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Session 3PD Rethinking The Valuation Process

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Summary: The NAIC's Life and Health Actuarial Task Force (LHATF) has made a request of the AAA to initiate a thorough study regarding current valuation methodologies applicable to life insurance, annuities, and health insurance, and make recommendations as to changes that should be implemented. The AAA Task Force is taking a "blank sheet of paper" approach to its assignment. Preliminary reports from the AAA Task Force highlight the important but challenging aspects of the project. Recently, the focus of the Task Force has shifted from a narrow view of valuation to a broader view, with implications for preparers and users of financial statements.

Mr. Larry M. Gorski: Today's topic is rethinking the valuation process. Our panelists will be discussing a recently released report from the AAA's Valuation Task Force. Why did the Academy take on that assignment? About a year and a half or so ago the NAIC LHATF requested that the Academy consider the current statutory valuation framework and make recommendations for change if appropriate.

The reason why the NAIC group made that request of the Academy is that there's a strong feeling by many of the members of the LHATF that the current formula-driven reserving system is showing the strains of old age. It just can't keep up with the new products of today. Some good examples of that are the equity-indexed annuities (EIAs), variable annuities with guaranteed living benefits, variable

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Note: The chart referred to in the text can be found at the end of the manuscript.

annuities with guaranteed minimum death benefits, and guaranteed separate account products. Each of those products is now the subject of intense scrutiny by Academy task forces and the NAIC. For example, the EIA product was the basis for a year-long Academy task force project to look at various aspects of the product but primarily reserving. Conservatively, that group probably spent about 5,000 hours in 1997 to come up with the recommendations that they did. It's really not practical anymore to patch up the current system; hence, the need to change the valuation framework for statutory reporting purposes.

Our first speaker will be Bob Wilcox. Bob is currently employed by Deloitte & Touche, but probably more importantly, for the purpose of this project, Bob is the former commissioner of the State of Utah. I've been with the State of Illinois now for 20-odd years, and periodically, every 3 or 4 years, we have a new commissioner, and the first thing we try to find out about a new commissioner is if he or she can spell the word "insurance." Bob not only can spell insurance, but he wrote the book on insurance. Bob is well versed in all insurance and actuarial issues, and he is chairing the Academy task force dealing with rethinking the valuation system.

Jim Reiskytl is equally well-known. He's the vice president of Tax and Financial Reporting for Northwestern Mutual. Jim is a very passionate speaker on many topics, and I believe if this planning session is any indication of the passion he's going to bring to this meeting, my role will probably be to separate Jim from Bob as we proceed.

Mr. Robert E. Wilcox: Before I begin, just a little bit of information for my benefit. I know that a number of people have been tracking this task force from the beginning. I see people in the audience who were key participants in the task force. By a show of hands how many of you are really getting your first brush with this project? A significant number of you are learning about this for the first time, however, because of the time and the amount of material that we have, I'll be cutting a bit of the background that I would give if we had an extra hour for this presentation, but hopefully there'll be enough that you can get a flavor for what we're talking about.

As we began this project we made comparisons of the current law with the overall standards we were trying to achieve. We addressed issues such as: "What were the advantages and what were the disadvantages?" Let me just say that the disadvantages significantly outweighed the advantages. I'm not going to go through the details. Out of all of this we tried to identify the things that we really wanted to accomplish, and we came up with a concept that was built on three basic ideas; the first being viability. We wanted a valuation system that would go past solvency and

give information about the viability of the entity, a continual evaluation of the adequacy of the insurer's financial resources to execute its business plan. However, we still needed a view of solvency, the regulatory trigger, the adequacy of the current resources of the company to meet its obligations as they come due. Finally, we had to support the various accounting systems that were already in existence and would be extant in the future with regard to insurance. We wanted to be able to support all of those through a single system that would serve different needs.

We recognized that there are different audiences. The requirements of those different audiences are different, yet we felt that there needed to be a great deal more consistency in the information that could be provided to those different audiences. Consistency was really a critical part of what we were working on, and a key piece of that consistency emphasized that resources and obligations should be valued in a consistent way. We shouldn't have one side of the balance sheet on a book-value basis, and the other side of the balance sheet on a market-value basis. We needed to provide more information to our audiences so that they would understand the expected levels of adequacy associated with the information that we were able to provide.

We came up with two important ideas for our document that would be the touchstone as we were developing the unified valuation system (UVS), one being the framework—and I want to run through the elements and the various tenets of the framework with you—and the other being three basic objectives. One, we wanted to be able to provide information to policyholders and others to assist them in making sound judgments about the organization. Two, the valuation system should support financial analysis both at points in time and over time. There was a strong feeling that this should not be just periodic snapshots but a system that would allow an ongoing and continuous evaluation of the financial capabilities of the entity. Three, it should address overall solvency, not just contract reserves, and, in particular, as it says here, it should address resources consistently with obligations, back to something I mentioned before. The idea is that the valuation actuary should be responsible for all the contingent events in the evaluation of the company's ability to perform under those contingent events.

We were very concerned about being able to produce verifiable and auditable results so that there could be greater confidence and reliability of the results. We wanted to cover all insurance activities. It should be a holistic approach to the entire enterprise, not just a sum of the parts. This gives the valuation actuary a greater ability to recognize the covariance that exists between various contingent risks and appropriately value those risks in the UVS report. It should be a balance of practicality and cost-effectiveness. This is not intended to be simply a big increase in the guaranteed employment for actuaries but, rather, a system that is

practical and produces better results not at a greater cost but hopefully at a lower cost than what we do now. It should be consistent for all companies and among the various regulatory jurisdictions. This has been an ongoing problem for you and many others, trying to deal with the differences between the various regulatory jurisdictions. Because this approach sets standards at a very high level for the valuation actuary, I think there is a reduced likelihood that the regulators and legislators will tinker with the details because this is not dealing at a detail level.

It should be flexible and able to accommodate unidentified future needs. When the next product comes down the line, whatever the next product will be, this should be a system that can accommodate those new products without having to undergo substantial renovation and revision. Certainly it's important that it be based on actuarial judgment rather than prescribed methods and assumptions. This is an aside. With the experience that I had as a regulator, and I think Larry and others who have been involved on the regulatory side will bear this out, whenever you try to regulate at a detailed level the rules take the place of what you're trying to accomplish, and the people who are complying then focus not on the original objective but how can they manipulate their product to match the rules in the best possible way so that they can be closer to the line than anyone else and have a competitive advantage. That becomes a critical part. The more we can steer away from safe harbors into an adherence to basic principles and objectives, the more effective the regulation will become. That means actuarial judgment, not prescribed methods and assumptions.

Finally, one of our tenets was that it should accommodate materiality issues. As we put that down, we recognized that we didn't know what it meant, but we saw the accountants use it all the time, so we were sure they knew what it meant. When we talked to the accountants they said, "Yes, we do use it all the time, but we have no idea what it means." So we will accommodate it, whatever it means.

There are three objectives, and they tie back to what I mentioned before. First of all, the evaluation of the ability of a company to carry out its business objectives, the viability versus solvency perspective. A year and a half ago there was a task force that the Academy convened to look at insurer solvency. I don't think they had met more than twice when that task force came back and said you asked the wrong question. It shouldn't be insurer solvency. It should be insurer viability. The report came back with that perspective—be useful in protecting policyholders and assuring that an insurer's obligations to policyholders would be met. We had to move back from insurer solvency and identify the problem much earlier in the process; that is, viability. Does the company have the resources to match the business plan that it's trying to carry out or will the business plan itself assure the failure of the entity? That was the sort of question that we felt the insurer solvency task force needed to

address, and if that sounds like some other things that we're going to be talking about in terms of dynamic financial condition analysis (DFCA), that's intentional.

The second part of the objective does tie into the solvency issue, and this goes to the point that the regulators need an effective regulatory trigger mechanism. They need to be able to go in front of a judge and say this organization requires regulatory intervention and get the necessary court order to do whatever is required and justified under the circumstances. Regulators have been in that position. I can tell you about some of his experiences, and as a commissioner, I've gone through that process of going to the judge and saying, "I have an insurer. Here is their condition. I'm seeking this order to be able to go in tomorrow at eight o'clock with a locksmith and seize the company, change the locks, and take over the operation of the company." You have to have something definitive to do that. That's a solvency test as opposed to a viability test. Finally, we have to be able to support all of the other people who interface with the insurer. Creditors, stockholders, reinsurers, and anyone else who has occasion to deal with that company needs to have information about the company's ability to perform.

To understand where we are headed with the UVS, imagine a horizontal axis showing resources relative to obligations. The vertical axis shows the probability of survival. We've talked about this in our group many times as the probability S curve. If you pick any point along that horizontal axis, for example, if you pick the point where assets were exactly equal to liabilities, no capital or surplus, there is a certain probability, greater than zero and less than one, that the company at that point could, in fact, meet all of its obligations as they fell due. This is without introduction of any new business, just taking the existing obligations that are on the books and receiving the premium on the policies that are in force, paying out the obligations as they come due. So we would find that there is a point on the curve that would match that particular level of resources relative to obligations.

As you go from company to company under the current circumstances, we know that there's a wide variation in where that might fall; that it's not a clearly defined point, but there is a point that exists there that corresponds to that level of resources relative to obligations. Now, as you increase the amount of resources relative to obligations, you'll find that you can reach a higher and higher point upon that probability S curve, generally never reaching a probability of one. In fact, if you look at the various control levels that are defined by the current risk-based capital (RBC) formula, will be taken to a higher and higher level along the probability S curve. In fact, if you have assets in excess of liabilities plus the company control level, RBC definition, then you have a fairly high probability of being able to meet all of the company's obligations, and that's what it's intended to do so that the regulators have an interval of time between when you hit that particular point and

when the ability of the company to meet its obligations is severely suspect. You come at those various points along the probability S curve defined by the current system.

The thought occurred to us that instead of using the current system of defining reserves and RBC to produce those results, what if we defined it in terms of the point on the curve? What if we pick some point along the curve, and let that define statutory liabilities rather than the other way around? The UVS came out of that concept of defining the results by the points on the curve rather than coming up with a formulaic approach, such as the Commissioners Reserve Valuation Method (CARVM), minimum mortality, or minimum interest, and ending up with some point on the curve. Let's say that we want to define a point, and at this point in the discussion it isn't as critical to talk about where that point ought to be as it is that we can define a point, and then we can build from that point. It could be 50, 60, 70, 80, or 85 percent, or whatever we want it to be, and that can define what we want for statutory liabilities. Are there questions about this curve before we go on? It's important that you understand this particular concept.

With this idea, where do we go from here? First of all, we need to continue to develop a methodology necessary to carry this out. If you were to define right now the methodology necessary to do this sort of valuation, it would include pretty much everything we know as actuaries in terms of defining a problem, identifying contingent events, measuring the probabilities of those contingent events, determining the distribution of those probabilities, and learning how they combine with other probabilities so that we can combine the factors together. Pretty much everything we know falls somewhere in that methodology, and that's not bad, but there's a real concern that we still don't know enough, and there are additional things that we have to develop in order to do this as well as we're capable of doing as valuation actuaries.

The next thing that we need to do is complete a draft of a model valuation law. A number of people have asked, "Why are you moving to a draft law with a concept that is so new and still in such an early stage of development?" Well, again going back to experience as a regulator, and I think that Larry and others in the room who've had that experience can testify, when you bring it together in that form the questions, the problems, and the concerns really take shape. When you look at it in a legal form that says you're going to do this and this and this, the completeness of the scheme shows up as a potential question and exposes the problems that it creates. A draft model law is a good way to examine the problem and get it out for people to look at and respond to. It does not mean that it's ready to be adopted, and that's important for you to understand, that this is not a draft model law in the sense that you should go home and tell your neighborhood legislator that this is a

bill that should be introduced in the next session of the House and taken forward. There's still a lot of work to do to finalize that draft and have it ready to go.

Then we need to develop a strategy for implementation, and that strategy is going to be important from a number of aspects. There are a lot of laws that exist in a lot of different places that are impacted by a change of this magnitude, and a lot of thought needs to be given to how you interact with those, and certainly the various accounting systems are critical. We have met with the FASB. We've met with the AICPA. We've generally had a very friendly hearing for the ideas and the concepts that we're bringing to them, but a lot of work needs to be done in carrying that forward.

A little bit more about the methodology. We need to catalog the various methods that we know about at the present time and evaluate those mechanisms for how they can be used, and when they should be used, but we also need to look forward to the development of additional actuarial techniques in order to flesh out the methodology into a more complete form. We're trying to get efforts going forward on this in a lot of different places. I recently met with the faculty at Georgia State to interest them in writing papers, assist in undertaking research projects, and we hope that there are other academics who will take a real interest in this. One of the concerns that we had was a central review body to review the work that came out of this. The current direction that we're taking is not like a central review body, such as the Government Actuaries Division (GAD) in the U.K., but we may come back to that at some point as an approach that should be taken to develop the overall consistency and approach that we'd like to have.

Let's get into talking about the model unified valuation law. There are 14 sections of the current draft. What I'm going to be talking about reflects not only what's in the draft that was presented to the LHATF on June 4, but also the response that we got back from the members of the LHATF where they said discard that option, use this option, etc. The regulators gave us some guidance on which of those options they liked and didn't like. I'm going to focus on those options where they told us to focus.

Let's talk about scope for a moment. It's important to understand who this would apply to. As currently drafted, it would apply to all life and health insurers authorized to do business in the state, and the health insurers that are to be grouped with that include the nontraditional health insurers as well as the traditional. It should include the HMOs and all of the other Os that are out there of various types in order to have as much consistency as possible across the health lines. It is not being applied to property and casualty (P&C). There was a good deal of discussion about that, and that particular question is in the hands of the regulators to decide if

they want it to apply it to P&C and, if so, in what way. The inclusion of people who write health insurance and file a yellow book is a critical part of the concern that this presents.

In terms of the definitions I want to just mention a couple that are of particular interest that may strike you as terms that you haven't seen before. Item C, assets reserved to support policyholder interests, is a new term, and it would represent, in terms of today's language, the sum of liabilities plus the RBC, all of those funds that are set aside or reserved for policyholder obligations, and only assets in excess of that level would reasonably be available for owners or as stockholder dividends. Related to that is the second term, dedicated capital and surplus, and this simply recognizes the part of assets reserved for policyholder interests in excess of liabilities. Those are a couple of the new terms that are defined.

Now let's go on to some critical parts of Section 4 of this report. First of all, one of the drafting notes referred to the review process. We offer different alternatives as to how the review would be conducted. It could be done by a central review body. It could be done by the NAIC. We could simply rely on actuaries to do the right thing, to follow the Actuarial Standards of Practice (ASOP) and be subject to discipline by the Actuarial Board for Counseling and Discipline (ABCD) if they do that poorly. We also talked about having it reviewed by an independent actuary, an actuary separate from the appointed actuary, whether it's an in-house appointed actuary or a consultant retained as the appointed actuary, or have the work reviewed by an independent body. The regulators liked the latter, but we want to be able to approve that independent reviewing actuary.

A word about the valuation of liabilities. If we go back to the probability S curve, we say the accounting value represents a set of assets identified by the appointed actuary as having a probability of at least "x" percent of providing for all material obligations of the insurer as they fall due, so you're actually defining the value of the liabilities as the value of a specific set of assets, the accounting value of a specific set of assets that will give you that necessary probability of survival when you consider all of the obligations and all of the contingent events that can occur. There are contingent events that can occur on the asset side of the balance sheet as well as the liability side, and those are expected to be taken into account. It represents all of the obligations of the insurer, not just the policyholder obligations, because in addition to meeting the policyholder obligations, you have to pay your creditors and stay in business to do all of those other things that are required.

One of the other concepts that we've talked about a bit is the relationship between GAAP liabilities and the balance sheet. There is a real interest and effort to move GAAP to correspond precisely with this sort of definition of statutory liabilities

defining statutory earnings. I don't know if we'll get there. FASB is willing to talk, and it would certainly be worthwhile if we could get there.

Section 5. The appointed actuary must be appointed by the board. The current model for the valuation actuary says that the board can designate someone else to make the appointment of the appointed actuary. This doesn't do it that way, as the regulators have requested.

From the Floor: Are the independent actuary and the appointed actuary the same person—I'm confused.

Mr. Wilcox: Let me see if I can say it again and clarify it. The appointed actuary is appointed by the board, and that can be an employee of the company or an outside consultant. After that there is a reviewing actuary who is to review the work of the appointed actuary in-house or out-house, and that reviewing actuary would be subject to approval by the regulators as either designating a specific reviewing actuary or selecting from a designated list of reviewing actuaries. So that's two people.

In terms of this next step, this is one of the places where the regulators said we still are not sure which way we want to go. There was a lot of sympathy to move in the direction of the point on the probability S curve idea. That is the right and desirable way to do it, but the question was raised—I think more by others outside of regulation than within regulation—are you really going to be able to get a court to act on a number that is a product of actuarial judgment? And are you going to have to have instead something more definitive in that regard? I think if we do this right, we can do the former, but right now we're looking at two separate options. One is the point on the probability S curve which is represented as item number one and the second is looking at something like the current RBC formula on top of the reserves that are defined as a point on the probability S curve. And so that's a point where there's still some work to be done and some sorting out to decide which of those is most likely to be effective.

Just a few more points on the actuarial analysis. Out of that determination, if the actuary is unable to opine that the necessary level can be achieved, then you fall below the company action level or perhaps below one of the other action levels. The various action levels are simply defined in item number one as various points on the probability S curve, and on item number two as various points on the multiples of the RBC formula. One of the real advantages of the point on the probability S curve idea versus the RBC formula is that using the RBC formula you really don't know what that gives you in terms of the probability of the company being able to meet its obligations. We've looked at a lot of factors to try to come up

with something reasonable, but we've never really attached probabilities to it, and those probabilities are going to vary a great deal from company to company.

Let's discuss DFCA. We have a definition included, which is basically the publications of the Society that have been out there and requirements that the board receive the DFCA report and that troubled companies must submit that to the commissioner. If a company is in good financial condition, not below the company action level, then there's no requirement that the DFCA report be submitted to the commissioner.

Implementation strategy. We need a broad exposure of the draft model. We encourage the development of alternative models. This is certainly not the only way that the problem can be solved. It's one way to encourage anyone to develop alternatives, and we think that the world would be better for it. We need to work hard at identifying and considering all of the effects of such a change. We know that there will be unintended outcomes, but we should do all that we can to minimize those effects. Certainly this issue needs to be addressed very carefully.

Mr. Gorski: As Bob pointed out, we'll have some time for Q&A at the end of Jim's presentation. Jim will speak and then I have a list of prepared questions that are intended to stimulate some joint discussion between Bob, Jim, and myself. At that time, if there are any comments from the audience, you'll be able to introduce them also.

Mr. James F. Reiskytl: I would like you to write down five words: statutory reserves, taxes, insolvency, and practicality. If I'm successful, which I hope I will be, I'm going to elaborate on these four elements which Bob has just described to you. I think, frankly, that the UVS only exists today in concept. It's a great dream. It's a dream we all should aspire to. It already exists. We have GAAP reserves. We have statutory reserves. We have RBC. And to a varying degree, we have the ability to measure probabilities of these events. Can we do it perfectly? No. Can we do it better? Obviously. Do we have to do it better? Assuredly.

If you want to deal with your wife or your boss, you should always ask seven questions. You come home, and you're tired. Let's go out to eat. Your spouse asks, "Why do you want to go out to eat?" You ask seven whys. By the time you get down to the last why, presumably you get to the heart of the matter, and if I had the opportunity and time permitting, I would ask Bob the five whys. I would ask, "Why do you want to do this?" and he would give me an answer. I'd then ask, "Why do you want to do that," and "Why do you want to do that?" Presumably at the core of that we find out what's really motivating him to make these changes, and we might find out that we both agree on the core issues but given the time

today, I want to focus on that. The first one is taxes. Now, I don't know if there's anyone here from *The National Underwriter*—if they are, they can identify themselves—or from the IRS, but speaking very bluntly, today taxes are built on statutory reserves. They're built on tables. They're built on actuarial methods. They're built on state laws and state regulations. That's a simple fact of life. That's how the tax structure is built. The largest single deduction for your company is for reserves. Point number two. The government views reserve deductions as exceptions. There are rules that determine when you can deduct the future payment liability, and they're called accrual rules, so they view the reserve deduction as a loophole. It's not a loophole, but that's how they view it.

The third point is that any change in the structure is likely to go in one and only one way, increased taxes. If you heard former Governor Campbell, you heard about the \$8 billion assault, and that was before Bob even launched the UVS. Can you imagine what the government would do, given the opportunity potentially of having additional comments made by actuaries? I think, unfortunately, that the task force has been very carefully trained or at least been admonished to be very careful about talking about taxes in the most efficient fashion. I wish we had a world where we could just live in dreams, and we wouldn't increase taxes as a result. I may sound like a spokesman who came home to be applauded by his countryman, but clearly the ACLI just came out with a study, conducted by Coopers & Lybrand, that said we already are overtaxed as an industry. From my perspective the issue is, how can we become more tax efficient, not less tax efficient?

As I said, the tax reserves are built, as you know if you're involved with taxes, on statutory tables, methods, and so on, and as a result, in effect, everyone gets basically the same deduction even though they have quite different experience, and so you step back and ask, "How much should be deductible?" This "loophole" that isn't a loophole, how much of it should be permitted? I'm very pleased to have one former commissioner and one of the best regulators in the business attending this session. They are very important to this tax structure because we have a linkage between statutory and tax reserves, and my opinion makes sense. The NAIC establishes appropriate reserves driven by actuarial considerations and due process and not by revenue. Imagine, if you would for a moment, if you were going to develop all your reserves based on your own experience, you would then be defending each and every deduction. This tax system is not perfect by a long shot, but the discipline of the NAIC establishing what are appropriate standards is a very important consideration as one decides whether one wants to follow a dream of one form or another. For statutory reserves, if you're not a tax person, you'd also realize there are over 25 other sections of the Internal Revenue Code (IRC) that will have to be rewritten to accommodate potential changes. Of course, as I said earlier, the devil is always in the details. It all depends how it gets changed, and what needs to

be changed. These include things as fundamental as the definition of a life insurance company, the definition of the life insurance product that you sell, and many, many others.

Then there's the number one priority or the cornerstone of products with a cash value. If you forget everything else I say, I hope you won't forget that any valuation system cannot undermine the cash value floor. Why do I say that? Because to undermine a cash value floor in any form in a valuation system would attack the very basics of inside buildup, and surely this audience doesn't have to be told how if you were to cut through the floor, if the Academy of Actuaries or anyone else were to make such a foolish statement, then you would, in effect, be taxing inside buildup and giving away part of the advantage you have in the world.

Given that the tax system is built on statutory reserves, clearly one would not go to a GAAP-like structure unless you define GAAP to equal statutory, and if GAAP equal statutory, then Bob and I are on the same page. If they are not equal, clearly GAAP is just not even in the vocabulary of future considerations.

That takes me to another basic point, and that is as you step back, and here Bob and I agree—we probably agree on more things than we disagree—that RBC level is the determining level. In reserves, as shown in Chart 1, suppose the current reserves are there, and RBC is there, from a tax perspective the little blank spot on the top, that's tax inefficiency, is money that we must hold to remain in business, but we don't get to deduct. Now, it wouldn't take a rocket scientist to figure out that if you want lower reserves and increased tax efficiency, I would not go with you and explain that to your management. Clearly, where the reserves are to a degree are immaterial for this determination. One could argue eliminate reserves all together, and then we'd simply have RBC that the actuary can do ably or at least will do ably, and then the reserves are whatever they may be. I would say, if you look at this, some have the naive view that if one were to reduce reserves, one could free up capital. That's only true if RBC is at an inappropriate level.

If RBC was at the appropriate level, then lowering reserves accomplishes very little, which takes me into RBC or insolvency. Why does it say insolvency? Because this proposal suggests as one alternative that your company may be taken over based on your own assumptions. That puts you in a great position, doesn't it? You're going to explain to your CEO that if you change the assumption, you'll be solvent, but if you change the assumption to something else, you'll be insolvent. Now, I wonder which one he'll choose. And I don't say this just to be partially humorous.

The beauty of the formula in my personal opinion is that it establishes two criteria, one where there'll be an interaction between the fine regulator and the actuary as to

what needs to be done to keep this company solvent. That's called this regulatory action levels, and that is critical to a good system, but here I'm focusing on only one point, and that is, when do you want to be taken over? But RBC formula says it is a precise number for your company of \$3 billion or \$300,000. It has nothing to do with your assumptions. Before that, hopefully because of good regulatory review and good actuarial work, you'll never get to that point, but think for yourself. Do you want your company taken over based on your own assumptions?

Another topic, how can I not love a person who's in favor of DFCA? Clearly we have a couple of new concepts here, and given the time, I'm going to go through this rather quickly. Do you want to have surplus surplus in your statement and regular surplus or some other kind of surplus? We have dedicated surplus, and policy owner surplus, and who knows what else. I leave that for you to think about as you read the report.

My third area of discussion is practicality, and here I ask, are you ready to do this today? Are you willing to sign an opinion that the assets cover at least 98% of the risk your company faces? Do you have the tools to do this for every line of business your company writes? Do you believe you have sufficient training to aggregate all lines of business, including possible P&C at some point, realizing, which I strongly support, you will also have to include new business? You can't use new business to create assets. If new business in fact is a drag, you'll have to recognize the discipline in this test. I personally applaud moving in this direction, and I think we have some ability to do this, but I raise this for you to think about. Of course, if you want to do all that, what about your legal liability? It's great to look at other countries, and it's great to look at a dream, but when you are faced with potential legal side effects from having signed this opinion, I'm sure you'll do your best to minimize that. Bob and his team have taken an effort to do that, but I think you have to think about that, and your company has to think about having you sign that statement. Of course, I had a little fun with the super actuaries, and the regulators, I guess, threw that out last week, but this idea that somehow we're going to pick the Super Bowl champion of actuaries to work on the central review board I find to be an interesting concept. I think again the devil's in the details. Will the super-duper actuaries or this reviewing actuary simply say you've done it right? Will they, in effect, discipline what you're doing? Will they take action on what you're doing or will they simply take another view? Yes, the document is complete, and it seems to comply with whatever standards there are. It's advisory, so you have this dramatic spectrum of what the super-duper actuary may or may not do. And, of course, there's a young actuary who once played the insurance game, and maybe some of you have played this game where you determine you've got a company. You can decide to increase sales or change your asset mix or buy the revenues or do whatever you want, and you try to beat everybody else, and you see who's got the

most successful company, and unfortunately the thing about actuaries is the first thing you write down rules, and you try to figure out how to beat the rules. So, they try to figure out how the system works. And I think there'll be an element of this in the super actuary concept, that, in effect, you're going to trade the tables that exist today. You'll figure out that the super actuary will accept interest rates between 5–7%. The super actuary will accept mortality ranges between x and y . They'll assume certain expenses. They'll assume certain this and certain that. And pretty soon basically you're just right back to the table because you're going to be smart enough to figure out what the super actuary wants to do.

Dave Sandberg has taken on this challenge, and I find this particularly charming, and I think Bob referred to this, and that's a feedback loop. It seems to me that a much more efficient way, if we can figure it out, is to have a feedback system so that if you become too liberal in your assumptions, whatever that means, that there'll be an automatic self-correcting process that will be penalty-strong if you choose to become too liberal. I think that's a welcome alternative.

My view is the actuaries have the stronger part of it; the accountants, the weaker part. If one were to go to a GAAP system, I would suggest the accountants would become the primary driver, and the actuary would have a lesser role, but reasonable people can differ, and I think once you have moved off the actuarial mystique to establish statutory reserves and RBC, and you move to recognizing GAAP, you have our own accountants, and you can design your own accounting system to produce the revenue that you like. Now, Bob suggested, as I conclude here, that maybe we should develop other alternatives. I'm not sure these are really alternatives. They're really just filling in the details in a different way, so I'll offer you a very simple one, and that is statutory reserves should cover one standard deviation to risk or 85% of possible events. I want to emphasize that I was just flabbergasted when I attended one of Bob's task force meetings when some actuary actually conveyed the idea that the current formulaic approach to reserving actually is a safe harbor. I don't think you'll find it anywhere in the valuation law, nor will you find it in the valuation actuary concept. I believe there's a broad usage of the 85%, and I replaced xx with 85—well, it could be 80 or something close to it and if we put this in place, we might solve a lot of these original concerns about the current valuation system, that is, what do you do about these new products, and how do you do this and that? The answer is if we had a standard that said this is what you had to achieve, whatever it is, put an xx if you prefer, you would have gone a long way to meeting the need for statutory reserves. It probably is no surprise that I would build it on the current structure, and I would try this new standard for the new creative stuff to see how it works, and we've seen some examples of it now in 126 in New York and a few other things. I end with this—hopefully you will remember the four points

comment: Are either of these dreams better than what we're doing today? Are they fundamentally different? And how might they impact your company?

Mr. Gorski: This is an interesting session in the sense that we've had three different types of presentations, a PowerPoint presentation, a slide presentation, and my own presentation using old-fashioned transparencies, which are really low-rung, and state-of-the-art 20 years ago. What makes it unusual is that with the project we're talking about, the regulators are pushing for the state-of-the-art with respect to thinking on valuation while some of the actuarial profession would like to keep things at the current level. The first question is to get to the heart of the matter, as Jim would probably say, which is, do either of you believe that actuarial science can provide risk assessment methods or, as Bob calls them, valuation tools, that can be used to support statements concerning the probability of survival like those contained in the report?

Before you answer the question, let me give you a little background. I'm an actuary. I serve on the NAIC Life and Actuarial Task Force, but I'm also involved in a couple of other regulatory working groups that have an investment bent, and at their meetings we have people from the same companies we have represented here who give a different picture as to the abilities of investment professionals to quantify risk, measure risk, and assess risk. They seem to be more than willing to move into the 21st century with respect to risk assessment as opposed to staying within current formula-reserving methodologies.

I'm a little bit at a crossroads here. On one hand I hear people, well known, well recognized professionals in the actuarial field, who are suggesting that we stay where we are, maybe make some refinements, as opposed to hearing other people in the insurance arena outside of the actuarial field who are encouraging us to move ahead with alternative risk assessment tools. Now, granted, these investment people who are suggesting this are looking for something out of the process, and what they're looking for is increased ability to invest in new instruments, maybe reduced reporting requirements and things like that. So, there is a dichotomy in views. Jim and Bob, how would you—how do you respond to the question?

Mr. Wilcox: Let me tackle it first. We recognize certainly that as valuation actuaries there are going to be additional skill sets that we will have to develop and build within the profession to be able to take it on, but I think we can do these things. I refer to one of our meetings of the task force last year when a prominent economist at the Wharton School was speaking to us, and argued that it's not a question about whether or not these sorts of valuations are going to be performed. The question is will they be performed by actuaries? As we've discussed it further, these sorts of valuations will be done by insurance companies or entities

undertaking insurance risk. Will it be the insurance industry as we know it now or will it be new parts of the financial services industry that are moving into the insurance risk area beyond the conventional insurance area? We can do these things if we can price the products. If we can stake the company's future on our ability to measure these contingent events and adequately manage or hedge those risks, then we can value on that basis.

Mr. Gorski: Jim, part of your argument is that the actuary today doesn't have the skill set to do the kinds of quantifications that Bob's task force is contemplating. Well, in the booklet for this meeting of the Society, there are at least two sessions that deal with the kinds of topics that Bob is suggesting. One is entitled "Risk Management," and the other is entitled "Risky Business: Covering Your Assets." It's true that maybe the broad spectrum of actuaries don't have the expertise that is needed for carrying out those types of valuations, considering at least one of the options in the task force's proposal, but there is material out there that could help the actuary along.

Mr. Reiskytl: I agree with Bob. I think we are not prepared to do this. As you'll notice, hopefully, my alternative for consideration by the task force or others also includes this statement. I fundamentally believe in the long run we'll be able to do it, albeit imperfectly. I think Bob has more or less written in the current report that says sometime we're going to wing it. Those are not quite the words he used but we'll wing it here and there, and we're going to make progress. I think there's a line between the first step, and I've been involved a lot with DFCA. The first step was just to get people to think in terms of measuring, stress testing, measuring risk, and not putting probabilities on it. Once one achieves that first part, you have to measure the risk, and once you can measure the risk then you can perhaps put some probabilistic statement on it. It's the latter part that I struggle with the most, and I also think, although again I agree in a dream status with Bob wholeheartedly, if you're running an enterprise, and who knows, some day it may be a bank, a car rental agency, a movie theater, or an insurance company, you're going to put all those risks into one model and come out with the effective need, and it can't quarrel with the concept. All I'm saying is we're still learning how to do it for an insurance company. I think we should keep moving in this direction because I believe this is the ultimate way to go.

Mr. Gorski: One of the earliest projects completed by the task force was a compilation of strengths and weaknesses of the current statutory reporting framework. I think Bob probably alluded to that. The weaknesses exceed the strengths by a significant margin. That being the case, why did the task force suggest as one of the options a continuation of the current formulaic approach to statutory reserving?

Mr. Wilcox: That's an excellent question, and it goes to the heart of how the task force is operated, trying to achieve consensus, and we found that there were a lot of differing points of view on this and a lot of other issues that we were working on. By presenting options back to the regulators I think we were able to keep everybody working together toward that objective. There were some who said, as Jim has suggested, that there are products for which the current valuation system seems to work well. Why don't we continue to use it and only develop a new method for the places where it doesn't work well? It was in that context that that option was put out. How to make that distinction between where it works well and where it doesn't work well and then meld the results back together into a cohesive system still left a lot to be desired, but at this point the regulators have indicated that they don't want to follow that approach. So that option is off the table now.

Mr. Reiskytl: To answer the question specifically, I think the report ignores the valuation actuary and asset adequacy concept. In fact, at one point, two-and-a-half pages into these criticisms, it says, by the way, if you have a valuation actuary, most of the stuff goes away. The criticisms of statutory accounting or statutory reserves are more geared to using a formula blindly as a safe harbor or what-have-you, and if that were true, I would agree with many of the criticisms there. One could view the report as a criticism of the valuation actuary since the valuation actuary presumably should be recognizing almost every criticism. In my opinion, that's on those two pages. There are a couple things that don't fit within that domain that bring me back to my famous whys. First, the process is slow. Does this process make it faster? Sure, it just says the rules are whatever the actuary says they are, so I guess that speeds things up.

The second is inconsistency, and we have had this with codification and other purposes. The states have chosen to make different decisions. Do we want to move to a federal type system? A state type system? There's a third allegation made that the regulation is slowing down or putting us out of business. I'm one of those guys from the Midwest who says, fine, I'd like to know what it is that you're being inhibited in doing, and what might we do? and I repeat my whys. This is one solution. A very simple knee-jerk reaction says get rid of the formula reserves, and that may be what the regulators have done, and I'm not accusing them of knee-jerk reactions. It depends on how you ask the question. I believe I could ask you a question and get a yes response and then ask you the same question in a different form and get a no response.

And so I think, depending on how you ask the question, you will either decide you like statutory reserves or dislike them. If you look at it as a safe harbor, you'll get one kind of answer. If you look at it as a valuation actuary design system that requires that you look at your statutory tables and methods and so forth, and you

still apply actuarial discipline, you may get a totally different answer. So I believe most of the weaknesses there aren't really weaknesses of the current valuation system, but some people think they are.

Mr. Wilcox: Before we leave that Jim, going back to the report of that working group on the current system, they pointed out specifically that asset adequacy testing could deal with a number of the concerns about the current valuation system, but even there, if you look at asset adequacy testing and how well it works, if asset adequacy testing says that you need additional reserves, you're obligated to establish those additional reserves, but do you get a tax deduction for those additional reserves? No, you don't. If, on the other hand, the asset adequacy testing indicates that your reserves are redundant and could appropriately be reduced, you're not allowed to reduce below those otherwise statutory minimums. So, yes, asset adequacy testing can fill in some of the gaps and problems of the current system, but it doesn't do it very well.

Mr. Gorski: The next question's probably related more to Jim, and it's somewhat of a follow-up to what he was already beginning to say. If you envision the report as outlining three different paths, one would be what's called a formulaic approach to reserving and risk assessment, another being a GAAP basis, and a third being a probabilistic approach, one could probably characterize Jim's viewpoint as leading down in the direction of a improvement on the formulaic basis, and within the context of the report, Options A2 and D2 are the options that relate to the formulaic approach. The question for you Jim, is assuming that the Academy task force can only gather support for Options A2 and D2, what changes from a current regulatory scheme would actually occur?

Mr. Reiskytl: For those of you who don't know what A2/D2 is, you might think we're coming in from Mars. That's actually statutory reserves and formula basis for RBC insolvencies, I believe, and what kind of changes? All kinds of changes, Larry. I'll just tick off a few. First, as you're well aware, we're looking at some C-3 research, and we hope to make the RBC more efficient on C-3 both from the interspersed and ultimately from the equity side. That work is moving along, and we'll see where it goes. Clearly you have codification and what it brings to the table, so it takes a fresh look at a lot of things. You have continual GAAP pronouncements, and with codification GAAP will look at the various GAAP changes and decide what's appropriate for statutory accounting purposes. I think you'll continue to see, as with your effort on equity-indexed products, that the underlying question still remains—what is an appropriate reserve? If you allow me complete freedom as an actuary to decide whatever it is to meet this 85% or 98% standard, how do you as a regulator have any idea whether I've achieved the standard for a newly created product? Going back to these feedback loops or other

such things, the real key is how do you know if I am a mild-mannered actuary or an aggressive actuary? If I'm a conservative actuary or a liberal actuary? You have some responsibility to the policyowners just as I have some responsibility to the policyowners.

With a system that builds on improving today's environment, and I cite Regulation 126 in New York, we will deal with issues, and it really doesn't matter if we call this thing D2, A2, or whatever. I think it matters on taxes, and I hate to say that too often, but it has a major impact on my thinking. But, more importantly, you have to decide how to establish appropriate reserves. I wonder how many of those thousands of hours you spent could have been saved if you had taken the alternate route and simply said we're going to establish appropriate reserves at this level. You have people who have negative promises, and you have people who are fully invested in derivatives and that whole spectrum, and you're trying to put a reserve structure around it. I think you might have spent at least hundreds of hours trying to analyze what is an appropriate standard, and then this poor super actuary that has to come in after you and second-guess the first actuary to provide you with a report. Now you have two reports. Suppose the first one says it's hunky-dory, and the second one says there are all kinds of problems. Now it goes to Larry Gorski, and he has to now decide what to do with it.

Mr. Gorski: That's when I bring my lucky coin out. A question for you, Bob. The probabilistic approach that's outlined in your report is one that's maybe a bit troublesome to me. How can statements concerning the probability of survival be made when the actuarial analysis being suggested does not take into account new business? What effect does probability survival need when you're only looking at a closed block of business?

Mr. Wilcox: Well, just as you've described it, if you take the hypothetical case of no new business, then you can determine the ability of the company to carry out its obligations from that point without introducing any gains or losses associated with new business. We know that in a going concern that new business is a part of the picture; however, new business depends on the business plan that the company has and its ability and its will to execute that business plan. That's where we bring the report to management based on DFCA into the picture. DFCA then looks at not just the single picture at the point in time of evaluation that shows the ability of the company to meet all of its obligations as they fall due but the set of probability S curves represented in the future as you introduce new business into the picture at various levels depending on the effectiveness of the company and its execution of its business plan. So, I think, yes, you can do that, and looking at new business just represents the set of images of the company looking into the future, and I think you have to look at it without the introduction of new business in order to assure that

the policies that are on the books and the obligations that the company has right now can be effectively met. So, I think that would be a radical departure, even more radical than what we're talking about here, to say that you could rely on profits on new business, for example, to cover shortfalls in the current balance sheet. That would be a dramatic step away from anything that we have looked at in the past in terms of responsible valuation of insurance companies.

CHART 1
RBC VERSUS RESERVES

