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Session 1 PD
Life and Annuity Valuation Issues

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Panelists: Thomas A. Campbell
Kory J. Olsen

Summary: This session provides an overview of a range of current statutory valuation issues pertaining to life and annuity products. The major valuation issues are introduced and are covered in-depth at subsequent sessions. Life and annuity valuation issues covered by the panelists include status of adoption of Actuarial Opinion and Memorandum Regulation amendments, progress on variable products reserving standard, status of adoption of 2001 CSO, progress on C-3 Phase II RBC project and an update on the annuity and life nonforfeiture.

MS. MEREDITH A. RATAJCZAK: On the panel today, we have Thomas A. Campbell. He is a vice president and corporate actuary at Hartford Life. He's the appointed actuary and is responsible for actuarial review, financial reporting, reserve valuation and actuarial compliance. He is actively involved in American Academy of Actuaries activities. He is currently the vice chair of the Academy's Life Practice Council and chairs the council's Life Valuation Subcommittee. He also chairs the Academy's Variable Annuity Reserve Work Group. Previously, Mr. Campbell represented the Academy as a member of the AICPA's Nontraditional Long-Duration Contracts Task Force.

Our second panelist is Kory J. Olsen. He's an actuary at Allstate Financial. Mr. Olsen’s responsibilities include setting statutory GAAP and tax-reserving methodology, assisting in appointed actuary functions and maximizing capital efficiency. He also is involved in American Academy of Actuaries activities. Currently, he is vice chair of the Life Valuation Subcommittee and is on the Academy's Life Practice Council. He is co-vice chair of the Variable Annuity Practice Note Work Group.

MR. THOMAS A. CAMPBELL: There's a lot of material that we need to cover. Most of these issues are being covered by the NAIC's Life and Health Actuarial Task Force (LHATF) and by the NAIC's Capital Adequacy Task Force. They're working on these issues with a lot of support from the Life Practice Council of the American Academy of Actuaries. We're going to split this discussion into two topics.

We are going to talk about some of the new and current initiatives that are underway within the Academy. These initiatives bring in principle-based methods by measuring risk and include stochastic modeling techniques. We're going to cover key issues that involve the current reserve and risk-based capital (RBC) framework, as well.

I'm going to start with the Enterprise Risk Management Project, also known as Standard Valuation Law II (SVL II). This is a project that's just in the discussion stage, but it provides a methodology that incorporates some of the other new direction initiatives that we are going to talk about this morning. It also provides a framework for similar initiatives in the future. It's currently a project of the Academy's Life Financial Soundness/Risk Management Committee. The goal is to develop initiatives to implement a new enterprise risk management structure in a three- to five-year timeframe.

Many have described the current reserve and RBC framework as a rules-based governance with audit. You calculate your reserves, and you get audited. Either your reserves are too high or too low. This initiative is considering principle-based governance with accountability on the part of the actuary. It ties in the measurement of risks with management actions. This is a structure that can cover reserves. It can also cover RBC. We're talking about other types of measurements that this methodology can cover. The focus is a comprehensive structure that applies to all product types, including life and annuities. They also include things like health and even reinsurance. Under the structure, it's an enterprise-wide view of all the risks. You identify and explicitly model and analyze all of the risks. A major component is diversification. The idea is to look at a broad view of the overall risks, instead of studying each risk independently. Actuarial assumptions would be based on best estimates with explicit margins, based on criteria such as how credible the company's experience is or how consistent it is with industry-wide experience. It also brings in non-guaranteed elements. Current discussions contemplate using a non-guaranteed-element plan that would be confidential and would outline how a company intends to manage non-guaranteed elements. The illustration actuary and the non-guaranteed-element actuary would provide certification that the plan either is being followed in illustrations and in actual practice, or the deviation will be documented.

This is a multi-dimensional challenge. Currently, there are four dimensions that are being examined. Product types is the first dimension. This can include categories such as variable annuities with and without guarantees, fixed annuities, equity-indexed annuities, universal life (UL) and variable universal life with and without guarantees. But it also could cover things such as long-term care, long-term disability and other health coverages.

The second dimension includes the various types of risks that need to be addressed. This would be your traditional C-1 through C-4, but also would include things such as new business—growing too much, not growing enough—and the availability and unavailability of reinsurance. Those things might not necessarily be in reserves, but would be part of the analysis.

The third dimension would be risk diversification and correlation. This would be between the risk types, the product types and even between issue years.

The fourth dimension would be the risk measurement level. This would include RBC and reserves. You would look at the entire distribution of the results of any analysis that you do along a continuum. You can use that for various measurements. If you're going to look at the whole enterprise, it's going to take a lot of time. In the meantime, the group is considering setting up short-term initiatives over a 24-month period, which would include representative anchors (things that would be used to define future structures).

For instance, we're currently working on variable annuities. We're learning a lot of things. If we were to start a new project, we'd probably do some things differently. It would address high-priority issues, such as the universal life issue.

Those are going to be the priorities over the next 24 months. For practical reasons, the most important issues will be variable annuities and universal life, because that's really what's being worked on currently. We will also consider bringing in things such as equity-indexed annuities and maybe even long-term care. It would measure C-2 and C-3 risks.

Longer term, they're discussing finishing up the C-3 and C-2 for the remaining products. They also are trying to put together a plan for addressing C-1 and C-4 and any other risks that are there. You would develop a strategy to address diversification and correlation. This is something that is expected to happen during 2005. Also, they are working with the NAIC to develop regulatory oversight tools for the regulators, which would include tools such as peer review, back testing, and things like corporate governance and required reporting standards.

They also are trying to coordinate the development of educational materials. Before you move forward with this, there's a lot of work that needs to be done—not just educational, but also training. The Society of Actuaries is working to develop experience studies. There are many different experience elements that need to be examined in order to move forward with something like this. Also, they are addressing the interaction of statutory reserves with tax reserves. This is a big issue that had come up in C-3 Phase II, and it's an issue that will need to be resolved.

The group is going to finish the preliminary report. This is the Academy group, chaired with other Academy Life Practice Councils. They will discuss the issue with the appropriate NAIC groups and with professional groups like the Society of Actuaries, and even the AICPA and some of the industry groups. This is something that you'll hear more about in the next three months.

The second new direction project that I'm going to talk about is the C-3 Phase II and the variable annuity commissioners annuity reserve valuation method (CARVM), which are proposed standards for RBC and reserves for variable annuity products, with and without guarantees. This fits within the enterprise risk management framework. It's also a key initiative that's one of the representative anchors. There are two different work groups within the Academy. The Risk-Based Capital C-3 Phase II group was formed almost three years ago. They're looking at RBC. The variable annuity reserve group was formed shortly after the RBC. There's a lot of overlapping membership between the two groups, and we work very closely on a lot of things.

We also work very closely with the NAIC. There are two work groups, LHATF for reserves and Capital Adequacy Task Force for RBC. There's a lot of overlap, and they have a joint work group. There are plenty of details about this methodology on the Academy's Web site.

I want to point out that the work is not entirely new. The principles and concepts have been discussed and implemented for several years. We drew ideas from the Unified Valuation System (UVS) that the Academy started several years ago at the request of LHATF. This fit right into the Life Practice Council's position that long-term non-formulaic RBC solutions that incorporate reserves should be pursued for all products, but especially for variable annuities. This UVS project was meant to analyze the entire company. You have to look at the risk profile. You look at all the combinations of variable annuities. You have living benefits. You have death benefits. You have roll-ups and ratchets, all sorts of different types.

The term "snowflake design" was coined a few years ago. No two variable annuities are alike. Since there are none alike and the variations are so diverse, it's very difficult (I'd say impossible) to come up with a single formulaic methodology, such as a single deterministic scenario or percentage of account value. The other reason is that the real risk to these products, especially if you have a rich guarantee, is that you might look at unexpected value and get a very low reserve. But when you look at the tail risk, you see that there’s a great deal of risk. You have to measure the tail in order to get the true impact of the risk that you have with these products.

If you look at the current requirements, you might see nothing for some. Minimum guaranteed death benefits have no RBC requirements. You're going to see a fixed percentage of account value for RBC for living benefits. You're going to see the single deterministic scenario under Actuarial Guideline (AG) 34 for reserves for death benefits. You're going to see an accumulation of fees for living benefits under Actuarial Guideline 39. I would submit that the current reserve and RBC frameworks don't always fit the risk profile. Sometimes, it's going to be too high. Sometimes, it's going to be too low. I'd even argue that for living benefits, the results are counterintuitive.

It would appear that AG 39 reserves decrease. They don't really decrease. They actually don't grow as much when the market is down. But if you look at the RBC, if you have a drop in the market, the account value goes down, your RBC goes down. This is where you're going to have the biggest risks. That's counterintuitive.

Let me describe some of the key concepts that apply to the methodology, both for reserves and RBC. First, the methodology is model-based. It requires companies to model the variable annuity business over a broad range of stochastically generated scenarios. These scenarios are calibrated, based on historical performance. Therefore, I think that it allows the risks to be captured under stress scenarios. The reserves and RBC are measured using a conditional tail expectation (CTE) measurement that averages the results of the tail of the distribution for each scenario. So you run a whole bunch of scenarios. You take the distribution. You measure the average over the tails. It uses CTE 90 for the total capital requirement, and it uses CTE 65 for reserves.

The methodology is cash-flow based. It brings in the principles of cash-flow testing that are used to support the actuarial opinion. It also looks at the liabilities and assets at interim periods. It does that in measuring a greatest present value. So it does recognize the balance sheet. The methodology integrates all components of the business. This is a very important concept. The model-based method captures diversification of risks not only within a single contract, but also over the entire book of business that you're measuring. It allows the aggregation of offsetting benefits. It does it in a way that will capture the risks where the aggregated risk is at its greatest.

The methodology uses prudent best estimates, which applies to the so-called deterministic assumptions. That is your best estimate with a margin for estimation error. Where applicable, it requires that the assumptions vary with the underlying scenarios. There's some margin in the assumptions, but most of the conservatism in the reserves and capital is in the recognition of the tail risk within the CTE approach.

Another concept is that the methodology integrates reserves and RBC. It does this by directly reflecting the level of reserves in the RBC calculation. You calculate the CTE 90, which is the total capital. You subtract the CTE 65, which is the reserve. There's an adjustment for taxes, but that's the RBC held. That is superior to a method that ignores the reserves. Actually, if you ignore reserves, you penalize companies for holding more conservative reserves. This properly allocates the total capital between reserves and RBC, as the levels are set by the NAIC. The methodology was to develop consistency between reserves and RBC, assuming that the same models would be used for both. From a relative point of view, there's not as much work as if you had to measure both separately.

The methodology relies on the judgment and the professionalism of the actuary. Actuarial judgment is required and relied upon throughout the whole process. But with that reliance, there's responsibility. There are certification and documentation requirements within both the reserves and RBC requirements. Of course, the work of the actuary is also subject to actuarial standards of practice.

Given the discussion of the reasons for the methodology and the description of the key characteristics, it's clear that this method has several key advantages over a single deterministic-scenario methodology or a percentage-of-account-value methodology. The methodology appropriately fits all products. You avoid the problem of having RBC and reserve requirements that are too high for some products and too low for others, because you're modeling the actual risk. You may argue that CTE 90 is too high or too low, but you can't argue that the models are measuring the true risk.

There's no need to adjust the requirements for new products. When you come out with a new product, the models and the assumptions that you put in the models are going to change, not the methodology. This is key because it will allow actuaries to focus on getting better at measuring risks, fine-tuning our practice and addressing regulatory oversight issues. Companies will benefit from doing the right things through risk management techniques. The more risk management you do, the more it is reflected in the reserves. You're spending time on the risk management techniques instead of designing products to get around the formulas. The methodology is moving in the direction of the developments on the international front, which is the fair-value direction.

Now I will summarize the model-based methodology and show you how it fits within the requirements. I'm not going to spend a lot of time on this. The center of the methodology is the model-based calculation, at least it is for the Academy proposal. One thing that I want to point out regarding model-based is that hedges and reinsurance are included in the model, as long as they meet the stated criteria. I think that's important. The Academy also came up with an alternative methodology that is more of a practical application to use as an alternative to model-based, but only for contracts that have only minimum guaranteed death benefits or have no guarantees. It's formula-based. The formulas were developed using models. There are 88,000 factors. So, there's a lot there. There's also a provision for modifying the formula, but that has to be supported by modeling.

There's another component of the requirements that is not part of the Academy proposal but is something that the NAIC is adding. It's a standard scenario, and it's part of both reserves and RBC. The idea is that you calculate either model-based reserves and capital or the alternative methodology. When you determine that for the entire block of business, you compare it to this standard scenario for the entire block of business. The standard scenario is seriatim calculation, at least for reserves. There's no aggregation for the reserves. For RBC there is aggregation. As a result of this, it's a single scenario. Since it is seriatim, and you don't get aggregation at this point, there are still some issues with the standard scenario for reserves. There's more work needed to come up with something better for the standard scenario.

The intention for the standard scenario is to be lower than the model-based results. It is support to catch companies when they are being aggressive in their modeling. It's looked at as something that will help with the validation of models. It's also something that's being argued that makes this reserve methodology better fit the tax requirements and better fit the Standard Valuation Law. On the RBC side, you allow aggregation. But there's also a lot of controversy on the RBC side as to whether this is needed. The bottom line is that on both RBC and reserves, there's still some work that needs to be done for the standard scenario.

Are we there yet? When is this going to be in place? RBC and reserves are both separate proposals and involve different NAIC work groups. It is possible that the two requirements could be adopted and effective at different times. Having said that, I think that having the same effective date for both is desirable, but it is not necessary. The sentiment seems to be that the RBC needs to be in place before or at the same time that the reserves are put in place. Because the actual reserves are reflected in the RBC, if the RBC is put in place, and the reserve isn't in place, it's possible that the reserves could be greater than the RBC requirement. From a calculation point of view, that's not a big deal, because then you just have an RBC of zero. I think that it's going to send the wrong message if you have a reserve standard that's greater than RBC.

Both LHATF and the Capital Adequacy Task Force exposed the most current versions of the requirements for comment recently. The exposed RBC proposal applies to both new business and inforce business, as do all RBC requirements. It was exposed for a 45-day comment period. At the end of the 45 days, the Capital Adequacy Task Force plans to meet and go through the comments. They could adopt the standards with a December 31, 2005, effective date.

On the reserve side, LHATF exposed the most current version of the Actuarial Guideline. The current draft is in the form of a guideline. It applies to new and inforce business that was issued after 1980, because that's when the SVL defines CARVM. The effective date in the guideline is also December 31, 2005. It's not clear whether LHATF is going to wait for RBC to be adopted before they move forward. At this point, the target is to stay on that 2005 date.

At the last Valuation Actuary Symposium, there was a lot of discussion on several issues. I want to outline some of the latest developments. There have been some changes and a lot of work has gone into this. The first change has to do with hedging. Over the last three months, a lot of work has gone into defining exactly what "hedging" means and how you can incorporate hedges in the models. It was clarified that you can use hedges to offset RBC and reserves for the model-based methodology, but you can't use hedges for the alternative methodology. The definition of a "clearly defined hedging strategy" was strengthened quite a bit. An appendix was added that tells you how you measure this. The fact that you have to adjust your results for risks that aren't in the model, such as basis risk or GAAP risk, was established. It also specifies that you have to use real hedging strategies. You can't make one up. You can test it. You can have mock testing, but it's got to be something that is in place. There has to be certification, not only by the actuary that calculates the reserves but also by the chief financial officer or the chief investment officer, that the hedging program in the modeling is actually being used.

Another development involves reinsurance. The requirements make it clear that reinsurance should be reflected. What's not clear but probably needs to be clarified is the fact that the requirements in the guideline do not supersede the transfer of risk requirements in the model—Life and Health Reinsurance Agreements regulations or Statements of Standard Accounting Practice (SSAP) 61 or Appendix A-791. You have to meet those risk transfer requirements. The Variable Annuity Reserve Work Group is going to discuss adding language for that.

Another development is that, on the RBC side, there was an added provision for smoothing. This was just on the RBC, not on the reserves. The idea is that, because of the volatility of results, there's going to be a weighted average between what you're holding for RBC currently and what you calculate in the current valuation date. The ACLI proposed something. The Capital Adequacy Task Force agreed with it. At this point, it's not clear whether it made it into the most current proposal that's being exposed. If it didn't, that's an oversight.

A couple of other things were added, including a section on principles. This is a principle-based methodology. We added something that outlines those principles. A section that deals with certification and documentation was added. They are examining the definition of "prudent best estimate." It has been proposed that that be based on the assumption itself; look at the total results and have prudent best estimates that give you a 90 CTE or a 65 CTE. The problem with that is if that's adopted and added, it's going to cause you to have to do two different sets of calculations. There has been some discussion about regulatory oversight. I mentioned that more work needs to be done on the standard scenario.

The alternative methodology has not yet been decided. What is the mortality standard going to be for that? Factors were developed at 65 percent of the 1994 Guaranteed Minimum Death Benefit (GMDB) Table and at 100 percent of that table. LHATF and the Capital Adequacy Task Force are still deciding on that. There was language added for the interaction with C-3 Phase I. Also, the Society of Actuaries has completed a mortality experience study for deferred variable annuities. The

Academy has begun discussions with them on other experience studies. Finally, there's a group that has been formed that is going to develop the life practice note, which will get into all the best practices and the expected best practices. The idea is that it's going to serve as a bridge between the knowledge of the Academy group and knowledge of other actuaries, regulatory and company actuaries.

One of the issues that has come up is, how does this modeling that's being proposed interact with the Actuarial Opinion? I want to point out that the reserve requirement is not a substitute for the Actuarial Opinion. To the extent that you're using projections to calculate reserves, a lot of the work that you're doing can be used for asset adequacy analysis. This raises the bar for modeling. Up until now, some companies may have been using a deterministic scenario for their analysis. This requires more of a stochastic analysis by fine-tuning all of the elements that go into the modeling. This is something that's going to help asset adequacy analysis. The supporting memorandum and the documentation requirements are very similar. This is by design.

There are several differences between the model-based and the asset adequacy analysis. You need to consider this. The model analyzes a line of business, while asset adequacy analysis examines the entire company. The results for the reserves and capital bring in a change in working reserve. When you do asset adequacy analysis, you may be looking at cash flows, or you may look at change in reserve. But if you look at change in reserve, remember that the change in the working reserve in the model base is not the same as the statutory reserves that you're going to hold. You may get different answers because 65 CTE is not a required standard under the Actuarial Opinion and Memorandum Regulation (AOMR). This is something that the regulators chose for reserves. That doesn't mean that you have to look at CTE for asset adequacy analysis. Also, the greatest present value that's in the reserve requirements is not necessarily the standard for the Actuarial Opinion, although some actuaries do look at interim results.

There's a lot going on with C-3 Phase II. It's not just a methodology. There are a lot of things that go with it. The Academy has worked very hard on this. This is a process that can be used for other things going forward.

I want to talk about an update on the RBC C-3 Phase I. There were two changes that were made to the current requirements for Phase I. The first one was a change that now excludes equity-indexed annuities from the exemption test. The reason that it was taken out of the exemption test is that it's not included in the required stochastic analysis. If it's not included in the analysis, why have it in the exemption test? That was an oversight, and it was fixed. The second change will give insurers the option of using C-3 Phase I. If you're exempt from doing it, you can still opt to do it. Once you opt to do it, you have to continue to do scenario testing. Another thing that's being considered is getting rid of the exemption tests altogether. If they're removed, all companies will have to perform scenario testing for C-3 Phase I.

MR. KORY J. OLSEN: I'm going to start with Actuarial Guideline 38 (AXXX). It was originally adopted by LHATF in 2002. As many of you may know, Actuarial Guideline 38 came about because LHATF had determined that some companies were not applying XXX as they intended it to be applied. They came out with the actuarial guideline to clarify the calculation in Regulation XXX. But now Actuarial Guideline 38 is under review, due to perceived abuses with the guideline. This is most specifically toward universal life insurance with shadow account secondary guarantees. The shadow accounts have been designed to eliminate any additional reserves.

The regulators had written Actuarial Guideline 38 with what I'd call a preamble. It outlines that they are not able to understand or perceive any future product development and incorporate those requirements into the actuarial guideline. They added in the preamble that all products for reserving need to follow the letter and the spirit of Actuarial Guideline 38. Some regulators believed that this has been violated in the reserving that had been going on. Some believe that there's not a level playing field for similar products. Similar products with the same type of guarantees are having different reserving requirements. LHATF is leaning toward updating Actuarial Guideline 38. At the LHATF June 2004 meeting, they were saying that they were not going to change Actuarial Guideline 38. Then they determined that they do need to update and revise Actuarial Guideline 38.

Currently, they have four options on the table. The first option is no change at all, which several regulators support. They say that XXX was clear enough and didn't need a guideline, so there should be no reason to update it.

The second option is just adding stand-alone asset adequacy testing for universal life insurance with secondary guarantees. This validates that the reserves that you are holding for your UL secondary guarantees are sufficient.

The third option is a New York proposal. New York has proposed to modify Example 8. Example 8 has about nine steps. They're eliminating seven of them and declaring that if your secondary guarantee has been pre-funded, you just assume that no net premiums come in until they need to in the calculation. In your present value of future benefits minus present value of future premiums, present value of future benefits would be the same. But for your present value of future premiums, you may assume no premiums coming in for the next four or five years (or however long the secondary guarantee has been pre-paid).

The fourth option is to use the attained-age level-reserve method. This is the method that is in Actuarial Guideline 37 for variable life products with secondary guarantees. It's an option that was proposed.

The Academy is reviewing possible long-term solutions to this issue. The Academy has the Universal Life Work Group. Its product scope originally was just universal life with secondary guarantees and to address these issues that LHATF is having. It seems that the issue is similar to the variable annuity issue, for which the expected value of the secondary guarantees may be nothing but out on the tails, there is some value and some risk. The Universal Life Work Group gave a presentation to LHATF, and LHATF asked them to expand the scope to include term. It's going to include term.

The Academy work group is going to look at reserves and RBC both, and join them together. This is based on the variable annuity (VA) CARVM approach. It will be model-based and use CTE. During the presentation to LHATF at their September 2004 meeting, they were supportive of the direction in which the Academy was going.

The next item that I'd like to discuss is practice notes. The American Academy of Actuaries has practice notes to guide actuaries, to let them know what the general practice is for different types of issues. The Academy is working on revising, updating and creating new practice notes. Some of the practice notes that the Academy has on the Web site have been there since 1995. During that time, new issues have arisen. Practice has changed. It's time to be revising old ones, and new ones should be created. The most recent one to be released was the new GAAP long-duration standard of practice, SOP 03-01, which was released in March 2004. The asset adequacy analysis practice note is being revised. I believe that there used to be five old ones, dated around 1995, which are being brought together. The practice is being updated. New issues are being added. They're being merged into one large asset adequacy practice note. That is coming very near completion.

A reinsurance practice note is being created and nearing completion. There's a new one under development for GAAP for modified coinsurance (modco) reinsurance under Financial Accounting Standard (FAS) 133. This follows their Derivative Implementation Group (DIG) B36 issue that came about. There's a variable annuity practice note. This includes the RBC C-3 Phase II, and the variable annuity reserving. It's intended to be a transfer of knowledge from Academy members that worked on those projects to other actuaries in the industry and to regulators to help them examine its meaning. How is this designed? What are some general practices that this group thinks would be acceptable in actually applying this new reserving requirement and RBC requirement? Other practice notes will be updated and developed as resources allow.

Now we will update you on current requirements. The 2001 CSO Mortality Table was adopted by the NAIC in 2002. Since then, it has been adopted by 32 states, as of August 2004. Three states started using it in 2003, 26 states in 2004, and three states will use it starting in 2005. In order to use the 2001 CSO table, a company can elect it on a plan-by-plan basis after its permitted date. It must be used for both valuation and nonforfeiture purposes. For most products, the product would need to be re-filed in order to use the 2001 CSO table for nonforfeiture purposes. The mortality table must be used as of a mandatory date of January 1, 2009. Any policy issued after that date will need to use the 2001 CSO Mortality Table, both for valuation and nonforfeiture purposes.

Tax reserves become an issue with the 2001 CSO table. There's a tax reserve requirement to use the state's prevailing mortality table, which is designated by the passage of 26 states. The 26-state requirement was met in July 2004. It begins the three-year phase-in period for the tax reserves, which begins in 2005. The 2001 CSO Mortality Table will be optional for tax reserves in 2005, 2006 and 2007, and mandatory starting in 2008. Since the tax reserves will be mandatory in 2008, statutory still may not be mandatory until January 1, 2009. There is a push for all states to adopt the 2001 CSO table by 2008 so that you'll be able to use both statutory and tax reserving on the 2001 CSO table, and so that you will not have the difference in the reserve basis.

Annuity nonforfeiture is generally something that is not discussed at valuation items meetings, but it does come into play and has a possibility to come into play in our reserve calculations. The revised Standard Nonforfeiture Law for individual deferred annuities was adopted by the NAIC in 2003. There are several changes to this new law. The first one was that it created a dynamic minimum nonforfeiture interest rate. The minimum formerly was 3 percent. Now it can range between 1 percent and 3 percent, which will be based on averaging the five-year Constant Maturity Treasury (CMT) index—at this point less 125 basis points.

It also allows the company to re-determine this minimum nonforfeiture interest rate during the life of the contract. It will need to be specified in the contract when the re-determination is going to take place, and the formula through which this new minimum nonforfeiture interest rate will be set. Equity-indexed annuities (EIAs) are allowed an additional offset to the minimum nonforfeiture interest rate, provided that they show substantive equity participation.

So instead of using the 125-basis-point reduction, they're allowed up to an additional 100-basis-point reduction. They can have, in total, up to a 225-basis-point reduction in their five-year CMT average. This nonforfeiture law has been adopted by most states—approximately 40. The question is, how does this impact reserves? It impacts reserves to the extent that the minimum nonforfeiture interest rate can be re-determined at points in the future.

When you do your CARVM projection, you take into account all of the greatest present values. So you'll have what I call your minimum guaranteed benefit stream, which includes your normal guarantees in the contract and your minimum nonforfeiture benefit stream. You need to hold the greater of those for your CARVM reserving. But when will your nonforfeiture rate be re-determined at some point in the future? What interest rate do you use in projecting that out further?

LHATF has started to address this in their Actuarial Guideline ABC draft. Essentially, Actuarial Guideline ABC tells you to assume the worst case. During your projection, after your next nonforfeiture interest rate re-determination date, you need to assume the maximum nonforfeiture interest rate specified in the contract.

Normally, it is assumed that that rate is probably going to be 3 percent. However, some policies may allow more. They wanted to take that into account. Also, it addresses the EIA offset.

For this additional 100-basis-point offset for the minimum nonforfeiture interest rate, they said that after the next re-determination date or after the next EIA re-determination date, assume that that 100 basis points goes to zero basis points — essentially assuming the worst case in your projection of the CARVM reserves. In most cases, this guideline will not impact reserving. Most of the time, the minimum guarantees that you're projecting out are going to be credited higher than your minimum guarantees, initially, and your nonforfeiture benefit will have guarantees, but there's an expense allowance for the beginning of your nonforfeiture benefits. It's a cumulative type of comparison. In most cases, this actuarial guideline will not impact most reserving calculations.

There are times when the actuarial guideline does not come into play. For example, when there's no re-determination, it does not come into play. Also, when your minimum guaranteed rate is always greater than your nonforfeiture rate, it doesn't. If your minimum guaranteed interest rate is tied to the nonforfeiture rate and there is re-determination, you assume the maximum nonforfeiture interest rate and do your CARVM calculation, taking the greatest present value.

When your minimum guaranteed rates are specified, but your nonforfeiture rates are re-determined, for your nonforfeiture rates that are re-determined you assume the maximum interest rate after the next re-determination date and do your CARVM projection, taking the greatest present value of your benefits.

When your minimum guaranteed rates are specified, your nonforfeiture rates are able to be re-determined. Actuarial Guideline ABC tells you to use 3.5 percent after your next re-determination date. At that point, you project out your benefit streams and do your CARVM greatest present value.

In addition, the AOMR was revised. The revised AOMR was adopted by the NAIC in 2002. As most of you are aware, the revised AOMR has many different items than the original AOMR, including asset adequacy testing required for all companies regardless of their size. They must submit a Regulatory Asset Adequacy Issues Summary by March 15 of the following year. There's a list of more detailed requirements that go into the memorandum. That was specified in the original AOMR. States are given the option to allow state of domicile opinion.

There has been some activity on the AOMR and the adoption of it. As most of you probably know, it was adopted by four states for 2003, effective by year-end. It has been adopted by six states so far in 2004. Rhode Island formally adopted it for 2004. At this point, there are six states where the revised AOMR is effective for year-end 2004. It is proposed in four states, which may become effective in 2004. It's something to keep an eye on. I know that Alaska and California are specifically targeting a 2004 effective date. I was unable to determine dates for the other two at this point.

Florida has a checklist of items that the state will be reviewing. The checklist actually comes directly out of the revised AOMR. State officials go down the checklist and make sure that everything that is required by the revised AOMR in the memorandum is actually covered there. Indiana indicated that it only wanted the summary for domiciliary companies. If a company wasn't domiciled there, it didn't need to send them one.

MR. CAMPBELL: Regarding the review of NAIC models, there's a process that the NAIC has now put in place. Task forces look at model regulations that either haven't been acted on or haven't been adopted; there has been no activity for five years. They want groups to determine whether or not the model regulations need to be updated or deleted. LHATF is looking at four such models.

The first two are the Modified Guaranteed Annuity (MGA) Model Regulation and the Variable Annuity Model Regulation. They have been around for a number of years. About 10 to 12 states have adopted the MGA Model Regulation. I'd say that about 35 to 40 states have adopted the VA Model Regulation. LHATF believes that these models are needed but that the nonforfeiture provisions in the models may need to be updated, based on changes that were made to the annuity nonforfeiture law and regulation. They are going to take a closer look at these models. At this point, it doesn't appear as though any valuation issues are going to be affected.

The third is the Interest-Indexed Model Regulation. This is a model regulation that hasn't been adopted by any states but somehow got put into codification under Appendix A-235. LHATF is putting off the decision of recommending whether this model needs to be kept or deleted until it can determine whether alternative standards are needed or if they're even desired, and whether they can be developed. They're looking at Actuarial Guideline ABC to see if they can fit it in there. They're also looking at some of the methodologies that are used for Actuarial Guideline 35 for equity-indexed annuities. I think that this is going to have a very low priority.

The fourth regulation is the Life and Health Reinsurance Agreements Model Regulation. This has been adopted by most states and is in codification under Appendix A-791. LHATF is recommending that the model be retained. While they believe that there are areas that may need improvement, they don't believe that the regulation is flawed enough to warrant changes at this time. However, during a recent discussion, the ACLI Reinsurance Committee has indicated that they have comments on potential areas where the model regulation can be revised. LHATF is going to listen to these and may end up acting on them.

There are a couple of other things related to this. First, the NAIC's Reinsurance Task Force added a charge for 2005 to look at the model regulation. At this point, it's not clear exactly what issues have been raised to that task force. Presumably, if they move forward with that charge, they will involve LHATF. Secondly, the NAIC's Statutory Accounting Principles Work Group, the parent of Emerging Issues, has referred an issue to LHATF that raises questions of whether SSAP 61 needs to be updated. They're going to look at this issue. It sounds like there's a possibility that the reinsurance may become a hot topic in 2005.

A second issue has to do with Actuarial Guideline 34. Late last year, LHATF made modifications to this guideline. The changes were effective for year-end 2003. We're reviewing them to make sure that everyone is aware of them. The underlying issue is dollar-for-dollar provisions, which allow for minimum guaranteed death benefits. If taken to the extreme, contracts that have these provisions will allow the contract holder to take a contract where the death benefit is in the money, and at its extreme, withdraw all but a dollar of the account value and lock in a death benefit for which the company is not being reimbursed through mortality and expense (M&E) charges.

The issue involved the interaction of the SVL, Actuarial Guideline 33 and Actuarial Guideline 34. The question was whether reserves according to CARVM, interpreted by these guidelines, would require companies to consider a scenario that 100 percent of the contract holders would take all but a dollar. This is often referred to as stripping the contract. Should you assume that 100 percent of the people strip their contracts when the benefits are in the money when you calculate reserves? Obviously, a "yes" answer would result in quite a large increase in reserves for many companies.

So far, the use of stripping has been very low. It has been very low through the second half of 2003, when the market was down and there was a lot of publicity about people doing this to their contracts. Despite all that publicity, there was very low use. After a lot of discussion, LHATF decided to modify Actuarial Guideline 34. That means that you have the option to use it. It doesn't mean that AG 33 can ignore partial withdrawals. The interaction of the partial withdrawals with the death benefits may be ignored. They also added a provision that you have to do a stand-alone asset adequacy analysis for variable annuities. If the analysis shows a shortfall, then you have to increase reserves. Finally, there were no modifications made to Actuarial Guideline 33 because of this discussion. LHATF is considering the work of the AG VACARVM, the C-3 Phase II methodology for reserves, to address this issue.

My third issue is the Generally Recognized Expense Table (GRET). It's used for illustration work, mainly, but it does have other uses. The Society of Actuaries developed a table for 2005 and found that there were some problems with it. They recommended that LHATF not adopt it. They're re-examining their processes. They expect that next year they will develop a new table for use in 2006. I think that means that companies that are using the GRET need to continue to use what's out there.

MR. OLSEN: Regarding the Life Liquidity Working Group recommendations, LHATF has adopted an exhibit for liquidity risk. This is for institutional business with fund-demand disclosure. It's expected to go in the blanks in 2005. It's still a year off, but I wanted to bring this to your attention. It includes a certification by a company officer. There are two points that the officer is certifying. First, the company must understand, measure and deal with the stress of liquidity risk. Second, the company can assess this risk; they must have the ability to do that. A certification is required.

There's a chart that needs to be filled out with three different sections. The first section is fund demands allowed, but not exercised or scheduled. The second section addresses maturities that are scheduled. The third section addresses fund demands that have been exercised. A fourth section had been added prior to its adoption, which is the sum of the first three, to give you a total exposure. At the bottom is the officer's certification. This is going to be into the blanks in 2005.

Other things were recommended along with that table. It was recommended that each state implement something similar to New York Circular Letter No. 4, which came out in 2002. It asks a lot of questions regarding liquidity and exposure, monitoring it, etc. It was recommended that the state actively review the companies in its state and follow up with any questions that it may have of them. The final recommendation was modified language for the liquidity section of their *Financial Condition Examiner's Handbook* to make it more useful for life insurance companies. Currently, that section is more focused toward banks. The recommendation was to make it more focused toward life insurance or usable for life insurance, also.

My last topic is credit life and valuation standards. These were updated and adopted by the NAIC in June 2004. The Credit Life Insurance Model Regulation is effective on or after the effective date of the 2001 CSO in the specified state. It changes the minimum standards to use the 2001 CSO table. Only the 2001 CSO Male Composite Ultimate Mortality Table can be used. We confirmed that Regulation XXX does not apply. Instead, you use commissioners reserve valuation method (CRVM), except for the monthly outstanding balance credit life. For that piece, you can either use your unearned premium or CRVM. It's the state's choice.

MS. RATAJCZAK: Mr. Campbell, you mentioned that they're considering revising SSAP 61. Are there any specifics on the issues on which they're focusing?

MR. CAMPBELL: The issue that was being referred to LHATF from the Statutory Accounting Principles Work Group has to do with a treaty that doesn't quite fit the definitions. SSAP 61 defines different types of reinsurance. This treaty that's being questioned doesn't fit into any of the definitions. They're asking questions such as, did SSAP 61 mean to address each and every issue? Is it exclusive? Is it the only type of reinsurance that you can have and get reserve credit for? Or are they examples? Another question is whether the SSAP needs to be updated.

ARMAND M. DE PALO: I'm going to talk about AG 38, XXX and the Standard Valuation Law. It's good to see that the Academy is working on it. If we had a clean slate, we'd like to go to principle-based valuation. I have no objection to that. I think that that's the right research path to go on. But when we say that this is principle-based, a whole new infrastructure of support has to go with it, such as the credibility of the assumptions used. I was one of the industry authors of Regulation XXX. That was a test of this industry to see if all actuaries could be responsible for the assumptions and practices they did. Some people feel that most of the industry passed that test, but I use the word "most." Then we came along with AG 38. It should never have needed to be written.

Additional questions have been raised. This is a schism within our profession. I don't know if either side agrees with the other, but there's a great void in between. If we're going to go to a principle basis, this schism cannot survive without being resolved. When LHATF determined that AG 38 didn't need to be changed, they were really saying that if what was being presented was really being done by companies, those companies will have to correct the reserves, and they'll find them on audit.

Now, when you get to cash-flow testing or scenario testing for mortality, that's a future event. Scenario testing works very well for things like capital market movements. It doesn't work well for mortality. The Standard Valuation Law is based on three basic underpinnings. Unless this law is changed, nothing can change. It's based on a valuation interest rate and a valuation mortality table. If you calculate reserves on the mortality that you think your company is experiencing, that's not consistent with the existing valuation law. It doesn't protect other companies from the fact that one company could assume very low mortality and that this is what they are doing their cash-flow testing on. In my opinion, this is okay. This is an issue that you're going to have to deal with if the Academy wants to push forth an alternate fundamental-based scenario, because the law doesn't support it. Mr. Campbell, I'd like your opinions on this and its time frame.

MR. CAMPBELL: I think that you raise a lot of valid issues and concerns. I hope that you continue to do that. The actuarial profession needs to continue to have these discussions. The Academy is not pretending to have all the right answers. We're going to enter a process and get feedback. You mentioned a principles basis. This is my personal opinion and not that of the Academy. One of the reasons that there are issues with Actuarial Guideline 38 is because it talks about the intent, it talks about the spirit and it talks about the letter, but it doesn’t define "spirit." I think that different people feel that the "spirit" is different.

You've expressed your opinion. I know that it is one of the opinions out there. There are others out there, too. In the meantime, I think that we need to look forward, and we need to find a way of coming up with a principle-based methodology. What those principles are, I don't know. But they do need to be defined. You raise some valid questions on mortality. This is one of the issues with which the Universal Life Work Group is going to be dealing. Whether or not they need to change the Standard Valuation Law is a valid issue. I think that there are techniques to do stress mortality. There were some techniques that the group is looking at that were used for X factors. I think that there are some valid methodologies there. All of these things need to be discussed. As far as the time frame, well, how long have they been working on the nonforfeiture law?

MR. DE PALO: I expect this to go on long past I retire. So that is the time frame I have. But in the interim, we have to put this profession forward as one that we can count on, not just that 85 percent of actuaries are able to be relied on. If we're going to go to a principle basis, we're going to have to have peer review. We're going to have to have Academy-level standards. We're going to have to have a lot that's not in place. My only real concern is *talking* about it, while leaving in place what I'll call "tabular base valuation law." This is giving people the impression that this is something near-term. I don't disagree that it's a correct long-term solution, but it's long term. It's not something that will be resolved in a year or two years, because there's too much underpinning that has to be replaced if we're going to move in this direction. Too few people are involved with these topics. This is what I've been saying for the last 10 years. This is a fundamental issue for our industry. All actuaries have to get involved. This is something that reflects on our whole profession.

MR. CAMPBELL: Let me just add two things. You talked about peer review and standards. I think that the Enterprise Risk Management Group is looking at these things. They are working on it. The Universal Life Work Group is examining the more specific issue. I think that they're going to continue to look at this. I can see a solution put in place within the three-to-five-year time frame that the Enterprise Risk Management Group has set. Whether that happens, we'll see. I echo Mr. de Palo's comment that the more people that are involved in this, the better we are. This is not a closed group.

MARTIN R. CLAIRE: With regard to liquidity, I want to give people an early alert. Last week, in a phone call with the Life Insurance Council of New York (LICONY), it was mentioned that they're considering two changes. One change is that they're considering simplifying their liquidity questionnaire. They felt that now that they have 12 tables, they'll go down to four. On the flip side, they are considering getting rid of all exemptions. In other words, everyone would be required to fill out the liquidity questionnaire. They said that the reason that they're doing this is that, every now and then, the commissioner would ask how a company was doing on liquidity. The answer would be that it's an exempt company and there is no information on that. Those are two changes that they're pondering for this year-end.

MR. CAMPBELL: One thing that I want to add on the New York liquidity is that I hope they'll consider doing something along the lines of the old AOMR, so that companies that are exempt would only have to do this every three years. That way, they would address the issue that you mentioned, and it won't be overly burdensome for companies that are exempt.