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Summary: The ASB and the CIA have recently adopted or proposed a number of standards on such topics as qualified domestic relation orders (QDROs) and choosing economic assumptions. This session will review these standards and discuss how they apply to the work of the practicing actuary.

Mr. Edward E. Burrows: Heidi, my co-panelist, is chair of the pension committee of the ASB. I am a member of the ASB, finishing up my second term. I will have my complete release as of the end of this calendar year. Heidi is a management consultant with Foster Higgins. She is the chief pension actuary of the committee as well as the research actuary when it comes to pensions for Foster Higgins. I know I value her input in all sorts of issues, not just ASB matters.

We are going to update you on what's up with the ASB and its pension committee. We have two standard projects in the works; one is a brand new one, and one is an amendment to an existing one. Heidi is going to tell you where we stand on the brand new standard on economic assumptions. I will follow with a rundown on where we stand on the amendment to *Actuarial Standard of Practice (ASOP) No.4*.

Ms. Heidi R. Dexter: Before I launch into the economic assumption standards, I wanted to take a minute to go over the overall game plan for pension standards and update you on the status of what you can expect for the rest of the year. In reviewing the comment letters that we received on the second exposure draft of the economic assumption standards, I found that we did get a fair number of questions about why we are just talking about economics. Why aren't we talking about demographics, and dealing with conservatism and other issues like that? I think it is helpful to understand how this standard fits into the long-term game plan.

As you're probably aware, we currently have one main pension standard, *ASOP No. 4*, and that standard provides very general guidance in many areas. There are assumptions, methods, and liability measures, but it doesn't really go into depth in any of those areas. So the ideal was to write four more detailed standards that would go into much more depth in the areas of economic assumptions, demographic and other assumptions, liability valuation, and actuarial cost methods, and asset valuation methods. When those four standards are all completed, *ASOP No. 4* will be rewritten as sort of an umbrella standard that would tie these four detailed standards together and it would also address some of the overriding issues like conservatism, which you can't really address in the context of economic assumptions. You can pick very conservative economic assumptions, but if you have a cost method that's not appropriate for your evolving liabilities, it may not be conservative at all. So that is where we're ultimately going.

There are a couple of other standards in the works that we'll talk about. We're looking at a shorter term amendment to *ASOP No. 4*, and we also have a standard in progress on measurement or division of retirement benefits in connection with marital dissolution. There are a few other things we're working on, but this is the main thrust of our activity.

The economic assumption standard is very close to completion. The other standards are in much earlier phases. We have a task force working on the demographic and other assumption standards, which I think will probably be the next one to be exposed, and the liability valuation and cost methods will probably come after that one. We are trying to coordinate the asset valuation method standard with a research project that the Society of Actuaries (SOA) has undertaken that's to explore what methods people are using, and how well those methods are working. So that one is going to be a bit further down the road.

What to expect for the rest of 1996? The board has a meeting scheduled for July 23 and 24, and at that meeting we anticipate that a third exposure draft of the economic assumption standards, and a second exposure draft of the proposed amendment to *ASOP No. 4* will be approved. After looking at the changes we had made to the economic assumption standards in the second exposure draft phase, the feeling of the board and legal counsel was that any material change really needs to be re-exposed, so that's why we are going for the third exposure. We do anticipate this will be the last exposure of that standard. The board is very anxious to get that enacted by the end of December 1997 before Ed goes off the board and they have to get a new pension member up to speed on what we've done. If the board does approve those two documents for exposure at the July meeting, you could expect to receive the little booklets probably very early in August. It will have a 60-day comment period, which is shorter than the prior exposure drafts have had. People have seen all of this before, and we are putting these exposure drafts on Actuaries Online now, so those of you who have access to that, I would expect that it will be available there before the printed booklets are available. You can check Actuaries Online after July 24 to see if the new standard has been posted. The comment period will end in early October, and then the committee will start reviewing the comment letters. I think our goal is to have a final draft to the board by the beginning of December, and the board will, at some point in December either have a conference call or meeting to review those final drafts and hopefully adopt them by year-end. This is all tentative, of course. Depending upon the comments, the schedule could be extended.

I am now going to talk about the economic assumption standards. The second exposure draft went out a year-and-a-half ago. The scope applies to those assumptions that the actuaries select. It does not apply to prescribed assumptions, which are assumptions that have been mandated by law, regulation or other binding authority, or an assumption that is selected from a specified range that is set by law, regulation, or other binding authority. So that would mean the Pension Benefit Guaranty Corporation (PBGC) interest rate for valuing invested benefits for the variable rate premium or the IRS current liability rate where you must pick a rate in the range would not be subject to this standard. Another example would be your *FAS 87* discount rate, where the auditor is the party responsible for selecting that. If they dictated an assumption to you, you're not held responsible to the standards of practice for that selection. It also applies for measurements of pension obligations. We've added some new language in the latest draft which clarifies what that means. It means an actuarial valuation or any other type of assignment of cost to time periods, a liability measure such as a plan termination liability, or your *FAS 35* liability, to projected liability measures, such as a cash-flow forecast or other projection of what the plan's obligations will be in the future. It does not apply to individual benefit calculations. There might be specific situations where it could apply if management is hiring some senior executive who wants to know what his certain benefit is worth or something, it might come into play, but in general it's not benefit calculation’s or individual participant benefit statement projection calculations. It's very much geared to measuring the plan's liability on the whole.

One of the key definitions in this standard is the best-estimate range. The approach the standard takes is that none of us really knows what the future is going to hold, so most actuaries do not view their best estimate as a single point, but a range of assumptions that are likely to occur. So the way we define the best-estimate range in the current draft is that for each economic assumption, it is the narrowest range within which the actuary reasonably anticipates that the actual results, compounded over the measurement period, are likely to fall within. So if you try to do a stochastic forecast, you'd be looking at the 25–75% range. When we go on to *ASOP No. 4*, we're also trying to expand this concept to other types of assumptions. If you're talking about something like using mortality for a very small plan, it may be that both ends of your range are zero mortality because it's very unlikely your individual may die before retirement age. We've added a few new definitions in the latest draft of the standards. The measurement date is of course the date as of which the calculations are done, not the date you do the calculations on. We expect it would be effective for measurement dates six months after adoption by the board. The measurement period is used in referring to specific assumptions, and that's the period subsequent to the measurement date during which the assumption operates. So different assumptions can have different measurement periods. If you're looking at a salary-related plan, the salary scale operates up until the last active participant retires, but your investment return assumption may have a longer measurement period if you're not paying everyone out a lump sum, because it continues to operate even after that point.

We discussed prescribed assumptions. We also changed the definition of risk premium in the second exposure draft. There was some circularity in how we were defining the risk premium together with the real risk free and the real return, so we tried to take that circularity out. We've also added an inflation definition which was something we added at the request of the editorial advisory board. We think everybody knows what we mean by inflation, but in the glossary that was put out by the actuarial standards board, there are actually two definitions of inflation. There's general economic inflation, which is what all of us pension actuaries think of when we think of inflation. There's also something called social inflation, which is more applicable on the insurance side and gets at how inclined people are to file malpractice claims and things like that. So that definition is also in there, and as I mentioned, there are other definitions that have been in prior exposure drafts, like the real return, real risk-free return, compensation scale, and some of the basic assumption issues.

Materiality is another important concept for which we've added expanded language in the draft that has gone to the board. It's clarifying that you don't need to use an assumption if it's not material. In the economic assumption standards, this would primarily be the compensation scale if you have a small plan where the principal owner is already earning over the 401A17 limit. Your compensation scale may not be relevant. So you would not have to use a compensation scale in that measurement. Similarly, you do not have to use a more refined assumption if that does not produce material results. What we mean by that would be a select-and-ultimate turnover table as opposed to a table that just varies by age or assumes a single retirement age as opposed to retirement weight, if it is not material to the plan you are valuing. A theme that runs throughout the standard is this issue of measurement specific factors. You really have to look at the plan you're valuing and come up with unique assumptions for that plan.

There were some comment letters on the earlier exposure draft that sort of had the view that there is a fixed range that should apply for all plans. The committee really did not agree with that view at all, but we think you'll have a very different range of assumptions if you're dealing with a large plan with diversified assets and an ongoing employer as opposed to a small plan. That’s especially true if your principal owner is going to retire two years down the road and everything is invested in bank certificate of depositsthat are going to mature in two years. So there will be different assumptions used for different plans, and for different measurements of the same plan. A plan termination liability measure may use very different assumptions than the ongoing plan valuation. The most controversial element in the second exposure draft was what we called the provision for adverse deviation (PAD), a concept we actually picked up from the Canadians. That drew a great deal of very heated comments where most commenters felt that was inappropriate. It was fine to have measurement-specific factors where you're taking into account identified risk, but to just have this PAD for something that might someday happen that we can't really put our finger on was inappropriate. So that one large section of the second exposure draft has been eliminated.

In the factors to be considered in setting assumptions, you not only look at your general economic data, which is available to all of us, but you also look at your historical plan experience. How has your plan's investment manager done relative to the market? We are not advocating that you use what some have called the historical plan method where you take the last three years' average investment return and use it as your investment return assumption. When selecting these assumptions, you can look at how your plan has performed over time. In the previous exposure draft, we really just talked about the investment return assumption, and that drew some comments that we really need to deal separately with the discount rate. So we've added language. We're really saying your discount rate is your investment return assumption, but it's for a hypothetical portfolio that may be totally unrelated to the plan's actual or expected investment, but you do have to somehow relate it to some kind of investment to identify what that discount rate is.

We've discussed the primary methods used in selecting economic assumptions, such as the building-block method, where you break the assumption down into its components (like inflation and real return for each asset class) and apply your investment mix. On the investment return or discount rate side, we've identified the cash-flow matching method where you're looking at specific bonds that would match your liabilities in determining the discount rate inherent in those assets. Those are really intended to be broad classes of methods. Many of the stochastic methods are really variations on the building block, where you're looking at much more sophisticated relationships between the means and expected values of your various different pieces. As a result, we have added some clarifying language that states that any method that is consistent with the principles set forth in this standard is an acceptable method. It doesn't have to be exactly what we've laid out in that standard.

There are a number of measurement-specific factors that we primarily list with respect to the investment returns, and this is where most of the discussion has been. One measurement-specific factor that you always have to consider is the purpose of the measurement. Some things may be material for a cash-flow forecast, but are not material for an ongoing plan valuation for example. So a primary factor in selecting the investment return is your plan's investment policy, and that doesn't just mean what is the policy, but what you expect the investments to be over time. There is reinvestment risk, investment volatility, and this would include, for example, default risk, bankruptcy risk, or just investing in very volatile asset classes. That volatility could be a factor in selecting your assumptions.

Let's discuss investment management performance. We think it generally may be a bit aggressive to assume that an investment manager is going to be performing above the market over long periods of time, but there certainly are situations where underperformance might be expected. For example, when the plan sponsor is the investment manager, it's not likely that he could replace himself. There are investment expenses, cash-flow timing, and benefit volatility, where you have subsidized lump sums or early retirement benefits.

A couple of new things have been added; one is expected plan termination and another is the tax status of the funding vehicle. Plan terminations can particularly be an issue in the small plan market where you know when the principal owner retires, the business ends and his plan is going to terminate. So your investment horizon may be a good deal shorter. There are also some large plan areas, such as if you have a government contract, and at the completion of the contract, the plan is probably going to terminate. That's something you may want to take into account in looking at your investment horizon, your asset mix, and your selection of the investment return rate. Of course, the tax status of the funding vehicle would be another one.

We've added a couple of new types of economic assumptions to the standard. Again, the key ones we talked about are inflation, investment return, discount rate, and compensation scale. Some of the other assumptions that do affect valuations, but in a less dramatic way, are the social security assumptions, the wage base increase and the consumer price index (CPI) increase, a cost-of-living adjustment in the plan or if you're doing something like a *FAS 87* valuation, where you're projecting the Internal Revenue Code limits with some kind of CPI increase. Two new ones include growth of individual account balances, if you have a floor offset type plan, you may have a separate defined-contribution plan that you're tracking over time, and variable conversion factors such as the lump-sum factors for cash balance plans, depending on how you're converting from benefits to lump sums.

We've expanded on materiality and cost effectiveness. The second exposure draft had something like cost effectiveness and small plans and was really getting at for many of the small plans how it's going to be appropriate to just use general research. You can reflect relevant case-specific information, but many commenters suggested, and the committee agreed, that cost effectiveness and materiality are really considerations for all sizes of plans.

If the assumption itself is not material or if the further refinement of the assumption will not be material, you don't need to make an assumption. So for things like selection of option factors and those kind of things, you're generally not going to need an assumption other than perhaps for lump sum versus annuities.

Each individual assumption has to satisfy the standard. What do we mean by an individual assumption? It is a type of assumption; it's your retirement rates or your compensation scales. We're not saying that every rate at every single age has to be an individual best estimate, but the assumption overall has to reflect your best estimate.

In the earlier draft, we had an exception to this rule. If an assumption was prescribed, the actuary could adjust the assumption the actuary selects to maintain consistency with that. This is something that primarily comes up in the public sector where you may have an investment return rate that's prescribed. I know Michigan or Minnesota prescribes 5% interest for example. We ended up removing that exception, partly in response to the comments we got on *ASOP No. 4*. There were commentators on both sides of the issue who felt strongly. Some felt the actuaries could do whatever it takes to get the right results, including adjusting, if something is outside their best-estimate range, and others felt very strongly that the actuaries should never go outside their best-estimate range, regardless of what the prescribed assumption is. So the committee finally concluded that in general, whoever is prescribing the assumption is doing that for a purpose, and that allowing the actuaries to circumvent that purpose by manipulating all their other assumptions is only going to lead to yet more regulation and more constraints on actuarial practice. We acknowledge that there are situations where it may be appropriate. For example, in Minnesota, where there is a mandated 5% interest rate that was set in the 1940s, it may be very appropriate to adjust your assumptions to produce reasonable results. You can still do that, but it is considered a deviation from the standard which has to be disclosed. Whenever you deviate, you have to disclose the nature and effect of the deviation and be prepared to justify it. We did feel that, in general, the cases where deviating from the standard would be appropriate, were probably infrequent enough that it was better to handle them through the deviation clause than giving a blanket license to people to manipulate their assumptions.

So the consistency requirement now applies to those assumptions that the actuaries select, and they need to be consistent with all the other assumptions the actuaries select, unless there's an assumption that's not really material to the measurement. The reason we added that last exception would be if there is a situation where you have the small plan and the principal owner is earning over the 401(a) 17 limit. Is that a 0% salary scale assumption or is that no salary scale assumption? There was great debate on this point. We felt that we could handle that through this consistency requirement where that salary scale assumption is not going to be material; it does not have to be consistent with your other economic assumptions like the investment return rate.

Finally, as we discussed earlier, prescribed assumptions are not subject to the standard and furthermore, the actuaries should select all their other assumptions without regard to the prescribed assumption. So where you do have an interest rate that may be prescribed for a public plan, select all your assumptions as if you were selecting the interest rate. Then you can use the interest rate that has been prescribed for you on top of those other assumptions. You do have to disclose in your actuarial communications the source of any prescribed assumption. In an earlier draft, there had also been a requirement that if that prescribed assumption was not consistent with the standard, the actuary should also disclose that, which has drawn a great deal of negative comments. The committee had actually taken it out on the second exposure draft, and the board put it back in. I think it will probably come out in this third exposure draft, although I guess that remains to be seen. So those are the key changes.

Mr. Burrows: Heidi has talked about the best-estimate range. That is an extreme element of both the economic assumption standard and the amendment to *ASOP No. 4*. We expect it will be a key element on the standard of noneconomic or demographic assumption. When you receive the new exposure draft, if you read nothing else, take a look at that information and see if you can live with it. What we've tried to do is incorporate the concept of an interportal range, but we tried to word things in such a way that it's not going to be necessary for the actuary to always perform stochastic modeling. We're not sure we've succeeded, and we need input from the profession. So look at that definition very critically. If you're not comfortable with it, be sure to let us know.

As Heidi was just alluding to, if you're not happy with it, don't just say it's awful. Tell us what you think would be preferable, keeping in mind that we're trying to get at this notion of 25–75%. We're trying to encourage people who see fit to do stochastic modeling without requiring it. Heidi also mentioned that we've taken out the exclusive provision for adverse deviation. It is our plan, and I hope we have succeeded and will continue to even though we don't have an exclusive provision for adverse deviation, or a provision for contingency margins. Even though we used the words best estimate, we think we have provided enough flexibility so that the actuary who feels there is a need for conservatism because of the facts of the case, has been given enough flexibility to incorporate the requisite amount of flexibility and conservatism. You'll find the source in some of the measurement-specific factors. For example, investment volatility includes the probability of ruin and the probability that the issue of the security will go out of business. Benefit volatility includes the probability that we never are quite sure how many people will retire early and elect early retirement supplements. We make an assumption about that, but we're never quite sure of what will actually happen. There is also the probability of plan termination. These are all factors that the actuary can consider, which we're hoping we will encourage the actuary to consider to provide essentially the degree of conservatism that would have been provided by our provision for adverse deviation. About the only thing we are taking a stand against is conservatism for the sake of conservatism. We don't think that is appropriate. We do think that if there are uncertainties where the purpose of the measurement requires that we make an allowance for the possibility that the uncertainties will fall in the wrong direction, we think that the actuaries should have the authority to reflect those uncertainties in their assumption. Much depends on the purpose of the measurement. A measurement for funding would probably involve quite different conclusions than a measurement for internal estimates of probable future long-term costs of the plan would provide.

From the Floor: I have a couple of questions about standards in progress: the possible QDRO standard and the noneconomic assumption standard. Maybe we could have some discussion about where those stand. I know what the work of the committee is like having spent five years on it, and I know there's a great deal to be done. I was just wondering where those might be. I know they're in discussion.

Ms. Dexter: On the QDRO standard, as we call it for short, there's a group that has been known as the Boston Numerical Dissolution Group, which includes lawyers and actuaries who have come up with a working discussion draft. Ken Steiner, who chaired that group, has circulated the draft to various people who had expressed an interest. They have received comments back and that group has incorporated those comments into a new draft. The changes were not terribly extensive. The committee is meeting on August 6, 1997, which should be in the middle of this comment period. For the first meeting since I've been there, we're not going to talk about the economic assumption standard. We're going to spend a half day on the numerical dissolution standard and then a half day in the breakout groups on the demographic and other assumption standard and the asset/liability, the liability measures and actuarial cost method standards. The QDRO standard is the furthest along as far as actually having a draft document at this point. I think the demographic standard is the furthest along now, and we're hoping that as we get the economic assumption standard nailed down, that will help us a great deal with the demographic assumption standard. The demographic standard task force is fairly large. I think there are six people who are working on that. It seems to be coming along fairly well. I think they're making good progress this year. They did get a little bit delayed a year ago with some turnover in the committee. I had asked one member who wanted to retire last year to stay on so we could try to keep that work moving forward while we get the new people up to speed.

Mr. Burrows: We've gone far enough on the demographic assumption standard to realize that it's not as easy as we thought it might be. We thought that when we got the economic assumption standard behind us, it would be downhill all the way. This is not going to be the case.

Ms. Dexter: Just so you know that the people who are chairing those task forces, of course now the whole committee is taking over the QDRO standards, for the rest of this year Dave Gustafson is heading up the demographic and other assumptions, and Larry Sher is heading up the actuarial cost methods and liability valuation and Dick Wench is going to be heading up the asset valuation methods. So if there's an area you're particularly interested in, contact the chair of the drafting task force and they can always use more members. If you just want to be involved in seeing some preliminary work as it goes along to have an earlier opportunity to comment, we are happy to share that. It is a very difficult process if you've never been involved in it. I think the new members are always a little shocked after they've been to a meeting or two.

Mr. Burrows: I think that in the responses we've received to the economic assumption proposals and the proposed amendment to *ASOP No. 4*, we've got some good news and some bad news at the same time. I'm viewing it as mostly good news. The good news is that for the first time, people seem to be paying attention to the work of the standards board and its committee. Still not as much as I would hope, but we're receiving many more comment letters than we ever have in the past. The bad news, of course, is that we have to take all those comment letters into consideration.

Ms. Dexter: I certainly would encourage people to write comment letters when these exposure drafts do come out. The committee does pay a great deal of attention to those people who take the time to give us their thoughts.

Mr. Burrows: In some ways, the committee pays too much attention to the comments. You have to have been there to appreciate how much influence a letter has because there are so few letters. You will see in the appendix to the new economic assumptions proposals standard a discussion of numbers. In one case, the overwhelming majority consisted of 13 letters. Some 13 individuals took the time to sit down and tell us what they think, and you could say, to a very great extent, they're calling the shots for the entire profession. Now if you happen to agree with those 13 letters, you're in good shape. But if you don't, you and the rest of us are going to be living with the conclusions that the board and its committee drew from those 13 letters.

Mr. Joseph A. Applebaum: I noticed that in formulating the investment return, if you're using let's say the building block method, you're going to have some forecast of inflation. Later you mentioned some forecasting of social security wage bases and the use of some measure of inflation. Does the standard specifically require under its consistency guidelines that those be identical?

Ms. Dexter: It requires that they be consistent. It does not require that they necessarily be identical. It gets back to the whole measurement period issue—some assumptions operate over one period of time, and other assumptions operate over a different period of time. That one factor alone might affect the relationship, and we specifically say that just keeping a constant spread between those assumptions doesn't necessarily mean they're consistent when you're changing assumptions for example. We do say they should be consistent. For example, if you're using a select-and-ultimate interest rate, you should probably be reflecting that in your compensation and social security scale or whatever other assumptions are applicable to your plan.

Mr. Burrows: To use your specific example, I think it might be possible to make a case for the proposition that if you use the same percentage assumption about future increases in the social security wage base that you'd use for inflation, it is an inconsistency.

From the Floor: I'm saying that the inflation assumption is underlying the increase in wage basis.

Ms. Dexter: Right.

Mr. Burrows: One of the earlier versions of the economic assumption disclosure draft suggested the possibility that there could be two rates of inflation that would be appropriate; one applying to investment return, and the other applying to everything else. The responses that we received to that one were different ways of asking, what are you talking about? We decided that was a refinement that we didn't want to outlaw, but we're certainly not going to insist that everyone try to incorporate it.

Ms. Dexter: I think what they were trying to get at was when you're looking at the investment return and you're talking about inflation, you're really talking about an investor's expectation of what inflation is going to be as that investor is determining what assets to invest in. That may be somewhat different than the general expectation of future price increases, but it was very confusing, so we took it out.

Mr. Burrows: It was tied to another concept that also disappeared called the tax risk in investment forecasting. Taxable investors are going to want to have a better return if they expect inflation because they will have to pay taxes on the inflated values of their securities. That is also gone.

Ms. Marilyn Miller Oliver: Could you provide a little more discussion of the subject of materiality?

Ms. Dexter: The section on materiality does specifically talk about whether it's going to be material in the judgment of the actuary. So your peers don't necessarily have to agree with you but you have to have a good rationale for why you concluded it was not material. We are not requiring an explicit test. For example, in the case of the small plan, 90% of your liability lies in one person earning over the 401(a)17 limit. You may have one other employee who has a lower salary, but you're expecting that employee is probably going to terminate in two years anyway. It's not going to make very much difference. We're not requiring you to value with and without. The salary scales determine whether that's material.

From the Floor: Are you saying though maybe there should be a file memo saying why you did it?

Mr. Burrows: Yes. Throughout all of the pension standards, I think it's important that we're not trying to suggest doing something that you'll be able to sell to your peers. Instead, we're suggesting that you should be able to convince your peers that you went about it in a thoughtful, methodical manner to come up with the answers you came up with. In other words, it should no longer be adequate to say I picked 8% because that's what everybody else has been using. Instead, you need to be able to say, “This is the thought process I went through in arriving at this assumption. Agree or disagree as you see fit, but I want you to know that I used the following rational thought process.” I think one consequence of the battery of pension standards will be that the worksheets that you keep in your file will be a little bit more extensive than they have been in the past.

We would like to propose that you should be doing what you think is most appropriate, that you should not be influenced by any knowledge you might have that there are certain black lines or trigger tests. On the other hand, and that might be bad news, because we might be suggesting that you invite arguments if your conclusions should happen to be that you can't stay inside this trigger test area that you know the service has. On the other hand, we should all be aware that these standards apply to all actuaries who are members of any of the United States actuarial societies, including actuaries who work for the various governmental agencies. Let’s say an actuary should, in the future, question you about your selection of an assumption. If you show him your rationale for arriving at that assumption, and he still says, “I'm sorry, but I'm going to redo your valuation and insist that you use the following assumption,” you can say, “I'm not sure that you are following the standards, Mr. Government Actuary. I think maybe we should go together to the Actuarial Board for Counseling and Discipline and talk this over.” I think that could have a salubrious effect on the problem we've all had. I think this particular small plan audit problem may be behind us, so we may be worrying about something that may not be happening again anytime soon. Does that give you a flavor for what we're after?

Ms. Dexter: Also from a practical standpoint, my sense is that the key thrust is being inside your best-estimate range. We do want you to reflect appropriate measurements and specific factors, but I don't know that anybody is going to be able to second guess why you picked a particular point in your range.

Mr. Burrows: I would venture to guess that it's going to be impossible to fault an actuary about where within the best-estimate range that actuary decided to pick a point.

Ms. Dexter: Right. To the extent that there is any overlap between your range and the perceived sanctioned range.

Mr. Burrows: I would say that as long as you stay within the range that you developed, the only way that you could ever get into trouble would be to go to the same end of the range for each of the assumptions. If one were to do that, I think the results in the aggregate would cease to be reasonable.

Ms. Dexter: For example, if you were at the high end of both compensation and interest rate, they might be very consistent, but if you were at the high end of interest rate and the low end of salary scale, they might not.

Mr. Jeffrey A. Groves: Your comment about assumptions and the aggregate made me think of the earlier comment in which you stated that you were going to rewrite *ASOP No. 4* as an umbrella standard. The conservatism that had been in the new economic standard is probably going to be better put in the new *ASOP No. 4* as an umbrella. It sounds as though we might be talking a decade. I don't mean to be facetious. What happens in the interim if we have an economic standard that doesn't address conservatism? What if we don't have some overlying standard that talks about reasonable assumptions in the aggregate?

Mr. Burrows: I think you're going to find that the latest version of the proposed amendment to *ASOP No. 4* is in a sense, responsive to your question. In that latest version we do talk about, we incorporate the notion of your best-estimate range, as well as the assumptions must be reasonable in the aggregate.

Ms. Dexter: Let's talk about the amendment to *ASOP No. 4*. I think it requires a little bit of history. The original *ASOP No. 4* was promulgated by the predecessor to the Actuarial Standards Board, the Interim Actuarial Standards Board back in 1988. At that time, the feeling was that it would be consistent within prevailing practice to encourage that it's acceptable to use assumptions that are reasonable in the aggregate. Not that it has ever been unacceptable to use reasonable assumptions, but at that point, I think that the general attitude was that it's perfectly acceptable to use assumptions that, in the aggregate, are reasonable. So the original *ASOP No. 4* dictates use of either approach, but it kind of gives the nod to your reasonable in the aggregate approach.

From the Floor: I believe that was done before *FAS 87* required individually explicit assumptions. There was a strong concern about coming through with a heavy nod that would be beyond what was acceptable to the IRS for funding. Not that that should be a real measure of judgment, but that was one of the considerations. It was also before PCs were really, really good. So there was an extreme practicality cost effectiveness issue except for the very large practitioner which was a concern at that time.

From the Floor: I joined the committee in 1985, and this was half done when I got there. I think it took us until late 1986 before we issued an exposure draft, but I could be off with my timing there.

Mr. Burrows: In 1993, the ASB and its pension committee decided it was time to reformat the original *ASOP No. 4* to the current standard format that the ASB is now using. The game plan was to do practically nothing in the way of substantive revisions in the original document. That game plan was due partly to a question of priorities. We all had much more pressing issues to wrestle with, in particular the economic assumptions standard. It was partly due to the fact that at that particular point in time, we didn't want to go through the process of re-exposure, and we knew that a major change would have to be re-exposed as part of the due diligence process. So instead of making a change in our approach to the individual versus aggregate issue, we changed the words slightly so that with the 1993 version, we were continuing to sanction both approaches, but we were indicating a preference for the approach where each assumption is reasonable.

One reason why we didn't feel it was necessary to go further that time was our conviction that because of the statutory changes Joe has just mentioned, it probably wasn't necessary to have a standard that called for individually reasonable assumptions. That is what the law already called for. Unless we were talking about multiemployer plans, the law says that 412 work must use individually reasonable assumptions, or assumptions that are reasonable only in the aggregate. However, if you use this latter approach, the contributions developed by those assumptions that are reasonable only in the aggregate, had to be the same as the contributions developed by assumptions that are individually reasonable. We thought that at that point it was not necessary for us to suggest that only individually reasonable was appropriate because it seemed to us the law already said so. It came to light fairly recently that we were wrong.

In your 412 valuation, you first do a base valuation using individually reasonable assumptions, and come up with some answers. Then, you do a PBGC premium calculation using a combination of mandated assumptions. The PBGC premium calculations involve mandated assumptions, plus whatever discretionary assumptions are necessary to produce a PBGC premium which is either zero or as close as possible to zero. Then you take those discretionary assumptions and come back to your basic 412 valuation and you ask yourself what changes in other assumptions you might make to your basic 412 valuation to use the same assumptions I just used to develop a PBGC premium of zero. At the same time, develop a section 412 contribution, which is identical to the contribution that I developed with my base calculation.

The Actuarial Standards Board and its committee were not real happy to see this kind of behavior. We didn't think it did the profession any good, we thought it was probably going to lead to still further dictates that were written into the law regarding what assumptions we'd have to use. We could envision the possibility that our current liability calculation for example would involve not only mandates as to interest and mortality, but it might involve mandates as to assumed retirement ages. We knew that our long-term game plan was to go to a point where all assumptions would need to be individually reasonable, so we decided it was probably appropriate to expose an amendment to *ASOP No. 4*, which would make those changes to make it clear that a good practice standard did not involve throwing the notion of individually reasonable assumptions out the window. We had received virtually no adverse commentary on our original economic assumptions exposure draft, that part of the exposure draft which dealt with individually reasonable assumption requirements, so we were fairly confident that most of the profession probably would not find it objectionable that *ASOP No. 4* was to be amended to make it pretty clear that the assumptions should be individually reasonable.

Were we ever wrong. We received a flow of comment letters which was about as good as any we've ever received on any standard. That flow expressed a lack of understanding, they showed that we needed to clarify our definition of individually reasonable. We had indeed left some aspects of our definition of individually reasonable up to the imagination. We had for example, not made it clear that individually reasonable for investment rate of return assumptions did not mean you have to use your best guess as to what will happen in 1997, and again, your best guess as to what will happen in 1998 and again in 1999 and so forth. What we should have said, and what we now say, is that individually reasonable ran through the notion of the type of assumption that as long as the investment rate of return assumption is consistent with the actuary's best guess as to what will happen, it doesn't matter whether it is a select and ultimate assumption or a single rate. This also applies to static versus dynamic mortality assumptions and a single assumed retirement age is acceptable or whether we have to have a full blown retirement decrement. As a result of some of these comments, we did two things. We went back and revised the economic assumptions standard to try to reflect some of the same comments, and this is the reason why the economic assumptions standard now discusses materiality, and I think we have words in there that make it clear what an individual assumption is.

Mr. Burrows: That's only in *ASOP No. 4* at this point. I don't think it's that difficult an issue in the economic assumptions standard. We have refined our discussion of when you need to use an assumption, so we think that the reaction we got to the amendment to *ASOP No. 4* probably has given us a better work product in our new version of *ASOP No. 4.* In addition, in our revised version of the economic assumption standards, we have incorporated many of the notions that are in *ASOP No. 4*, such as a best-estimate range. So we think we've accomplished what we were after, and we're hopeful that the profession will agree that we have eliminated many of the problems that we created by being too brief in our first draft of the amendment to *ASOP No. 4*. We would certainly invite questions on our general notion of the whole issue of individual versus aggregate. As we've already said, you have to do both. That is, each assumption must be individually reasonable, the assumptions must be consistent each with the other, and when you put it together, the aggregate result must be reasonable. This is an interesting point where we're dealing with a series of assumptions, each of which individually might not be material. If you have a whole series of assumptions and you decide that you are going to make the no assumption with respect to each one of them because each one of them is immaterial, the sum total of those no assumptions may create an aggregate picture that is not reasonable.

Mr. Groves: I have a question about the applicability of these various standards. I'd like to get back to what Heidi had said earlier about the standards not applying to things like benefit statements. I know that on the life side right now there's a lot of activity going on with life insurance illustrations, and I wonder at what point we need to be reasonable with the sorts of things we do on pension statements. I've seen pension statements that merely show accrued benefits and normal retirement benefits projected with no inflation; I've seen them with inflation projections, but brought back to nominal dollars. There are many ways to do this and you could certainly change the numbers around. There's always some perspective that you're trying to get at, or that someone wants you to get at. I was a little bit disenheartened to hear that the standard wouldn't apply in those areas except the one that you mentioned regarding validating the supplemental executive retirement plans (SERPs) for an executive.

Mr. Burrows: I'm not sure that we meant to imply that the question of preparation of benefit statements, especially benefit statements that involve projections, should not be subject to an actuarial standard. What we did mean is that we hadn't thought about application of the standard to benefit projection for individual employee statement purposes. Let me illustrate. It's not clear to me that a benefit statement that projected your expected retirement benefit and did not include an expectation of changes in your current pay, would satisfy the standard on economic assumptions. On the other hand, it seems fairly clear that it should be an acceptable approach. It should be acceptable to give employees benefit statements that don't make assumptions regarding future increases in their pay. It might be a useful approach to do so, as long as you surrounded the statement with enough wording making it very clear what was done.

Ms. Dexter: You also get into the issue of valuing, showing a benefit in 1996 dollars versus 2024 dollars, which people may not be able to relate to at all.

Mr. Burrows: So there are some elements of understandability to the lay employee that need to be addressed before we try to extend any standard to the question of preparing individual benefit statements. It is quite different from preparing a benefit statement for an executive which puts a value on that part of his or her compensation package that is represented by the SERP. It could be argued that the standard should apply. We don't mean to say that there should be no standard or no elements of professional accountability when an actuary is helping prepare participant statements. We haven't thought through the issue far enough to be willing to extend this particular standard to that exercise.

Ms. Dexter: There also are consistency problems. I know one of my pet peeves with many benefit statements is they show a pension at 65, assuming no salary increase, and a 401(k) balance at 65 assuming an investment return. This is a totally inconsistent assumption. On one hand, there is an assumption of no inflation for salary increases with respect to the future contributions to the 401(k); and on the other hand an inflation element used in the investment return assumption. We really felt we couldn't deal with those issues. There was at least one, maybe even two comment letters that suggested that the standard should apply to all retirement calculations of any type. Considering the difficulty we've had drafting this standard for pension measurement, we didn’t want to expand the scope to include all retirement calculations.

Mr. Burrows: Let me turn the question back to you. You've expressed a little disappointment that the standard doesn't apply to participant statements. Do you think that a standard which would apply to participant statements should be fairly high on the priority list? Do you view it as an issue that deserves fairly prompt attention?

From the Floor: No, I don't, although I certainly had employers tell me, as Heidi has mentioned, that we want a benefit statement that shows the 401(k) balance or an Employee Stock Ownership Plan balance brought forward at what we think the underlying return on those shares or those accounts are going to be; it would be nice if I point to a standard which outlined what was acceptable.

From the Floor: Oftentimes we don't get involved with doing benefit statements because somebody in the communications part of our company will be doing the benefit statements. Anything we have that says here's a standard of practice, strengthens us.

Mr. Burrows: Agreed. You are bringing me to one of my pet issues, and that is that the absence of one of these little gray books does not mean that there's not a standard. There are current standards that haven't yet been qualified and written by the ASB. It seems perfectly acceptable to me to tell the person who makes the request that in your opinion that would not satisfy your professional responsibilities. It's not consistent with generally accepted actuarial practice.

Mr. Applebaum: This is really a critical issue. If firms are producing benefit statements that are based on unreasonably inconsistent assumptions, this really creates a whole raft of issues for us as a profession. I'm speaking here solely on my own behalf. Take an example where annuity rates were also provided under the same circumstances. Someone who is in their mid 40s and who had a few years of experience on a job could reasonably conclude that based on the 401(k) plus the pension plan and Social Security, given the current rate of contribution, the person would get a replacement rate of something like 125% of gross pay, after a 20-year career.

Mr. Burrows: I think you're right, and I guess most of us have seen outrageous examples of that type. I think this has been a useful dialog. I think we now have to see if we can get a handle on whether it's occurring with enough regularity so that we should be pushing a standard that treats this issue up to the top of the list.

Ms. Dexter: Another problem I see with that though is the fact that there is no requirement to have an actuary certify a benefit statement. To the extent you have these statements being prepared by communications people with no actuarial input, how do you govern part of the practice, but not all of the practice?

From the Floor: The question is whether someone has to sign off. Whether they are an actuary or not is an important issue, and I fully subscribe to that. The point is, without any such disclosure, it is simply impossible for the public to have any confidence in the projections being reasonably close to the actual results that they'll get. Given that we all know that there are going to be more and more defined-contribution plans around, or at least that's the way things look right now, we will be greatly remiss in our public responsibilities if we don't step in and try to explain to people why this is important.

Mr. Burrows: I think you're right, and I think we have a fairly respectable analog in our approach to *FAS 87*. Our standards do not apply to a selection of assumptions for *FAS 87* to the extent that the client, in concert with the client's auditor has dictated them to us. On the other hand, the standards do apply to any advice we might give the client or the auditor on what we think might be appropriate assumptions. The analog here is that although we may not have control over what goes into those participant's statements, and therefore can't be held accountable, if we're asked for advice or if we see a client doing something for which it would be appropriate for us to give advice, I believe that it's proper to have actuarial standards that apply to that advice.

Ms. Dexter: I would make one follow-up comment on the amendment to *ASOP No. 4*. The published report that you'll get will just be the amendment and it will say things like replace the first paragraph of 5.24A with the following text, so you really have to look at both the original standard and the amendment side by side to figure out what goes where. To help people get those things together, we are planning to put on Actuaries Online, a revised version of *ASOP No. 4*, integrating the standards so you can print out the section on assumptions and see the whole thing as it would stand after the amendment.

Ms. Dexter: A draft of these applicability guidelines is something that each of the operating committees is working on for their own practice area, envisioning that someday these will come out as a published document covering all the practice areas.

Mr. Burrows: If projecting future results for tuition savings arrangements becomes a big issue, the pension standards should be on the list for that kind of exercise.