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Track: Financial Reporting

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Panelists: Larry J. Bruning
                    Edward L. Robbins
                    Dennis P. Lauzon

Summary: This session provides updates on statutory reporting issues of current interest, such as state adoption of the 2001 CSO Mortality Table, tax issues related to adoption of the 2001 CSO table, reserving for variable products and other significant developments at the NAIC.

MR. LARRY J. BRUNING: I am chief actuary with the Kansas Insurance Department, and I also serve as a current Life and Health Actuarial Task Force member of the NAIC.

We have Dennis Lauzon presenting today. Dennis is the supervising actuary with the New York Insurance Department. Dennis is also a member of the NAIC's Life and Health Actuarial Task Force. Dennis has done a lot of work related to the Capital Adequacy Task Force on C-3 Phase II.

Our third speaker is Ed Robbins. Ed is a retired partner with KPMG. He is a retiring member of the Board of Governors of the Society of Actuaries. He has served on the tax subgroup of the variable annuity working group. Ed is currently senior actuary with Allstate.

We're going to begin with the discussion of the 2001 CSO Mortality table. I'm going

to give an update on state adoption of the 2001 CSO Mortality Table. Ed is going to talk about reserves under the new 2001 CSO Mortality Table. In particular, he'll talk about tax reserves and the tax implications of using the table in the definition of life insurance under Section 7702. Then Ed will give you an update on the variable annuity working group's work on the new variable annuity reserve methodology. Dennis will update you on the work done by the Capital Adequacy Task Force regarding C-3 Phase II. Then I will close with a discussion of the NAIC model law regarding standard non-forfeiture for individual deferred annuities.

The 2001 CS0 Mortality Table has been adopted in 28 states, is pending in six states and there has been no action to date in 16 states and the District of Columbia. The source of this data is the NAIC's model law and regulation Web site. It was about September 15 when we put the slides together, so there might have been some changes since that date. Now I'm going to turn it over to Ed, and he'll talk about specific issues regarding tax reserves under the new mortality table.

MR. EDWARD L. ROBBINS: I want to talk about two major subjects. One is the 2001 CSO table, tax aspects in particular. Then I want to move on to the work product of the Variable Annuity Reserve Working Group, of which I'm a member by virtue of being on the tax subgroup of that working group. On the 2001 CSO table in particular, I'll be talking tax reserve issues first and product issues second. If there were some of you in the product session earlier today, some of this was already covered.

The 2001 CSO table became prevailing in 2004. By about July, the table was approved by 26 or more states. What does that mean? It basically means, according to Revenue Ruling 87-26 and Revenue Ruling 92-19, that you go all the way back to the first of the year to ascertain what policy issue dates are covered in the year that a table becomes prevailing. In other words, for issues beginning January 1, 2004, you may use the 2001 CSO table. You have option years through issues of December 31, 2007, during which you can use either 2001 CSO or 1980 CSO. You have your choice.

I would like to make a few comments about the 2001 table. As many of you know, it's a 25-year select table. However, for tax reserves you don't use select factors, at least up until now. There was a section of Revenue Ruling 92-19 that stipulated, when referring to 1980 CSO, using the 1980 CSO table "*without select factors.*" That was based on the concept in the Internal Revenue Code Section 807(d), that where you have an option under two or more tables, or an option of more than one approach under a given table, you use the table that generally gives the lowest tax reserve. That concept is to be applied on an industry-wide basis. Treasury came to the conclusion on 1980 CSO that ultimate values generally give the lowest reserves. So for tax purposes, we're talking probably ultimate values for 2001 CSO. There is a 2001 Academy report that was given to the Life and Health Actuarial Task Force (LHATF) that indicated that ultimate mortality rates on the 2001 CSO table generally give the lowest reserves. We're anticipating that Treasury will follow

that.

I want to talk a little about the coordination of the 2001 CSO table under the 2001 CSO Model Regulation with the Valuation of Life Insurance Policies Model Regulation, also known as Regulation XXX. It coordinates well with the new table. Basically, the 2001 CSO Model Regulation steps through Regulation XXX and substitutes the 2001 CSO table wherever the 1980 table had existed. Watch out for a few things. For example, there is a tabular cost minimum in Regulation XXX. While for 1980 CSO there is a 10-year set of select factors in determining the tabular cost that can be used for statutory purposes, there is no corresponding 10-year select factor set for the 2001 CSO. You must use the ultimate table for tabular cost minimum reserve purposes.

Also, regarding the "triple test" with which some of you are familiar in paragraph 3 of Regulation XXX, as to whether a universal life policy with secondary guarantees is exempted from the regulation, the net level premium that you use to compare with the specified premium is based on ultimate 2001 CSO values. Further, there's an exemption part of Regulation XXX that talks about yearly renewable term insurance and n-year renewable term, exempting them from requirements to calculate unitary reserves. Here again, they speak to 1980 CSO with 10-year select factors, and here again the ultimate 2001 CSO values must be used.

Why am I dealing with select versus ultimate on the rules in XXX, when for tax you're suppose to use ultimate values anyway? Well, for a lot of term insurance, the use of select factors for statutory purposes puts an upper limit on the federally prescribed reserve, so the statutory rules end up affecting your tax reserves after your statutory comparison.

I'm going to quote Dan McCarthy for a moment. He once said, "A statute is like a ship, and regulations are like barnacles on a ship." When you have various laws that don't necessarily coordinate well with each other, you end up with some somewhat anomalous results. When you talk statutory versus tax code and regulations, you can end up with a few anomalous results. I want to pick on one of these results in particular, group permanent life. I'm referring to both group universal life (UL) and traditional group ordinary. There is in Regulation XXX a complete exemption for UL without secondary guarantees and for UL that passes the "triple test." That completely takes UL outside of the regulation. It doesn't simply exempt such plans from Section 7 of the regulation (which deals with UL with secondary guarantees); on the contrary, such insurance plans are completely outside the scope of Regulation XXX. Meanwhile, the Standard Valuation Law does not cover group insurance. The tax regulations, Section 1.807-1(a), stipulates that in the absence of a 26-state prevailing mortality table for group permanent business, you must use the individual table applicable to male lives. Of course, when a table becomes prevailing, it "trumps" Section 1.807-1(a). So here's what we have. You've got your triple test, which is a specified premium greater or equal to the net level premiums of the secondary guaranteed period, a secondary

guarantee period less than or equal to five years and an initial surrender charge at least equal to 100 percent of the specified premium.

So what does that mean? In the analysis below, for simplicity, I'm ignoring pre-1982 issues, since they are no longer important. I'm also ignoring the three option years following the year a table becomes prevailing.

For traditional group permanent policies and also group UL that fails the triple test and thus falls under Regulation XXX, issues of 1982 to 1999 use 1980 CSO male, issues of 2000 to 2003 use 1980 CSO sex-distinct, and issues from 2004 and on use 2001 CSO sex distinct.

For group UL that passes the triple test and for group UL with no secondary guarantees, which is your typical group UL product, you ignore XXX completely. Likewise, for group variable life, you simply use the individual table applicable to male life all the way through for tax purposes. That is, for issues from 1982 to 2004 use 1980 CSO male, and for issues from 2004 on, use 2001 CSO male.

I dealt with the issue of "without select factors" because it looks like we're probably past the issue of Treasury probably coming down on the side of the ultimate table producing generally lower reserves. That's probably the way it's going to go.

Just to give a rough sense of quantification for tax purposes, mortality rates are generally 10 percent to 20 percent lower for the broad range of ages. The Universal Life Model Regulation reserves (Commissioners Reserve Valuation Method, or CRVM) after the cash value comparison are close to the 1980 CSO level, partly due to the cash value floor. I want to give my appreciation to Aon Consulting's 2002 "Research Brief" that supplied this data and also some other data that I'll be showing you in a few minutes.

Policyholder taxation has been by far the most controversial 2001 CSO issue. It has been a major concern of the ACLI and of practicing product actuaries and tax actuaries. Policyholder taxation aspects of 2001 CSO were a major concern up until September. The reason for the concern was that, once a table becomes prevailing for tax reserve purposes for Section 807 issues, it becomes the maximum allowable table for the computational limits under Sections 7702 and 7702A, that is, for the computation of guideline premiums, net single premiums and seven-pay premiums. Imagine this scenario: The new table is adopted in 30 states in 2004, with 20 states still on the 1980 CSO table. Then what do you do? In a non-adopting state on a traditional whole life policy, you've got a real problem, absent any Treasury guidance. This is because for policies under the cash value accumulation test (most traditional permanent policies), your minimum non-forfeiture value happens to be greater than your maximum Section 7702 net single premium, the result being that you can't issue such a policy in a 1980 CSO state. It's an outrageous result. On the other hand, if you have a guideline premium product, your normal mode of actuarial memo demonstration that your non-forfeiture values are greater than

minimum is, using the account value as your net level reserve, to show that the net surrender value exceeds the account value minus the unamortized maximum allowances as stipulated in the Standard Nonforfeiture Law (SNFL). Keeping the analysis straightforward, a company would normally prefer that the SNFL mortality rates in the test be used for the guaranteed mortality charges in the contract and equal to the prevailing mortality table (in order that the account value be equal to the net level reserve). If a state has not adopted the 2001 table, then the prevailing table would not be equal to the other two bases. Thus, companies that are subject to 1980 CSO as a requirement would tend to use 1980 CSO for their mortality guarantees as well. That basically means that, using the 2001 CSO computational limits, the policy will not be allowed to mature under its guarantees in the 1980 CSO states. The guideline level premiums are going to be less than the amount necessary to fund your contract to maturity under the contract guarantees. It's not an insurmountable problem, but a bit of a concern.

The IRS was extremely accommodating in its issuance of Notice 2004-61 in September 2004. It set the latest date for conversion of policy forms for computational limit purposes as December 31, 2008, which happens to be the same as the latest date in the 2001 CSO Model Regulation for use of the l980 CSO tables, and it allowed for a form-by-form, state-by-state transition during that time. That was more than we expected. We had expected a matching to the three-option-year structure that existed for tax reserves under Section 807, so this extension was a very favorable conclusion.

That said, some of the exchange rules are somewhat complicated. The notice speaks to any change in guarantees, i.e., interest, expense or mortality, as a deemed new policy. If you've got a 1980 CSO contract on which you change any of those guarantees, all of a sudden it is deemed a new issue for mortality table purposes under Section 7702, therefore falling under the 2001 CSO computational limits. That can be a real problem. I would caution you to be very careful about these grandfathered blocks of business. Don't make any changes to them without careful consideration. If your contract at issue allowed you to make those changes, then it's not a problem.

One of the major issues is what is considered a change of interest rates. A lot of companies declare interest rates once a year on their policies. I've been told by informed legal counsel that that type of interest rate change is not a *real* interest rate change; it's more in the nature of a dividend under Section 808. The IRS is not particularly worried about that type of change of interest rate. One IRS official has opined that five years might be a little too much. The Regulations Section 1.848, which deals with the deferred acquisition cost (DAC) tax, speaks to a 10-year threshold; one year is not a problem.

The notice, while it resolved the arguably largest problem, left a few other issues unresolved. Let me mention a few of them.

The Service has not really grappled with how to define the computational limits for substandard lives. There has been a lot of talk about simply multiplying the guaranteed cost of insurance (COI) by the substandard multiple. That would be one ideal solution. Tax practitioners deal with a lot of unresolved questions and do the best they can. One of the precepts that we go by in this business is that you make your best interpretation of the law, you write it down and you follow it. Another issue also arises under substandard lives. The Conference Agreement to the 1988 Technical & Miscellaneous Revenue Act (TAMRA) spoke to the issue of what falls under adjustments to the mortality assumption for substandard lives. It referred to impairments of which the insurance company is aware, which left out guaranteed issue and simplified acceptance. Credence was given to where a state *requires* you to limit your underwriting (for example, when the District of Columbia years ago prohibited blood testing for a while), but that was obviously not extremely helpful.

For multiple lives under a policy, either first to die or last to die, the IRS has not grappled with that issue either.

The last of the unresolved issues that I'd like to talk about is that the new table actually goes to age 121, the last q_x value being at age 120. That gives us several issues. Section 7702(e)(1)(B) stipulates that when you calculate your computational limits, you must deem the endowment date to be between ages 95 and 100. What do you do with a mortality table that goes to age 120? There are two major issues here. Can you continue to pay premiums beyond age 100, and will the guideline level premium limit continue to accumulate past age 100? We don't know. Also, the guideline level premium for Option 2 under the 2001 CSO table going to 120 happens to be bigger than the Option 2 guideline level premium under 1980 CSO going to 100. I would caution you on your product design to be aware of that possible concern.

Generally, the computational limits have decreased, i.e., become more restrictive, which is to be expected. The significant exception is the Option 2 guideline level premium to the maximum age of the table. At age 25, the Option 2 premium for 1980 CSO endowment at 95 is $20.36, and for 2001 CSO endowment at 120 the Option 2 premium is $32.53. That's illustrative of the issues with which we're dealing.

Let me turn now to the second subject that I'm speaking about, which is the work of the Variable Annuity Reserve Working Group (VARWG). There has been some new authoritative guidance work in process for a new variable annuity (VA) Commissioners Annuity Reserve Valuation Method (CARVM) draft. It's a huge draft. It's going on about 60 pages now, which is approaching about 50 percent of the red Jordan. It's pretty complicated. In consulting we used to say that the definition of an expert was that you, too, could be an expert if you define the field narrowly enough. But this one is going to be a tough one to get your arms around.

Basically, the VARWG is in a hurry for this because Guideline XXXIX, which deals

with variable annuities with guaranteed living benefits (VAGLBs), "sunsets" on January 1, 2006. The new VA CARVM guidance also is expected to replace two guidelines, not one: Guideline XXXIV, which deals with minimum guaranteed death benefits, and Guideline XXXIX, which deals with guaranteed living benefits.

There are basically three bodies of people that are working on this. In addition to the VARWG, there is the Life Capital Adequacy Task Force, which is dealing with a like approach for risk-based capital (RBC) and which the VARWG is attempting to mirror for reserving method. Finally, there is the tax subgroup that I'm on.

It's still rolling along; it's still in progress. They're hoping to have an effective date of December 31, 2005, on it. It borders on the unrealistic perhaps, because there's a large amount of work to be done. There's also a question as to whether it's going to be a guideline or a model regulation. It looks like they're headed toward the guideline alternative right now.

As I said, the draft guideline is modeled after the C-3 Phase II project, which is basically a stochastic approach to total asset requirements of variable annuities. There are a few differences. The reserving approach is basically a pre-tax approach and it's based on 65 CTE, while C-3 Phase II is post-tax and based on 90 CTE. What does 65 CTE mean? CTE stands for "conditional tail expectation." The "65" means that you take the worst 35 percent of your scenarios and average them, and that's your reserve. The "90" CTE means that you take the worst 10 percent of your scenarios and average them, and that's where the total asset requirement (TAR) falls. The TAR minus the reserve will equal the C-3 (common stock) element of the company action level RBC formula.

The scope of the draft guideline includes all guarantees on variable annuities, death benefits, guaranteed payout annuity floors, income benefits, accumulation benefits, withdrawal benefits and earnings enhancement benefits. Interestingly enough, the draft guideline speaks to variable universal life as well. It says that where you have no other explicit authoritative guidance on a given variable universal life benefit, then the stand-alone guarantee gets lumped into this particular guideline. So, for example, guaranteed living benefits on variable UL would fall under this guideline as well.

You might not have to do stochastic testing. Let me explain why not. You've got your stochastic 65 CTE reserve, as your so-called baseline reserve, with 10,000 scenarios or whatever. Available as well is an alternative methodology reserve. What is that? The alternative methodology was developed by a special group of technical experts. It basically consists of an Academy software package that's currently out on the Web. Anybody can grab it. I'll talk about that in a moment. It can be used in certain circumstances as a substitute for the stochastic reserve for those who don't want to do stochastic testing.

The standard scenario reserve is a seriatim minimum floor to the entire reserve. In

other words, you perform your standard scenario reserve for each policy, and the total of that number over all your policies in the block becomes your reserve floor.

Your stochastic reserve is gross before federal income taxes. It allows for hedging, and it has certain requirements for hedges. It uses what they call a "calibration points" approach. What "calibration points" means is that you want the tails of your distribution that you're using to be sufficiently fat. For example, they use the term "gross wealth ratio" in the guideline. The meaning of "gross wealth ratio" is best given by example. If you take a dollar of asset value and you compound it along the growth rates of your random path, you might have a gross wealth ratio of 1.4 at the end of five years, for example. If the probability of your gross wealth ratio being less than say 80 cents on a dollar is less than 5 percent, and 5 percent is the calibration point in the guideline for that duration, you've got a problem, that is, your tail is not sufficiently fat. The draft basically says that you can choose any reasonable probability density function for your growth tests, but you've got to perform the calibration points testing to assure that the tails of your distribution are sufficiently robust.

The alternative methodology is a very simple formula on the surface. Anyway, I've got to tell you that it's a very complex process inside the black box that the Academy has provided. Any one of us can download the package from the Academy and calculate the required addition to the cash value to obtain the reserve. Inside those factors is a very complex process. You've got over 80,000 factors (nodes) inside the package. Those nodes consist of functions of seven variables mentioned in the draft guideline. Those variables include the following, for example: plan (return-of-premium, 5 percent roll-up, etc.), attained age, policy duration and the money-ness of the contract (how much in the money or out of the money the contract is at the valuation date). It calculates the components of the reserve for the contract as the excess needed above the cash surrender value.

The alternative methodology is a very complex internal "black box" process, but it's a very easy one to use if certain conditions are satisfied. You cannot use it for a contract that contains VAGLBs. Also, if, on a given contract, you had used the stochastic method previously, you cannot go back to the alternative methodology without the consent of the commissioner. Perhaps most important, if your plan doesn't resemble one of the package plans, you may have a major obstacle to using this method.

I've given a brief description of the 80,000 factors, or "nodes." It also uses what we call a "multivariate linear interpolation" approach from the factors that you extract to get the final coefficients to obtain your reserves. We know of one major company that's definitely going this way. Once it's set up, it's possibly an easier approach than stochastic. That major company doesn't have much in the way of living benefits, so it can use it pretty much with impunity. But for those of you with both a living benefit portfolio and a death benefit portfolio, you could use the alternative methodology on the latter portfolio. In other words, you're allowed to use the

alternative methodology on part of your block and stochastic on the other. However, you do lose a little of the benefit of aggregation when you do that. You're certainly welcome to do it. In summary, the alternative methodology is a deterministic, seriatim approach, and it is a potential alternative to the stochastic approach.

Dennis Lauzon is going to go into detail on the standard scenario. This is one in which the tax subgroup is extremely interested.

For those of you who are doing, for example, a September 30 reserve in anticipation of year-end, in order to divert the workload off of December 31, there have been two methodologies suggested for projection of the results of year-end. Those methodologies are planned to eventually be elaborated upon in a practice note. The interpolation method gets pretty good results. We've tried it on some models, and it appears to replicate well subsequent stochastic results as of December 31. It's a rather intensive approach, however. The projection method is easier and less accurate, we think.

I have just a few final comments. These are personal notes; they are not official commentary or official conclusions from the group. The standard scenario, modified for the tax assumptions and so forth, should be deductible. It's a seriatim calculation. It uses a recognized mortality table and an assumed interest rate. So it has all those tax-favorable elements going for it. The alternative methodology is not as attractive from a tax perspective, but some of us feel that we might be able to shoehorn it into deductibility as well. We'll know in about five years as cases and rulings evolve. The stochastic reserve is the least attractive from a tax deductibility perspective. Properly allocated, some of us feel that the stochastic method may have some value in increasing the statutory cap.

MR. DENNIS P. LAUZON: Thank you, Ed. Any views I express are my own and not those of the New York State Insurance Department, unless explicitly stated. I'll be spending most of the time covering the C-3 Phase II project. Then I'll spend a little time on the long-term-care RBC proposal, risk-based capital for reinsurance and Actuarial Guideline (AG) 38.

The RBC Task Force prior to this year worked with Life, Health and Casualty working groups. In the restructuring of the NAIC, those groups were done away with, and only the Capital Adequacy Task Force (CADTF) was left. This made it much more difficult for the CADTF to do their work because they had to go into details on all the issues that in prior years would have been covered by the work groups. In response to this, the CADTF developed subgroups. At the last CADTF meeting, the chair of the CADTF, Lou Felice of New York, said that he was going to recommend that the NAIC bring back the work groups next year. We'll have to wait and see whether that happens.

For long-term care (LTC), the Academy recommendations on RBC used the same

approach that was used in the recommendation on RBC for disability income. The Academy's recommendation was exposed on a conference call between the September and December CADTF meetings. The CADTF will follow up on LTC in December based on comments that are received.

There have been some issues on reinsurance, and I want to touch on these quickly. New York has raised concerns with the reduction in RBC for credit risk. When a company uses unauthorized reinsurance to reduce reserves, the RBC can disappear. Is that appropriate when it's done through unauthorized reinsurance? The assuming company is not picking up the RBC that's being removed by the ceding company. The Academy was asked to look into this. Their initial thinking is that maybe there should be a credit risk charge applied for the RBC that is released by the ceding company.

A second concern is that when reinsurance is unauthorized, it is supported by trust funds or letters of credit, and these are held on a market basis. Liabilities, on the other hand, are held on a book basis. Is there is a C-3 risk? Should there be C-3 requirements because there's a difference between the way assets and liabilities are accounted for under unauthorized reinsurance?

There also seems to be a lot of concern about reinsurance letters of credit. Although letters of credit have to be evergreen and renewable, their costs are not fixed, so there is a risk in unauthorized reinsurance that the cost of the letters of credit could skyrocket.

A final note on reinsurance is that the LHATF is considering updating the NAIC model for reinsurance. However, it doesn't look like the model will be opened for changes.

Now let me review the C-3 Phase II standard scenario. This scenario would be a floor on C-3 Phase II requirements. It was recommended for both reserves and RBC by the New York State Insurance Department. It's a single scenario with specified assumptions. The reserve standard scenario is similar to the RBC one. The reserve calculation is a seriatim contract-by-contract calculation, whereas the RBC calculation is in aggregate. The reserve standard scenario calculation is a pre-tax calculation and the RBC calculation is a post-tax calculation. The assumptions underlying the reserves are less severe than those underlying RBC.

In general, given the same CTE level, say 65 percent or 90 percent, a pre-tax amount is higher than a post-tax amount. So on tax assumptions alone, the RBC calculation would come out lower than the reserve calculation if they were both done at the same CTE level.

What were some of New York's motivations for a standard scenario? First of all, as a floor, it's a barrier to unreasonably low reserve calculations. It is a reasonable transition to requirements that are totally the responsibility of the actuary from the

current requirements, which are formula minimums. Also, the standard scenario could be used to compare results over time. If a company is using a projection, let's say from September to year-end, you could look at the standard scenario at both places in time and have a way to compare whether that projection is lining up with the changes and the standard scenario. If a company is using a model office to do its stochastic work, which we assume most will, you can look at the standard scenario applied seriatim and on the model office and see how close they are as a validation tool for the model office. The standard scenario can also be used to compare the stochastic results to the standard scenario results from year to year. The standard scenario is a way to help validate some of the moving parts.

The standard scenario uses a discount rate (DR), which is the 10-year constant maturity Treasury rate in the month just prior to valuation, plus 50 basis points. For the reserve standard scenario, there have also been some calculations where the discount rate will also be looked at as the applicable federal interest rate in the year the policy is issued. For the RBC scenario, the equity returns are given a 10 percent immediate decline followed by a 10 percent decline in the first year and then subsequent returns at the DR rate, which is the 10-year Treasury plus 50 basis points.

We based the returns for the standard scenario on the Academy's set of prepackaged scenarios for bonds, Treasury and equity funds. The prepackaged scenarios have correlations, so that the 10,000 prepackaged scenarios for these different fund classes are correlated. When you look at the average of the worst 35 percent of the equity returns in the prepackaged scenarios as a 65 CTE estimate of where you should be for one scenario and you look at the corresponding bond returns that are correlated to those equity returns, they are pretty close to the average returns for bonds over all scenarios.

The worst 35 percent of equity returns are not highly correlated to the corresponding bond returns. The bond returns correlated with these equity scenarios look pretty much like average returns. The standard scenario follows suit, and there's not a lot of conservatism in the bond fund returns in the standard scenario. Bond returns in the standard scenario are zero percent the first year, followed by the 10-year Treasury plus 50 basis points in years thereafter.

The fixed account returns for the contract holders are the guaranteed rates of the fixed account plus a margin. The standard scenario provides a margin for the contracts, and it looks at how the projection of that margin compares to the guarantees and the cost of guarantees. Based on the scenario and the margin, the standard scenario determines how much the reserve is for the guarantees. The revenue or margin that's provided during the surrender charge period is approximately 30 basis points—10 basis points plus the maximum of 20 basis points or your actual guarantee charges. If guarantee charges are not stated explicitly, there is an allowance of 20 basis points. After the surrender charge period, the margin is approximately 65 basis points, or, if less, 50 percent of any

remaining margins over the margins already being recognized. The mortality assumption in the standard scenario is 80 percent of the MGDB table.

Standard scenario lapse rates varied in three dimensions. They varied by whether a contract was in the money or out of the money. They varied by the type of guarantee, whether it was a guaranteed minimum death benefit, guaranteed minimum accumulation benefit (GMAB) or a guaranteed living benefit (GLB). Lapses also varied by whether a contract was in the surrender charge period. So, for instance, all the death benefits had a 5 percent lapse rate during the surrender charge period and a 10 percent lapse rate thereafter. It doesn't make a difference on lapse rates whether the death benefits are in the money or out of the money. Guaranteed living benefits that are out of the money have the same lapse rates as death benefits—5 percent in the surrender charge period and 10 percent after the surrender charge period.

For GMAB benefits, lapse rates are zero if the GMAB is in the money. Essentially we're looking at a GMAB as a rate of return guarantee. For other guaranteed living benefits that are in the money, the lapse rate was 3 percent during the surrender charge period, 7 percent after the surrender charge period if the benefit was in the money 10 percent or less, 5 percent if the benefits were in the money between 10 percent and 20 percent and, if the benefit is in the money more than 20 percent, the lapse rates were reduced to 2 percent.

The assumptions for guaranteed withdrawal benefits had two dimensions, based on age and on whether the guaranteed withdrawals impacted other guaranteed living benefits. For someone less than age 50 with guaranteed withdrawals that wouldn't have an effect on other guaranteed living benefits, election rates assume the contract holder would take advantage of 50 percent of the amount he or she could withdraw, but not less than any minimum withdrawal. This election rate would go up by age. From age 50 to 59 it was 75 percent, and at age 65 plus, election is 100 percent of any guaranteed withdrawal benefits. If the guaranteed withdrawal benefits would reduce some other benefit, like a guaranteed minimum income benefit (GMIB), or the contract holder gives something up to take the withdrawal, those withdrawal rates are reduced. For instance, under age 50, they're reduced from 50 percent to 25 percent, etc.

There were also assumptions for other election rates. How fast are people going to make election rates on other benefits? Basically, the standard scenario says that whenever a benefit is in the money, you should assume that 15 percent of the people make an election to exercise the benefit, as long as it doesn't reduce a more valuable living benefit that's in the money. It's not sensitive to whether they have a death benefit or not, but if there's a living benefit, it's a 15 percent election, except if it's the last time that they can exercise the benefit. If it's the last time that they can exercise it, then 100 percent election is assumed if the benefit is in the money.

The tax rate assumption only applies to the RBC scenario. It is 35 percent, the

same as underlying the alternative methodology. The tax rate is applied as a marginal tax rate, but one could question whether there should be some kind of reduction for prudent best estimate since, as I have already pointed out, a lower tax rate would produce higher results. Is it a good idea to assume the maximum tax rate in this situation? Nevertheless, the tax rate for the standard scenario is 35 percent.

The standard scenario also asks for runs besides the floor seriatim calculations on the statement date. As I already mentioned, if you use a model office, you're asked to do the calculation on the model office. If you have a prior in-force, you're asked to do the calculation on that prior in-force.

After you've done the standard scenario calculation, you're allowed to make adjustments for hedging. Any hedges currently held are put through the standard scenario to see the value that they return. The value is deducted from the standard scenario reserve, but you can't reduce reserves below an AG 33-type reserve. The same thing goes for non-proportional reinsurance. You reflect that after the fact, by looking at what the non-proportional reinsurance would do under the standard scenario. The non-proportional and hedge adjustments are combined. Together they can't lower the total reserve to an amount less than the AG 33-type reserve. Any proportional reinsurance you reflect in the model projections, you also reflect in the standard scenario calculations.

There's some provision in the standard scenario for indexes. If you have an equity index that influences a reinsurance contract, then you have to assume that equity index follows or is consistent with the equity scenario placed in the standard scenario. Similarly, if you have interest indexes that are part of a reinsurance agreement, then you have to share that interest rate going forward from the statement date.

The reserve for the standard scenario is calculated twice. It is run using the 10-year constant maturity plus 50 basis points and compared to results of running it again, using the applicable federal interest rate for each contract based on the year it was issued. The higher of the two reserves is the standard scenario reserve.

There are some issues with the standard scenario. For reserves, one is the aggregation issue. When we aggregate the results on the RBC side and we compare it to a contract-by-contract calculation on the reserve side, it's possible that the reserve number might exceed the RBC number. The major cause of this is aggregation, but there is also the pre-tax, post-tax difference. The fact that RBC is a post-tax number actually lowers the amount.

What are some of the possible solutions to that? New York has recommended using a 95 percent CTE on the RBC side. That would be the same number that is used in the Canadian segregated fund requirements. However, the Canadian segregated funds requirements are based on the Canadian asset liability method, which is

generally not as strong as the statutory reserve method. It has certainly been pointed out that comparing to the Canadian 95 CTE is a little like comparing apples and oranges.

New York has also noted that the equity calibration points are based on a 50-year history of the S&P 500 in which price/earnings (P/E) ratios have been increasing and where the underlying average equity return is 13 percent. We think that's too high and that it should be adjusted. If those calibration points were adjusted down and the mean return was reduced, that would have more of an impact on the RBC because RBC is done at a lower calibration level than reserves.

The Academy has come out against the standard scenario. They note that it is inconsistent with the whole stochastic process. They have concerns that it might dominate the stochastic results and, therefore, reduce the motivation to do stochastic analysis.

Another issue that we have with the C-3 Phase II results is the oversight issues. C-3 Phase II is known as a principle-based approach. The actuaries are going to be deciding what mortality tables, what lapse rates and even what processes and methods are going to be used. The whole question is whether there's a regulatory structure in place to provide oversight to this market value principle-based approach.

One thing I would note is that the Sarbanes-Oxley Act required the SEC to do a report on the principle-based approach. The SEC did the report and in it suggested that FASB go ahead and move to a principle-based approach. The International Accounting Standards Board (IASB) uses a principle-based approach, and FASB has agreed to move toward convergence with the IASB standards. We can see that the principle-based approach is becoming more of a standard in many areas. It's practiced elsewhere, for example Canada, Australia, the United Kingdom and the European Union. But there can be oversight issues with the principle-based approach, as indicated in the SEC report. There has been a joint LHATF /CADTF subgroup formed to look at some of the oversight issues. The subgroup has been considering the role for self-regulation and the role for state regulation.

In terms of self-regulation, one of the avenues to oversight is peer review. Peer review was very important in the SEC report. Of course, the SEC report is talking about auditors and peer review of GAAP statements. The report notes that the peer reviewer should be hired by the audit committee of the board. All the points that the SEC made on peer review and its importance in a principle-based approach would apply to actuarial certifications of reserve statements.

Another key to oversight is to require some kind of back testing. Companies have to indicate how closely their models apply to actual historical information. There needs to be a demonstration on how well the model approximated what actually happened. Back testing is one of the main requirements for banks using an internal

risk-based approach. They need to back test their models and verify that they work.

Another important piece of self-regulation is for a company to have good governance. In fact, the SEC said of the principle-based approach that there would be a lot of difficulties with it if the Sarbanes-Oxley Act hadn't already emphasized the need for governance. The fact that this governance is going to be put in place makes the advantages of a principle-based approach much more likely to be realized and the disadvantages a lot more likely to be avoided. As part of the joint LHATF/CADTF subgroup work, Washington, D.C., will take the lead on governance.

Another avenue to oversight is consistent integration in the company. If a company is using a certain mortality assumption in its stochastic analysis, it should not be inconsistent with pricing or management of hedging. Those mortality assumptions are not necessarily the same, but at least they are somehow consistent with pricing and management of the business.

Another important part to self-regulation and oversight is report standards. If we lay out in enough detail what we want the reports to look like, that will go a long way to help oversight. The SEC report on a principle-based approach emphasizes how important it is to document how the principles are met, in order to avoid second-guessing after the fact on whether the reserves set-up met the principles. The SEC report also calls for significant guidance so that the range of outcomes that might result can be limited. Washington, D.C., has also taken the lead as part of the joint subgroup on report standards.

Another avenue to self-regulation is model validation. How does an actuary demonstrate that the model seems to be working right or that the process is working right?

One avenue of state regulation oversight is regulatory discretion. If the regulators disagree with what has been produced by this principle-based approach, how do they avoid a long series of haggling and getting bogged down in disagreements and arguments? How do you build in regulatory discretion in either the actuarial guideline, if that's how the reserves are put forward, or in the instructions for RBC? Texas has agreed to take the lead on this issue for the joint subgroup.

Another oversight issue is the procedures regulators should have in place when they perform an examination for this kind of approach. Texas is also taking the lead on exam procedures. Both Texas and Washington, D.C., have asked the Academy to help them formulate some views on how these oversight issues should be addressed.

The joint subgroup also is looking at the NAIC avenues to oversight. How might the NAIC help? One possibility is with the training of regulators. C-3 Phase II can be a very complicated process. It has already been suggested that at the NAIC annual

meetings there be some training sessions on hedging and how it is used by companies.

One of my main concerns with C-3 Phase II is how to keep standards on a national basis. Because this stochastic testing is so difficult, it would fall under its own weight if there were 50 different sets of instructions on what to do and how to do it. That's why it's important to maintain national standards.

The NAIC might have a role in reviewing results so that there is a comprehensive look at any problems with the reporting that's being done. Also, to maintain national standards, something like the Health Reserve Guidance Manual could be developed for C-3 Phase II. A C-3 Phase II guidance manual would have a stronger impact on requirements than practice notes from the Academy. There might be a lot of items the Academy has in its practice notes that would be incorporated in a guidance manual. A guidance manual would provide a focus to update requirements. Especially in the first few years as experience is gained, there will be changes to requirements, possibly some additional checking or analysis. For example, suppose lapse assumptions are not supported. Then some additional information to support lapses would be required. After a few years experience, it would be appropriate to update the guidance manuals to tighten the range of outcomes that can happen, given the facts and circumstances of a particular company.

Finally, it's possible that the NAIC could serve as a source of centralized expertise. For example, a state has a company that is using a new mathematical way to reduce the number of scenarios they need to test. The company doesn't have to do 1,000 scenarios anymore, and it has this complicated mathematics that shows it's all right. Maybe a centralized source of expertise is needed to turn to and ask whether the mathematics looks okay or not. That's another role that the NAIC could provide.

I did consider whether the Academy could play a role in guidance even though they are not a part of the NAIC. We know that FASB is not a part of the SEC, and yet they provide guidance for GAAP accounting. NASDAQ provides guidance in their industry. That was one of my original thoughts; however, LHATF decided to go the guidance manual route. We'll have to see how that works. The guidance manual could end up being very time-consuming. Maybe at some point LHATF would delegate the guidance manual to experts with enough expertise that LHATF would be confident the guidance given was professional.

What are the issues and outlook for the C-3 Phase II approach? One issue is revenue sharing. In this analysis, a company is allowed to use some of the revenue they get from the mutual funds to offset their reserves. This is revenue that's not coming out of the insurance contract cash flows but is coming out of contracts or maybe even handshake agreements with the mutual fund company. This issue is going to be looked at by LHATF.

Another question that is open is the definition of "prudent best estimate." The Academy has recommended prudent best estimate for the non-stochastic assumptions other than returns. For instance, mortality and lapse assumptions are to be best estimate plus a margin for uncertainty. It's not clear what the total of those prudent best estimates imply for the total valuation. New York recommended that when you look at all the experience factors, you should be achieving the 65 CTE in aggregate for the reserves and the 90 CTE for RBC.

There are still some questions on accounting for hedges. There are issues on how to get the RBC proposal into the instructions. There are some questions on the mortality assumptions. For risk-based capital, 100 percent of the MGDB table for the alternative methodology has been exposed, based on New York's recommendation. The Academy recommended 65 percent. What has been exposed for reserves is the 65 percent of the MGDB recommended by the Academy. New York has recommended that that be pushed up to 85 percent. The Academy is thinking of an approach were a company could use an interpolation of both the 100 percent and 65 percent factors, based on the company's own mortality, although nothing specific has yet been recommended.

Let me just spend a minute on AG 38. AG 38 is an actual guideline for secondary guarantees for universal life, among other things. There has been some question as to whether certain universal life secondary guarantees designs are following the principles of AG 38. Last Friday, LHATF had a conference call, and at that conference call it was decided, by a fairly large majority, that AG 38 should be revised. A proposal by New York for the revision was exposed for comment. There will probably be some discussion on the follow-up conference call and at the New Orleans meeting in December.

Another part of what was happening with AG 38—this was sort of interesting—is that a Form B was submitted to the NAIC Emerging Issues Accounting Working Group (EIAWG). A Form B is a request for accounting guidance. AG 38 has this principle-based wording in it that an unusual design should set reserves equal to more typical designs. Someone interpreted that to mean no additional actuarial guidance is needed on AG 38 and additional guidance could be given by an accounting interpretation. I don't think that it was ever the intent that a decision would be made without LHATF input. The first thing the EIAWG did with the Form B was to send it to LHATF for their input.

An RBC proposal on long-term care has been exposed for comment. Some comments express concerns that RBC is based on incurred claim, which can be more volatile than the current premium requirement. Other concerns are that the RBC proposal doesn't directly address interest and lapse rates that have been part of the reason for recent rate increases.

MR. BRUNING: Thank you, Dennis. The last topic I will cover is the Standard

Nonforfeiture Law for Individual Deferred Annuities. This is a new NAIC model law. I'm going to highlight the major differences between the new and the existing law. The first difference is the removal of the difference in expense loads between single premium contracts and flexible premium contracts. Under the old law, for a single premium contract, the minimum nonforfeiture value was calculated by taking 90 percent of the difference between the gross consideration and a $75 contract fee. You then accumulate that value at a 3 percent interest rate. Under the old law, for a flexible premium contract, the minimum nonforfeiture value was calculated by taking 65 percent of the difference between the gross considerations in the first year less $1.25 for each gross consideration and a $30 annual contract fee.   You then accumulate that value at a 3 percent interest rate. For renewal premiums on a flexible premium contract, the minimum nonforfeiture value was calculated by taking 87.5 percent of the difference between the gross considerations in the renewal year less $1.25 for each gross consideration received in the renewal year and a $30 annual contract fee.   You then accumulate that value at a 3 percent interest rate.

Under the new law, the minimum nonforfeiture value is calculated by taking 87.5 percent of the difference between the gross considerations and a $50 annual contract fee. You then accumulate that value at an interest rate. What is the interest rate under the new law? The interest rate is the five-year constant maturity Treasury on a particular date (or you can use some average of the five-year constant maturity Treasury rate) less a spread of 125 basis points, subject to a minimum rate of 1 percent and a maximum rate of 3 percent. What you have is a minimum nonforfeiture interest rate that can float between a low of 1 percent and a high of 3 percent. The new law also allows a company to re-determine the interest rate. The five-year constant maturity Treasury (CMT), or its average, must be within 15 months of the issue or re-determination date of the policy. For example, you could not use five-year CMT rates that were 30 months prior to the issue or re-determination date. Whatever formula you use, whether you use the five-year CMT on a particular date or you take some average, the rate or rates used in the average have to be within the prior 15 months of issue or re-determination.

The new law also specifies that if there is a substantial equity index benefit in the contract (or a substantial equity index bucket if there are multiple buckets inside the annuity contract), the contract may be eligible for up to an additional 100 basis points of spread. The 125 basis points could be increased to 225 basis points in such contracts. The new law allows the commissioner of insurance to require the actuary to provide a demonstration that the present value of the additional basis point spread does not exceed the market value of the equity benefit.

The other major change in the new from the old law is that under the old law, the company could reserve the right to defer payment of any cash surrender value for up to six months. That was a standard provision that you would have found in any annuity contract under the old law. Under the new law, the company may reserve the right to defer payment of any cash surrender value for up to six months only

after the company has provided a written request and received approval from the insurance commissioner. If a company is going to execute that right and delay payment of the cash surrender value for up to six months, the company can only do so if it has provided a written request and received approval from the insurance commissioner prior to executing that right.

The Life and Health Actuarial Task Force of the NAIC is working on a model regulation that clarifies some of the gray areas in the new Standard Nonforfeiture Law for Individual Deferred Annuities. That NAIC model regulation has been exposed, and it is the desire of the Life and Health Actuarial Task Force to have the model regulation adopted by the NAIC in December 2004.

What is the status of state option of the new NAIC model Standard Nonforfeiture Law for Individual Deferred Annuities? The new law has been adopted in 38 states. It is pending in one state (New York), and there is no action in 11 states and the District of Columbia. State adoption of the new model law is on fast track. The reason for the fast track is that when the economic downturn occurred, many state legislatures lowered the 3 percent nonforfeiture interest rate requirement under their existing statutes to 1.5 percent, with a sunset provision of two years on the 1.5 percent. This would mean that if no new law were to be adopted within two years, the 1.5 percent interest rate would revert back to 3 percent. In Kansas, for example, the 3 percent nonforfeiture interest rate was lowered to 1.5 percent, with a sunset date of July 1, 2006.   It was therefore important for the Kansas legislature to adopt the new model law prior to that sunset date.

It is also important for the NAIC to adopt the model regulation on annuity nonforfeiture and get that model regulation on a fast track in the states that have adopted the new model law. The reason for the fast track for the model regulation is that the model regulation clarifies some of the gray areas of the new model law. Without the clarification, actuaries will not know what the insurance departments require in actuarial demonstrations. For example, on annuities that have a substantial equity index benefit, actuaries are going to need to know how to demonstrate that the present value of the additional basis point spread does not exceed the market value of the equity index benefit, since that is a requirement by the commissioner of insurance under the new law. The model regulation will also define a "substantial equity index benefit."

Now, I will open it up for any questions.

MR. ROBBINS: It appears that when we talk about 7702, it's the latest in a series of events that have caused life insurance to be less and less attractive over the years as an asset accumulation product. Beginning with the 1984 Act, you had a major issue of tax reserves below statutory reserves, which caused the pricing to be a bit of a problem. In 1988, along came the applicable federal interest rate, which caused tax reserves to be further below the statutory reserves. Then you had the DAC tax that came along in 1990 and 1991. Finally, we now have a table that

actually provides for computational limits under 7702 that are lower than in the past. Almost all the computational limits will be lower than they were before. It makes permanent life insurance less attractive and term insurance perhaps more attractive relative to permanent. It's an evolving issue. The one possible offset to that might be the fact that the applicable federal interest rate and the statutory prevailing interest rate are pretty close to each other now, relative to what they were 10 years ago. They were about 300 basis points apart in the early 1990s, and now they are pretty close, so that particular problem is going away.

MR. MARK SLOTSKY: I have a question about the formalities of adoption of CARVM, either as a guideline or a regulation, and the adoption of C-3 Phase II. If C-3 Phase II was adopted by the NAIC, does that immediately become part of the instructions for RBC? Or do the states have to adopt that?

MR. LAUZON: If C-3 Phase II is adopted, it would be part of the instructions for RBC. It wouldn't require state-by-state adoption because most states have adopted that. You know you do RBC according to the instructions.

If CARVM is adopted as a guideline, most states require you to follow for codification purposes the accounting principles manual. But I guess it's not uniform as to exactly which manual you have to follow. I think some states actually adopt a specific manual from time in and time out. Some others just adopt a current manual. So that might not be quite as uniform, depending on how a state goes about adopting a manual and exactly when that guideline makes it into the manual.

FROM THE FLOOR: Is there any pressure to adopt it as a regulation, or is it leaning more toward guideline?

MR. LAUZON: There have been some advantages and disadvantages put forward about adopting it as a regulation or as a guideline. Certainly, some of the advantages as a guideline are that you can put it in place immediately, it's sort of retroactive and it's uniform. If you go by regulation, then you'll have to wait for each state to go ahead and adopt. On the other hand, there's some question of whether the changes are of such a nature that they should be adopted by regulation and not guideline.

MR. BRUNING: I would add to that. I've looked at the Kansas statute regarding valuation for variable annuities and talked with our legal counsel. We're of the opinion in the state of Kansas that it would need to be a regulation. We think we can see our way clear in the valuation statute that we can promulgate a regulation. The process of establishing a reserve by running stochastic scenarios does not fit within the meaning of CARVM as defined by the valuation statute in Kansas. Actuarial guidelines typically clarify how a particular model law is to be applied. We believe that a reserve established by stochastic scenarios is a change in the existing CARVM statute and therefore cannot be effected by an actuarial guideline.

FROM THE FLOOR: I'm going to ask a question of the regulators. Lots of model regulations have now been adopted in the Accounting Practices and Procedures Manual (APPM) by virtue of the appendices. Appendix A-830, for example, is XXX. What does that mean? Once the regulation actually gets into the APPM, is it codification and a state doesn't have to take a positive action to adopt it, or what? I'm not sure. What's your opinion?

MR. LAUZON: I think each state can take a different approach to how it follows the guidance manual. The way some states do it is that it can be sort of automatic. But other states have to adopt a specific version each time. It's a question of when they catch up to a change in the guidance manual.

MR. BRUNING: I would agree with those remarks.