

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impact of new business strain and must indicate any prudent limits on the volume of business that may be accepted.

- o The actuary is particularly charged with the task of examining the interrelationship between assets and liabilities, and, of his valuation to changes in interest rates. Would the assets and liabilities move by corresponding amounts? He must provide appropriate margins in the valuation basis to allow for interest rate fluctuations. He must decide whether, in his judgment, the investment policy of the company is, or could become, inappropriate given the nature and term of the company's liabilities. If so he must advise the company of the constraints necessary to protect the position of the policyholders.

I have concentrated as far as possible on describing how the appointed actuary interacts with regulators, the actuarial profession, other management members of his company and his Board of Directors. An important thing to appreciate is that most of the considerable powers of the position flow not from legislation, but from the responsibilities which the Institute and Faculty place upon its members. It is, as I have said, from the ranks of those two bodies that appointed actuaries are exclusively drawn. It is also reasonable to suppose that the wide powers of the position would be difficult to exercise if they did not have whole hearted support from the regulators.

I will briefly summarize the main areas I perceive where the British appointed actuary's role is significantly different than that of the valuation actuary in Canada and the U.S.

First, the U.K. role could be regarded as established with only consolidation necessary. In the U.S., the role could be regarded as at conception. In Canada, quite a number of actuaries feel that the valuation actuary's role needs significant further development. Next, the legally allowed U.K. assumptions and methods are limited in some general ways. In Canada, there are no limitations on assumptions and the method is specifically constrained by law for some types of business. In the U.S., there are very detailed constraints on both method and assumptions.

Unlike in Canada or the U.S., the appointed actuary has direct access to the company's Board of Directors. He has a duty to satisfy himself that, among other things, the premium rates for new business, the expected volumes of new business and the company's investment policy do not jeopardize the company. He has a right of access to the necessary information to achieve this. He has a duty to approach the regulator if his warnings of potential jeopardy are not heeded. He has an official route to obtain assistance, in absolute confidence, from a senior member of the profession.

The opinion the appointed actuary signs is a statement of judgment that the reserves are "proper." The guidance notes and the "solvency test" nature of the legislation suggest a concentration on adequacy of reserves. This is in contrast with the adequate and appropriate objectives of Canadian practice. The appointed actuary is particularly



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charged with a duty to fully reflect the asset/liability relationship in his valuation. The appointed actuary's role is continuous. He is concerned with the financial condition of the company at all times. His most sweeping powers derive from his profession's expectations and requirements, they do not derive from legislation.

MR. LECKIE: I suspect many of you in the audience, who are valuation actuaries, may be envious of the situation in the U.K. Others of you might be frightened of the very broad responsibilities. Mr. Walter Rugland will now give us his thoughts on how far the U.S. can go towards either the U.K. or Canadian system.

MR. WALTER S. RUGLAND: My purpose here is to give you the U.S. view. Interestingly, one of the conditions the Joint Committee on the Valuation Actuary began with was that we the members would not spend time discussing what was going on in the U.K. We knew that British actuaries operate in a wholly different set of circumstances and didn't want to be frustrated by what we couldn't duplicate. However, it would be appropriate for us to look at the U.K. situation after we had completed our report and made our recommendations based on circumstances in the U.S. Here we have actuaries who sign opinions, but we don't have an official Valuation Actuary designation. One of my goals as a consultant is to try to help companies establish in-house valuation actuary positions. That's probably one of the first things a company ought to do if it is adding actuarial staff.

My comments on the concept of the valuation actuary in the U.S. are in two parts. The first part is my personal view on why we are pursuing the valuation actuary concept in the U.S. I am spending time on this project because of my views of the business, the actuarial profession and policyholder expectations.

To start with, let me comment on my view of the life insurance business in the U.S. I believe it will not remain a status quo business; to assume so is unrealistic. Changes will occur, and they will occur faster than any of us can imagine. The marketplace in which life insurance companies operate in the U.S. is broadening. Savings dollars are becoming more and more confused with investment dollars; soon the insurance environment will include all financial services. The players in the marketplace will include anyone who thinks he has a way to remove savings or investment dollars from your or my checking accounts. When the life insurance business operates in this broad competitive marketplace, the market will set the premium rates. No longer will the company, or the narrow life insurance market, set its rates. It will be market determined in the broadest sense, influenced by people who have a varying view of the risks involved.

Life insurance regulators will multiply in the future as the marketplace broadens in this manner. As that happens, some will better understand the risks being undertaken by the industry, but few will have the full perspective.

During the course of my work on the committee, I foresaw two potential opposing scenarios. One is an industry burdened with detailed

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regulations, fraught with conservative rules to protect the foolish from themselves, and protect others from the foolish. The other scenario is a marketplace where the smart folks can operate freely; where subsidization of the foolish by the smart is avoided; where correct management of a company's risk taking capacity is not penalized. Secondly, I am spending time on this project because of my view as a professional. I think we actuaries are emerging as a mature profession.

I see several signs of this maturation. The first is that our general status in life insurance companies in the U.S. is increasing dramatically. The second is that our role in U.S. pension is changing significantly, in large part due to the change in the role of defined benefit. The third sign I will mention is the appalling observation that our profession essentially does not conduct basic research in the areas we serve. We just adapt old ideas, or pick up new notions from other professions. Last, our profession seems to put an emphasis on mechanical, formal, riskless and run-for-cover activities.

These signs demonstrate to me that our profession is maturing. We are in need of a breakthrough event to create a modern role for our profession for it to continue to grow and thrive. We need to blast out of our straight jackets and the development of the valuation actuary concept, I believe, is the vehicle that will have the greatest effect on helping us do that. Our consulting actuary has said that many of his assignments involve helping management understand what is in the actuary's black box. Our black box is perhaps better called a "block" box. A modern profession cannot afford to depend on that either.

Finally, I am spending time on this because of my view of policyholder expectations. I believe that, more than ever, the public wants to be assured that the funds it is entrusting to life insurance companies will, in fact, be there when needed. We are able to assume that trust; and I believe the regulators are ready to give us the opportunity to do so.

So, I believe the concept of the valuation actuary merits a firm commitment from us all. Think of the horizons it opens for our profession. Consider all aspects of it with an open mind. Discard the notion that the status quo will prevail, that today's situation will exist years from now. Think positively about how the concept can be improved upon.

The second part of my comments is basically a status report on the development of the valuation actuary concept in the U.S. In response to the recommendations of the Joint Committee on the Valuation Actuary in the U.S., and as authorized by its Board, the American Academy of Actuaries is preparing proposed model legislation which would:

- o establish the statutory responsibility of the valuation actuary.
- o require the valuation actuary to be appointed by the company Board of Directors.
- o require the company to inform the insurance commissioners in all states about the appointment, and any subsequent appointments of the valuation actuary.

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- o require that any financial statements published by the company include the statement of opinion of the valuation actuary; and that any summary published include the name of the valuation actuary and an indication that a statement of opinion has been furnished.

This proposed legislation is based on the premise that the Standard Valuation Law no longer accomplishes its intended purpose of measuring a company's economic health, or assuring policyholders that benefit payments will be made. It also assumes that we have a basis to make a legal determination of solvency. The objectives of the action are as follows:

- o To require a designated, qualified actuary to render an opinion as to the capacity of the company to deliver on its promises, and to support that responsibility with a legal basis.
- o To allow each jurisdiction, state by state, to be assured through this actuary's opinion; to know who the actuary is and be informed of new appointments to that position.
- o To require the actuary's opinion to be a part of the statutory financial statement in all respects.
- o To maximize the objectivity of the actuary, yet preserve efficient and effective use of available actuarial skills and in-depth actuarial knowledge of the situation.

The recommendation of the Joint Committee suggests a different type of opinion than has been in use during the last ten years. In addition to providing evidence of satisfaction of the legal and solvency requirements, the committee's report suggests that the Annual Statement carry a two part actuary's opinion. The first part would provide a judgment about whether or not:

The reserves established in the statement are such that the related anticipated policy and investment cash flows will make a good and sufficient provision for all future obligations on a basis sufficient to cover future reasonable deviations from expected assumption.

The second part would be an evaluation of whether or not:

Such reserves and additional internally designated surplus are such that the related anticipated policy and investment cash flows will make a good and sufficient provision for all future obligations on a basis sufficient to cover future plausible deviations from expected assumptions.

The first of these refers to the appropriateness of reserves for meeting reasonable deviations from expected assumptions. The second suggests that the capacity of the company is such that it can meet all plausible deviations from expected assumptions. As I interpret these, the basic change is from what is essentially a gross premium valuation to a cash flow analysis based on various sets of scenario conditions. Additionally,

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the Joint Committee expects the valuation actuary to present management with an actuarial report supporting the work performed in preparing the opinion.

The Financial Reporting Principles Committee of the Academy has been working on standards of practice with regard to the proposed new responsibilities of the valuation actuary. It anticipates that the process will be an evolving one. The vehicle for this work is a revision of Recommendation 7 of the Academy's Standards of Practice. Next month, the Academy Board will consider for release a discussion draft of the revised actuary's opinion. That version would read as follows:

The anticipated investment cash flows arising from an allocation of assets equal to reserves and other liabilities plus anticipated considerations to be received from the in-force policies make appropriate provision, according to presently accepted actuarial standards of practice, for the anticipated cash flows required by contractual obligations and the related expenses of the company.

Revised Recommendation 7 will describe the accepted actuarial standards of practice. It is anticipated that these standards will be updated from time to time as research and practice advance.

Given these developments, and concern within the NAIC about the apparent practices of some companies with regard to their internal financial capacity, the NAIC appointed a special working group. It will suggest interim procedures to assure regulators that the current actuary's opinion (which speaks to the reserves as being good and sufficient to provide for future guaranteed obligations) considers items which the regulators and the profession believe to be important.

I am Chairman of this special advisory committee. The members intend to suggest some specific approaches that the NAIC can take to improve the validity of actuarial opinions--both the current version and the suggested revision. Our report will be considered by the NAIC Life and Health Actuarial Task Force in October. If accepted then, it will be considered by the NAIC at its December meeting.

The advisory committee will be developing more effective surveillance techniques to better enable regulators to execute their responsibilities in this area. The committee members believe definitions could be made which would put the burden of proof on the actuary making an opinion rather than on the regulator. Additionally, we intend to suggest that the NAIC require appropriate documentation of the work performed in establishing the opinion, and that documentation be available for review, if deemed necessary, by the regulators.

The Academy has made significant changes in its disciplinary process, paving the way for the adoption of the valuation actuary concept. For the NAIC, there are some specific issues yet to be resolved. Those relate to non-Academy actuarial accreditation by individual states. The issue of discipline, or at least removal of accreditation, needs to be addressed. It is my hope that the NAIC will use the Academy's

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disciplinary process for Academy members, and will establish a similar process for non-Academy members.

More importantly, the NAIC could require Academy membership for all valuation actuaries and thus eliminate the need to deal with this issue. Also, by establishing the Academy membership requirement, the NAIC would not need to concern itself with a promulgation of a practice standard. However, even if non-Academy members were deemed qualified to render actuarial opinion, I believe that by remaining silent on standards of practice, the NAIC would require non-Academy members to follow the Academy standards of practice because those would in fact be the definition of accepted actuarial standards of practice.

The suggested statement of actuarial opinion begins in this manner:

I, (name), am a member of the American Academy of Actuaries and meet its qualifications to act as valuation actuary.

The words "and meet its qualifications to act as valuation actuary" are new to the opinion. It is believed that this positive affirmation on the part of the valuation actuary is critical to the long-term integrity of the concept.

The Academy Committee on Qualifications is suggesting that the Board release a discussion draft of the revised qualification standards for actuaries signing statutory opinions. This revision contains a more definitive discussion of education requirements and alternate routes to their satisfaction. In addition, the experience standard is significantly tougher--three years of experience under the supervision of a valuation actuary.

On the basis of discussions with NAIC members, it is clear to me that they will object to any suggestion that more than one person be available to them for discussion regarding the economic health of the company. They're nervous about some of the multi-signature opinions they're currently receiving. Their concern is whether or not the whole company is covered; that nothing has dropped between the cracks, and that several actuaries aren't all taking credit for the same margins. I've talked to them about the extent to which it is appropriate for the person signing the actuarial opinion to have supporting documentation from all the different actuaries providing input. They agree that it is appropriate, and they do not expect one individual to possess all the expertise necessary for all the work to be done in forming the opinion.

On the asset question, the NAIC committee members do not believe that actuaries today, or even possibly in the future, will be equipped to evaluate investment risk. So, part of the task of the valuation actuary will be ongoing communications with personnel responsible for investments. They must agree on the margin required to cover defaults in the investment portfolio. However, we do believe that the actuary has sole responsibility for the mismatch risk determining how much of its capacity the company has used up in covering the effect of changes in the asset values because of interest rate fluctuations.

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MR. J. DICKSON CRAWFORD: I have been asked to comment on current developments in Canada, specifically on the work of the Special Committee of the Canadian Institute of Actuaries to consider a broadened role for the valuation actuary. I am Chairman of that committee. I will describe some of our initial activities, indicating the emerging issues. It is important to emphasize that our work is just beginning, and we have not reached any conclusions. To the extent that I indicate biases this morning, they are my own. We invite input, and this session offers a golden opportunity to make your views known.

Our considerations involve both the developing regulatory situation and the rapid changes in the business environment. While the Insurance Act of 1910 gave little discretion to the professional actuary, the amendments of 1927, 1951 and 1956 gave him increasing degrees of freedom and responsibility in choosing valuation assumptions. In 1977, board appointment of the valuation actuary became a requirement, along with formal notification of changes in the position to the Department of Insurance. Thus the position of the valuation actuary has grown in responsibility, flexibility and visibility over the years.

The competitive environment of recent years has resulted in a thinning of the free surplus margins of most companies. Many new products were introduced by smaller companies attempting to carve out a larger market share. These new products were quickly copied, and the development time for validation of new risks was reduced. Unbundling of products has reduced opportunities for cross-subsidies between different experience factors. Wide swings in interest rates, inversions of traditional yield curves and economic recession made the asset side of the balance sheet a much less reliable source of extra profit than in previous times.

Life insurance company failures have not been a serious problem in Canada. Only a few small provincial companies have become insolvent. Canada has not experienced a crisis of the dimensions of Baldwin-United in the U.S. However, failure of some trust and property/casualty companies, and the near collapse of some smaller banks, have given rise to concerns about the financial soundness of all entities in the financial services industry. The role of valuation actuary has become pivotal in discussions about safeguarding the solvency of life insurance companies.

The Institute has published guidelines for valuation actuary professional practice. These are extensive and inclusive. Some individuals have argued that responsible adherence to these guidelines is all that is required. However, there is also concern that actual practice is developing faster than the guidelines. The volatility of cash flows on both sides of the balance sheet is greater than it was at the time the guidelines were published. There are calls for more specificity, more communication among valuation actuaries and more activity by the Institute in ensuring compliance with the guidelines. The mandate of the committee is:

To consider whether the Institute should seek a broadened role for the valuation actuary and, if so, to consider what that broadened role should be.

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Such a broadened role might, for example, call for the valuation actuary to give an opinion on one or more of: the financial solidity of the company, the financial feasibility of its marketing plans, the appropriateness of the nature and value assigned to the existing assets in relation to the liabilities, the appropriateness of its asset/liability management, and of its policyholder dividend and pricing practices, the existence of circumstances which in his opinion could threaten ongoing solvency.

As an initial activity, we conducted a survey of valuation actuaries with the objective of documenting the current status of this role in Canada. Only about one-half of the expected responses have been received up to today, and so a summary now would be potentially misleading. We are asking questions about:

- o the relative seniority of the valuation actuary and his reporting relationships;
- o the opportunities that the actuary has to present and discuss his report with the CEO and the Board;
- o the areas of involvement of the actuary in related aspects of the management of the business;
- o the actuary's opinion as to the desirability and scope of a broadened role;
- o the help that should be given to the actuary by the Institute.

I would now like to describe some of the issues our committee will be addressing. These relate to the working environment for the valuation actuary and thus affect the performance of his role, whatever that is defined to be.

1. Organization Seniority: This may be a euphemism for "clout." In many companies the person who is designated as valuation actuary is well up in the hierarchy of the management structure. He is a member of the top management team and is often the Chief Actuary for the company. He is thus involved, on a daily basis, with all of the management decisions which ultimately effect the strength and solvency of the company.

In some companies, the valuation actuary is down several levels. We wonder if this indicates that the position has been viewed by top management as one of statutory compliance in a narrow sense. We also wonder if lack of seniority may be a practical barrier to getting early and accurate information on those management decisions which will eventually come to the valuation actuary for assessment. There is a related problem where the valuation actuary is a consultant, and may not be involved continuously in product pricing and design decisions.

2. Conflicts in Relationships: In our preliminary discussions we do not see either the necessity or desirability of requiring that the

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valuation actuary be independent of management. In fact we prefer the opposite, and accept the tension from the dual roles of management and valuation actuary as inevitable. We like the British concept of managing this tension openly, with the proviso that in an ultimate conflict situation, the valuation actuary's final responsibility is to the public at large, as represented through the mandates that have been given to the regulators and to the actuarial profession. It is useful to remember that the exclusive position of the Canadian Institute of Actuaries is granted to us by Canadian Society as a whole and this mandate can be withdrawn if we fail as a professional body.

3. Relations with Regulators: The regulatory authorities in Canada know that responsibility for sound management and company solvency lie with the management, not with the valuation actuary. The regulators have a special function, created because of the special nature of the life insurance, property/casualty, trust and banking businesses in the lives of individual Canadians. In the case of the life insurance business, a key link in the process of regulation is the report of the valuation actuary. It is intended that when a company is in difficult circumstances, the regulators, the valuation actuary and the management work in close harmony to prevent the company from becoming insolvent. This can be best performed in private, and within reasonable limits and this is the intended course. Only when channels of information, communication and rehabilitation are not effective does the public activity take over. It is acknowledged to be much more difficult to save a shaky company in the public arena than in the private one.
4. Other Lines of Business: It can also be observed that the role of the life insurance valuation actuary has applicability to any other form of long term contract between a financial institution and its customers. The obvious parallels will be explored by our committee and included in our report.
5. Career Implications for the Actuary: Some people have suggested that expectations of the valuation actuary's function are unrealistic. Who will want the added exposure? Things are tough enough as they are. The isolation of the valuation actuary can be profoundly disturbing. We do not believe the industry will be well served by a group of Jeremiahs, Doom-Sayers and Whistle-Blowers. They would be shunned by everyone. We think that it is vital to focus on the central theme of these issues, and not get derailed worrying about the rare instance where the valuation actuary and management will part company. That would represent a breakdown of the system, and our whole effort should be directed at building a system which will not break down.
6. Support from the Profession: All of our discussions to date have emphasized a more active role for the profession in supporting the valuation actuary in both his present responsibilities and any future expanded role. The profession must help him by defining acceptable standards of practice in newly emerging product and



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risk areas. We cannot wait for years of experience to be documented before developing guidelines.

At the Council Meeting of the Canadian Institute, which took place last Tuesday, an important step was taken in that direction. The first paper on valuation technique was submitted and the Financial Reporting Committee approved it for use by Valuation Actuaries with the 1985 Statements. The subject of this first paper is the valuation of lapse-supported products. Other papers are planned on valuation of adjustable premium and renewable term plans, choice of the interest rate assumption, and, reinsurance. Those are not yet commissioned, but are what the group saw as required technique papers. The council acted promptly to approve them for distribution to valuation actuaries this year, but there is quite a bit of work to be done in fitting this new name--"Valuation Technique Paper"--into the formal processes of recommendation, discipline and so on of the Institute. That has not yet taken place. It seemed to us to be urgent to have this paper in front of the membership with a strong encouragement that it be adopted this year. The final recommendation to be dealt with by the Institute as a whole is the requirement that valuation actuaries be familiar with the technique papers--that they use only the techniques described; and if they feel it is appropriate to deviate, they should be prepared to justify their actions. In other words, the onus will be shifted to the valuation actuary to demonstrate and justify deviation from these technique papers.

Another important step we must take is to provide regular opportunity for valuation actuaries to meet, to share their understanding of this special role and its practical applications. Finally, we must help the valuation actuary to be accepted within his company as both a key member of management and as a responsible professional with obligations that extend beyond his corporate duties.

In closing, may I encourage all actuaries to contribute to this debate, whether or not they carry the responsibility of valuation actuary. The outcome of this initiative within the profession will have important consequences for actuaries in every function involved with the management of long-term risks.

MR. LECKIE: We welcome comments or questions from the audience. This is a joint Canadian Institute of Actuaries and Society of Actuaries meeting. We have with us the current President of the Faculty of Actuaries, Alex Shedden, and a past President of the British Institute of Actuaries, Michael O'Brien. Also in the audience is a former Superintendent of Insurance in Canada. Who wants to ask the first question?

MR. BOB DAVIS: I'm going to mention some subjects I think might be of interest for discussion. In the U.S., a number of banks and savings and loan institutions have failed in the past few months. I wonder if those might have been avoided if the valuation actuary position had been in place in these segments of the financial services industry. Also, I wonder if the job of valuation actuary is too big for one person. I don't feel that the average actuary can be an expert on both

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reserves and assets. In the old days, which may still be with us, we were primarily concerned with "what if the company went out of business today? Would it be able to fulfill its obligations?" I anticipate that, in the future, we will have to say the company is solid right now and it is going to be solid in the future. The latter statement requires many assumptions. In the valuation work I have done over many years, I've had to attest only to the fact that the reserves were probably at least as large as future benefits. I have always been able to accept the accountant's word, or the investment officer's word, about the value of the assets and their ability to cover the liabilities. Those individuals give me information about the assets which sometimes might make me nervous (too many government bonds or too much investment in stocks), but I've had absolutely no say about investments and wouldn't be surprised if other actuaries have had the same experience. I think that what you are doing is a great thing, but I also think it has the potential to create an awful lot of stress on actuaries. I wonder if it might be wise to split the job between assets and liabilities.

MR. LECKIE: It is often the case that an individual who assumes accountability or responsibility is not a thoroughly competent technician on every detail. For example, the President of the United States cannot be knowledgeable of every facet of activity within the government, but must be accountable. The CEO of an insurance company is accountable for all aspects of the operation, because he is the ultimate decision maker, not because he is the ultimate expert. I would be very sorry to see a splitting of the valuation actuary's role into areas in which he is truly technically competent and getting someone else in areas where he is not as fully competent. The point is that accountability assumes certain relationships. Actuarial expertise is needed to know how disjointed pieces come together. That is what is really important, and knowing the experts to call upon for assistance.

MR. RUGLAND: In the discussions we have had with some of the staff members of the NAIC, it seems very clear that they would give us problems if we suggested that more than one person have responsibility for analyzing the economic health of the company. In fact as mentioned previously, they are nervous about some of the opinions they are getting now, which are signed by a multitude of individuals. They want to know that the whole company is covered. If one person does the health line, somebody else the annuity line, and somebody else again the life business, how do they know that nothing dropped in-between and that all the lines aren't taking account of the same margin in each opinion? We have also talked to them about the appropriateness even today of having supporting documentation from different people in the company regarding their input to the actuarial opinion. NAIC staff agree with us that it is very appropriate, and that no, they do not expect an individual to have the expertise in every area that could be brought into the work performed for the opinion.

On the asset question, the committee has tried to communicate as clearly as possible that it did not believe that actuaries are, or possibly will be in the future, equipped to evaluate risk in investments. It's my personal hope that some day we will be as ready to do that as anybody, but it still may be that we're not ready to do it. We on the committee

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think that part of the success of the valuation actuary will be an ongoing communication with whoever is responsible for invested strategy and management in order to have the company agreement on the type of margin that is required. In other words, how much of the asset value is required to cover defaults in the investment portfolio. Again, we also believe that the actuary has responsibility for determining how much of the capacity of the company has been used up in covering the effect on asset values of changes in interest rates, the mismatch issue. That responsibility should not be passed on. That is a basic responsibility of the valuation actuary.

MR. ALEXANDER SHEDDEN: I wanted to make a couple of comments on Mr. Loney's description of the guidelines for Appointed Actuaries. Those are issued jointly by the Institute and the Faculty. Even though both bodies have separate general professional guidelines, they do have a number of common points, which are promulgated by joint financial standard committees. Second, there have been a few changes in these guidelines in the course of being promulgated. One is the removal of the words "prima facie," but this is thought not to reduce the weight of the guidelines. Compensating wordings were put in elsewhere. An addition to the guidelines is a comment on the bonus earning power of the company. This comment is going to be made by the appointed actuary not as part of a warning that the company may not be able to afford bonuses, but hopefully as an aid to the life insurance industry in using moderation in their illustrations of future bonuses, and quotations for new business. My third comment is that although I am an Appointed Actuary, I cannot act as a valuation actuary in Canada. You may wonder why that is the case when the moderator of this panel is allowed to act as an appointed actuary in the U.K. The reason is two-fold. One is that the reporting of the valuation actuary in Canada covers the Canadian business only of a foreign company, whereas a foreign company in the U.K. reports on all of its liabilities worldwide, and the appointed actuary certifies not merely the business in the U.K., but all business worldwide. For this reason, the Government Actuaries Department prefers that the person signing this report be sufficiently knowledgeable about the affairs of the company on a worldwide basis. It raises an interesting point. Since a significant part of the role of the appointed actuary in the U.K. springs not from regulation but from professional guidance, in order for a foreign Appointed Actuary to play a proper role he, in effect, has to be subject to this guidance.

MR. LECKIE: In the U.K., there can be conflict between having responsibility for worldwide operations of the company and also having access to the Board of Directors. That conflict overrides the requirement to be Fellow of the Institute of Actuaries. So they have created another membership class called Affiliate. That way they put me under their guidelines for professional conduct. Otherwise I am not qualified in the U.K., but I do have access to board of directors of my company.

MR. DICK HUMPHRYS: With regard to other financial institutions, I think it is very important that, at some point in time, they also have this kind of solvency certificate. One of the mistakes we have made in

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Canada, and in the U.S. too, in the deposit taking institutions is excessive reliance and focus on the balance sheet. When leverage of assets to equity gets up to twenty-five, the capital surplus margin runs 4-5 percent. Then if a company gets in trouble, the change on the asset side in moving from a going-concern basis to a wind-up basis is pretty startling. So there has to be an effort to get a forward looking opinion for those institutions. And, I think the actuarial profession is where that kind of opinion should come from. It's probably early for that yet because we've got our hands full trying to work it out for the life insurance industry. However, it is very much on the horizon.

With regard to the comment about splitting the job, somebody has to bring together the financial nature and expectations of the company. I have always thought that the actuaries should do that rather than regulators or accountants or anyone else.

MR. DAVIS: First of all, I would like to say that I second the opinion of the last speaker because I mentioned savings and loans when I spoke earlier. I think they need valuation actuaries much more than insurance companies do. I hate to see the public lose confidence in savings and loans because insurance companies could be next. As a result of seeing some banks and savings and loans go broke in the U.S., my feeling is that members of boards of directors and CEOs of financial institutions ought to be held personally liable when they make obviously bad judgment. I don't believe they should be able to purchase full coverage insurance for their liability. Then we would see a lot more responsible action from institutions that pour too much of their assets into single risk investments. I think they need valuation actuaries as much as any insurance company.

MR. LECKIE: Let me say that I heartily endorse the idea of personal liability for CEOs. Interestingly, I think it would lead to a much enhanced position for the valuation actuary. That is because I can't believe that the CEO wouldn't rely more heavily on the valuation actuary under such circumstances.

MR. CRAWFORD: When I take on personal liability, I hope that the valuation actuary will take it on also.

MR. RUGLAND: We don't have to worry about whether or not they can get insurance because I don't think they will be able to.

MR. LECKIE: Many of us are happy to assume this role without liability insurance.

MR. KIT MOORE: I just wanted to make a comment on the further strengthening of the role of the valuation actuary. Recently the Canadian Institute of Actuaries and the Canadian Institute of Chartered Accountants produced a joint report on the role of the actuary and auditor of financial statements. One of the recommendations was that the valuation actuary should be elected by the policyholders or shareholders of the company. The purpose of that recommendation was to enhance the objectivity, or at least the perceived objectivity, of the valuation actuary in the eyes of the auditors. That was our purpose as

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actuaries on that committee. However, the suggestion has not received the whole-hearted support of actuaries who are also CEOs of insurance companies. But, I would be interested in hearing the views of Appointed Actuaries on that subject, whether they had considered going that far to strengthening their role and if not, why not?

MR. LECKIE: I think that would be a retrograde step, and would not enhance the role of the valuation actuary.

MR. MICHAEL O'BRIEN\*: That's not a suggestion that I have considered before, and I don't think it would be considered in the U.K. We're in the happy situation of being at one with the regulators, having government actuaries and members of the profession supervising us as we perform our professional work. We don't feel our position is vulnerable. The profession requires the board to give the appointed actuary access to information, as a condition of their appointment.

MR. LONEY: I think the entire concept of the appointed actuary is predicated on this carrying out his joint responsibilities as a member of management and an agent of the Department of Trade and Industry. Were he to be appointed by the policyholders, I think it would de-emphasize his position as an integral part of the management team, and set him aside from the management mainstream.

MR. O'BRIEN: We have had discussions about whether the appointed actuary should be independent of the company, and have argued broadly that he share heavily in the management of the company. That is a very big element in the appointed actuary's influence in and knowledge about the company.

\*Mr. Michael O'Brien, not a member of the Society, is a Fellow of the Institute of the Actuaries and a past president of that organization.

