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TERM INSURANCE: NEW YORK REGULATION 147 AND THE NAIC'S XXX

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This session will review the effects on term insurance product design of reserve requirements resulting from the NAIC's XXX and New York Regulation 147. Pricing implications on term and universal life (UL) will be discussed.

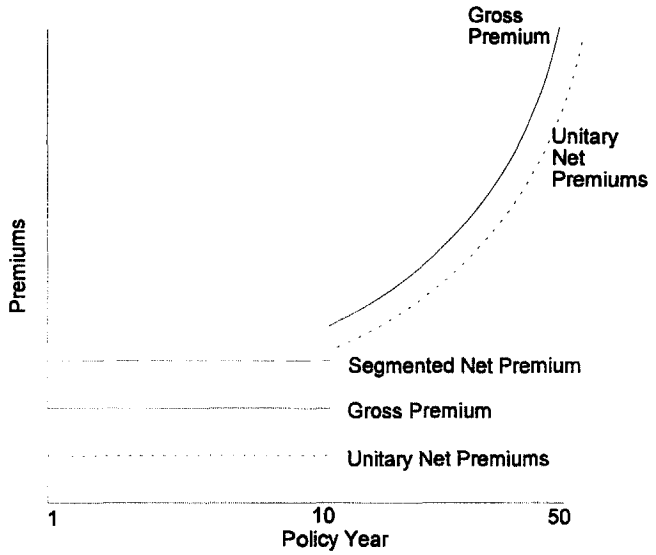
MR. TIMOTHY C. PFEIFER: I would like to start by talking about an overview of the model regulation formerly known as Actuarial Guideline XXX. Mr. Lotter will then talk about an overview of New York Regulation 147. He will compare and contrast Regulation 147 with XXX. Last, Ms. Marler will discuss the impact of both the model regulation and New York Regulation 147 on term and term UL products.

The main new development regarding the new model regulation is that it was adopted at the March 1995 NAIC meeting. Though it has been commonly referred to as Guideline XXX, it does have a title, which is much more lengthy, and that is the "Valuation of Life Insurance Policies Model Regulation." The title goes on even further than that to say "Including the Introduction and Use of New Select Mortality Factors." Guideline XXX was originally conceived as an actuarial guideline that would update the current Actuarial Guideline IV to make it applicable for 1980 Commissioners Standard Ordinary (CSO) issues of term life insurance products. Guideline IV is one of the older actuarial guidelines, and it applied XXX-type methodology to 1958 CSO term business only.

Some states in the past have moved to enact or promulgate Actuarial Guideline IV as a state regulation and essentially create rules that are close to XXX in today's environment, but generally not with the detailed calculations that the new model requires. A few states have moved toward a 1980 CSO application of Guideline IV. The new model has been in development for more than six years. Those of us who have worked with it for a while continue to learn implications of this regulation and its impact on product design.

What was the motivation for Guideline XXX? I've tried to depict it graphically (Chart 1) in a simple way. The pattern shown here is not the only reason for adoption of XXX, but it's certainly one of the major ones. Chart 1 depicts a ten-year term product, which is a typical design today, with a ten-year level premium period, followed by annually renewable rates thereafter. The solid straight line on the chart would be the level of gross premiums. The dotted line would be the level of valuation net premiums on a unitary reserve basis. You can see that after the first ten years of level premiums, the guaranteed gross premium jumps up considerably. On a unitary basis (meaning we look at the contract from the date of issue all the way to maturity), we calculate a net premium that is a constant percentage of the corresponding gross premium. In this case, we produce a valuation net premium that is lower than the gross premium; therefore, we must calculate deficiency reserves and likely find out that no deficiency reserves are necessary.

CHART 1
MOTIVATION FOR NEW REGULATION XXX



A dashed line is the valuation net premium in our hypothetical example if we only examined this contract for a ten-year period. In this situation, you see that the valuation net premium is larger than the gross premium. Thus, if we were looking at reserving only for this contract over a ten-year period, deficiency reserves would emerge during that time. This is one of the issues that regulators have been concerned about, namely that companies have been offsetting early-year premium deficiencies with later-year premium sufficiencies. This allows carriers to sell products with very competitive early-year term rates, but with no deficiency reserve requirements. The later-year sufficiencies (in regulators' minds) may never be realized, given the relatively high lapse rates on term business. This is perceived as a problem with the unitary method.

There is also a provision with the new model regulation that relates to term UL products. These are products that were developed by insurance companies that saw the impending Guideline XXX coming down the highway and thought that one way to address it was to develop UL contracts that can function like term insurance. In these contracts, typically a minimum premium would guarantee coverage for 10 or 15 years. Many companies developed term UL products, and the regulators responded by developing proposed actuarial guideline EEE which later was melded into the new model regulation, and we'll get to that in a minute. This is an approach that regulators have taken to try to address the use of UL products to function as term substitutes.

How does the new model address these regulatory concerns? The first main point is that under the new model, the minimum statutory reserve must equal the greatest of the unitary reserve (that is, looking at the contract as one long contract to maturity), a segmented reserve at each valuation date, one-half the cost of insurance and, if any, the cash

surrender value under the contract. It's possible that for any given contract, one may have reserves that are defined at one duration on a unitary basis and in the next policy duration on the segmented basis.

How do you define how long the segments are? There is a specific requirement as to how to divide contracts into the appropriate segments. In addition, the new model defines a new comparison test that must be done for reserves on term UL contracts that have a no-lapse guarantee period of more than five years (this would be a term UL contract that says if you pay a specified premium for x years, you'll be guaranteed coverage for that period of time regardless of your account value).

In addition, the new model applies to general policies that have nonlevel premiums and/or benefits. It's not restricted only to term insurance or to term UL, but to any contracts that have nonlevel premiums and/or death benefits. It creates some interesting issues with respect to products such as mortgage decreasing term.

The method of defining the segments was a source of much discussion within the regulatory and industry communities. Segments under the segmented method are defined by the minimum duration, call it t, such that the ratio of the guaranteed gross premiums from one duration to the next exceeds the ratio of the valuation mortality rates at the comparable durations. At any point in time if the jump in the gross premium scale exceeds the corresponding jump in valuation mortality, you have then defined a segment cutoff point. In calculating the ratio of the guaranteed premiums, one can exclude policy fees if they are level.

Segments defined by minimum t so that:

$$\frac{GP_{x+k+t}}{GP_{x+k+t-1}} > \frac{q_{x+k+t}}{q_{x+k+t-1}}$$

Of interest is a situation in which one has a mortgage decreasing term product with a level premium, but a death benefit that is declining. How do you treat that? In terms of this segmented method, one approach that has been used is to convert the level premium per $1,000 decreasing death benefit pattern into a level death benefit/changing premium rate per $1,000 contract and define your segments on that basis.

The valuation mortality rates used in calculating this ratio would be the mortality rate used in calculating deficiency reserves (as opposed to base reserve mortality).

Another point to note is that in calculating the ratio of the mortality rates, one must use the same mortality basis and the same selection-factor basis between each of the numerator and denominator, which normally doesn't create an interesting scenario except when one is transitioning from select to ultimate. That can create a problem. So one has to make sure that the basis is the same.

The ratio of the mortality rates on the right-hand side of this inequality (which is defined as the R factor in the regulation) may not be less than 1, but may be adjusted at a company's discretion by a plus or minus 1% so as to avoid one long segment in a situation in

which the ultimate gross premium might be a constant percentage of the valuation mortality rates.

As one has divided the contract into a number of consecutive segments, you are permitted to use the Commissioners Reserve Valuation Method (CRVM) for calculating reserves in the first segment, but you must use net level reserve methodology thereafter. Within each of the segments, the net premiums are a constant percentage of the gross premiums, as they are on the unitary basis. If the first segment is less than or equal to five years, a safe harbor is permitted that allows companies not to replace the net premium with the gross premium in the event the gross premium is less than the net premium. To take advantage of the safe harbor, the insurer must demonstrate reserve adequacy annually. This says that for a product with an initial rate guarantee that is less than the corresponding valuation net premium, one must still calculate deficiency reserves in the first five years, but only deficiencies existing after the fifth policy year would be considered. Deficiencies that may exist after five years cannot ever be ignored. Thus, the model is not saying that a carrier won't ever have deficiency reserves in the first five years; only that you don't have to substitute net for gross in the first five years, which is a big difference. It's also led to product designs in which companies set their gross premiums after five years equal at least to the valuation net premiums after that point so as to avoid the need to hold deficiency reserves in the first five years.

The calculation of deficiency reserves is very consistent with what we've seen in the past. We calculate deficiency reserves as a recalculated base reserve over the originally calculated base reserve, with the recalculated base reserves involving substitution of gross premium for deficiency reserve net premium in those years when gross is less than net. In doing this calculation, you are permitted to use the policy fees in calculating the gross premium.

The new model also permits the use of new base selection factors. These can be available for the first segment of the segmented approach. Companies are still permitted to use the old ten-year-select factors if they prefer. If the first segment is less than ten years, one can use the current ten-year-select factors after the first segment up until the end of the ten-year period. The new select factors are available for all policies, not just those with nonlevel premiums or benefits. The selection factors were permitted because of recent mortality improvement over the 1980 CSO level. The 50% margin that was added for the base reserves was included to ensure that experience won't be worse than permitted under this mortality standard.

The new base selection factors last for 15 years and they vary by issue age, sex, and smoking class. For purposes of the base reserve calculation, a company may use 150% of these base factors and for deficiency reserves, the company can use 120% of the base factors. It's less for the deficiency reserves because the new factors don't reflect mortality improvements over the past ten years or reflect the differing underwriting classes that companies have put into their contracts.

The new model also has some special reserving rules for policies with nonlevel premiums and benefits and which further have unusual cash value patterns. It will not be covered here in detail simply because we're focusing more on term insurance, but there are some special rules for contracts that have unusual cash value patterns and there's a specific definition of what "unusual" means.

As mentioned before, the model attempts to address UL policies that were intended to sell in a termlike environment. This section of the model applies to both fixed and flexible premium UL contracts. It applies to contracts that have secondary guarantees in excess of five years. The model goes on to explain what a secondary guarantee means. A secondary guarantee includes a no-lapse guarantee UL, which states that if you pay a certain specified level of premiums for a defined number of years, the insured is guaranteed that that coverage will stay in force regardless of the account value. It also includes contracts that have minimum premiums beyond the fifth year that are less than a one-year valuation net premium, and that minimum premium is a premium required to keep the policy in force on a guaranteed basis. The secondary guarantee period is defined as the longest period under which the contract is guaranteed to remain in force, subject only to one of those secondary guarantee requirements.

For the new model, the definition of basic and deficiency reserves under term UL products is a segmented reserve requirement. That is, one needs to calculate CRVM and net level reserves over that segmented secondary guarantee period. The gross premium used in the calculation of basic and deficiency reserves would be this specified or minimum premium, whichever one came into play in defining the segment links. The overall minimum reserve that would be required on a term UL contract would be the greater of this segmented reserve and the reserve required under the NAIC UL model regulation, because it still is a UL contract.

The new model goes on to provide for some specific exemptions from its rules. One optional exemption that allows a company to forego the unitary or the segmented approach is for yearly renewable term (YRT) reinsurance. In this situation, the reserve is typically going to be one-half the annual cost of insurance. In calculating these tabular costs of insurance for this YRT reinsurance provision, the 15-year-select factors cannot be used but the current ten-year factors can be used.

Another optional exemption is for direct sales of attained-age YRT products. Once you've elected to take this optional exemption, you must then use it for all future YRT-type contracts. The regulation goes on to specifically define what is meant by attained age YRT. It is defined as a contract with both current and guaranteed premium rates that are based on attained age and are independent of policy duration. In this case, one can again use the tabular cost of insurance and hold a reserve equal to one-half of c_x. If a contract was a level term followed by a YRT; as in my example earlier (that is, if it becomes an attained-age annual renewable term (ART) at some point, which many contracts do), a company can elect to use the exemption after the initial period, provided that the initial period is constant by sex, class, and plan, or provided that the initial period runs to a common attained-age that doesn't vary by issue age. Thus, one can define an attained-age YRT portion even if the initial period is level.

Another exemption from the model is for jumping juvenile products that would allow an insurer to forego the unitary reserve calculation. There are some specific requirements on that. Specifically, the issue age under the contract must be less than or equal to age 24, and if prior to the end of the juvenile period (which has to be less than or equal to age 25), the current premiums and death benefits must be level and the contract must have no cash values. Further, after the juvenile period, gross premiums and death benefits must be level. If all those conditions are met, then the carrier can elect to forego the unitary reserve calculations.

Other types of renewable term policies can avoid the requirement to calculate unitary reserves, and there are specific conditions on that. These conditions include the requirement that the contract defines a series of *n*-year periods, where *n* is constant for each of the periods and for each of the *n*-year periods, the current and guaranteed premiums are level. Further, if the guaranteed premium is larger than the net valuation premium on a 1980 CSO basis, and the contract provides no cash value, then a unitary reserve check does not need to be performed for these renewable term policies. Last, variable life contracts and variable UL contracts are specifically exempt from the new model.

The effective date of the model is open to the individual states as to enaction. State responses to date have been very slow. You may have read recently that Illinois apparently has pushed back its effective date to at least January 1, 1997. A few states have made declarations that they're prepared to enact the new model. Maryland and Louisiana have made comments to that effect. In general, though, states have been very slow to respond. Many states are reviewing the new model to see how they want to deal with it.

Other influences have been involved in this process, however. There has been a bit of a consumerist backlash as to the impact of the model. Letters have been written to state insurance departments voicing concern that this regulation is anticonsumer and that it will cause premiums to increase. I think this has caused some states to step back and take another look at the model and take a more deliberate approach to enactment.

When Guideline XXX was being drafted initially, it was thought that its implications would be that states would enact it quickly and that premium rates would go up. Instead, I think we've seen just the opposite happen. States have been slower to adopt it and, if anything, the enactment of the model has inspired a new round of term pricing at many companies, and nobody wants to be left in the dust. We've seen a real leapfrogging of premium rates. Although the guarantee period on term rates may come down to five years, premium rates are going down and they're going down quickly.

With respect to term UL, although some companies have come up with some ways to address some of the limitations that are placed on term UL, I think, in general, that term UL will be punished quite severely under the model. It raises the question of why not just design a term product as opposed to a term UL product. I think you're going to see either term UL suffer in terms of future development, or else the no-lapse guarantee periods will be cut back to five years just to make it work.

Let me now introduce Mr. Johan Lotter, who will speak about the main provisions of Regulation 147, the New York counterpart to Guideline XXX. Mr. Lotter is a Fellow of the Institute of Actuaries and came to the U.S. in 1983. He has worked for a wide array of insurance companies, including a mutual insurance company in South Africa, several foreign reinsurers, and several consulting companies. Johan formed his own consulting firm in 1994 and he consults with insurance companies, investment bankers, and law firms.

MR. JOHAN L. LOTTER: My job is to give you an overview of New York Regulation 147 and a brief outline of the differences between the two regulations. When I first read Regulation 147, I went into comprehension panic. I read it many times and found it very difficult to understand. It reminded me of a story of a legendary quantum physicist who was asked by a young assistant whether it would ever be possible to understand the

quantum theory. The senior physicist said to him, "You're never going to understand the quantum theory. You will just have to get used to it."

Regulation 147 isn't quite the quantum theory, but some of the numbers that emerge from doing Regulation 147 calculations seem to approach some sort of quantum unreality, or is it reality? In my rebellion against the complexity of Regulation 147, I sat and wrote down what I thought it was saying.

By now, we all know that Regulation 147 was issued by New York State and that it sets a new mortality basis for valuation. It permits the use of new selection factors for valuing individual life policies and group life certificates with nonlevel premiums and benefits. It also makes an allowance for the timing of the payment of death claims. That's something that you won't see in XXX, but it's contained in Regulation 147. It applies to life companies and fraternal reinsurers and it applies to all policies except re-entry, variable life, and group life certificates without guaranteed gross premiums. The reason it doesn't apply to these group life certificates is because if you don't have guaranteed gross premiums, there is no need to worry about deficiencies.

Regulation 147 applies in its entirety from January 1, 1994. I'm not going to read all the complicated rules to you, but it does say that if a *reinsurer* is authorized in New York and wrote business in 1994, including risks outside of New York State, then from January 1, 1995 this applies.

Regulation 147 applies to UL irrespective of issue date. The reason it applies to UL is because in the New York law, UL standard valuation law methodology has never been implemented, so the regulation effectively implements that. The regulation provides for the usual floors for the reserves as well, namely the tabular cost of insurance and/or the cash surrender value. Immediate payment of claims must be recognized if the policy promises that.

On your in-force business, if you find that there is an increased reserve requirement (and the typical case of that would be if in previous years you haven't made proper provision for the incidence of death claims), then the regulation permits a five-year grading-in period. This means that a carrier should have 20% of the strengthening at the end of 1994 and should have completed strengthening by the end of 1998. It's also possible that the regulation may lead to decreased reserve requirements.

Throughout Regulation 147, deficiency reserves are defined to equal the minimum reserves minus the basic reserves. That's routine and actually not a new idea for any of us. Deficiency reserves can't be less than zero and that's also not new. When we talk about our gross premium, we mean the premium for life insurance and endowment benefits, but it excludes the premium for riders. An indeterminate premium policy in the regulation means a nonguaranteed policy with both a current gross premium scale and a maximum gross premium scale. Then the regulation bristles with the ubiquitous "segment" word. A segment is simply an integral period of years. Every policy can have segments. The least number of segments is equal to one and the most number of segments would be the policy duration, in years, to expiry. The regulation also discusses maximum valuation interest rates, and those are already familiar to the valuation actuaries here. The regulation defines the 1980 CSO tables with or without select factors, the old ten-year-select factors. The

regulation refers to the 1980 CSO male, female or blended, smokers/nonsmokers, and it also defines tabular cost of insurance.

The regulation uses the definition of a UL policy that we are all very familiar with by now. A UL policy is one that has guaranteed expense charges, guaranteed mortality charges, etc. A unitary modified net premium is defined as a uniform percentage of gross premiums. At issue, the present value of the unitary modified net premium must equal the present value of the benefits plus the expense allowance.

Unitary reserves are meant to be the present value of guaranteed benefits minus the present value of all future unitary modified net premiums, taken over the entire policy term as if the policy has only one segment. The unitary gross premium is any premium that becomes due during the premium-paying term.

Let's talk about segment net premiums. Within any given segment, the segment net premiums must be a uniform percentage of the segment gross premiums. Then it's equal in present value to the present value of all the benefits in the segments. In respect of the first segment, you can use the CRVM net premiums. In respect of all other segments, you must use net level premiums.

With segmented reserves, we mean the present value of all future guaranteed benefits minus the present value of all future segment net premiums from the beginning of the segment to the end of the policy, the expiry date.

Then we get to the ubiquitous quantity A. Quantity A is the basic reserve (defined in the previous paragraph) but with a guaranteed gross premium substituted for a net premium at durations when the guaranteed gross premium is less than the net premium. The deficiency reserve has been defined in the regulation as quantity A minus the basic reserve.

The immediate payment of claims merits a good page or so in the regulation, and there are some very simple ways of doing this. If you are calculating your basic reserves by using curtate functions, but the claims are paid immediately, the reserve must be increased by adding one-third of a year's valuation interest. If, on the other hand, you're using curtate functions and you add interest to the death proceeds, you need to add one-half of one year's valuation interest. The segmentation calculation is arithmetically the same as in Guideline XXX.

Again, regarding the mortality standard, the company has the freedom to adopt 150% of the base valuation selection factors, not to exceed 100%. You can elect alternative sets of select factors under those restrictions but, of course, you have to justify them to the superintendent. For deficiency reserves, you have the same situation. You have a choice. You will recall that when Tim Pfeifer spoke, he gave you the 120%-of-base valuation selection factors as an option. Under Regulation 147, you also have the 150% as an option. Regulation 147 gives you an additional choice that you won't find in the new model regulation. Here also you can elect alternative sets of select factors, but you have to justify them.

As is the case with XXX, if the first segment is five years or less, then in making your deficiency reserve calculation, you cannot replace the net premium by the guaranteed gross premium during the first five years. Remember that the base valuation factors can

only be used for the first segment. So if your first segment is shorter than 15 years, the 15-year-select factors may only be used during the first segment.

Again, talking about quantity A, there are some rules about how to calculate this quantity. This is the number that you need to derive your deficiency reserves. You calculate quantity A by using the same formula as the basic reserve, but you substitute the guaranteed gross premium for the net premium at each duration in which the guaranteed gross premium is less; and then as mentioned before, the deficiency reserve is quantity A minus the basic reserve.

There are optional exemptions for YRT reinsurance. Tim spoke about those. As far as I could see, they are practically identical to those in XXX. My recollection is that they are, so I won't deal with those.

Talking about reserves for UL policies, I'm not going to give detail in this because this is the CRVM method and you all know this method. You all know what a flexible premium UL and a fixed premium UL are. These things are all defined in the law. Tim has spoken about minimum premiums and one-year valuation premiums and specified premiums. They are identical.

The next issue is a rather important issue that you should look at carefully because you all hold UL policies. The essence of this is that you have to amortize your expense allowances now for structural policy changes on a layered basis. In other words, if your policy has been changed, you have to amortize your expense allowances effectively from the date of change forward. This is actually good news because it means you can save on your reserve requirements. The only thing you need to do is carry in your database the details of your policy change or policy conversion. You may be able to decrease the amount of reserves you have to hold under your UL block by simply implementing this layering of reserves.

Finally, the California method is an alternative for UL reserving. If all the prior methodology is too much for you, the regulation will allow you to use the California method, which is the interpolated one, one-half the cash value plus one-half the account value. You must calculate the UL alternative minimum reserve (AMR) just as was described by Tim Pfeifer.

Secondary guarantees are very much like the provisions in XXX. Your basic reserve for the secondary guarantees are calculated by treating the policy as term insurance expiring at the end of the secondary guarantee period and using the specified premium as the guaranteed gross premium.

Once you've done that, you calculate the AMR by using the same formula as for basic reserves, but substitute the specified premiums as gross premiums whenever they're smaller. Then the deficiency reserve would be the AMR minus the basic reserve.

There exists an optional exemption for ART. This is similar to the exemption for YRT in XXX. There is a small difference between Regulation 147 and Guideline XXX as to how this is treated. Mechanically it works the same way as was described by Tim Pfeifer, so I won't talk about that anymore.

It is interesting to compare and contrast New York Regulation 147 with the new NAIC model regulation. As far as enactment goes, Regulation 147 is now a New York law; effected January 1, 1994 for direct writers and January 1, 1995 for reinsurers. The NAIC reserve model has not been promulgated anywhere as of today, and the observation that Tim made is valid. The last information that I had was that just four states were actually in the process of adopting it. The majority of states are simply continuing to study the regulation. Seven states have decided to postpone or defer any action on the regulation until a later date. A clear difference between the two regulations is that UL is contained in Regulation 147, where the CRVM method for the first time is formalized. In Guideline XXX, there's no mention except as far as the secondary guarantees go. The deficiency exemption—that's the first five years of the policy term in which you don't have to bring in the deficiency premiums in your evaluation—impacts both Regulation 147 and Guideline XXX, but annual justification is needed for Guideline XXX. Regulation 147 does not provide for that. There's quite an important difference on deficiency reserves in general. Regulation 147 asks for the higher of the unitary reserve or reserves under the contract segmentation method. Guideline XXX says that you determine deficiencies by an algorithm identical to that which you used for basic reserves.

As far as the ART exemption goes, Regulation 147 says that the policy must qualify from issue. Guideline XXX says that the policy can qualify later, once it meets the requirements for ART, even if it did not meet the requirements when it was originally issued. With respect to immediate payment of claims, it's clear that Regulation 147 requires it, and it causes some problems. The new selection factor rules are a little more stringent for Guideline XXX. We've spoken about all that, except no one has so far mentioned that between years 10 and 15 on the Guideline XXX calculation you must do linear interpolation.

As far as the segmentation calculations go, Regulation 147 is based on the mortality applicable to basic reserves. Guideline XXX is based on the mortality applicable to deficiency reserves. That's potentially a huge difference. Also, Regulation 147 does not actually speak of CRVM reserves whereas in Guideline XXX CRVM reserves are specifically mentioned. I don't know if this may have tax implications. Then there are the cash values and reserves being treated as pure endowments. Only unusual cash values qualifying under that definition can count for this under Regulation 147. Under Guideline XXX, you can take credit for cash values or unitary reserves at the company's option and use them as single premiums going forward.

MR. PFEIFER: Our last speaker is Carol Marler. Carol is director of actuarial research with Transamerica in its North Carolina offices. Carol is a very visible and prominent commentator on actuarial issues, specifically reinsurance and term issues, and an author of many articles. Carol will discuss the impacts of both XXX and 147 on term and term UL products.

MS. CAROL A. MARLER: Now that you've heard about the reserve requirements, let's cover what the impact is on product design and pricing. I suspect that's probably why many of you are here. First I will review just those aspects of the reserve requirements that affect product changes, and then I will mention some things that you may want to be doing right now. I'll talk about the alternatives to changing your pricing, and I'll say a few words about the current environment, to reinforce what Tim and Johan have said.

Then I'll cover the most common alternatives as far as pricing is concerned, along with some pros and cons.

For most companies, the required reserves for term insurance are likely to increase when you become subject to XXX due to the requirements for segmentation. Some of those changes would be to increase the reserve during the initial ten-year or shorter segments, and also the deficiency reserves will be much different than they were under the unitary method.

Now, offsetting the effect of this new requirement, to some degree, is the fact that we now have a new set of select factors. In addition, for those companies that were offering superpreferred rates, a compromise was worked out under which there is now the five-year safe harbor. For companies that have previously adopted reserve methods more conservative than Regulation 147, New York has included a provision that lets a company destrengthen its reserves. This applies basically to the retroactive portion of the increase and was part of New York's attempt to ensure a level playing field. If a company's reserves were stronger than those mandated by Regulation 147, a company would be able to go back and apply to have its reserve method changed.

I have one final comment about these new reserve requirements. This may be in the back of your mind already, but the fact of the matter is that deficiency reserves are not tax-deductible. So any strain in the deficiency reserves will not be offset by tax benefits and as a result, it does make a difference as far as your pricing and planning are concerned.

What to do now? If there is an opportunity for you in the state of New York, now is the time to grab it. You need to make application to the superintendent and get approval to adopt the lower reserves. Some companies have probably tried to do a segmentation method in advance of the adoption of Regulation 147 and the promulgation of the final form of XXX, and at this point, they may want to go back and talk to New York about lowering those reserves to match only the minimum requirements of the law.

Well, that's the good news. For the rest of you, what are we going to do about the new NAIC model? I think the best advice comes from the Boy Scouts who tell us to be prepared. You should look at the potential impact of Guideline XXX on your company's surplus position even if you do business only in states that have not yet moved to adopt it. In addition to the impact on surplus, you may want to take a look at what it does to your risk-based capital ratios. After you've determined the magnitude of the problem, it puts you in a better position to manage it and deal with it.

Naturally you want to be sure that your valuation system can develop the proper factors. Third-party software is available for this purpose, or you can leave those compliance changes as the inevitable exercise for the student. If you're not already pricing for an after-tax profit goal, it's one more time to give serious consideration to making that change. Also, it's advantageous to have your pricing program reflect the cost and benefit of any reinsurance arrangements you may have, particularly if you're going to be reinsuring a large portion of your term business in response to the requirements of XXX. Most important, everyone needs to monitor the activity of the regulators in your own marketing territory, being aware of what is being talked about, whether XXX is about to be adopted, with what effective date, and whether it will follow the NAIC model or if there is a special version being considered, whether to follow the New York law or some other idea. The

more information you have, the better equipped you will be to deal with the changes as they occur.

After you've determined the potential amount of surplus strain for your product, you may conclude that your company is actually in a position to absorb that strain, and also the impact on the risk-based capital ratios. However, that's not very easy to do in today's environment. Most companies want to be sure that they're deploying their available capital where it will do them the most good. If you want to look into alternatives that did not involve any change in your product, you should consult with your reinsurance company about ways in which it can assist you. A coinsurance arrangement can be structured to help share that initial surplus strain. Also, a YRT arrangement, even without any particular benefit as far as surplus strain is concerned, can help you manage your risk-based capital ratios by changing the net amount-of-risk component in the risk-based capital calculation.

Every company has its own strategic needs, and you'll want to talk to your reinsurer about what you're trying to accomplish so that the two of you can work together and come up with solutions that fit your needs and that address specific concerns of your company.

Before I talk about pricing, I say just a few words about the current environment. I think regulatory uncertainty is maybe an understatement at this point. Outside of New York, nobody knows when or if XXX will be adopted. When New York put Regulation 147 in place, I think they were convinced that other states would follow promptly, and even though they did give a one-year leeway for admitted reinsurers to comply, they wanted to make sure that the playing field is as level as possible. It puts reinsurers in an interesting position in that all of them either already must comply with New York or will need to by the end of the 1994.

At this point, there just has not been a groundswell of activity to adopt XXX. I'm sure one of the reasons for that was the fact that the consumerist point was raised about what this could do to the products being offered to the policyholder, that everyone expected that premium rates would go up or that guarantees would be reduced or some combination of those would come about. In fact, some companies have taken advantage of this situation and have put out their advertising campaigns for your last chance at a guaranteed low premium rate. I think the regulators are very aware of this, but none of them wants to be the first to kill it in his state. Companies are in similar positions. They do not want to move until the states require them to do so, because it is now seen as a detrimental effect on the consumer aspect of the product design.

So we're all waiting and watching to see what happens next. While we wait, let's consider more options. As Tim mentioned, the regulators put in language that says that you cannot pretend that your term product is UL and ignore the requirements of XXX. However, you are in a position to take advantage of the five-year safe harbor, as it's sometimes termed. Even if your level premium period is longer than five years, it's possible to change the guarantee to only last through five-years, and then the premiums thereafter would be the current scale, but not necessarily guaranteed. One of the benefits to this is that you wouldn't have to make a change in your pricing. But the fact that those premiums are no longer guaranteed for the full level period will be a marketing disadvantage, particularly in competitive situations when the question comes up, "Well, what happens when you get to the end of that five-year period?" What do you think that company is going to do?

We come to the possibility of changing the pricing. Here you want to strike that delicate balance of raising the premium just enough to cover the cost of the surplus strain for the deficiency reserves, recognizing the fact that as you raise the premium, the deficiency reserves will be going down. The advantage here is that the revised scale can, in fact, be guaranteed for the entire level term period. The obvious disadvantage is that the price may go up. Now, if the premiums are too high, all the actuaries immediately turn to the mortality assumption. "How can we lower our mortality assumption to keep our premium rates competitive?" One possibility that many companies are beginning to use is the nontobacco rather than cigarette definition of a nonsmoker. This actually improves the expected mortality, both for the nontobacco-user group and for the tobacco-user group so the net effect is that the mortality improvement applies on both sides of the scale. However, some people, who previously could have qualified for nonsmoker insurance, will no longer qualify under the nontobacco definition. Whether this is an advantage or disadvantage may depend on your perspective. It certainly will make life easier for underwriters when they're faced with positive nicotine results and have been assured by the agents that this was the result of pipe or tobacco use and the applicants still should qualify as nonsmokers.

A similar approach can be taken by revising the requirements for the preferred class. There's a lot of variation from company to company. In fact, that was one of the things that the drafters of XXX stumbled over when they tried to come up with a way that would be fair to all, recognizing the benefit of the preferred underwriting standards.

You can look at your requirements for preferred underwriting and modify one or more of the rules to improve the mortality of the people who qualify as preferred. But at the same time, and here's your trade-off, fewer people will be able to qualify, and this can be of great concern for your marketing organization. As you think about a change in your preferred-class definition, you'll want to work with your marketing people and your underwriters (and I think it's also a good idea to bring your reinsurer in at this point) and discuss with them what their perspectives are on how much mortality improvement these changes may make and also what it may do to the percentage of people who are able to qualify as preferred.

Just a few words in conclusion. Many companies now are coming up with a strategy of offering their customers a choice. There is a product with the longer-term guarantees and a higher premium rate, and there is also a product that has fewer guarantees and a lower premium rate. This lets each buyer make the choice of what is more important—the lowest premium possible or the assurance that premium won't change during a specified period of time.

Finally, now or when your company becomes subject to these new rules, you'll want to talk to your reinsurance company about what it can do to help you meet your objectives. In the past, reinsurers had been considered primarily a resource for managing the mortality risk. As our environment has grown more and more challenging, we have taken the attitude that the reinsurer should be there to assist its clients in managing all the risks that its companies face. This would include expense control, alternative product delivery systems, systems management and, of course, regulatory initiatives. I appreciate the opportunity to talk to you, and I hope my remarks have been helpful to you.

MR. PFEIFER: Well, as you've seen, we were only able to have enough time to scratch the surface on this topic.

MR. DOUGLAS A. SZPER: I'd like to mention a few of the items that Tim brought up and give my opinion on this. I think this is a bad regulation. I've been working for 20 years in this business and constantly deal with deficiency reserves. Tim mentioned that the motivation was "sufficiencies offsetting deficiencies" and that lapses will make the sufficiencies disappear. The fact that the statutory valuation methods don't allow you to take into effect lapses means that deficiencies are going to disappear also, but you still have to hold them. I won't admit to having been taken up by an alien spacecraft, but somewhere along the way, the concept of the valuation actuary doing a realistic valuation of the risk and holding appropriate reserves is lost. In XXX we've gone back to formula methods and we can't even decide which formulas are good. We say that the unitary method is bad, but then if it's larger, hold that, too. We have four different criteria. We have to hold the greater of all that. It costs a great deal of money and it's anticonsumer. I think as actuaries and informed consumers, we should talk to our legislators and tell them this is not good.

MR. CHARLES S. LINN: There is another subtle difference between Guideline XXX and Regulation 147 on the select factors. The original version of XXX and the current version of Regulation 147, when applying the 120% and the 150% factors, called for rounding to the nearest percentage. But for some reason, when the final regulation of XXX came, the rounding was taken away and now you're not supposed to round. It seems to me that you're going to have to maintain two sets of mortality tables for that reason alone.