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Current Topics in Annuity Financial Reporting

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Summary: This session provides an update on current annuity financial reporting topics. Issues covered includes the status of annuity valuation law revisions and proposed Actuarial Guideline GGG.

Mr. Thomas A. Campbell: I'm a corporate actuary at ITT Hartford Life in Simsbury, Connecticut. I get involved in many financial reporting and valuation issues, and I also serve on several American Academy of Actuaries work groups. I am the co-chairperson of both the Reserving for Minimum Guaranteed Death Benefits (MGDB) in Variable Annuities Work Group, and the Academy Commissioner's Annuity Reserve Valuation Method (CARVM) Multiple Benefits Work Group. I'm also a member of the AAA Task Force on Annuity Valuation.

Errol is a senior actuary and director at Allstate Life Insurance Company in Chicago. He is responsible for GAAP and statutory valuations and serves as the company's appointed actuary. He is also involved in AAA groups, including the Asset Valuation Reserve Group, the CARVM Multiple Benefits Work Group, and the Task Force on Annuity Valuation, of which he is the co-chairperson. Errol is also a member of the Planning Committee of the Valuation Actuary Symposium.

Mike is with Actuarial Resources Corp. in Kansas City, where he's involved in general consulting, marketing, and client support of their valuation software.

Prior to that, he was with Tillinghast for four years, where he worked on product development, asset liability projections, and software marketing and development. He started his career with Kansas City Life.

We will talk about three topics. Errol will discuss the status of the annuity valuation law, Mike will talk about Actuarial Guideline XXXIII, and I'll cover other current topics.

Mr. Errol Cramer: I would like to start by providing some background on what the AAA Task Force on Annuity Valuation is trying to achieve.

As you all should be aware, CARVM was part of the 1980 amendments to the standard valuation law (SVL). Two fundamental concepts came out of these 1980 changes. First, the greatest present value of guaranteed benefits was required as opposed to merely the present value of guaranteed benefits. Second, a structure of dynamic valuation interest rates was put into place to make the rates more up-to-date, although there is still a lag in when the rates are determined.

Since the 1980 amendments were passed, there have been new products not anticipated at that time. An AAA group, reporting to the Committee on Life Insurance Financial Reporting, was formed and headed by Denny Stanley. The group reviewed certain annuity valuation issues and came out in late 1991 with a paper titled "Practical Applications of Reserving for Contemporary Annuity Products."

There was further discussion of CARVM issues in 1992 by a technical resource group (basically an industry advisory group) of the NAIC Life and Health Actuarial Task Force. The technical resource group was charged to gather all the annuity issues that were out there and propose a comprehensive solution. The group was in existence for a couple years, headed up again by Denny Stanley, and came out with a report in 1994. Basically, the report concluded that the greatest present value concept really isn't a very practical application, and it would be preferable that more judgment be given to the appointed actuary.

The group introduced the concept of a "core benefit"; i.e., for a single premium deferred annuity this would typically be the cash surrender value, and for other annuities it might be the annuitization benefit or a contractually fixed benefit. The proposal was that written standards be defined for determining the core benefit and for determining its present value. All other supplemental items, i.e., policy options and ancillary benefits, could get quite complex to value and would be left up to actuarial judgment, again subject to standards.

The second point of the proposal was to have valuation rates based on a yield curve, i.e., the Treasury yield curve, rather than a single bond index.

The third point was not really a proposal as much as an outcome. That is, continuous CARVM should apply once the issues have been resolved of using realistic valuation interest rates and of using a practical present-value-of-benefits method (versus greatest present value methodology).

With this continuous CARVM approach, there was also a feeling that there was a lack of internal logic in basing valuations strictly off guarantees and in ignoring the economics of the product. For example, if one guarantees 3% and has an 8% valuation rate, current valuation methodology requires projecting benefits at 3% and discounting at 8%. However, in reality the marketplace or even the policy provisions might not provide for a 5% spread to be earned (8% net earned minus 3% credited). So the group proposed that there be some maximum spread placed on the difference between the valuation rate and the (nonguaranteed) projection rate.

After the group came out with its report, the NAIC Life and Health Actuarial Task Force thought there was an opening now to redo CARVM. However, the regulators weren't willing to have any fundamental change. Rather, what they wanted was a rewrite of CARVM that retained current principles but incorporated some of the refinements that came out of the Denny Stanley group. They asked the AAA to form a task force for this purpose, and this resulted in the Task Force on Annuity Valuation, which was formed in early 1995 to propose a rewrite of CARVM. A short one-year time frame was set.

This concludes the background, and I would now like to give a status of what's happened with the Task Force on Annuity Valuation, of which, as Tom Campbell stated, I am the co-chairperson.

My task force looked at the Denny Stanley group's report and discussed it in great detail. Basically, we endorsed that group's proposals as being sound, in particular, the concept of having valuation rates that are more related to the duration of the liabilities. Though we would have proposed simplifying the valuation interest rate structure because, once one allows for yield curves and the concept of refreshing the valuation rates over time, the valuation rates can get horribly complex. So there was some discussion on how to have the valuation on a practical basis.

However, when it came down to evaluating what the outcome would be of our new CARVM, the consensus was that the pain was not worth the gain. Remember, we were working under the constraint that current CARVM principles be essentially

retained and unchanged. Although our proposal might tidy up some issues, it was felt it still would not address many of the issues. In particular, there were new annuity versions that came out as we concluded our discussions, so the proposal would be outdated even before it came up for public disclosure and comment. Also, there was the reality of having to get the amendments adopted in each state's SVL. This would be no small task, as evident from the current experience in trying to get the "XXX" life regulation adopted.

We presented a status report to the NAIC Life and Health Actuarial Task Force in the fall of 1995 and indicated although we could propose a rewrite of CARVM, our recommendation was not to do so. Rather, we recommended that something more comprehensive be done: CARVM for the year 2001 rather than sprucing up the 1980 version of CARVM. The regulators were a bit disappointed at first but, after discussion, they agreed with our recommendation.

This requires that current outstanding issues continue to be addressed by ad hoc groups. Mike Harrington will talk about the AAA CARVM Multiple Benefits Work Group, which is addressing Guideline XXXIII interpretations. Tom Campbell will talk about some other topical issues, such as variable annuity minimum guaranteed death benefit reserves and equity indexed annuities.

A new CARVM will be addressed as a longer-range item. The NAIC Life and Health Actuarial Task Force voted to reopen discussions pending developments of the proposed revisions to the annuity standard nonforfeiture law. This begs the question of why work on the annuity valuation should be hung up because of the nonforfeiture law work. First, annuity nonforfeiture has the higher priority. The current CARVM may not be ideal but it is in place and works reasonably well; whereas, the regulators feel annuity nonforfeiture needs to be addressed immediately. So, as far as their resources go, the regulators think they cannot give any time at this stage to considering CARVM until they resolve the annuity nonforfeiture issues (they thought a one-year deferment was needed). Second, a lot of product design will be based on what eventually happens with annuity nonforfeiture. It's no use having a new valuation law in place unless it can handle products that are likely to occur in the future.

Before considering possible future directions to CARVM, let's look at what does not work with the current CARVM. First is the issue of hit or miss valuation interest rates. Some of it has to do with basing valuation rates on the Moody's bond yield index, which is essentially a 15- to 20-year duration index. This is inappropriate for short duration contracts, e.g., a five-year guaranteed investment contract (GIC). Also, valuation rates are set by calendar year and have an average six-month lag. This is fine under stable interest rate environments but not otherwise, especially for

large annuity sales that are cyclical and where one can then get a very extreme mismatch between the valuation rate and actual interest rates effective at the time of the annuity's issue. This is a big concern in the group annuity market.

Second is the issue of locked-in valuation rates. Under book value accounting, the portfolio rate is locked in at its book value, and provided there is a reasonable matching at issue of assets and liabilities, it's appropriate to lock in the valuation interest rate. This breaks down where one has a very long-tailed product, e.g., deferred annuity or structured settlement, where benefits might persist such that reserves take 30 plus years before starting to run off. One cannot invest long enough at issue, and it's a stretch to make a call on where valuation rates should be in 30 years' time. There is no mechanism to get an assumed valuation rate back on target.

The third issue has to do with the greatest present value methodology being too limiting. Some has to do with its complexity. When Mike covers Guideline XXXIII, it is seen that even though greatest present value appears at first sight to be reasonable in concept, as one gets to look at all the possible combinations, it is seen to be far more complex and impractical. Also, CARVM is typically either too conservative or too liberal depending on the product. For example, it might be too conservative for a modified guaranteed annuity where a market value adjustment on cash-out allows one to invest for a long duration and guarantee a certain credited rate for the same duration. Only minimal allowance is made for this in the valuation rates, and it is generally impractical to reserve these annuities on a book value basis. An example of being too liberal is for a short duration contract where the prior discussed mismatch of the valuation rate (based on a longer duration index) results in an inadequate minimum reserve.

Also, what I consider to be a fatal flaw with CARVM is the fact that it does not explicitly handle policy options. I think the only way to have a proper reserve where there are these options is to consider the specific asset and liability position. A classic example is the equity indexed annuity recently introduced in which an appropriate reserve level would need to be driven by the extent to which the equity option is offset by hedging. It makes no sense to me to reserve this product by looking at the liabilities alone.

Now that we've discussed what's broken, let's look at possible paradigm shifts for a new CARVM. One possibility is to allow discretion to the valuation actuary. The valuation actuary (as appointed actuary) already needs to choose assumptions for the annual actuarial opinion and memorandum cash-flow testing. It's unlikely the valuation actuary will be left entirely to determine his or her assumptions or methodology. Rather, there are likely to be standards and guidance set by the

regulators and the AAA. Key here is that practice is likely to change quicker than can be defined by law, and it may be that any solution requires acknowledging that the valuation actuary is the best person to determine what the options are in a policy, what the asset liability mix is, etc.; that should be considered in setting the appropriate reserve level. This paradigm shift then is to get away from formula reserves and replace them with standards of practice.

A second possibility is to hold GAAP-type reserve levels. Many of the mechanisms are already in place to do GAAP for all insurers; e.g., we now have GAAP for mutuals, and we have the illustration actuary concept in place, which requires identifying the company's expenses. The advantage of GAAP is that it looks at the actual specifics of the company's products and conditions that exist at time of issue; e.g., the valuation rate is based on actual new money rates. A comment that often is raised with GAAP is that it may not be conservative enough. One possibility is to have an explicit margin that would be a regulatory defined addition to GAAP reserves or, alternatively, to risk-based capital (RBC).

A third possibility is that the new law determines a high reserve level such as current CARVM-type formula reserves, which would be a safe harbor. Lower reserves could be held if the valuation actuary justifies that as being appropriate. So these are some of the options that should be considered by a successor group to the current Task Force on Annuity Valuation.

Last, I would like to cover why, given that the industry's level of annuity reserves is not in question, there is a need to fix something that does not appear broken. In particular, reserve adequacy testing is by and large now required for any insurer with annuity business. Well, CARVM appears to be working, but it's working because actuaries are making it work. This requires careful technical management of reserve levels, and I would like to cover some of these next.

On the financial side, one can do research into the law regarding differences in interpretation, although sometimes one has to make an analogy to justify a slightly different situation. Also, one can lobby for regulatory changes, e.g., to actuarial guidelines or to law itself, if you can convince regulators that an idea makes sense. Also, one might be able to get state approval for a specific exemption if justifiable. Another financial strategy is to go to a market value approach where book value reserves don't work. This is done on the group annuity side as well as for modified guaranteed annuities.

On the management side, one can, of course, change product design for reserve reasons, and I suspect this is what has really driven a lot of coping with the current CARVM rules. Also, one can manage the timing of sales (or stop selling),

depending on the valuation rates versus market interest rates, especially in the group market. Reinsurance is another option, and discussion of this would be an entire topic in itself. Use of derivatives has an indirect impact on reserves regarding reserve adequacy testing, i.e., avoiding putting up additional reserves.

In conclusion, companies have learned to live with the current CARVM, but this has required certain noneconomic-based actions to be taken where the formula reserves have not worked.

Mr. John Michael Harrington: My first part will be a brief overview of Actuarial Guideline XXXIII and some of the questions that it's raised. These are the questions that the CARVM Multiple Benefits Work Group will address. Notice I said I will go over the questions. I won't go over the answers, because those are yet to be determined in most cases. I hope you weren't expecting many answers at this session.

The second part of my comments will be to present the results of a survey we did at our firm. We called 25 companies to find out what they did at the end of the year to respond to Actuarial Guideline XXXIII and, if they did anything, what impact it had.

Actuarial Guideline XXXIII was effective at the end of 1995, and it applies to all deferred annuity policies issued on or after January 1, 1981. Its purpose was to codify a basic CARVM interpretation and was not meant to be a change of method or a change of basis in reserve. There were two main reasons why it was adopted. First, industry practices have been inconsistent with respect to CARVM reserving, going from one extreme of holding cash surrender value to the other extreme of looking at all the possible benefit combinations. Second, there was a perceived problem of reserve discontinuities when a contract annuitized, because the deferred annuity reserve was not tied into the annuitization reserve.

I'll now briefly go through some of the key points in each section of the guideline. Section 1 states that as a minimum, the reserve should be the greatest present value of all the separate streams of benefits. Examples of the separate benefits are the cash surrender value, annuitizations, or death benefits. It could also be nursing home benefits and whatever other benefit might be available in the contract.

One of the questions that has come up concerns the reference in this section to valuation interest rates that apply to plan-type guarantee duration. The section refers to annuity valuation rates, so the question has come up of whether this precludes you from using life valuation rates when you calculate a death benefit reserve.

Section 2 addresses the cash value test and seems to require that this approach be taken as a separate calculation from the present value of combined benefits. This test is what most companies that were applying CARVM before the guideline were doing. At first, some actuaries thought this section was requiring continuous CARVM in all cases, because of the way it was worded. Now it's generally been accepted that it really didn't change anything, so that states that previously allowed for curtable are still doing that. States that required continuous are still doing that as well.

Section 2 makes reference to "any possible cash surrender value." This phrase has brought up the question of whether all partial withdrawal paths have to be considered, because that can affect the future cash surrender values.

Section 3 of Actuarial Guideline XXXIII addresses the annuitization test, the one that's probably been the most publicized and the one of which you are most aware. It seems to require a separate approach for annuitization, so you need to look at the annuitization stream as a separate benefit stream. It also requires the assumption that 100% of the people annuitize at any given point in which you're doing a present value calculation. It also brings up the question of whether you have to consider partial annuitizations. Another point in Section 3 addresses the valuation interest rate. You use one interest rate to calculate the present value of the annuitization on the assumed election date and the same rate to discount it from that assumed election date back to the valuation date.

Section 4 goes into more detail about how to determine what the valuation interest rate should be. It's based on the guaranteed duration concept in which the guaranteed duration is the number of years from the issue date of the policy to the assumed annuitization election date. It's also, in most cases, considered plan type A. The one exception is if you have a nonlife contingent annuitization option that is less than five years—then you'd use plan type C. If you're doing calculations to project future annuitizations on a seriatim basis, keep in mind that any given annuitization option present value factor will have to be calculated at several different interest rates, because of the change in guaranteed duration. So it takes many computations or large tables to get all the values calculated properly.

Another question that this has raised, and I may talk a bit about this later when we have time for discussion, is whether those interest rates should be refreshed each year or somehow brought more up-to-date to help eliminate the discontinuities that might occur at the time of annuitization.

Section 5 addresses the change in fund method. Currently, the SVL says you can only use change in fund for contracts that have cash settlement options. That raises

the question of whether, when you're looking at the annuitization stream that would not have cash settlement options, you would have to use the issue-year method even if you're using the change-in-fund method for your cash surrender benefits. It appears in this case that the intent is to allow the use of the

change-in-fund method for the cash surrender benefit stream, but to be forced to use issue year for the annuitization stream that does not have any cash surrender benefits.

Section 6 refers to contractual guarantees of preferential purchase rates. A preferential purchase rate is a guarantee offered to the contract holder to annuitize at the company's current settlement option rate. One of the questions that has come up is how to define that guarantee—what does it take in your contract to require this to kick in? If you have preferential purchase rates or guarantee to offer the current annuitization rates, there's a floor reserve. You're allowed a 7% expense allowance off the fund value and that is your minimum reserve for that contract. A question related to that refers to the wording in Section 6, which states that the expense allowance comes off the accumulation fund. The accumulation fund is defined elsewhere in the guideline to mean the value that is used to apply to annuitizations. If your contract only allows for the application of the cash surrender value for annuitization, does that mean you can take 93% of that as your minimum reserve rather than 93% of the full fund? I think the intent was to have it be the full fund, but the wording does bring up that question.

Section 7 states that any other benefits available under the contract should be valued like a separate policy. If you offer death benefits, for example, those need to be valued like a single premium life policy with increasing death benefits. If that's the case, do you use the valuation assumptions you would use for a life policy? It does state in the guideline that each benefit stream is to be valued like a separate policy.

Even though this wording implies a separate approach, other sections of the guideline may require you to look at combined benefit streams. What valuation basis do you use in a combined benefit stream? Do you have to mix them up and use life rates for the death benefit piece and annuity rates for the other pieces?

Section 8 talks about the minimum statutory reserve and states that it is the greater of the results of the distinct benefit stream test and any other guarantees provided by the contract. Do other guarantees provided by the contract mean a combined benefit stream? The task force that Tom and Errol are on, the Academy CARVM Multiple Benefits Work Group, is helping to define what those combined benefits might be, and if this section of the guideline means you have to look at combined benefit streams. Does this mean you should not only look at annuitizations but also look at the possibility that, at a certain point in time, so many people will have died and received a death benefit, other people will have annuitized, other people will have taken a cash surrender, and so on? Well, as you can imagine, it could get kind

of carried away with many possibilities. Those are some questions that need to be addressed.

In conclusion, here is where things seem to be going, but nothing has been put in writing yet: Actuarial Guideline XXXIII does seem to require that you do both the cash value test and the annuitization test on a separate basis. It also seems to be requiring a look at multiple benefit streams, like I just described, where you're looking at the possibility, at each point in time, of having had deaths or cash surrenders occur, etc. In those combined benefit situations, we'll have to, as actuaries, figure out how to define those benefit streams in an acceptable way. How many of those do we really need to test on a practical basis, and then what valuation assumptions do we use when we have various benefits that we're trying to combine and look at all at once?

Now I'll go into the second part and talk about the results of the survey. We called 25 different companies to ask them about Actuarial Guideline XXXIII. We asked what they did, what questions they had, and what impact it had on their year-end reserves. The companies we called were of various sizes—the smallest one had only about \$150 million of annuity reserves and the largest had \$26 billion.

The first question we asked was how companies were calculating reserves prior to Actuarial Guideline XXXIII. Of the 25 companies, 19 said they used the straight CARVM methodology, the greatest present value of future benefits. Of those 19, 7 were holding a reserve for excess death benefits. Three of the remaining companies held the full fund value. A couple used what we call a unitary approach, which is basically a combined benefit approach, where you're looking at death benefits and surrenders as one stream. One company had a different method it was applying.

Because Actuarial Guideline XXXIII was originally written to address two-tiered annuities, we asked if they have a two-tiered annuity. Of the five that did, only two had any significant amounts.

We then asked if they made any changes in their annuity reserve calculations at year-end 1995 because of Actuarial Guideline XXXIII. Nineteen made some changes or made some effort to comply or at least decide if it would impact them. Of those companies, six did nothing and went on the way they had before.

We then asked whether they had any interpretation questions concerning any of the provisions of Actuarial Guideline XXXIII. We were trying to solicit information that we could take back to the Academy CARVM Multiple Benefits Work Group. The questions asked included whether Actuarial Guideline XXXIII required continuous CARVM and whether it required a separate approach or whether it required

combined benefits. Companies also asked, on the combined approach, how they could practically test for every combination. They had questions about how death benefits and partial withdrawals should be handled. Some questions had been on what valuation rates they should be using for the different streams. On variable annuities, it was asked if they could ignore the annuitization, because it has no guarantees on the payout stage.

A question came up on the valuation rate to use at annuitization—looking at the Plan A rate. The Guideline seems to say you use the rates for contracts without cash surrender option, but interpretation is to use the Plan A rates for a stream with a cash surrender option, because the contract as a whole provides for those options. Another question was whether Actuarial Guideline XXXIII is really just a clarification or a change of basis.

Next we asked, did you perform a mathematical demonstration to prove compliance instead of projecting annuitizations? We thought that maybe some companies might have done a spreadsheet analysis on the side and determined that even if they did all the projections of annuitizations, it would not have any impact on their reserves. We found that to be the case—17 of the 25 companies said they had done that as their way of complying.

We then asked, did your annuity reserves increase because of Actuarial Guideline XXXIII? Of the 25 companies, 15 said they experienced some increase. Nine had no increase, and one didn't know because it didn't do calculations both ways. Generally, the reserve increases were small. Some were in the 2%-of-total-reserve range. In many cases, the increase turned out to be immaterial.

We asked whether companies included annuitization calculations on a seriatim basis in determining the preferred annuity reserves. Only five companies had done that. The next question was whether companies calculate the present value of each benefit separately and hold the largest of those present values. We were trying to find out whether companies were doing the separate benefit approach, consistent with one of the interpretations of Actuarial Guideline XXXIII. Six of the companies said they had done those calculations, although we weren't completely sure that they really understood our question (i.e., whether we really got the question across properly and they were answering the question we thought we were asking).

We then asked if they had looked at different benefit combinations. Again, it was difficult to determine whether people were answering what we thought we were asking. Ten of the companies said they did attempt to look at different benefit combinations when they calculated their reserves.

Next we asked about the recognition of free partial withdrawals in the reserve process. All 25 companies do something to recognize these. The majority of them (14) adjusted their surrender charge at any assumed cash-out date. Five assumed that there would be 100% utilization of any free partial withdrawals at any future date. A couple companies held the greatest of these two approaches, and the other four used some other method.

We next asked what mortality table was used to discount annuitization payments and death benefits. The majority of companies indicated that the question did not apply to them. Virtually all the companies that looked at annuitizations used the 83a table. For the death benefits, it was fairly well split between 83a and 80 CSO, with just a few more using the 83a table.

The guideline allows companies to spread any reserve increases over a three-year period. We asked whether companies had done that when they had a reserve increase. Of the 15 companies that said they had a reserve increase, only four used the three-year grade-in. As I said earlier, many increases were immaterial, so in most cases, companies took the increase all at once and got it over with.

We asked whether companies used Actuarial Guideline XXXIII rules to calculate tax reserves and whether they will use the ten-year grade-in that is specified in the tax law. About half said that they already have used or plan to use Actuarial Guideline XXXIII for tax reserves. The others either said no or hadn't decided yet. Of the 13 that planned to use Actuarial Guideline XXXIII rules in tax reserves, only seven planned to use the ten-year tax reserve grade-in. Again, I think it was a case of companies thinking that, because of the immaterial nature of the reserve increase, it wasn't worth the effort to spread the tax increase.

Finally, we asked a general question about utilization rates. This was another opinion question used to gather information for the work group. We asked whether companies believed insurers should be allowed to incorporate utilization rates for contract holder controlled benefits in the calculation of reserves under Actuarial Guideline XXXIII. Contract holder controlled benefits would include benefits such as full surrender, partial withdrawals, and annuitization, whereas a death benefit would not be. Several respondents had said they experienced very low annuitization rates, in the neighborhood of 1–2%, so they thought it was unnecessary to reserve for the possibility of 100% annuitization. In those cases, of course they would think utilization rates were appropriate. In response to this question, some said they thought utilization rates would be appropriate. Five said no and nine said it would not be appropriate on full surrenders, but it would be on other benefits. Four companies said they did not have an opinion. So those are the results of our survey.

Mr. Campbell: I will just go through eight topics to update you on some of the things that are currently going on. All but one are issues that directly involve the NAIC and will be addressed at the quarterly NAIC meeting in New York City next week.

How many people have company representation on a regular basis at the NAIC meetings? Not many. Many things go on that impact our business, and if you're not attending the NAIC meetings, you should keep track of issues through the AAA or through the NAIC mailings.

The first topic is MGDB reserves. An Academy work group was formed in response to the concerns of the NAIC's Separate Account Working Group (SAWG) over the lack of uniformity in reserving for these variable annuity benefits. This concern stems from the growing richness of these benefits. The AAA MGDB Reserve Work Group is going to recommend a reserve methodology that integrates the MGDB into a CARVM-type approach, in which the death benefits will be mixed together with other benefits, such as surrenders and annuitizations.

The recommendation involves projecting the death benefits by assuming an immediate drop in account values, followed by a recovery at an assumed interest rate. We put together distributions of returns using data from *Morningstar Mutual Funds Inc.* We've also added data that go back for 35 years, using others such as the Standard & Poor's (S&P) 500. The drops and the recoveries will be based on those distributions. I think everyone should be happy with that recommendation, but it will be exposed so you'll certainly get a chance to review it. The work group's final report will be presented to the SAWG this Sunday at the NAIC meeting in New York City.

In addition, the Society of Actuaries (SOA) has formed the Task Force on Mortality Guarantees in Variable Products. That group put together and just recently distributed a survey on what companies are doing with these benefits. It is also working with the Society on a mortality study involving the deferral periods of variable annuities.

The second topic is the treatment of separate account surplus. Last year, the SAWG adopted new accounting procedures for separate account surplus. It requires that surplus that is generated by holding reserves less than account value be held as an unsettled receivable from the separate account in the general account. This year, the SAWG is working with the Academy to publish guidance for those companies that need to change their accounting because of this new treatment. The SAWG is also working with the Academy on an RBC formula change that will accommodate this accounting treatment. Included in that recommendation will be a change in

some of the factors that are applied to the separate account surplus. That proposal is being presented in New York City.

The third topic involves the Actuarial Opinion Memorandum (AOM) and minimum reserve standards. The Academy and the NAIC have become concerned with the wide variations on how companies comply with the AOM's requirement that companies meet the minimum reserve standards, in aggregate, of every state where they file an opinion. Some companies ignore the requirement, some use exculpatory language, and some companies look at every single state's regulations and laws. I've talked with people whose companies run the gambit, and none of them walks away comfortable that everything has been interpreted correctly. They feel uncomfortable that they're meeting minimum standards, but they must still sign their name to the actuarial opinion.

The Academy formed the Task Force on State Variations in Standard Valuation Law that is putting together a recommendation that will allow acceptance of the domiciliary state opinion. It also recommends that a good and sufficient provision be added to Section 7 of the AOM, which applies to small companies. Finally, it recommends that a central depository, which will summarize each state's variations from the model regulations, be put together. That will be a tough issue, because the decision of which group will be responsible for the central depository is still up in the air.

Fourth, the Annuity Working Group of the NAIC is looking to develop a definition of annuities. Its concern is that there are products that are being written that are annuities but are not under the control of the states. These include annuities sold by banks and charitable gifts annuities. If you look at all the model regulations, I don't think you'll find anywhere where annuities are defined. They tell you what to do or how to treat an annuity, but nowhere are they defined. The working group has asked four organizations to prepare recommendations—the AAA, the American Council of Life Insurance (ACLI), the National Association of Life Companies (NALC), and the National Association of Life Underwriters (NALU). This is a very sensitive issue that has federal income tax, state tax, and guaranty fund assessment ramifications. There's also a concern that anything that they came up with may contradict individual state regulations.

The next topic is the update to the mortality basis for annuities. In March, the Life Health Actuarial Task Force (LHATF) of the NAIC voted to back off from its December adoption of a generational projection of the 1983a mortality table for individual annuities. It is now exposing a proposal that would project the 83a table by using projection scale G through 1996, applying it on a static basis. It also made

a request to the SOA to develop a more modern table and projection method. I'm also told that there are some people recommending the generational table.

The sixth topic is a non-NAIC issue. The American Institute of Certified Public Accountants (AICPA) Insurance Company Committee has decided to address GAAP accounting, reporting, and disclosures for separate account and annuity products. It is looking to the ACLI's GAAP Accounting Committee to form an industry group to provide input. The ACLI group is currently putting together an inventory of products and their corresponding GAAP accounting treatment.

The seventh topic is equity index annuities. This is something that's getting a lot of discussion. The product is heating up in the marketplace and there was a session on this topic earlier in the meeting. These are deferred fixed annuity products that are mostly written on a group basis. The product guarantees a return equal to a percentage of an external index, such as the S&P 500. There's also a guaranteed minimum fixed return. These are written as general account products, and that's part of the concern.

Regulators are generally very concerned about this product, for several reasons. One of them is the lack of understanding. Because this is such a new product, the regulators are just starting to deal with it. As you know, state insurance departments don't have access to marketing departments and sales people who can pitch ideas—so the product is new to them. I know that at least two states have said that they will not approve this product until they get a better understanding of it. Another reason is that it is a general account product, yet it participates in an equity index. Finally, there is concern over whether companies are properly investing for these products.

What does this have to do with financial reporting? Not much now, but it's only a matter of time before the NAIC turns its attention to trying to put together a reserve standard and an RBC standard. I just talked about lack of understanding and regulatory concerns. That generally translates into higher reserves and higher RBC requirements, and obviously, if your company is filing this product, you've already made assumptions as to how you're going to reserve for them.

I think this is a situation where the insurance industry has to get involved. We have to work to help educate the regulators and show them the risks in these products. The industry also needs to get involved to help formulate an appropriate reserve standard. If you're filing this product and you get a disapproval from a state for reasons that the state doesn't understand, then you should talk with people there and help them understand what this product is about. This is where the industry can help raise the level of understanding. I don't want to give you the impression

that none of the regulators understands this product. Many do but I don't think it is uniform among the 50 states.

The last topic is synthetic GICs. The LHATF is also looking at both reserve and RBC requirements for this product. For reserves, it is considering some type of CARVM methodology. For both reserves and RBC, it wants to make sure that any standard complies with New York Regulation 128. California also has a similar standard, and the LHATF wants to have a consistent standard among all the states.

So that's it for the current topics. As I said, most of these are NAIC-driven issues, and the NAIC looks to the insurance industry to provide input. So if there's anything I've mentioned that's important to your company, you should be getting involved. If you can't attend the NAIC meetings, you can get involved through the AAA, the ACLI, or the NALC. You should also talk with your state's regulators. Although it may be too late for you to make it to the New York meeting, the next NAIC meeting is at the end of September in Anchorage, Alaska.

That concludes my remarks. I want to open the floor for discussion on any of the issues I brought up. I also hope we can have a discussion on Actuarial Guideline XXXIII and annuity valuation in general.

Mr. William H. Moyer, III: Mr. Campbell, could you repeat a comment you made about the separate account surplus? How is it treated if the reserve is less than the fund value?

Mr. Campbell: The language that is used is CARVM allowance. To the extent you're holding a CARVM reserve that's less than account value, you're generating separate account surplus. Some companies have been accounting for this by holding the separate account surplus as a receivable in the general account, and others have been holding it as surplus in the separate account. The SAWG was concerned about the lack of uniformity and decided to require that all companies hold it in the general account as a receivable. One of the reasons that companies held the separate account surplus as a receivable in the general account was to avoid holding RBC on the surplus. The RBC formula tells you to look at your separate account assets and liabilities in the blue book and take the difference. Well, if you're holding the surplus as a receivable, your blue book shows that difference to be zero, so your RBC formula is zero for separate account surplus.

Because of this, the RBC committee will now require that you hold RBC on the receivable. The RBC requirement used to be 10% of the separate account surplus. The new requirement will keep the 10% factor on separate account surplus that's held as a result of surrender charges that are based on the account value. The

surplus that's held as a result of surrender charges that are based on the premium will be a lower percentage. Originally, it wanted a 5% factor, but the Academy is pushing for a 2% factor.

Mr. Robert J. Johansen: I'm going to wear two hats right now. One is as chairperson of the SOA Task Force on Mortality Guarantees in Variable Products and the other is as vice-chairperson of the Society Committee on Life Insurance Research. The task force, through the Society office, is extending an invitation to variable annuity writing companies to contribute to a mortality study of variable annuitants during the deferred period. Incidentally, I don't know of any study that's been made of mortality of individual deferred annuities. Because we really need participation by a large number of companies, I ask you to do whatever you can to ensure that your company does contribute.

On the issue of a new annuity mortality table, the proposal for applying Scale G to the 1983 table will result in a rather lumpy table. I previously suggested that an existing smooth table, the 1996 table, be used instead. I've provided a set of first and second differences and a comparison of the unsmooth table with a graduated table. I think those tables appear in the current LHATF mailing.

Mr. Campbell: Your comment on the mortality study is appreciated because the challenge is whether there will be enough data to do an appropriate study.

Ms. Mary A. Rohe: I have an Actuarial Guideline XXXIII question. With credited interest rates, you have to use the current rate if it's already been declared for the remaining period, and then you have to use the guaranteed rate thereafter. With the annuitization rates, if the company has already declared current rates as of the valuation date, do you have to consider those current annuitization rates as if the person annuitized today, and then use the guaranteed annuitization rates thereafter?

Mr. Cramer: This discussion had come up in the drafting of Actuarial Guideline XXXIII, and I'm fairly sure that the original position of some of the states was that if you declare a guaranteed rate as of the valuation date, then you should do the valuation by using that assumption. That was an area of, as I recall, a lot of contentious discussion. We can refer to the guideline, but I'm sure it was decided that you do not need to use the rate that you have in effect as of the valuation date if it is not fixed and guaranteed forever.

Ms. Rohe: Even though they had a new rate today?

Mr. Cramer: Correct. If it's a current declared rate in effect on the valuation date, but you have a right to change it, you do not need to use that rate. The 93% floor stands in place of this.

Mr. Lawrence Edwin Schwartz: One of the purposes of Actuarial Guideline XXXIII was to interpret CARVM to reduce the variations in the way different companies were reserving for annuities. The survey results that you share suggest that, at least with respect to partial withdrawals, there still is quite a bit of variation. Does that suggest that the Multiple Benefits Work Group might eventually require one approach or another with respect to partial withdrawals?

Mr. Harrington: I can't speak for the work group, but some of the discussions we've had was that this may come down to actuarial judgment. There are so many combinations that reasonable people could come up with to reserve for annuities. I don't think that the work group is setting out to propose a set of strict rules, but rather just to develop some general guidance. Then it will be up to the individual actuary to come up with reserves that he or she is comfortable with.

Mr. Michael P. Sparrow: I have a question related to the fourth item on Actuarial Guideline XXXIII, particularly with variable annuities and the annuitization stream. There are really a lot of problems with doing the annuitization test. In particular, you're suppose to use a Plan Type A valuation interest rate and determine the guarantee duration by going back to the original issue date. The whole idea is that you're going to get a very conservative valuation rate for discounting. Because, in fact, all the money is invested in separate accounts, this can really get you in trouble at some point in time. I was curious as to how other companies had addressed this, or if there are some questions about the interpretation of that.

Mr. Campbell: There are certainly many questions regarding the interpretation of that. When we look at how many companies are doing variable annuity reserves, most of them are using CARVM. They're projecting out the current account value at a rate of interest that's related to the valuation rate. The spread they're using is related to the spread that's in the contract, which is fixed. Although various companies handle this differently, the concept is to project out at a given rate and discount back at the valuation rate, where you keep the spread between those two rates constant.

The issue is to keep the rate at which you project out close to the rate at which you discount. On the fixed side, you're required to project out at the guarantee rate which, say, might be 3% or 4%. If you're discounting at the valuation rate, then you have a bigger spread. This was one of the issues that the Annuity Valuation Group was trying to address.

Mr. Cramer: There has been a little confusion about the variable annuity CARVM in general. A few years back, there was even a discussion by some states that CARVM does not apply to variable annuities, and you should hold full account value. Since then, the states have backed away from that. There's a general acceptance in accounting now that there is a variable annuity CARVM, but it's still unresolved on how to apply it. Some companies take the approach that if you don't guarantee anything, the reserve is the current cash surrender value. Other companies argue that you guarantee that what you are going to earn you will credit back to the contract holder, less a fixed spread. The question also arises whether to use 100% of the spread or less to account for your ongoing expenses.

The issue that you raised is actually an interesting one that I haven't thought of, and that is this: the annuitization test requires that you discount to the valuation date. Because you have a period of deferral, what do you assume in the deferral period? I'm just guessing, but a logical method would be to assume a fixed rate between the valuation rate and what you assume you'll earn, as Tom said.

Mr. Harrington: One of the companies I talked with in doing the survey had brought up a question similar to yours about the annuitization issue. This company, which I can't name, had taken the view that because there are no guarantees on what the payment will be after annuitization, that there was no reason to consider those in the reserve calculation. So it just chose not to consider the annuitization benefit as one of the benefit streams in calculating reserves for the variable annuities.

Mr. Cramer: There's one other point I would like to clarify regarding reserves for variable annuities, and that is the issue of whether one needs to look at the guarantees on the fixed account side. I believe this has been resolved by Actuarial Guideline XIII, which requires one to look through to the fixed side in determining whether contingent surrender charges apply for variable annuities. So if there is the option to transfer money to the fixed account, one does need to consider the guarantees, including annuitization options, of the fixed side.

Mr. Campbell: I have a comment on CARVM for variable annuities. If you look at the variable annuity model regulation, it says to look to the SVL, but also to take into consideration the fact that the benefits are variable. You can interpret that to look through to CARVM. You don't have any guaranteed benefits because you have a variable credited interest rate to the contract, so you should adjust the method to consider the variable nature of the contract. One way to do this is to use the fixed spread in the contract as the difference between the accumulation and discount rate in the reserve calculation. That's what most companies are currently doing.

I also think the variable annuity CARVM is something that the NAIC will address. When talking with regulators about the MGDB reserves, there is widespread concern about CARVM for variable annuities. The regulators are concerned that companies are holding cash surrender values, or saying they're holding CARVM appropriately, and ending up with cash surrender values as a reserve. I think in the next couple years we'll see the variable annuity CARVM addressed.

I have another Actuarial Guideline XXXIII question, which I'll ask Mike. You mentioned that 19 companies said that they made a change to their reserves because of Actuarial Guideline XXXIII. What areas were most affected?

Mr. Harrington: A couple respondents commented on that. One of them got hit with an annuity certain guarantee in the contract that was less than five years. I think it had a three-payout guarantee, which caused it to have to use the Plan Type C valuation interest rates instead of Plan Type A, which is higher. This caused its reserves to increase.

Some others got hit on the 93% floor. One company had a rather vague reference to offering current annuitization rates, but it was such that it thought that the floor applied to them. Because it had a contract with surrender charges in the 15% range, it had to bump up those reserves to the 93% level.

Mr. Campbell: Errol, the updates to the mortality tables that I mentioned exclude structured settlements. I know you're on one of the Academy groups that works on structured settlements. What was the reason for excluding structured settlements? Are there any plans to do something different for them, or will the tables for structured settlement stay the same?

Mr. Cramer: There's a proposed regulation to have updates to the annuity tables—Bob Johansen had talked about that a bit earlier. Structured settlements are exempt in the proposed regulation, so they would stay on the current table, which is 83a. The reason for the exemption is that the mortality for structured settlements is very different from insured lives. It seems to be closer to population mortality. There have been studies published in a recent *Transactions* report, and there were additional studies, which demonstrate that the current 83a is already conservative enough. It would, therefore, not be appropriate to add additional conservatism.

Mr. William A. Zehner: I have a question on one of the proposals about using the actuarial opinion to determine your reserves. Is the IRS also going to buy the actuary's opinion in determining the reserves?

Mr. Cramer: That's actually come up often in discussions on a new annuity valuation law, even when we're just dealing with valuation rates. For instance, if you use a split valuation rate, there's an issue because the applicable federal rate is compared to the valuation rate. Which rate do you compare it to?

The feeling is that it would only be possible for annuity valuation to undergo a paradigm shift if someone works with the IRS, because the current tax rules really relate more to the current CARVM. I'm sure that a completely unrestricted reserve, where the actuary uses discretion to determine the level of reserves to hold, won't fly with the IRS. So a complete shift away from the current CARVM won't be an easy task. We're talking about something that may take quite a few years to develop.

Mr. Campbell: That brings up an interesting topic with respect to tax reserves. As the NAIC is looking to make changes to valuation, it tends to not really look at the tax side of things. Because there are often alternate approaches that it can take, the NAIC needs to get as much input as possible on the tax ramifications of its decisions. If something is proposed that has adverse tax implications, it certainly needs to be aware of it.

Mr. Johansen: I have late breaking news: the Research Committee voted to sponsor two related studies. One is an extensive study of annuity mortality, and the second is an extensive study of generational mortality tables—not just the idea of it, but also how to construct the projection rates and look at the administrative problems that would be involved. So we'll try to keep you informed through *The Actuary* or other means of the progress of these two studies.

Mr. John W. Robinson: In terms of the annuitization option, what sort of options should you consider? I'm in a position of trying to write a reserve system and I wouldn't mind some guidance on that question. Would, perhaps, considering just a 5-year certain, a 20-year certain, and a straight life option make any kind of sense?

Mr. Harrington: I think Actuarial Guideline XXXIII says you're supposed to consider all options available. So what you suggested may not be enough. You might need to consider, or at least be able to demonstrate, that your straight life option will always produce a greater present value than the other options. On the certain annuities, you can look at the relationship of the valuation rate to the annuitization rate that you've guaranteed. It will always be at one end or the other of your shortest available and your longest available certain.

Mr. Robinson: Your valuation rates vary from year to year. Certainly you can't always tell that a particular relationship is going to hold.

Mr. Harrington: It has to be a dynamic calculation in the program.

Mr. Robinson: Yes, exactly. The other thing that concerns me is a joint life option in which you can raise all kinds of issues with ages. So where exactly do you draw the line?

Mr. Harrington: That's a good question. I'm not sure—perhaps you can look at extremes or do some type of testing to see where guarantees on joint life options impact reserves. This is where actuarial judgment comes in.