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MINIMUM FUNDING REQUIREMENTS AND MAXIMUM DEDUCTIBLE LIMITS

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- o The panel will discuss the minimum funding requirements and maximum deductible limits currently in effect, including full funding limitations and funding standard account determinations.

MR. JEFFREY A. GROVES: With me on the panel is Margaret Wood-Duggan. She is from George Buck in Atlanta. We are going to be switching back and forth during our presentation. Margaret is going to speak first, and then I am going to speak, and just so you can be thoroughly confused, she is going speak again, and if we manage not to take up the entire time, you all can speak.

MS. MARGARET WOOD-DUGGAN: We are going to start with a little bit of history. We'll go over the minimum funding requirements that have originally been set out in ERISA.

We had implicit actuarial assumptions: as everyone knows, that has to do with our salary scale, our interest rate, our decrements all being reasonably in conjunction with each other. We calculated all of our liabilities and normal costs under our regular funding method. We were allowed to use an actuarial value of assets which could be any method that the IRS approved. There were several. We used level dollar amortizations of all of our supplemental liabilities and experience gains and losses. Any liabilities that were determined upon plan inception could be amortized over 30 years (40 years for multiemployer plans). Any future plan amendments were to be amortized over 30 years, or 40 years for multiemployer plans. When we had experience gains and losses, we amortized those over 15 years, if our method called for explicit amortization of gains and losses, and 20 years for multiemployer plans. Any actuarial assumption changes or method changes were to be amortized over 30 years.

Original minimum funding rules had some exceptions. The first one that we will talk about is funding waivers. Waivers were granted if you had substantial business hardship. In the case of multiemployer plans, 10% of the employers had to have substantial business hardship. In order to get a waiver, you had to have IRS approval, and in the actual Code there was no set time limit for the waiver application, yet there is a revenue procedure that said that you were expected to file for your waiver before the end of the next plan year. The rules allowed for 5 waivers in 15 years. The waived amount is then amortized over the following 15-year period.

Another exception was that you could request an extended amortization period. The Code specifically said that you filed for your extension with the Department of Labor; that was later changed to filing with the Department of Treasury. The amortization extension was normally granted when the Department of Treasury felt that it wouldn't jeopardize the funding of the plan. The amortization period could be extended up to 10 additional years. Contributions for the funding standard account could be made within 8½ months after the end of the plan year in order to meet the minimum funding requirements.

We had an alternative minimum funding standard. This was only available if you had always used the entry age cost method. Under alternative minimum funding, you had charges that were the lesser of the plan termination unit credit normal cost or entry age normal cost, plus the excess of the plan termination liability over the market value of assets. In this instance, you still had to track your regular funding standard account, and if you ever switched back over, then you had to make some adjustments to your regular funding standard account. The difference in that position

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when you switch back gives you a special one-time credit, and the charge that is established against that is amortized over five years.

The full-funding limitation under the old rules is a comparison of the assets over the liabilities where the liabilities were determined under the regular cost method. You calculate the liabilities at year end by taking the beginning of the year liabilities plus the normal cost and increasing them with interest to the end of the year.

Do a similar calculation with your assets and you take the lesser of market value or actuarial value. You offset beginning of the year funding standard account credit balance and then give interest to the end of the year. Now if a full-funding limitation applies, you get a special one-time credit in your funding standard account so that you don't have any deficiency. At the same time, all your credit and charge bases are considered fully amortized.

This is our equation of balance:

$$\begin{aligned} \text{UAAL} &= \Sigma (\text{outstanding charge base balances}) \\ &\quad - \Sigma (\text{outstanding credit base balances}) \\ &\quad - (\text{funding standard account credit balance}) \end{aligned}$$

On the funding standard account, you always balance back your unfunded actuarial accrued liability or UAAL that you were using for your funding. Your unfunded accrued actuarial liability for funding would be your actuarial accrued liability minus your assets, and that should be the same as the sum of your outstanding charge bases minus the outstanding credit bases and then offset by the funding standard account credit balance. This was simply used to ensure that everything was working together correctly.

Before 1987 when the Omnibus Budget Reconciliation Act (OBRA) was passed, there were very few changes in what was required for minimum funding. We had the amortization period shortened for multiemployer plans in 1980 when the multiemployer pension plan act was passed. We then had PBGC requiring notification to them if your waiver amount exceeded \$2 million. Again, we had the same thing on your extensions; you had to give PBGC notification if the effect of the extension exceeded \$2 million, and extended amortization payments were figured at a federal short-term rate rather than at the valuation rate. Other than that, our funding standard accounts have been determined in the same way since 1976 until 1987, and Jeffrey is going to tell us how those changes have affected our new calculations on minimum funding.

MR. GROVES: One of the nice things about these new rules I'm going to be discussing is that it's really just between me, as an actuary, and my client contact as opposed to me, my client contact, and all of his employees. We really don't have to be changing the plan and increasing coverage or participation or decreasing plan integration. It's just really a matter of money. You know money is something that may be painful, but it's a lot easier to fool with than the public relations involved with the other changes. There are a few public relations things that are written into the new minimum funding requirements. I'm not going to talk about those, although if anyone wants to ask, I'll try to answer. We're just really going to be talking about money right now.

To begin with, I would like to say that Margaret was emphasizing things that were really familiar to us; for example, the full funding is based on the actuarial liability using the cost method: that just seems so obvious that we wonder why she mentioned it. But there was a good reason for dwelling on these points. I think before December 1987, we just were blindly going on our way assuming that we had actuarial cost methods and assuming that we'd do everything the way that we had always done it before. Well, things have changed somewhat.

This Revenue Act, as with a lot of revenue acts these days, came out of two places. It came out of the tax-writing committee where they're trying to raise some money. But there's always some other people who want to get something in. In this case, it was the PBGC that was suffering from all sorts of ballooning liabilities. As you know, one of the items that worked its way through here was an increase in the PBGC premium.

The legislators thought that perhaps part of the PBGC's problem was that the minimum funding requirements really weren't strong enough and that people were able to use actuarial assumptions that were too optimistic and generate losses that would be amortized over too long of a period, or

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change those assumptions and amortize those changes over too long of a period. Additionally, we had plan changes that, for example, might come up every four or five years in a negotiated environment where you would increase your benefit unit, and you would amortize that over a longer period, say 30 years, instead of the five that it might actually be good for, because 5 years later you would be changing your plan again.

We have the PBGC problems and a drive towards strengthening the minimum funding. On the other side, we have the tax writers and they're looking for revenue; and pension plans are always a nice easy place to get money because no one really understands them, except for the people in this room and our contacts. It is easy to raise taxes by going after certain things in the pension area, and they don't look like ducks, to use the expression I heard.

What did these guys do? They did something old and something new, I guess, to phrase it in a cute way. Some of the new things were pretty familiar. They require us to use explicit actuarial assumptions. We weren't always using those in our valuations. We would offset salary scales with interest sometimes. But we knew what explicit actuarial assumptions were all about. They also put some limits on the asset valuation methods; maybe we weren't using those to the extent that they were limited, but it was nothing new. Congress also shortened up the amortization periods. There was nothing terribly surprising about those three things, but then they added some stuff that we really hadn't heard of before.

For example, they came up with the idea of an unpredictable contingent event benefit, for example, a plant shutdown. Without the shutdown, participants might have to wait until they were 55 to get a reduced early retirement benefit; if the plant shut down, a special immediate unreduced benefit might go into effect for people age 50 and above. We really hadn't been counting those in a reasonable way in our valuations because we thought the probabilities were very low, or maybe we were counting them and getting big tax deductions, but it wasn't addressed anywhere in the Code or the Regulations. So now it's worked into the Code.

In addition, because of this problem with the PBGC liabilities, and the PBGC basically is taking on the value of accrued benefits when plans terminate, Congress thought it would be a good idea to get those unfunded accrued benefits to be funded as quickly as possible. So Congress said it was going to take all these accrued benefits as of the end of 1987 and fund them quickly by amortizing them off. This is an addition to what we're already amortizing.

Any plan change that we put into effect (and we'll see later that it's not just plan changes, but sort of environmental changes) after 1988 that would increase the value of the unfunded accrued benefits are going to be funded in a fashion that was new and different to us. It's not really being amortized in a level dollar amount; it is just written off in a very quick fashion.

In addition to the old things and the new things, there were some administrative changes. As Margaret mentioned, the Code hadn't said anything as to how long you actually had to apply for a funding waiver. Now the Code says you have 2½ months to apply. (We gave you a little special grace last year, you had 5½ months.) The thresholds to notify the PBGC when you want any of these exceptions were dropped from \$2 million to \$1 million, so if you're waiving \$1 million, now you've got to have the PBGC notification, and if you're extending your amortization periods in such a way that your minimum contribution drops by \$1 million, the PBGC has to be notified. In addition, the effect of these waivers and the effect of these extensions are going to be amortized at higher interest rates. So we have something else that's kind of new. We have two interest rates working their way through our funding standard account.

The last thing which we've all started to struggle with and the IRS gave us a notice on earlier this year, I guess after the first due date, is that our contributions aren't really due any more 8½ months after the plan year. They're due during the plan year, so we have to pay them a little bit more quickly.

That doesn't apply, by the way, to multiemployer plans, and I think from my experience, most multiemployer plans are making those contributions on a fairly periodic fashion anyhow.

So we have to put all this extra money in and get it in faster and what do we have to help? Well, we have new limits on how much we can put in. The limit that we were used to, the end-of-the-year actuarial liability under the cost method that we were using, has a new added twist. We get

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to use that, plus we have this current liability thing, and 150% of the current liability is also a limit. The current liability is more or less the present value of accrued benefits based on current market rate interest.

If the limit that we use is this 150% of current liability, then we don't get to wipe out the amortization bases. If we don't wipe out the amortization bases, then something has to happen to the equation of balance: we're not putting money in because of the full funding limit, but those outstanding amortization bases are reducing, and the whole thing won't balance. The answer is going to be, I suspect, that we're going to add a new charge base to the funding standard account to make up for this credit, and it's going to be amortized over some period. Since the charge base isn't referred to in the Code (obviously the period isn't and we're just kind of guessing); the latest guess I've heard is 10 years.

Maybe 150% is not the right number. Maybe in a plan that has a whole bunch of people under age 30 and no retirees, a final pay benefit really should have assets building up faster than 150% of their current liability. The Code gives the Department of Treasury the authority to change that 150% based on the demographics of the plan. But if it does, it has to make sure there is no overall revenue loss (or I guess, gain: I don't think the Department of Treasury would be too upset if there were a gain). I heard that the IRS doesn't really intend to do that, so I think 150% will stay with us.

Also, for those of you who are unaware, it was mentioned that in the Senate Finance Committee Bill (and I think also in the House Bill), there were some statutory changes to the 150% for certain plans. I had looked at them; they were fairly constrictive and basically wouldn't apply to many except plans with very young employees and almost no retirees. In any case they have been stripped out of the Bill before it's gone to conference, so I don't think we'll see much change there.

In the original ERISA, there were a few things you could do with assets, and then IRS regulations expanded on them a little bit. One of the things you could do if you had a bond portfolio was just evaluate it at its amortized book value. Well, that's gone away except for multiemployer plans. The regulations constrained your actuarial value of assets to be within 20% of the market value or within 15% of the average market value. Well now, the 15% of average market value is gone away, so your actuarial value of assets has to be within 20% of market.

In addition, all these amortization periods have been dropped down. As I mentioned to begin with, the idea was that plans were being overly optimistic in their assumptions, and the losses were amortized over too long a period, and the assumption changes, when they did occur, were amortized over too long a period. Gains and losses are now being amortized over a quick 5 years.

There was a question when the law came out, as to whether we should use this 5-year amortization for our 1988 valuations. I think it was May of 1989 before we knew the answer; the IRS said, "Well, for all you guys who used 15-year amortizations last year on those new gains and losses and if your plan year began on January 1, that was okay for last year. But whatever the unamortized amount of that gain or loss was, you have to write it off over the remaining 4 years; you've got to get back in step with the 5-year amortization of the gain or loss.

The assumption changes go from 30 down to 10 years. The waivers which you previously could amortize over 15 years, you now can amortize them only over 5 years. So they're really speeding things up. The idea is to keep the PBGC out of trouble. I hope it works because the worse the trouble is, the more of these things they are going to put on us.

What has this Revenue Act done to minimum funding? Looking at this thing like a big onion, we can sort of peel it back. I've given you a rough overview; now let's start peeling back the pieces. In my mind, the outer piece is what we put into this minimum funding machine and what comes out at the bottom.

We saw before what we're putting in had been implicit assumptions. Now we're putting in explicit assumptions, but the Code says that if we can get the same result with implicit ones, that's okay. I'm not really too sure how you can prove that you're going to get the same results without actually doing two valuations. I believe that most people are going to go to just using explicit assumptions.

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How about interest rates? Well, we get to use our interest rate that we think is our best guess. Now, of course, it has to be explicitly our best guess. But we have some other things that we're going to use market rates for and the market rates, interestingly enough, specifically do not apply to the plan. That's what the Code says. They specifically apply to the market, and they are based on the federal mid-term rate, which is the average rate that the government is getting on its mid-term securities. We're going to use these market rates to amortize our waivers, to figure out how to amortize payments being made over extended periods, and to figure out what the penalties might be for making our contributions (which are now due quarterly) late.

In addition, to do the current liability calculation, we're going to use the same market approach, but we have a corridor around the market rate in which we can pick a number or have a number picked for us. It's somewhat unclear; last year it was a combination of both.

And, of course, we're going to add in this current liability calculation itself. As I mentioned, it's roughly the present value of the accrued benefit.

What comes out? We're going to look at the insides later, but what comes out of this process? What comes out are contributions that are paid every quarter like your estimated taxes for your individual returns. You have to put in a quarter of the required amount on or before 3½ months into the plan year, and then another quarter at 6½ months and 9½ months and the last quarter has to go in before ½ month after the end of the plan year. Since an awful lot of plan sponsors weren't doing that, in fact since an awful lot of plan sponsors were putting their money in at the last minute, 8½ months after the end of the plan year, Congress gave us a four-year phase-in. This year, for example, instead of putting in four one-quarters, we get to put in four one-sixteenths. We can make up the difference 8½ months after the end of the plan year. It's going to be an eighth next year and three-sixteenths the following year. Then in 1992 and on, it will be a quarter.

What is the contribution? On what is that quarter based? In my mind, you just think back to your individual income tax. The quarter is based on the same kind of thing that you would do your estimated income tax payments at: namely, 100% of last year's required contribution or 90% of this year's required contribution. When you figure last year's, you do it at the end of the year, the day before this plan year began. When you figure this year's, you do it at the beginning of the year, so you are taking those two numbers at the same time.

You don't count the credit balance, so if you had a big credit balance last year and your minimum requirement wasn't very big, maybe even zero, you don't start with 100% of zero. You start with 100% of whatever it was without the credit balance. If you had anything waived last year, you can't count that either. Now if you have things waived this year, you can count them, but you don't really know if you are going to get that waiver right away, so maybe you'd better not count it in the first couple of payments until you actually get the waiver.

I said you couldn't use the credit balance to help figure out the required annual payments, but you can use it to help make the payments. So if you've got that \$1 million credit balance and last year's contribution was really zero, and without the credit balance it would have been say \$.5 million, then this year's contribution is a quarter of that due on April 15. You can use the credit balance in the account to pay that down. You're going to calculate that amount without using the credit balance, and then the credit balance dollar-for-dollar can pay it down.

You can only use the credit balance to the extent that money is actually in the fund. You know you get to count money in the fund if you put it there by September 15 (for a calendar year plan, you can count it as in there on December 31 of the prior year). But in this case, you can't do that. You actually have to have made last year's contribution before you can start using that credit balance to count against this year's quarterly requirements.

Once we've made all these quarterly contributions based on 90% of this year's liability, if there is any amount left, then we still get to put that in 8½ months into next year. ERISA had originally given us 2½ months, and the IRS had come out almost immediately and said, we'll give you 6 extra months, so the 8½ months has been with us almost always. Now the 8½ months is actually written into the Code. I don't know if that makes it safer or not, but that's where it is.

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What if your payments are late? Then you are hit with penalties. The late payment penalties are just interest charges to the funding standard account. In a sense you're paying interest to yourself. The interest is counted at 175% of this federal mid-term rate. I can't think of what that is offhand. My guess is it's going to be around 14.5-15% currently. The interest is counted from the day the contribution was due to the day you actually paid it. Normally, charges to the funding standard account just run to the end of the year, so in the past we made our payments on September 15, they're counted as being there on December 31, 8½ months earlier. This interest penalty runs from when it was due to when you actually put it in, so you're going to be hit with interest for that 8½ month period if you delay.

Peeling back the onion a little bit more, we're going to look inside. We see some new funding requirements, things that we hadn't had before. The stuff we talked about so far, the waiver requirements and the amortization being done over shorter periods of time, was different but it wasn't really new. Now we have some stuff that's really new.

We've got to get rid of our unfunded current liability as fast as we can. That's what it boils down to. The PBGC does not want any unfunded plans out there throwing their liabilities off on them.

If you have an unfunded current liability, which is based on your assets minus the credit balance (so to a certain extent, having funded in an overambitious fashion over the years doesn't help you too much), you have to make some special payments. It doesn't apply if you're a multiemployer plan. It doesn't apply if you have less than 100 participants; if you have somewhere between 100 and 150 participants, it applies on a pro rata basis. I guess most of the plans aren't covered by this, as most of the plans have less than 100 participants. Most of our work, and most of the employees, are covered because most are in with more than 150.

Inside that onion where the funding waivers and the amortization periods are, things have gotten a little bit tougher. As I mentioned, the PBGC is going to be brought in at an earlier time, at \$1 million instead of \$2 million. You're not going to get as many waivers. I'm not too sure how many plans out there actually got 5 waivers in 15 years, but now they're only going to get 3. You have to make those waiver applications sooner, and more importantly, the business hardship that you're under (for which you are applying for the waiver) has got to be temporary. It can't be substantial so that you're going to go belly up in two years, or you're not going to get the waiver. It has to be substantial but the waiver is going to help you pull out of it. The PBGC doesn't want you waiving contributions for two years and then going belly up. This has to be a temporary business hardship only.

As I mentioned earlier, when you create the charge base for the waiver and start paying it out, it's being paid off at a higher interest rate. It's the federal short-term rate for multiemployer plans (MEPs) and 150% of the federal mid-term rate for all the rest.

What are we going to do with all of our additional funding? Like I said, we're going to pay off that current liability as fast as we can. The current liability is the present value of accrued benefits, and the present value of accrued benefits includes all the obvious things that we think of for people who have regular plans and who haven't had strange contingent events happen to them. So my plan that's a hospital, for example, is probably never going to have any unpredictable contingent event benefits. But my plan that's a manufacturing firm that decides to close down an operation and vest all its employees and pay them off, or give them increased immediate benefits, has some unpredictable contingent events and benefits.

When those events occur, obviously we're going to fold those things into the current liability. The events occur, we can measure them, we know what's going on. But for purposes of paying the current liability off in some rational fashion, we're going to separate it. So we take our total current liability and extract the regular part, the part that is straightforward; then over here on the side, we have the part that relates to these unpredictable contingent events. There is nothing anywhere that I've seen out of Washington that says what they are, except perhaps in the Committee Reports where it mentions plant shutdowns. So as to what an unpredictable contingent event is, it is not related to service, pay, age, death and disability; it's related to something else. I'm going to think "plant shutdown."

We've got the current liability regular part. (We're going to deal with these unpredictable parts later.) We're going to separate it into two pieces. First the old piece, that's the piece that's around

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right now (rather, it's the piece that was around at the end of 1987); we don't have to start doing anything with it until 1989. People in my office say the rumors are, and they seem to change every so often, that we're really going to have to worry about the end of 1988 as being the old liability as opposed to 1987, because the IRS is having trouble making the arithmetic work. I don't know if that's true, I haven't talked to anybody at the IRS. In any case, we're going to cut this whole regular unfunded current liability into two pieces: the old part and the new part. We are going to write the old part down over 18 years, and we're going to do something funny with the new part .

Negotiated plan sponsors who, maybe before 1987 or in late 1987, had negotiated increases that happen in 1988, 1989 or whatever, don't have to count those increases in the old liability until they actually occur. Or if the plan sponsor wants to, he can count them in 1989 even if they haven't occurred yet.

The unfunded new liability is the amount that showed up since 1987, and it's hard to say how it shows up because, remember, the current liability is based on market interest rates. So if market interest rates drop, then all of a sudden the current liability will get bigger, and we'll think more if it showed up even though you may not have changed your plan. In any case, whatever the unfunded new liability is, we're going to get rid of it in a formulaic fashion as opposed to some interest-based amortization. Depending on how funded your plan is, you're going to get rid of it faster or slower. The current year charge is the applicable percent of the unfunded new liability:

<u>CL Funded %</u>	<u>Applicable %</u>
0-35%	30%
+ 1%	- $\frac{1}{3}$ %
99%	14%

If your plan is not very funded on a current liability basis, your charge will be 30% of the unfunded new liability. That 30% is about a 3-year amortization. If your plan is almost completely funded so you almost (but not quite) don't have to worry about these rules, then you're going to be funding this thing at 14%, which is around a 9- or 10-year amortization, so you may want to think of it as a sliding amortization schedule. The worse your funded status is, the faster you have to pay off these new pieces of unfunded current liability.

I have an example here:

CL	=	\$1,000,000	CL Funded %	=	75%
OCL	=	700,000	Applicable %	=	20%
NCL	=	200,000	UNLA	=	\$40,000
UCEL	=	100,000			
AVA - CB	=	750,000			

I'll walk you through it quickly. I have \$1 million current liability where \$700,000 relates to the old part, \$200,000 relates to the new part, and \$100,000 for the unpredictable contingent event liability. That's a plant that already closed for which you set up a special liability of \$100,000. That's not part of what we're doing for this special contribution. We'll get to it later. Let's say you have \$750,000 for your assets minus your credit balance. Then you're 75% funded. Your applicable percent is going to be 20%: We're going to have to take 20% of our unfunded new liability of \$200,000 and we get a \$40,000 charge this year. We'll do something with this unfunded contingent event liability later.

Let's finish up this special deficit reduction contribution. That's what it's actually called in the Code, and I'm not too sure if it's the federal deficit, or the plan deficit, or the PBGC deficit. We're going to take the unfunded old liability and run it off over 18 years in the standard way, and we're going to come up with this new liability amount which I described. But we get to offset them by certain things we were already charging to the funding standard account, so if you're already amortizing a plan change liability and if you're amortizing waivers, then you don't have to double count those; you can subtract them off. However, if you're amortizing assumption changes (because you were overly optimistic) or if you've got gains or losses, then you don't get to subtract those off.

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For example, if the total charge here were \$200,000 and you already had \$100,000 worth of plan change and other net charges to your account and maybe \$30,000 of gain and loss charges to your account, you could reduce the \$200,000 by \$100,000, but not by \$130,000.

What are we going to do with those unpredictable contingent events? Basically, we're going to pay them off as fast as we can. As I mentioned earlier, I'm not too sure exactly what they are, but they don't depend on age, service, salary, death, disability or anything else you can reasonably predict. Maybe a plant closing is the only possibility; I'm not really sure.

What you're going to pay is the greater of two things. One is the amortization amount: when this event happens and you measure its liability because you either bought annuities for everybody and you know how much you spent, or because you're giving them additional benefits that you otherwise wouldn't have and you know how much you're going to give them, you amortize that in 7 years. Or, if it's bigger, you pay the cash-flow amount: this is the unfunded current liability percent times the cash flow, i.e., whatever you're paying out because of this unpredictable contingent event. The cash-flow amount phases in over a long time, about 12 years. To begin with, we don't have to worry about funding all the cash flow, we pay 5%. But by the turn of the century, unpredictable contingent events that happen and result in a lot of money going out of the fund are going to result in considerable employer contributions coming in.

There is some special relief in the year that the event happens, the year that you close that plant; it's not optional relief that you have to apply for, it's optional relief that you get unless you apply out of it. The relief is this: we have the two amounts, the 7-year amortization of the entire liability or the cash-flow amount. If you want, you can just pay 150% of the cash-flow amount. If you do that, you've got to adjust the amortization correctly, because you still have to amortize the liability off over a 7-year period, so next year you're going to have a larger base amortized over 6 years. The 150% of the cash-flow amount doesn't sound like a good deal perhaps, but in these early phase-in years the cash-flow amount is only 5% of the cash flow, then 10% and so on. So 150% of the cash-flow amount is going to be fairly small compared to what's actually going out of the plan.

That's about it for the pieces, I think. We've got all the standard stuff that Margaret talked about, and we have the new pieces. We have this deficit reduction contribution which consists of the unfunded old liability amount (that 18-year amortization), the unfunded new liability amount (that sliding number), offset by what you're already paying for the plan-based liabilities, and then in addition this unpredictable contingent event amount. If, because of everything you're putting into the plan already, you manage to get it up to where it's 100% funded on a current liability basis, these extra amounts can be cut down. You don't ever have to put in more than 100%.

Margaret showed you the equation of balance. We have to add an extra line to this equation of balance to get it to balance, because we're putting some charges into the funding standard account that don't really relate to our amortization bases: all these deficit reduction charges, this unpredictable contingent event charge, and if we're making contributions late, the late penalty charges. Those are all the things that are being charged to the funding standard account on the one hand, and all the things you're going to have to pay on the other hand. So if you actually make the payments, then there's going to be no net effect on the funding standard account. There's obviously more money in the fund so our unfunded accrued liability is different than it might otherwise have been. We have to add something to make this equation of balance work.

$$\begin{aligned} \text{UAAL} &= \Sigma (\text{outstanding charge base balances}) \\ &- \Sigma (\text{outstanding credit base balances}) \\ &- (\text{funding standard account credit balance}) \\ &- (\text{accumulated deficit reduction charge}) \end{aligned}$$

I'm going to call this addition an "accumulated deficit reduction charge," which is just all these things brought forward with interest. I don't know what the IRS will call it, and I don't know what the interest rate should be. I think it would have to be the valuation interest rate as opposed to the current liability interest rate or any of the other ones we've talked about, just to make the arithmetic work out. In any case, we're going to be balancing back to something new next year, and what the Schedule B looks like is something I'm really dying to see. I expect a two or three page addition to the Schedule B.

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This is pretty much it for the minimum funding requirements. I'm going to turn it back over to Margaret, and she's going to talk about how much you can deduct after you put in all this extra money.

MS. WOOD-DUGGAN: The first thing I want to touch on is deductibility under Section 404(a). Section 404(a) applies to all plans which defer compensation in any form or fashion whether they are qualified or not. Contributions to a pension trust are deductible in the taxable year when paid, if the taxable year ends within or with a taxable year of the trust assuming the trust is tax exempt under Section 501. In addition, contributions are deemed made on the last day of the plan year if they're made before the due date for the filing of the employer's income tax return and they were made on account of the previous year.

The calculation of the maximum deductible limit includes three alternatives. First, is the amount necessary to satisfy minimum funding. This amount is deductible if it's larger than the other calculations. The second calculation is the amount necessary to amortize the unfunded past and current service credits as a level amount or a level percentage of payroll. The third amount, which is the amount we most normally see, is the normal cost plus what the regulators call a limit adjustment of each of the ten-year amortization bases.

Now a limit adjustment is the lesser of the 10-year level amortization of each 10-year base or the amount of the base itself. In other words, when you get near the end of the 10-year period, the unamortized balance of your base might be slightly less than the payment that you determined at the beginning. Your actuarial assumptions, funding methods and plan benefits should be the same as those that you use to do the calculations for Section 412.

There is one thing that is different about calculation under a maximum than there is under Section 412, and that is the plan assets and the unfunded accrued liability under the plan need to be adjusted if the deductions and the contributions weren't the same. You need to exclude any amounts contributed that weren't deducted or include amounts deducted even if they weren't taken into account for minimum funding purposes.

In determining your maximum deductible limits, you cannot take into account benefits over the current Section 415 limits or any other future changes in benefits unless they're automatic cost-of-living increases.

There is a relationship between minimum funding and the maximum deductible limit. The maximum deduction is limited to the Section 412 minimum. Under the new OBRA rules, you can deduct up to the plan's unfunded current liability which is the last point that Jeffrey was trying to make. You can deduct the full amount up to 100% of your current liability. If you have a combination of defined benefit and defined contribution plans, your deduction cannot be larger than 25% of compensation, or the Section 412 minimums for all your defined benefit plans combined.

Consider the establishment and maintenance of these 10-year amortization bases. The 10-year amortization bases, just in general, are established anytime you create a new base under Section 412 and are equal to the change in the unfunded accrued liability. The sum of these 10-year amortization bases should equal the plan's unfunded liability except for the fact that you may have made those adjustments that we talked about earlier with regard to deductions and contributions. Each base must be maintained separately. After the first year that the base is established, the unamortized base is just written down. The amount of contribution you use to write it down is called the "allocated contribution." For each base you simply take the total contribution deducted, with interest to the end of the year, and ratio it based on limit adjustments for the base. You simply allocate the total amount that you would normally use to write down your bases, you allocate it based on each limit adjustment to each base to do your write down.

If your total contribution is less than the normal cost plus interest on the unamortized amounts, that's going to mean that you don't have any contribution used to do any write down. Don't create a new base. You simply extend the time over which you're going to amortize your bases over because your bases are not going to be written down, they're going to increase. The limit adjustment for the base (the original 10-year amortization amount) is not increased, leave it the same as it was.

PANEL DISCUSSION

For 404 purposes, you can combine bases. Your unamortized amount which is going to be a single base, is just going to equal the sum of the bases you had before. The remaining amortization period is going to equal the average remaining period, and you're going to weight it by the absolute value of the remaining periods for the unamortized bases that you had originally.

Instead of combining bases, you can go to a fresh start alternative which is significantly simpler. You simply establish a new 10-year amortization base which is going to be equal to the current unfunded liability under the plan and then the limit adjustment is determined as if the base was a new base. You don't have any calculation of remaining amortization periods equalling average periods and all that kind of fun stuff.

The effect of the full funding limit on the maximum deductible contribution is pretty straightforward. The amount deductible can't exceed the full funding limit. If the full funding limit has limited your deductible amount, and all your 10-year amortization bases are considered fully amortized, then the deductible limit in future years will not include amortization of these bases. I have a fairly simple illustration.

LIMIT ADJUSTMENTS FOR 1988 PLAN YEAR CONTRIBUTION
INTEREST = 8%

<u>Date of Origin</u>	<u>Original Base & Reason</u>	<u>Unamortized Balance (BOY)</u>	<u>Limit Adj (EOY)</u>	<u>Contrib (EOY)</u>	<u>Unamortized Balance (BOY)</u>
9/1/87	Fresh Start \$1,000,781	\$984,578	\$ 149,146	\$149,146	\$ 914,198
1/1/88	Exp. Loss 1,027,202	1,027,202	153,083	153,083	956,295
1/1/88	Change in Funding Method (425,104)	<u>(425,104)</u> 1,586,676	<u>(63,353)</u> 238,876	(63,353)	(395,759)

This shows the determination of limit adjustments and then the maintenance of 10-year bases on a pretty simple case. This plan originally had a fresh start done on September 1, 1987. So we established an original base at that time of \$1 million. This is the 1988 plan year, so a portion of that had been written off. The limit adjustment is just the 10-year amortization of the original base. Then two other new bases were established in 1988, one being an experience loss and the other being a change in the funding method. These unamortized balances were established at that point, so they're equal to the base in that year, and limit adjustments are just simply the 10-year amortization.

In this instance, this client did actually contribute the maximum tax deductible contribution in that year. Contributions that were allocated to these amounts were equal to the limit adjustments. We simply had a straightforward write down in that year. When we come to the next year, you can see there's pretty much the same thing. There's no change in the limit adjustments, two new bases were established, and 10-year amortizations were determined for those pieces.

LIMIT ADJUSTMENTS FOR 1989 PLAN YEAR CONTRIBUTION
INTEREST = 8%

<u>Date of Origin</u>	<u>Original Base & Reason</u>	<u>Unamortized Balance (BOY)</u>	<u>Limit Adj (EOY)</u>
9/1/87	\$ 1,000,781	\$ 914,198	\$ 149,146
1/1/88	1,027,202	956,295	153,083
1/1/88	(425,104)	(395,759)	(63,353)
1/1/89	Amendment 361,811	361,811	53,921
1/1/89	Experience 1,076,129	<u>1,076,029</u> 2,912,675	<u>160,375</u> 453,172

You'll notice in 1989 we have an experience loss of \$1 million, and for maximum purposes, we're going to calculate a 10-year amortization. Now under the new OBRA rules for minimum funding,

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we're going to have to amortize that loss over 5 years. Looking back to 1988, when you make the comparison of our minimum contribution and our maximum contribution, and compare that to the full funding limit, our maximum contribution then is our normal cost plus our limit adjustment.

MAXIMUM CONTRIBUTION FOR 1988

Maximum = Greater of
(a) Minimum Contribution = \$396,577
or
(b) NC (EOY) + Limit Adj.
214,123 + 238,876 = 452,999
with cap of Full Funding Limit = 1,927,733
Maximum = \$452,999

When we get to 1989, since we had such a large experience loss, the difference between the 5-year amortization of that number and the 10-year amortization of that number causes our minimum Section 412 contribution to be larger than what our maximum contribution would be. So our maximum deductible limit is going to be the Section 412 minimum.

MAXIMUM CONTRIBUTION FOR 1989

Maximum = Greater of
(a) Minimum Contribution = \$724,348
or
(b) NC (EOY) + Limit Adj. (EOY)
196,258 + 453,172 = 649,430
with cap of Full Funding Limit = 3,709,924
Maximum = \$724,348

MR. RALPH J. BRASKETT: The combination limit of the two plans -- has there been any definite change in the definition of compensation or the 25% limit?

MS. WOOD-DUGGAN: None that I'm aware of.

MR. BRASKETT: So it's all compensation? Compensation of eligible employees or it's compensation up to \$200,000 for eligible employees?

MS. WOOD-DUGGAN: I believe it's all compensation, but I can check and see.

MR. BRASKETT: You still think it's all compensation then?

MR. GROVES: I don't know any different, I think it's all compensation, too.

MR. PETER M. HANSON: You mentioned one of the alternatives for funding the unfunded contingent event liability was a 7-year amortization. I'm not sure what the 7-year amortization is of. You haven't defined what it is.

MR. GROVES: Let me see if I can make something up. The Code doesn't say what it is, and there aren't regulations. The regulations hopefully will say when they come out. Let me give you an example. Imagine a plant closing and in the process of closing the plant you, as the employer, decide to let everybody who is eligible to retire, do so and take an immediate unreduced benefit. Let's even do better; let's extend it down to people who are 5 years away from their earliest retirement age. You'll have people age 50, say, who are being able to draw their accrued benefits unreduced immediately as opposed to waiting until age 65 to get the unreduced benefit or to 55 to get a reduced one.

I would think that the liability for that event would be the difference between what each individual is actually getting because the event took place as opposed to what he would have. For example, someone who is between age 50 and 55 and would not have been eligible to receive any kind of benefit is getting something. His benefits for the first five years would all be as a result of this unpredictable contingent event. His benefits when he got to age 55 would be in a sense partially what he would have received anyway (i.e., his accrued benefit reduced) and partially this additional piece to get up to his entire accrued benefit unreduced.

PANEL DISCUSSION

You've got a benefit stream for these people who are not 55 yet that starts out at their entire benefit that they're receiving, and when they reach age 55 is reduced to just the amount in excess of what they could have received (i.e., their accrued benefit with the reduced part taken out). You have a benefit stream that's big, it shrinks up some and goes on indefinitely. For the people who are already eligible to early retire, you don't have that front half, but you do have an additional piece that everybody could get because the plant closed down. They've got that immediate unreduced part as opposed to an immediate reduced part.

Being able to split everybody's benefit into two pieces like this is the key. The present value of all the extra pieces would be the unpredictable contingent event liability, and that's the amount you're going to amortize over 7 years. The actual different amounts themselves, I imagine, would be the cash-flow amount, which means that instead of keeping track of a retiree's benefit like you would normally do for your valuation, you're going to have to keep track of your retirees' benefits that they're actually receiving and what they could have received if the plant hadn't closed down, and track those two separately.

MR. MICHAEL A. ARCHER: I'd be interested in hearing your thoughts on how the full funding limitation, the deficit reduction contribution, the unfunded new liability amount and the unfunded old liability amount all tie together, both in the year in which the full funding limitation applies, especially in the year where you also have a deficit reduction contribution, and in subsequent years when you have an unfunded old liability amount, you subsequently hit full funding, what happens to the unfunded old liability amount? What happens subsequent to that when you go back into a deficit situation? Just your thoughts on that. I understand that there are no regulations on this so it's half conjecture.

MR. GROVES: My answer is I don't know. We could expand on that question more. What if you're not in full funding, but because interest rates go up, your unfunded current liability disappears one year, then interest rates drop, so it reappears the next year? Is it all unfunded new liability, or are you still sitting there with some kind of book entry to amortize off your unfunded old liability? I honestly don't know. I would think that it's a fresh start every year, if you're fully funded on the actuarial liability basis. There are too many possibilities, I suppose. I presume you're going to start afresh every year, and whether you keep a book entry for the way you're amortizing down your unfunded old liability or whether it goes away once you're first fully funded on a current liability basis is up in the air. I would think you keep that book entry and run it down over 18 years. You're probably going to amortize it at a different interest rate every year, too, because I would imagine if you've redetermined your current liability at somewhere in this corridor of an interest rate, and because the interest rate in the corridor applies to that whole paragraph, Code Section 412(l), then I would think you're going to refigure your amortization amount every year based on whatever the new interest rate is. That's conjecture. I don't have a real answer. Is that enough conjecture? Does someone else have some conjecture?

MR. JOHN A. TULLOCH: What do you do in a situation where you have an existing old current liability and a negative new current liability? I infer from what you have said here that the negative new current liability ends up being zero. There is no negative amortization. Is that correct or is it possible to have a negative amortization?

MR. GROVES: I think the Code says the new liability is what you get after you take the old unfunded from the total unfunded current liability.

MR. ARCHER: I think the words, "if any," are in the statute when it talks about unfunded liabilities. I'm pretty sure of that.

MR. GROVES: So you don't have to worry about adding something in as a credit?

MR. ARCHER: I think the wording is that unfunded is the excess of the unfunded current liability over the unfunded old liability if any. The unfunded current liability is less than the unfunded old liability, you can't have a negative unfunded liability.

MR. ARTHUR TEILER: In many plans, the lump sum distribution rate is a fairly liberal amount which causes practically all participants to take that lump sum distribution. Additionally, we have been funding to that lump sum distribution. In the current liability, can you just use that rate, or do you have to find the mortality and interest for your postretirement assumptions?

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MR. GROVES: I don't know the answer. My understanding is that you have to use the rate that is the current liability rate, and if it's 7½% instead of 6%, then you're funding to a smaller amount.

MR. CARROLL R. HUTCHINSON: Does an unpredictable contingent event liability occur when you have a retirement incentive program?

MS. WOOD-DUGGAN: Yes, I think it does.

MR. GROVES: It doesn't depend on salary, age, disability, death or service? The question was, Does an open window program result in an unpredictable contingent event? My guess is that to the extent that it's not much different from closing down a plant for your salaried employees, the answer would be yes. My initial reaction was no, but everyone says yes.

MR. ARNOLD A. DICKE: When you have a plant closing, would you be able to buy an annuity from an insurance company, and if so, what would happen to all these calculations?

MR. GROVES: If you bought an annuity, it would be considered a cash flow in the year that you bought it. But when you figure the greater of your 7-year amortization of the annuity or the actual cash flow, in the initial years a 7-year amortization is going to be bigger, because the cash-flow amount is phased in 5% now and ultimately 100%. Ultimately, buying that annuity is going to be much more expensive unless you could arrange a 7-year payment schedule to buy the annuity. The whole thing is considered part of the cash flow.

MR. DICKE: When you say these things don't depend on salary, etc., what does that exactly mean because it seems like in those situations the benefits probably do depend on that?

MR. GROVES: I think that becoming disabled or dying in service would otherwise be considered unpredictable events. I think the point is that even though these aren't predictable on an event-by-event basis, we've got some underlying statistics for the whole group, and the regulators didn't want those to be considered to be unpredictable contingent events. And the things that they've left out are basically retirements and resignations and turnover. That's what leads me to things like plant closings.

MR. HANSON: I'd like to talk about that full funding credit again. When it arises because of the 150% of the current liability over assets, it's not clear to me when you show that credit under the new bases whether you eliminate all the bases for the minimum.

MS. WOOD-DUGGAN: You don't eliminate the bases when you hit the new full funding limit, the current liability limit. You only eliminate those when you hit your old determination of full funding limit. If you hit your new full funding limit under the 150% of current liability, you still have to keep up with all the differences of what you contributed over what you should have contributed, and when you get to the end of that, you have to amortize that base again later.

MR. GROVES: It's not completely clear what happens if you didn't have the 150% limit and would have hit the regular full funding limit. In other words 150% limit may be less than cost method limit, and the cost method limit would have applied if you would have had the 150% limit in place. So what happens there? The Code doesn't really address it. I think conceptually all the bases would have to go away, because without the 150% limit you would have hit the other limit, and they would have gone away just like they've always done.

MR. BRASKETT: I think that's just a question of order. It would seem to me conceptually if you're going to hit both full funding limits that you regard the funding method limit first because that's a previous or an a priori thing that's driving your whole funding standard account, whereas the current liability OBRA stuff is like an estoppel from funding for immature plans. Then you have to go back later and amortize the estoppel, so the normal funding method limit applies. It blows away your bases and you start over just like you did earlier unless I'm missing something.

MS. WOOD-DUGGAN: No, I think that's right.

MR. GROVES: That's the way I interpret it.

MR. HANSON: I'm not sure what you told me. In my situation, only the 150% limit applies.

PANEL DISCUSSION

MS. WOOD-DUGGAN: Yes, you're saying the old full funding limit is still way out there, then you don't wipe out your bases.

MR. HANSON: So you still maintain your bases. So we're not sure whether you establish a new base, or do you spread the credit out over the old bases?

MS. WOOD-DUGGAN: You don't spread it out over the old bases.

MR. HANSON: You establish a new base.

MR. GROVES: Right. Whatever you take for a credit this year, you're going to stick in next year as a new charge base.

MR. HANSON: Now for maximum purposes, you spread them out over the bases?

MS. WOOD-DUGGAN: No, you don't change your bases there either. For 412, I think when you have to set up that new base for your new full funding limit, I don't think it's considered a base under Section 412. I think it's a separate item.

MR. GROVES: It's certainly not in the statute.

MS. WOOD-DUGGAN: I don't think you would establish a new base under 404. You would also not increase the bases that you have.

MR. HANSON: I guess the way the math would work, if you don't establish a new base in the maximum, you would end up spreading it over the other bases.

MS. WOOD-DUGGAN: To the extent that you did not make that contribution, because the bases wouldn't be written down by the proper amount, that is what would happen.

MR. HANSON: I guess the question I've got is, is it in the statute that you will establish a new base? No, is it in the statute that the 150% limit does not wipe out the minimum 412 bases?

MS. WOOD-DUGGAN: Yes.

MR. GROVES: Yes, that's in the statute. All the rest is just like a leap of faith to what they're going to have to do to make the balance equation work.

MR. DREW ANTHONY JAMES: When you establish this new charge base, over what period is it amortized, and is there a charge in the year the base is created or does it begin to be amortized in the next year?

MR. GROVES: Well, I don't know. We've been guessing that 10 years is the right period to amortize it over. I can't imagine that there would be a charge in the year you set it up because you're setting it up against the full-funding credit, and it seems like you're going to get into a circular definition here of defining a charge base equal to a credit where the credit is enough to make the thing balance and that would include the amortization of the charge, so I think that the only way that would work is to enter it in as a charge base the next year and be amortized the next year. As far as the 10 years go, that's really conjecture; we've talked with some of the IRS people who won't be pinned down, but 10 years seems to be our best bet.

MR. TEILER: Under 412, where you're allowed to contribute up to the current liability, as I recall that was only for plans with participants over 100 lives, or do you think it's for all plans?

MR. GROVES: Well, it's interesting, because you say allowed to contribute, and you're really beginning to get at the deductibility rules in 404. Regulation 404 doesn't really say anything about number of lives, but the requirement in 412 that says you don't have to put in any more than what would top you off at 100% is in that paragraph 412(i) which only applies to plans with more than 150 people and pro rata for plans with 100-150 people. I guess, yes. If you don't have your 150 participants, then you don't get to fund up to 100% of current liability.

MR. TEILER: I think it's 100% and it grades in.

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MR. DAVID E. SUNDERLAND: I'm a little confused about what we were talking about earlier with these additional benefits and unanticipated things. Back in the old days those would have created just additional amounts of unfunded liability, and before I think you were saying that they were going to have to generate additional types of minimum contribution. I'm not sure whether the difference is in the amortization period of the essentially unfunded liability they created, or is there an additional amount that is different from the old style minimum funding. To me it seems like if I think about it simplistically, the only problem here is you've got an additional amount of unfunded and what kind of amortization period?

MR. GROVES: I think both things must happen. For example, go back to a plant closing. If you close the plant and you amend your plans so that everyone gets these bigger benefits, the plan amendment is going to give rise to, just in the regular workings of the minimum funding requirements, a piece of supplemental liability that you're going to amortize over 30 years. I presume that if your plan document always had something in it that said, if we closed the plant, you're going to get all this stuff, then the liability would end up being an actuarial loss, and you would amortize it over 5 years. But in some fashion, the cost of closing that plant is going to work its way into the regular parts of the funding standard account.

MR. SUNDERLAND: Aren't we double counting and having to amortize this change twice?

MR. GROVES: What can I say? I agree. I think that the point is that the regulators want those liabilities to disappear as fast as they can. Remember, it's only double counted to the extent that you're not 100% funded on a current liability basis, so in effect, they're saying, "Okay, amortize these current events over some number of regular years, and, by the way, either pay the cash-flow amount or the 7-year amortization and keep doing it until you're 100% funded."

MR. SUNDERLAND: Now I'm confused a little bit. Are we counting in the funding standard account? You have this plant closing, this early retirement window, because I think they're the same kind of animal. The unfunded liability goes up; we sort of sit down and figure out how much is due to that and how much is due to just experience, so we got two numbers there. Now, the piece that's due to that, how do you deal with it for normal, plain vanilla 412 before this thing happens? How are you going to amortize that? Is it a 5-year experience loss? Is it a 30-year amendment? How is it dealt with normally before you get into this 7-year amortization?

MR. GROVES: I'm not sure I know the answer.

MR. SUNDERLAND: OK, that's fair, too.

MR. GROVES: You don't always have your window in the plan, of course. But when you're putting the window in the plan, I presume you were going to expect that a certain number of people retire. I'm not too sure if you call it a plan change liability and run it off all over 30 years under the theory that you expected all these folks to retire, so it's not really a loss. Or, you say, without the window they wouldn't have retired, and now they are, so it is a loss. Does anyone have any experience with this?

MS. SUSAN L. BREEN-HELD*: Usually with a window there's a subsidy involved as well, and we've split out the difference of the cost that would have been there if the people retired before the subsidy went in versus the cost of the subsidy itself. You've got two different things happening. One is a result of the window. The other, you may have just gain and loss type things because people retired early. You've got a gain and loss because people retired early and you expected them to normal retire. You've got a subsidy which is a plan change, and you amortize that. And that's the way we've gone at it.

MR. GROVES: You're going to look at the benefits that you pay to say, John Smith -- he's retiring earlier than you expected. What you would have otherwise paid to him if he retired without the window is the loss and the subsidy part is the plan change.

MS. BREEN-HELD: That's right.

* Ms. Breen-Held, not a member of the Society, is a Senior Pension Actuarial Associate at Principal Financial Group in Des Moines, Iowa.

