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**PENSION PROVISIONS OF THE GENERAL AGREEMENT ON
TARIFFS AND TRADE (GATT): FUNDING ISSUES AND
THE DEFICIT REDUCTION CONTRIBUTION**

Moderator: JOAN M. WEISS
Panelists: BRUCE ANTHONY CADENHEAD
PATRICIA L. SCAHILL
Recorder: JOAN M. WEISS

The panel will present the technical details of calculating the deficit reduction contribution as changed by the Retirement Protection Act (RPA) of 1994. This session will also include the new solvency maintenance requirement and changes to the full-funding limitation.

MS. JOAN M. WEISS: I'm with the PBGC and I will introduce our speakers. Our first speaker will be Bruce Cadenhead. Bruce is a principal and consulting actuary in the New York office of William M. Mercer. He's responsible for actuarial standards and serves as a technical resource to the other consultants. Bruce was elected Phi Beta Kappa at Harvard University, where he earned his B.A.

Our second speaker is Pat Scahill. Pat is also a principal at William M. Mercer in Baltimore. She's on the SOA Board of Governors and is in her final year of law school.

MR. BRUCE ANTHONY CADENHEAD: As promised, Pat and I will talk about the pension provisions of GATT or, as we'll refer to it, the RPA. I'll first give a historical perspective—the evolution of funding rules and the impetus for this law. Then Pat will take us through the details of these changes. Finally, I will go through some examples, some analyses, and discuss the choices that actuaries and plan sponsors face.

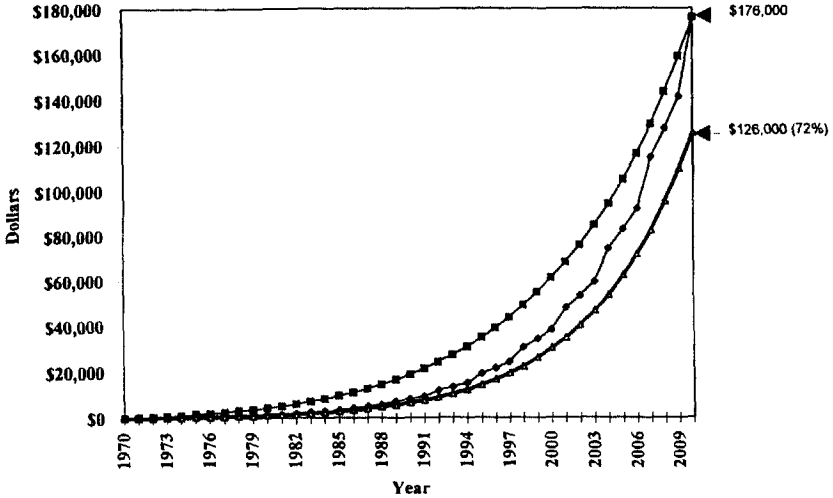
Regarding the evolution of funding rules, I will start with ERISA, then talk about OBRA 1987—really the first significant change since ERISA—and then we'll get into the RPA.

The basic ERISA funding rule—normal cost plus amortization of unfunded liability—has worked well for most plans. Most plans are very well funded these days. However, some have fallen through the cracks. Two main problems are the use of so-called “aggressive” actuarial assumptions or methods and the problem of unit accrual plans.

By unit accrual plans, I mean plans that base their benefit on a benefit multiplier times years of service. Unit accrual plans on their face are very different from final pay plans. But in actual practice, they're really not all that different. Benefit multipliers typically increase over time as does final pay in a final pay plan. These increases are generally applied retroactively to all years of service and are generally driven by the same forces that drive final pay increases: inflation, productivity, and so on. However, from the funding side, these plans are treated differently. In particular, benefit multiplier increases are not anticipated, but only recognized, when they become part of the plan. Once they are recognized, they're then amortized over 30 years of service. In a final pay plan, everything is recognized upfront.

Chart 1 illustrates the difference between these two types of plans. In this simplified example, we'll look at a plan with one employee, hired at age 25, currently age 50, retiring at age 65. We assume that the benefit multiplier increases every three years at an annual rate of 4%. There are no gains or losses. In this case we're funding by using 1971 Group Annuity Mortality (GAM-71) table and 8% interest.

CHART 1
NO ADDITIONAL FUNDING CHARGE*



- ◆ Unit credit—accrued liability
- Projected unit credit—accrued liability
- △ Unit credit—market-value assets
- * Projected unit credit—market-value assets

* Sample plan—one employee—hired at age 25
Age 50 at 1/1/95
Benefit multiplier increases every three years at an annual rate of 4%
Funding assumptions: GAM-71, 8%, retirement at age 65, no preretirement decrements
No gains or losses

The middle line (unit credit-accrued liability) shows the buildup pattern of the accrued liability. We're funding this liability on a unit credit basis. Every three years there is a jump in the liability as the multiplier increases. The line below is the funding line showing the buildup of plan assets. We see that it lags behind because of the delayed recognition of the ultimate benefit levels.

The top line is actually two lines: the liability and asset lines, which would arise if we were to fund this plan on a projected unit credit basis—anticipating the ultimate benefit level under the plan. The reason the lines overlap is because all benefits would be anticipated in the normal cost and therefore the assets. Because we have no gains or losses, assets would grow in step with the liability.

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In this example, we have \$126,000 of assets at retirement and \$176,000 of liabilities—a considerable shortfall. In this case, the employer must pay for a significant portion of this person's benefits after the participant has stopped rendering the service that goes along with the benefit. This is analogous to what has happened with many companies—particularly with those maturing workforces. In many cases, significant pension funding has been deferred to the future in which the workforce may be much smaller than it was in the past. This puts the PBGC at a great deal of risk.

OBRA 1987 was designed to fix some of these problems. I'm going to run through some of the key provisions that address the underfunding problem and then talk about some of the weak links. This discussion will lead into our main topic—the RPA.

OBRA 1987 did not really tinker with ERISA too much, but instead added a separate structure. For a plan that is being adequately funded under the ERISA rules, there's really not much change—the new rules don't come into play. But for plans that are not doing well under the ERISA rules, OBRA 1987 introduced the additional funding charge to prop up the contribution to some minimum acceptable level. These new calculations are based on a separate liability measure—current liability. These rules result in a more rapid amortization of unfunded liabilities. Instead of up to 30 years (for a plan amendment), now it's effectively a four-to-ten-year schedule, depending on your level of underfunding. The mandated interest rate (90–110% of the four-year weighted average of 30-year Treasury securities) chips away at the discretion that actuaries have in setting assumptions. OBRA 1987 also gave us a couple of modifications to the ERISA rules: it shortened the amortization period for certain bases (gains, losses, assumption changes) and limited the availability of funding waivers.

OBRA 1987 also introduced the concept of the variable rate PBGC premium. For the first time, sponsors now actually have to pay premiums that are somewhat proportional to the risk that their plans pose to the PBGC.

Finally, we have a change in the calculation of the maximum tax-deductible contribution. Under OBRA 1987, a plan sponsor that would actually like to get its underfunded plan up to an acceptable funding level can do that and take a deduction (up to the point where plan assets equal the plan's current liability).

What were the problems with OBRA 1987? There's the double-counting problem—I'll run through a quick example of that in a minute—and continuing problems with unit accrual plans. Chart 1 shows what happens under the new rules.

There are transition rules. As is the case anytime there's a major change such as this, the new rules don't take effect right away but are phased in. In this case, we have the unfunded old liability. When OBRA 1987 was put in place, it was amortized over 18 years, rather than the four-to-ten-year schedule applicable to newer underfunding.

Actuaries have also continued to use aggressive assumptions. Despite the mandated interest rate for current liability, the actuary still has discretion in choosing interest rates for ERISA calculations. There is also discretion with regard to mortality, retirement age, and other assumptions.

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We also have the full-funding limitation. Under OBRA rules, a plan that is fully funded on an ERISA basis can avoid the additional funding charge.

These next examples illustrate the double-counting problem. In each case we're starting with the same simplified plan: no normal cost, current liability equal to ERISA accrued liability, and equal to our assets. We'll look at the effect of different events.

In the first column of Table 1, we have a plan amendment. In this case there is no double-counting problem, but rather a perfect coordination between the two sets of rules. The DRC here is equal to the unfunded new liability amount. The DRC is offset by the ERISA amortization amount, resulting in an additional funding charge which, when added to the ERISA charges, results in a total contribution equal to the deficit reduction contribution (DRC).

TABLE 1
OBRA 1987 VERSUS RPA 1994
DOUBLE-COUNTING PROBLEM UNDER OBRA 1987

| | Scenario I | Scenario II | Scenario III |
|--|---------------|-------------|---------------|
| • Accrued liability (= CL) = actuarial value of assets | \$70,000 | \$70,000 | \$70,000 |
| • Unfunded liability | 0 | 0 | 0 |
| Significant Event: | | | |
| • (Gain)/Loss | 0 | 30,000 | (30,000) |
| • Amendment | <u>30,000</u> | <u>0</u> | <u>60,000</u> |
| • Total amount of significant event | \$30,000 | \$30,000 | \$30,000 |
| Unfunded liability after change | 30,000 | 30,000 | 30,000 |
| Section 412(b) Calculation | | | |
| • Amortization of loss | - | 6,898 | (6,898) |
| • Amortization of amendment | 2,363 | - | 4,726 |
| Section 412(l) Calculation | | | |
| • Current liability | 100,000 | 100,000 | 100,000 |
| • Unfunded current liability = UNL | 30,000 | 30,000 | 30,000 |
| • Funded current liability percentage | 70.00% | 70.00% | 70.00% |
| • Applicable percentage of UNL | 21.25% | 21.25% | 21.25% |
| • UNLA = DRC | \$6,375 | \$6,375 | \$6,375 |
| • Offset | 2,363 | - | 4,726 |
| • Additional funding charge | 4,012 | 6,375 | 1,649 |
| Total Contribution | \$6,375 | \$13,273 | - |

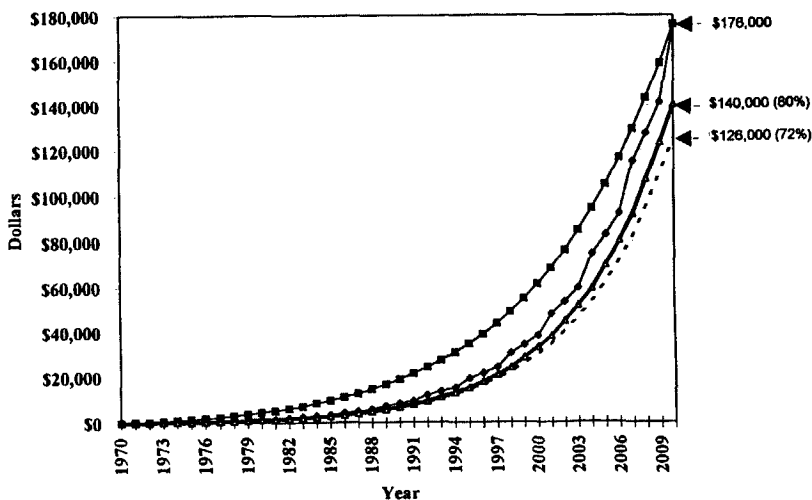
In the second column, we get to the same funded status, but through an actuarial loss rather than an amendment. In this case we have a higher ERISA charge (five-year amortization), plus we don't get an offset for that charge in calculating our additional funding charge. So we get a much higher contribution. This situation doesn't result in underfunding; in fact, it leads to more rapid funding. But we also have the flipside of this situation.

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The third column shows a case in which there is an actuarial gain of \$30,000 and a \$60,000 plan amendment. Our ERISA charges are actually negative because the gain is amortized more rapidly than the amendment is. Yet in calculating our DRC, we only offset for the amendment base, so we get a very small additional funding charge, which is then completely wiped out by our negative ERISA amortization charge, resulting in no contribution at all. So three plans with the same funding level can have very different results.

In this next example (Chart 2) we look again at the unit accrual plan from our earlier example. This is the same as Chart 1 that we saw before, but I've added another line. The dashed line is the old funding line, and the line above it is the new funding line. OBRA 1987 has improved the funding of this plan a bit—mainly due to the more rapid amortization of unfunded liabilities under the new rules. Our plan now has \$140,000 of assets (80% funded) at retirement. Better, but still not ideal.

CHART 2
OBRA 1987 ADDITIONAL FUNDING CHARGE*



- ◆ Unit credit—acrued liability
- Projected unit credit—acrued liability
- △ Unit credit—market-value assets
- ✱ Projected unit credit—market-value assets
- ERISA market-value assets

- * Sample plan—one employee hired at age 25
Age 50 at 1/1/95
Benefit multiplier increases every three years at an annual rate of 4%
Funding assumptions: GAM-71, 8%, retirement at age 65, no preretirement decrements
No gains or losses

This leads us to RPA. A good simple concise set of rules that fixes all these problems, makes everything wonderful. Pat is now going to take us through those rules, and then I'll come back and talk a little more about them.

MS. PATRICIA SCAHILL: Who do the additional funding rules apply to? Do clients have to worry? The DRC rules apply to single-employer plans with more than 100 participants in all plans of the controlled group. That's consistent with the way the other rules worked, and there's a partial charge if you have between 100 and 150 participants. They apply to plans with funded current liability of less than 90%, but, of course, there are some exceptions. If the plan has a funded current liability percentage of 90% or more this year, you don't have to worry. If it's less than 80%, the DRC applies. If the percentage is between 80% and 90%, a number of rules apply. We look at prior years: the prior two years or the second and third preceding year. If the funded current liability for one of those two, two-year periods is 90% or more, you're fine, you don't have to worry. And if it's not, the DRC may apply. How do we calculate the funded current liability percentage? We have multiple definitions, and Bruce will cover them through examples. But for the assets, you use the actuarial value and you don't reduce it by the credit balance.

For the liabilities, you use the current liability as defined in 412(l)(7) (the regular current liability) calculated by using the highest permissible interest rate. The RPA lowers the highest permissible interest rate, for some purposes, from the prior 110%. It's still based on the 4-year weighted average of 30-year Treasury securities. It's 110% of the weighted average for 1994 because that was pre-RPA. Then it goes to 109%, and it grades down to 105%, where it will stay. The required mortality table (this is new for us; we haven't had anyone tell us what mortality table to use) is the table prescribed by the Secretary of Treasury. Currently, it's the 1983 Group Annuity Mortality (GAM-83) table. Be sure to use the published table. This table is based on the insurance group annuity reserve table adopted by the majority of the insurance commissioners. It will change, but not for a while. There's a special table for disabled lives.

What's the required additional contribution? It's the amount of the deficit reduction contribution, minus the funding standard account (FSA) charges, plus the credits, plus the unpredictable contingent-event amount. It's limited to whatever is needed to make the funded current liability percentage equal to 100%. That's consistent with old law.

The deficit reduction contribution includes the current liability normal cost, and that's new. It also includes the unfunded old liability amount. We had that before, but now it includes the amortization of the change to the new required interest rates. It also includes the unfunded new liability amount with changes. So here's the formula for the percentage: the formula becomes $0.3 \text{ minus } 0.4$ (funded current liability percentage minus 0.6, but not less than zero). Then there is the amortization of the unfunded mortality increase amount. This isn't the change that you're going to be making now to go to GAM-83. This is what's going to happen way down the road. Starting in the year 2000, there will be a new mortality table and then that would be the separate amortization charge. We will be amortizing that charge over ten years, and it's going to apply anytime the mortality table changes. Again, the Secretary of Treasury said at least every five years. They could change it more rapidly, but not until 2000.

It's the deficit reduction contribution—we just went through all the components of that—minus the funding standard account (FSA) charges. That's all the charges, including the normal cost and all the amortization. Again, subtracting off the normal cost is new. You add on the credits. In the charges and credits you're going to include the gains and losses this time and then the unpredictable contingent-event amount. How many people have plans that have an unpredictable contingent-event amount? The amount is the

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larger of the two conditions in the prior law. Then there is the increase in the new liability amount if the contingent-event benefit liability were included in the unfunded new liability. I don't have plans that use this, so all I can tell you is that those are the words, and you added another limit. It changed the required quarterly contribution to reflect the new limit.

Who is affected by transition rules? If a plan is less than 80% funded as measured by the current liability percentage, the DRC applies. If the plan is between 80% and less than 90% for this prior two-year period, there are special transition rules for 1995-96. The funded current liability (FCL) percentage is treated as at least 90% for the prior two years. If the FCL percentage is actually 90% for the prior two years, or if it's 90% for any two years of 1992, 1993, and 1994 (and they don't have to be consecutive), the plan meets the requirement.

Just a comment here. Stop and think about the fact that you're using information from the 1992, 1993, and 1994 actuarial valuations. Let's say you took over a plan from another actuary in 1995. No problem, we all love to do that, but now you're actually having to certify current funding based on calculations done by the prior actuary, or you had to redo those calculations. So I don't have any answers for that, I just want you to remember that it's now getting trickier. Another part of this transition rule is that the FCL percentage before 1995 is treated as at least 90% if the full-funding limit was zero, if there were no additional contributions required under the old rules (no DRC), or if the additional funding requirement was no more than the lesser of 5% of the current liability or \$5 million. So I think that many plans will be able to fit under this. Obviously, if they're less than 80% funded currently, it doesn't matter. But I think these choices really will help. There are all kinds of phase-ins. The phase-in of the increases in the funding requirements is quite complicated.

I'm going to go over the quarterly contributions quickly because it was covered in another session. There's a new liquidity requirement, and this applies to single-employer plans that have a funded current liability percentage of less than 100%. It increases the quarterly contributions by the liquidity shortfall. These rules are going to apply to plans that are funded, that have assets heavily invested in real estate or in other contracts that aren't marketable securities. There are many definitions and, again, I'm not going to go through and give you all these definitions because this was covered earlier. With Bruce's examples you will get a great deal of practical application, and I think that'll be more interesting. But to calculate the liquidity shortfall, you have to know what the disbursements are. You have to know the adjusted disbursements. One comment on disbursements is that it includes expenses paid from the plan, not just benefits. You have to determine the base amount for the quarter, and that's basically the base amount of liquid assets that you need to have. Then you look to see how much in liquid assets you do have and then you determine the shortfall. The timing to do the calculation is very, very tight because it applies to what happened in the quarter that just past. So you basically have 15 days to do it.

Adequately funded plans were still under the quarterly contribution rules. The heavens opened up and something fell out; it's called no quarterly contributions required for these plans. It's one of the few gifts that you get from Uncle Sam and Washington. Also, no participant notice is required. I trust everyone knows that the legislation was drafted

incorrectly, but it has all been fixed—not the legislation, just that they're not going to enforce it.

Changes in the full-funding limit now include the current liability normal cost. I think that many people were doing that anyway, so in practice that may not be a change. It may fall more in the clarification category. With the minimum full-funding limit, you can't horse around with your assumptions and get a zero funding limit with a plan that's not well funded. It's 90% of the current liability minus the actuarial value of assets.

If you want to change your current liability assumptions, in certain cases you must get approval; that is, if the change is going to have a big impact, and if the unfunded vested benefits were more than \$50 million, and the assumption change significantly reduces the unfunded current liability. Again, the details are in the outline on how *significantly* is defined.

Bargained benefit increases apply to single-employer collectively bargained plans, not multiemployer plans. When you fund the plans, you have to anticipate the benefit increases that are in effect for the current contract. You obviously can't anticipate anything beyond the current contract because you haven't any idea what that is. But plan sponsors can't either have the benefits increased gradually throughout the contract or delay and have the increase at the end of the contract and get away with not recognizing the impact of that contract earlier. This starts January 1, 1995. So this can happen for collectively bargained benefits that are currently in effect. So the plan sponsor, the employer, negotiated this contract and anticipated that it could delay some of the funding. The law changes, and it can't delay the funding. Bruce will go over some examples. I think you'll really get a flavor for how these rules work.

MR. CADENHEAD: Now we'll go through some examples of how this RPA actually works. I'm first going to run through the key funding provisions. I will then talk, as I did about OBRA 1987, regarding the "weak links" or the provisions that were watered down in the final legislation. I will then discuss the additional complexity that this law adds. Finally, I will talk about the choices that actuaries and sponsors face with these new complicated rules.

For one thing, RPA eliminates the double-counting problem. I'll bring the example back and run through it quickly. We've got yet more rapid amortization of unfunded liabilities: now a four-to-six-year schedule instead of the four-to-ten-year schedule under OBRA 1987. The mandated mortality table for determining current liability takes away slightly more of the discretion that actuaries had in setting assumptions (aggressive or otherwise). The allowable rate has been restricted to (eventually) 105% of the 4-year weighted average of 30-year Treasuries. We now have to anticipate bargained benefit increases that accelerate funding somewhat for unit accrual plans. The full-funding limitation has been strengthened, so sponsors of poorly funded plans can't use this limit to avoid making contributions. And PBGC premiums have been increased by phasing out the cap on the variable rate premium. So if your plan is poorly funded, you will have to pay for it one way or another.

Table 2 is the double-counting example. In the first case we had perfect coordination, so all the new law does is change the applicable percentage; it gives us a little higher DRC, and we wind up with a total contribution, again equal to the DRC.

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TABLE 2
OBRA 1987 VERSUS RPA 1994
DOUBLE-COUNTING PROBLEM CORRECTED UNDER RPA 1994

| | Scenario I | Scenario II | Scenario III |
|--|---------------|---------------|----------------|
| Under OBRA 1987 | | | |
| • Accrued liability (= CL) = actuarial value of assets | \$70,000 | \$70,000 | \$70,000 |
| • Unfunded liability | 0 | 0 | 0 |
| Significant Event: | | | |
| • (Gain)/Loss | 0 | 30,000 | (30,000) |
| • Amendment | <u>30,000</u> | <u>0</u> | <u>60,000</u> |
| • Total amount of significant event | \$30,000 | \$30,000 | \$30,000 |
| Unfunded liability after change | 30,000 | 30,000 | 30,000 |
| Section 412(b) Calculation | | | |
| • Amortization of loss | - | 6,898 | (6,898) |
| • Amortization of amendment | 2,363 | - | 4,726 |
| Section 412(l) Calculation | | | |
| • Current liability | 100,000 | 100,000 | 100,000 |
| • Unfunded current liability = UNL | 30,000 | 30,000 | 30,000 |
| • Funded current liability percentage | 70.00% | 70.00% | 70.00% |
| • Applicable percentage of UNL | 26.00% | 26.00% | 26.00% |
| • UNLA = DRC | 7,800 | 7,800 | 7,800 |
| • Offset | 2,363 | 6,898 | (2,172) |
| • Additional funding charge | 5,437 | 902 | 9,972 |
| Total Contribution | \$7,800 | \$7,800 | \$7,800 |

In the second example in Table 2, we have the same DRC, but now we have coordination with ERISA, so we have an offset for our ERISA charges. Again, we wind up with a total contribution equal to our DRC.

In the third line, the same thing, only now our ERISA offset is a negative number. We actually add this amount and get an additional funding charge that's higher than our DRC. When we add this charge back to the ERISA charges, we wind up with a contribution equal to the same DRC in all three cases. So now all plans that are equally poorly funded will pay the same amount, provided that new rules actually result in higher contributions than the ERISA rules. The double-counting problems have been fixed.

So what are the weak links? What may not work well? What was watered down? As was the case with OBRA 1987, we have transition rules. The increase in current liability due to the new assumptions is treated as an old liability and is amortized over 12 years rather than treated as a new liability which would be amortized over 4–6 years. We also have the optional rule under which you can elect to treat the entire 1995 unfunded current liability as old liability and amortize it over 12 years. There is also the threshold (gateway) test. Plans that are at least 90% funded, or, in some cases, just 80% funded, can avoid the

additional funding charge entirely. Before, if you were below 100% funded, you at least had to do the calculations.

In the original draft of the legislation, the current liability interest rate range was 90–100% of the 4-year weighted average of 30-year Treasuries. As a compromise, we wound up with 105% as the top of the range, phased in over five years.

In considering full-funding limitation again, in the original draft, plans that were below 100% funded on a current liability basis would not be able to avoid a contribution due to full-funding limitations. Now you can still be as poorly funded as 90% of current liability, but if your ERISA full-funding limit is zero, you don't make a contribution.

With bargained increases, there are two reasons why this provision is not as significant as it might seem at first. Number one, the increases that must now be recognized are those that have already been agreed to and that would have been recognized in a year or two anyway. You still don't anticipate the ultimate benefit levels. Number two, these increases are not reflected in the current liability calculation, only in our regular ERISA accrued liability. Many severely underfunded plans will have their contributions driven by the DRC. Because the DRC is based on the current liability, the anticipation of bargained increases will not have any effect on contributions for these plans.

For the average plan, the RPA will either leave contributions where they are or actually reduce them—at least for a year or two. Although, in the long run the RPA will probably have the desired effect of improving funding.

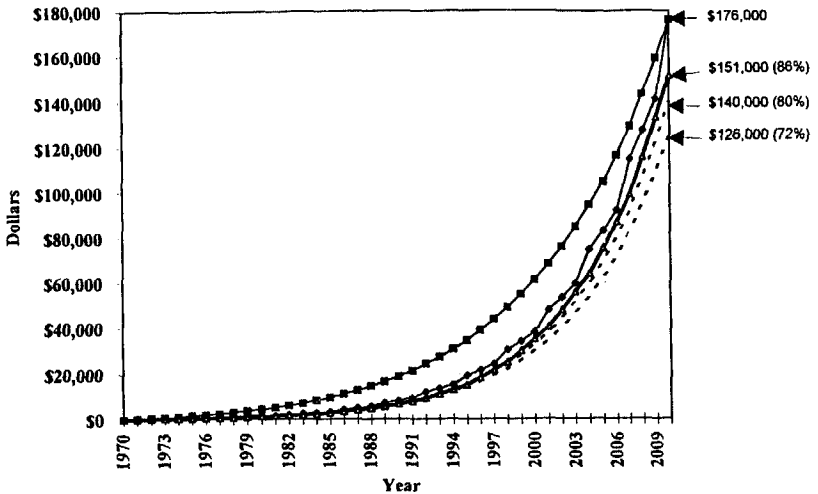
I have added one more line to the prior charts (Chart 3). We see that under the new rules the funding line has moved up again. The main reason for the improvement this time is not really the more rapid amortization of unfunded liabilities, but the increase in current liability due to the required change to GAM-83 mortality (because this plan was being funded based on GAM-71). So now our plan has \$151,000 of assets (86% funded) at retirement. Better, but still a little short. It's also worth noting that if we measured our accrued liability at retirement by using the GAM-83 table, rather than GAM-71, we would have a liability of \$187,000 compared with \$151,000 of assets—still a considerable shortfall.

One thing that the RPA will definitely succeed in is making things much more complicated. OBRA 1987 gave us a separate calculation structure. The RPA builds on those ideas. It doesn't do away with the OBRA 1987 structure, but it adds many new rules to it. We now have four potential measures of current liability, and I've counted five measures of the funded current liability percentage, which don't necessarily correspond to all those current liability measures.

Table 3 shows the different measures and what they're used for. In the first column is OBRA 1987 current liability. We still have to calculate that measure because it is used in determining the full-funding limitation. Mortality is the same as that used for the ERISA valuation. You still have the 90–110% range for interest rates. This measure is also used in calculating the OBRA 1987 or "old law" additional funding charge—in some cases we still have to look at what would happen under the old rules. The threshold current liability is used just for the threshold test (the 90%/80% test). This measure uses the top of the new interest rate range and the GAM-83 table.

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CHART 3
RPA ADDITIONAL FUNDING CHARGE*



- ◆ Unit credit—accrued liability
- Projected unit credit—accrued liability
- △ Unit credit—market value assets
- ✱ Projected credit—market value assets
- - - OBRA market-value assets
- - - ERISA market-value assets

* Sample plan—one employee hired at age 25, age 50 at 1/1/95
Benefit multiplier increases every three years at an annual rate of 4%
Funding assumptions: GAM-71, 8%, retirement at age 65, no preretirement decrements
No gains or losses

TABLE 3
BASELINE: HIGHEST CURRENT LIABILITY INTEREST RATE;
NO OPTIONAL RULE; PHASE-IN ELECTED; NO EXCESS 1994 CONTRIBUTION

| Measure | Mortality | Interest | Current Liability | Current Liability Normal Cost |
|-----------------------------|-----------|-------------|-------------------|-------------------------------|
| OBRA 1987 | GAM-71 | 8.00% | \$ 9,576,139 | \$377,990 |
| Threshold | GAM-83 | 7.93 | 10,298,257 | |
| RPA 1994 | GAM-83 | 7.93 | 10,298,257 | 407,813 |
| 1993 Assumption | GAM-71 | 8.00 | 9,576,139 | |
| Actuarial Asset Value | | \$8,127,231 | | |
| Credit Balance | | 0 | | |
| 412(b) Interest Rate | | 9.00% | | |
| 412(b) Amortization Charges | | | | |
| Amendments | | \$105,535 | | |
| Other | | (50,068) | | |
| 412(b) Normal Cost | | 349,304 | | |

We also have the RPA current liability. For this, the most frequently used measure, the interest rate can be anywhere within the 90–109% range (phasing down to 105%). But it should be the same interest rate that you use for OBRA 1987 current liability (provided that it falls within the allowable range) and GAM-83 mortality. This measure is used for determining the 404(a)(1)(D) maximum deductible contributions (the unfunded current liability maximum), the new DRC calculation, and the 90% of current liability floor on the full-funding limit. It's also used to determine whether your plan is 100% funded, and is thereby exempt from the quarterly contribution requirement, and to determine the maximum amount of the liquidity payment.

Finally, for 1995 only, thank goodness, we have yet a fourth potential current liability measure. We're calling this the "1993 assumption current liability." This is the current liability measured by using the same mortality table that you used in 1993 and the same interest rate (as a percentage of the 4-year weighted average of 30-year Treasuries) that you used in 1993. This measure is used to determine the effect of the change to the new assumption. The difference between the 1993 current liability and the new RPA current liability is amortized over 12 years.

MR. JAMES A. KENNEY: I have a plan that has merged in 1994. In the 1993 valuation, they used two different mortality tables: one for one plan and one for the other plan. What do I do for this last liability? Do I somehow split the population into two groups and use the two old mortality tables? How should I handle this?

MR. CADENHEAD: It's a good question. I'm sure that's not been addressed, and I don't know that it will be in time to help you. I would try to come up with something reasonable. If you can't actually split your current population, then maybe come up with some blend of the two tables.

MS. SCAHILL: What were the two tables?

MR. KENNEY: One of them was the 1983 group annuity table and the other was a 1971 group annuity table.

MS. SCAHILL: You might want to try to blend the tables, weighted by the population or something. I agree with Bruce. I don't think we'll have guidance in time, so I'd say to do something reasonable, and they'll never figure out what you did.

MR. KENNEY: If I split the population in two and use two different tables, wouldn't that be reasonable?

MS. SCAHILL: I can't think of any reason why that wouldn't be reasonable. I'm thinking that it's one plan, one valuation, but I don't see why for this calculation you couldn't actually identify who came from what. What about new hires, though, what are you going to do with them?

MR. KENNEY: I guess I would just assume they all go under the new surviving plan.

MS. SCAHILL: I think that would be reasonable.

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MR. CADENHEAD: It was a good question, but if we ask too many good questions, we won't get to the good material here. Table 4 is kind of tongue in cheek; it's a little painful, though, to look at. It's a list of all the different measures of funded current liability percentages that I could count. We have got the funded current liability percentage used for the OBRA 1987 (old law) additional funding charge calculations. For the threshold test, the funded current liability percentage is based on the threshold current liability with assets not reduced by the credit balance.

TABLE 4
FUNDED CURRENT LIABILITY PERCENTAGE CALCULATIONS

| Purpose | Current Liability Measure | Include CL Normal Cost? | Reduce Assets for Credit Balance? |
|---|---------------------------|-------------------------|-----------------------------------|
| OBRA 1987 additional funding charge | OBRA 1987 | No | Yes |
| Threshold test | Threshold | No | No |
| RPA 1994 additional funding charge; initial funded current liability percentage | RPA 1994 | No | Yes |
| Quarterly contribution exemption | RPA 1994 | No | No |
| Liquidity contribution limit | RPA 1994 | Yes | No |

For the RPA (new law) additional funding charge calculations, we use the RPA current liability, and we do reduce assets by the credit balance. We use the same liability measure for determining whether we're 100% funded. We can avoid quarterly contributions, but there we don't reduce assets by the credit balance. Finally, in looking at the maximum amount of the liquidity contribution, we throw the normal cost into the picture as well. So I count five different measures.

There are many things to consider to decide how best to comply with these new rules. I'm going to talk about four areas. Number one: acceleration of contributions. Can you contribute more for a prior plan year and thereby improve results for the current year? Number two: the optional rule. Should you make the election to treat the entire unfunded current liability as old liability and amortize it over 12 years? Number three: the phase-in. That's the provision that limits the amount that the additional funding charge can increase your funded percentage in any given year. Technically, this is an option, but in actual practice, probably everyone will make that election. And four: choice of the current liability interest rate. The rate you select in 1995 will have an effect on contributions down the road.

By accelerating contributions, for example by contributing an extra amount for 1994 (which we can still do if we haven't filed the Schedule B yet), we can reduce the current-year contribution. Possible benefits? For a plan that's just below the threshold, we can get the plan above 90% funded (we only need 80% if we pass the volatility rule) and eliminate the additional funding charge. Plus we now have a credit balance that we can

use to further reduce our 1995 contribution. In addition, if you contribute enough for 1994 to get the plan to 100% funded in 1995, then the 1996 quarterly contribution requirement is waived. Plans that are subject to the 90% floor on the full-funding limit can reduce the limit. I will discuss this point a little more later on.

The optional rule is a one-time election. You have to decide, for the 1995 valuation, whether you want to make this choice. Under this rule you amortize the entire unfunded current liability over 12 years instead of the new, more rapid schedule applicable to new liability. There is a catch, however, because the old law OBRA 1987 additional funding charge will then serve as a floor on your additional funding charge through the year 2001. This is not good for plans that were forced to double-count losses under the old rules. In many cases, the optional rule doesn't help much anyway because the phase-in provides the same result.

The phase-in is a year-by-year election. So you can decide to apply it one year and not the next and apply it again the following year. You might as well elect it because there's no downside. It's just an option to put a cap on your additional funding charge. It may not apply, but if it doesn't apply it doesn't hurt. The phase-in limits the required increase in your funded percentage to 3% per year based on the initial funded current liability percentage. For example, if, for 1995, your funded percentage is 70%, by the end of the year you only have to be 73% funded. By the end of 1996 you only have to be 76% funded. When we're in the range in between 75% and 85% funded, we start reducing that 3% increase. Once that funded percentage gets above 85%, we only add 2% to it.

One thing this won't do is reduce your contribution below what OBRA 1987 would have required. In cases where the OBRA 1987 charges are higher than RPA charges, this rule won't help. What was the phase-in designed to do? This provision was, in fact, in the original draft of the legislation and was designed to delay the impact of the RPA to beyond 1999. The reason this was included has to do with the budget process. The RPA was attached to the GATT legislation because it raises tax revenue. If the new funding rules were not phased in, then more rapid funding would be required for 1995. Sponsors would make more deductible contributions and pay less taxes, lowering the government's tax revenues. If the RPA was a revenue loser, it never would have gotten stuck to GATT to begin with, and I wouldn't be here talking to you about it. The phase-in defers the tax impact beyond the five-year period taken into account for budget purposes.

With regard to the current liability interest rate, the obvious choice, if your goal is to lower contributions, is to choose the highest allowable interest rate. However, there are some reasons why you might want to choose a low interest rate. A lower rate will increase the RPA current liability. This increases the difference between the 1993 current liability and the RPA current liability. This difference is treated as old liability and is amortized over 12 years, rather than under the new schedule. The higher liability will also decrease the initial funded current liability percentage (the percentage that's used in the phase-in calculation), lowering the maximum required funded percentage in future years. You can lower the current liability interest rate without increasing current-year contributions if you fall under one of two categories. Number one: the plan passes the 80%/90% threshold test. Remember that the threshold current liability is still calculated by using the top of the interest rate range. Regardless of this requirement, we can select any rate within the permissible range for determining the RPA current liability. Number two: if your 412(b) ERISA charges are high enough to fully offset the DRC, you can at least lower the RPA

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current liability interest rate until the deficit reduction contribution equals the ERISA charges. You can do this without increasing your contribution.

I'm going to run through some examples now. We will look at a plan that's being funded fairly aggressively (key assumptions include 9% and GAM-71 mortality). We have amortization charges for plan amendments and actuarial gains.

In this first example (Table 5), I'm going to take a straightforward vanilla approach and use the highest current liability interest rate. I'm not going to elect the optional rule, I am going to elect the phase-in, and I'm not going to look yet at the effect of accelerating contributions. So my four current liability measures really collapse now to two current liability measures, assuming I was at the top of the interest rate range in 1993 and I'm still now at the top of the interest rate range for OBRA 1987 purposes here.

What we find with this plan is that the funded percentage falls just below 80% and so it fails the threshold test. We have to do the additional funding charge calculation. For these examples I'm going to assume that the plan had no additional funding charge for the prior two years, and so the plan would have passed the threshold test with an 80% funded ratio. In this example, the plan falls just short, so we'll look now at the additional funding charge calculation. I'm showing the OBRA 1987 and RPA 1994 calculations side by side for comparison and also because we'll need the OBRA 1987 calculation. Our funded percentage under the new rules is lower than under the old rules because of the change in mortality and interest. That difference is the effect of the change to the new mandated assumptions and is treated as old liability, amortized over 12 years. So what we're left with as new liability is the same under both the old and new rules. However, our applicable percentage is higher under the new rules, so we wind up with a higher unfunded new liability amount as well. Plus you now add in the current liability normal cost, so our DRC is much higher under the new rules.

We also get more offsets under the new rules. We get to offset our 412(b) normal cost, plus we get to offset all our 412(b) amortization bases. In this case, that doesn't help because this plan was amortizing gains, and now under the new rules, it doesn't get to double-count those gains. So the net effect of these changes, on a preliminary basis, is that we have a considerably higher additional funding charge than we did under the old law.

But now we look at the phase-in. Our plan starts out at 78.92% funded, that's in between 75% and 85% so we add something in between 2% and 3% to that to get a target funded percentage of 81.53% at the end of the year.

We then figure out how much of a contribution would get us there. We multiply that percentage by our current liability. For this purpose we add the normal cost to the current liability and then subtract off the assets that we start with. Again, for this purpose, assets are reduced by the credit balance. We come up with \$601,428. Under the regular ERISA rules we are already contributing \$404,771. So the additional amount that we have to contribute to get us to \$601,428 is only \$212,252. This is the phase-in maximum—the maximum that we have to contribute. We compare it with the OBRA 1987 contribution because remember, the phase-in can't take us below what the old law would have required. In this case, the old law contribution is lower, so our DRC becomes \$212,252. So in total, we have a slightly higher contribution under the new law than we did under the old law.

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TABLE 5
VANILLA APPROACH USING HIGHEST CURRENT LIABILITY INTEREST RATE

| Additional Funding Charge | OBRA 1987 | RPA 1994 |
|---|-------------|---|
| A Current Liability | \$9,576,139 | \$10,298,257 |
| B Adjusted Assets (MVA - CB) | 8,127,231 | 8,127,231 |
| C Unfunded CL = (A) - (B) | 1,448,908 | 2,171,026 |
| D Funded CL% = (B) ÷ (A) | 84.87% | 78.92% |
| Unfunded Old Liability Amount | | |
| E OBRA 1987 UOL | 0 | 0 |
| F Additional UOL = Excess of (A) over 1993 assumption CL; = (C) if optional rule elected | N/A | \$722,118 |
| G Total UOL = (E) + (F) | 0 | 722,118 |
| H Unfunded old liability amount = (G) amortized over 12 years | 0 | 88,459 (11 years in '96, and so on) |
| Unfunded New Liability Amount | | |
| I Unfunded New Liability = (C) - (G) | \$1,448,908 | \$1,448,908 |
| J Applicable Percentage = 30% - MAX (0, (D) - 35%) × 25% = 30% - MAX (0, (D) - 60%) × 40% | 17.53% | 22.43% |
| K Unfunded New Liability Amount = (I) × (J) | \$253,994 | \$324,990 |
| Preliminary Additional Funding Charge | | |
| L Current Liability NC | N/A | \$407,813 |
| M Deficit Reduction Contribution = (H) + (K) + (L) | \$253,994 | 821,262 |
| N 412(b) Offset | 105,535 | 404,771 |
| O Additional Funding Charge = MAX (0, (M) - (N)) | 148,459 | 416,491 |
| P AFC with interest to year-end | 160,336 | 449,519 |
| Maximum Additional Funding Charge—Phase-In | | |
| Q Prior year maximum = (D) in 1995 | | 78.92% |
| R Maximum Required Funded % = (Q) + 2% + MIN (1%, MAX (0, 85% - (Q)) × 0.1) | | (Add extra 1% in 2000, 2% in 2001) 81.53% |
| S Contribution required to reach maximum Required % = (R) × [(A) + (L)] - (B) | | \$601,428 |
| T 412(B) Offset = (N) | | 404,771 |
| U Preliminary Maximum Additional Charge (with interest) = MAX (0, (S) - (N)) + interest | | 212,252 |
| V OBRA 1987 AFC = (P) from OBRA 1987 column | | 160,336 |
| W Maximum Additional Charge = MAX ((U), (V)) | | 212,252 |
| Minimum Required Law | Old Law | New Law |
| X Additional Funding Charge = MIN (P, W), not less than (V), if optional rule elected | \$160,336 | 212,252 |
| Y 412(b) Charges (with interest) | 441,200 | 441,200 |
| Z Credit Balance (with interest) | 0 | 0 |
| AA Minimum Contribution = (X) + (Y) - (Z) | 601,536 | 653,452 |

Now, let's see what happens if we change one thing (Table 6). I've already completed the 1995 valuation and see these results. Why not contribute more for 1994? I still have until

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September 15. In this example, we contribute an extra \$240,000 for 1994. This gets the funded current liability percentage for the threshold test above 80%. Remember that assets are not reduced by the credit balance for this test. In this case, we avoid the additional funding charge entirely.

I'm still going to go through this because there are a couple items that we will probably need in the future. Number one, we still have to calculate our additional unfunded old liability, because there's still an effect of the change to the new assumptions. Some people have suggested that the IRS may take the position that if you pass the threshold test, your unfunded old liability is considered fully amortized. But that's not in the law and is just a suggestion. I would not assume this treatment until we hear something more definite from the IRS.

We also have to calculate our initial funded current liability percentage, so that if we want to apply the phase-in in a future year we have something to start with. Again, we have the same initial percentage (78.92%) that we had in the first example, because for this purpose the assets are reduced by the credit balance that we created with the additional 1994 contribution. Again, it has been suggested that perhaps the IRS will not allow you to use the phase-in if your plan has ever passed the threshold test. But that's not in the law; it is just a suggestion.

The overall result in this case is no additional funding charge and a much lower contribution than under the old law. In fact, the contribution in this example is lower than the contribution in the baseline case by considerably more than the additional \$240,000 that we kicked in.

Let's take this one step further (Table 7). Given that we have no additional funding charge, let's choose the lowest allowable current liability interest rate (in this case 6.55%). The threshold calculation is still the same because current liability for that purpose is still at 7.93%. So the plan still passes. This change accomplishes two things. The unfunded old liability amount is much higher because now we have a bigger difference between our 1993 current liability and our new law current liability, giving us a much bigger amount that we get to amortize over 12 years. Plus our initial funded current liability percentage now starts out much lower, 65.07%, so that at the end of the year we only have to be 68.07% funded. At the end of 1996 we only have to be 71.07% funded. If in 1996 we go back up to the top of the current liability interest rate range, we may find that the phase-in helps a great deal.

So, in total, the new law contribution is the same. If we had used the lowest current liability interest rate under the old law, we would have had a much higher contribution. I'm not going to spend much time on this third scenario (Table 8). It's like the baseline case except we decide not to use the phase-in. Going right to the bottom line, our contribution is now much higher, under the new law without the phase-in.

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TABLE 6
 ALTERNATIVE 1: HIGHEST CURRENT LIABILITY INTEREST RATE
 NO OPTION RULE; PHASE-IN ELECTED; \$240,00 EXCESS 1994 CONTRIBUTION

| Measure | Mortality | Interest | Current Liability | Current Liability Normal Cost |
|--|---|----------|-------------------|--|
| OBRA 1987 | GAM-71 | 8.00% | \$9,576,139 | \$377,990 |
| Threshold | GAM-83 | 7.93 | 10,298,257 | |
| RPA 1994 | GAM-83 | 7.93 | 10,289,257 | 407,813 |
| 1993 Assumption | GAM-71 | 8.00 | 9,576,139 | |
| Actuarial Asset Value | | | | \$8,367,231 |
| Credit Balance | | | | 240,000 |
| 412(b) Interest Rate | | | | 9.00% |
| 412(b) Amortization charges | | | | |
| Amendments | | | | \$105,535 |
| Other | | | | (50,068) |
| 412(b) Normal Cost | | | | 349,304 |
| Threshold Calculation | | | | |
| A | Current Liability | | | 10,298,257 |
| B | Actuarial Asset Value | | | 8,367,231 |
| C | Funded CL Percentage = (B) / (A) | | | 81.25% Pass |
| Plan passes if | | | | |
| (1) FCL% ≥ 90% or | | | | |
| (2) FCL% ≥ 80% and FCL% was ≥ 90% for any two consecutive years in the prior three (for 1995, any two of 1992, 1993, or 1994 can be ≥ 90%) (for 1996, same as 1995 or 1994 and 1995 ≥ 90%) | | | | |
| Additional Funding Charge | | | OBRA 1987 | RPA 1994 |
| A | Current Liability | | \$9,576,139 | \$10,298,257 |
| B | Adjusted Assets (MVA - CB) | | 8,127,231 | 8,127,231 |
| C | Unfunded CL = (A) - (B) | | 1,448,908 | 2,171,026 |
| D | Funded CL% = (B) / (A) | | 84.87% | 78.92% |
| Unfunded Old Liability Amount | | | | |
| E | OBRA 1987 UOL | | 0 | 0 |
| F | Additional UOL = excess of (A) over 1993 assumption CL; = (C) if optional rule elected | | # N/A | \$722,118 |
| G | Total UOL = (E) + (F) | | 0 | 722,118 |
| H | Unfunded Old Liability Amount = (G) amortized over 12 years | | 0 | 88,459 11 years in 1996, and so on. |
| Unfunded New Liability Amount | | | | |
| I | Unfunded New Liability = (C) - (G) | | \$1,448,908 | \$1,448,908 |
| J | Applicable Percentage = 30% - MAX(0, (D) - 35%) × 25% = 30% - MAX(0, (D) - 60%) × 40% | | 17.53% | 22.43% |
| K | Unfunded New Liability Amount = (I) × (J) | | \$253,994 | \$324,990 |

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TABLE 6 (continued)

| Preliminary Additional Funding Charge | | OBRA 1987 | RPA 1994 | |
|---|--|-----------|--|----------------|
| L | Current Liability NC | # N/A | 407,813 | |
| M | Deficit Reduction Contribution = (H) + (K) + (L) | \$253,994 | \$821,262 | |
| N | 412(b) Offset | 105,535 | 404,771 | |
| O | Additional Funding Charge = MAX(O,(M) - (N)) | 148,459 | 416,491 | |
| P | AFC with interest to year-end | 160,336 | 449,519 | |
| Maximum Additional Funding Charge—Phase-in | | | | |
| Q | Prior-year maximum = (D) in 1995 | | 78.92% add extra 1% in 2000 2% in 2001 | |
| R | Maximum Required Funded % = (Q) + 2% + MIN(1%, MAX(0, 85% - (Q) × 0.1) | | 81.53% | |
| S | Contribution required to reach Maximum Required Percentage = (R) × [(A) + (L)] - (B) | | 601,428 | |
| T | 412(b) Offset = N | | 404,771 | |
| U | Preliminary Maximum Additional Charge (with interest) = MAX(O,(S) - (N)) + interest | | 212,252 | |
| V | OBRA 1987 AFC = (P) from OBRA 1987 column | | 160,336 | |
| W | Maximum Additional Charge = MAX((U),(V)) | | 212,252 | |
| Minimum Required Contribution | | | Old Law | New Law |
| X | Additional Funding Charge = MIN (P,W), not less than (V) if optional rule elected | | \$160,336 | 0 |
| Y | 412(b) Charges (with interest) | | 441,200 | \$441,200 |
| Z | Credit Balance (with interest) | | 261,600 | 261,600 |
| AA | Minimum Contribution = (X) + (Y) - (Z) | | 339,936 | 179,600 |

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TABLE 7
 ALTERNATIVE 2: LOWEST CURRENT LIABILITY INTEREST RATE; NO
 OPTIONAL RULE; PHASE-IN ELECTED, \$240,000 EXCESS 1994 CONTRIBUTION

| Measure | Mortality | Interest | Current Liability | Current Liability Normal Cost |
|---|---|----------|-------------------|-----------------------------------|
| OBRA 1987 | GAM-71 | 6.55% | \$11,728,567 | \$495,321 |
| Threshold | GAM-83 | 7.93 | 10,298,257 | |
| RPA 1994 | GAM-83 | 6.55 | 12,490,924 | 527,517 |
| 1993 Assumption | GAM-71 | 8.00 | 9,576,139 | |
| Actuarial Asset Value | | | \$8,367,231 | |
| Credit | | | 240,000 | |
| 412(b) Interest Rate | | 9.00% | | |
| 412(b) Amortization Charges | | | | |
| Amendments | | | \$105,535 | |
| Other | | | (50,068) | |
| 412(b) Normal Cost | | | 349,304 | |
| Threshold Calculation | | | | |
| A | Current Liability | | 10,298,257 | |
| B | Actuarial Asset Value | | 8,367,231 | |
| C | Funded CL% = (B) / (A) | | 81.25% Pass | |
| Plan passes if (1) FCL% ≥ 90% or (2) FCL% ≥ 80% and FCL% was ≥ 90% for any two consecutive years in the prior three (for 1995, any two of 1992, 1993, or 1994 can be ≥ 90%) (for 1996, same as 1995 or 1994 and 1995 ≥ 90%) | | | | |
| Additional Funding Charge | | | OBRA 1987 | RPA 1994 |
| A | Current Liability | | \$11,728,567 | \$12,490,924 |
| B | Adjusted Assets (MVA - CB) | | 8,127,231 | 8,127,231 |
| C | Unfunded CL = (A) - (B) | | 3,601,336 | 4,363,693 |
| D | Funded CL% = (B) / (A) | | 69.29% | 65.07% |
| Unfunded Old Liability Amount | | | | |
| E | OBRA 1987 UOL | | 0 | 0 |
| F | Additional UOL = excess of (A) over 1993 assumption CL; = (C) if optional rule elected | | # N/A | \$2,914,785 |
| G | Total UOL = (E) + (F) | | 0 | 2,914,785 |
| H | Unfunded Old Liability Amount = (G) amortized over 12 years | | 0 | 336,205 11 years in 1996, etc. |
| Unfunded New Liability Amount | | | | |
| I | Unfunded New Liability = (C) - (G) | | 3,601,336 | 1,448,908 |
| J | Applicable Percentage = 30% - MAX(0, (D) - 35%) × 25% = 30% - MAX(0, (D) - 60%) × 40% | | 21.43% | 27.97% |
| K | Unfunded New Liability Amount = (I) × (J) | | 771,766 | 405,260 |
| L | Current Liability NC | | # N/A | \$527,517 |
| M | Deficit Reduction Contribution = (H) + (K) + (L) | | \$771,766 | 1,268,982 |
| N | 412(b) Offset | | 105,535 | 404,771 |
| O | Additional Funding Charge = MAX(0, (M) - (N)) | | 666,232 | 864,211 |
| P | AFC with interest to year-end | | 709,870 | 920,817 |

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TABLE 7 (continued)

| Maximum Additional Funding Charge—Phase-In | | OBRA 1987 | RPA 1994 |
|--|---|-----------|--|
| Q | Prior-year maximum = (D) in 1995 | | 65.07% add extra 1% in 2000; 2% in 2001 |
| R | Maximum Required Funded % = (Q) + 2% + MIN(1%, MAX(0, 85% - (Q)) × 0.1) | | 68.07% |
| S | Contribution required to reach Maximum Required % = (R) × [(A) + (L)] - (B) | | \$734,422 |
| T | 412(b) Offset = (N) | | 404,771 |
| U | Preliminary Maximum Additional Charge (with interest) = MAX (O, (S) - (N)) + interest | | 351,243 |
| V | OBRA 1987 AFC = (P) from OBRA 1987 column | | 709,870 |
| W | Maximum Additional Charge = MAX ((U), (V)) | | 709,870 |
| Minimum Required Contribution | | Old Law | New Law |
| X | Additional Funding Charge = MIN(P, W), not less than (V) if optional rule elected | \$709,870 | 0 |
| Y | 412(b) Charges (with interest) | 441,200 | \$441,200 |
| Z | Credit Balance (with interest) | 261,600 | 261,600 |
| AA | Minimum Contribution = (X) + (Y) - (Z) | 889,470 | 179,600 |

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TABLE 8
 ALTERNATIVE 3: HIGHEST CURRENT LIABILITY INTEREST RATE;
 NO OPTIONAL RULE; NO PHASE-IN; NO EXCESS 1994 CONTRIBUTION

| Measure | Mortality | Interest | Current Liability | Current Liability Normal Cost |
|--|---|----------|-------------------|----------------------------------|
| OBRA 1987 | GAM-71 | 8.00% | 9,576,139 | 377,990 |
| Threshold | GAM-83 | 7.93 | 10,298,257 | |
| RPA 1994 | GAM-83 | 7.93 | 10,298,257 | 407,813 |
| 1993 Assumption | GAM-71 | 8.00 | 9,576,139 | |
| Actuarial Asset Value | | | 8,127,231 | |
| Credit Balance | | | 0 | |
| 412(b) Interest Rate | | | 9.00% | |
| 412(b) Amortization Charges | | | | |
| Amendments | | | 105,535 | |
| Other | | | (50,068) | |
| 412(b) Normal Cost | | | 349,304 | |
| Threshold Calculation | | | | |
| A | Current Liability | | 10,298,257 | |
| B | Actuarial Asset Value | | 8,127,231 | |
| C | Funded CL% = (B) / (A) | | 78.92% Fail | |
| Plan passes if (1) FCL % $\geq 90\%$ or (2) FCL% $\geq 80\%$ and FCL% was $\geq 90\%$ for 1995, any two consecutive years in the prior three (for 1995, any two of 1992, 1993, or 1994 can be $\geq 90\%$) (for 1996, same as 1995 or 1994 and 1995 $\geq 90\%$) | | | | |
| Additional Funding Charge | | | OBRA 1987 | RPA 1994 |
| A | Current Liability | | 9,576,139 | 10,298,257 |
| B | Adjusted Assets (MVA - CB) | | 8,127,231 | 8,127,231 |
| C | Unfunded CL = (A) - (B) | | 1,448,908 | 2,171,026 |
| D | Funded CL% = (B) / (A) | | 84.87% | 78.92% |
| Unfunded Old Liability Amount | | | | |
| E | OBRA 1987 UOL | | 0 | 0 |
| F | Additional UOL = excess of (A) over 1993 assumption CL; = (C) if optional rule elected | | # N/A | 722,118 |
| G | Total UOL = (E) + (F) | | 0 | 722,118 |
| H | Unfunded Old Liability Amount = (G) amortized over 12 years | | 0 | 88,459 11 years in 1996, etc. |
| Unfunded New Liability Amount | | | OBRA 1987 | RPA 1994 |
| I | Unfunded New Liability = (C) - (G) | | 1,448,908 | 1,448,908 |
| J | Applicable Percentage = $30\% - \text{MAX}(0, (D) - 35\%) \times 25\%$ = $30\% - \text{MAX}(0, (D) - 60\%) \times 40\%$ | | 17.53% | 22.43% |
| K | Unfunded New Liability Amount = (I) \times (J) | | 253,994 | 324,990 |
| Preliminary Additional Funding Charge | | | | |
| L | Current Liability NC | | # N/A | \$407,813 |
| M | Benefit Reduction Contribution = (H) + (K) + (L) | | \$253,994 | 821,262 |
| N | 412(b) Offset | | 105,535 | 404,771 |
| O | Additional Funding Charge = MAX (O, (M) - (N)) | | 148,459 | 416,491 |
| P | AFC with interest to year-end | | 160,336 | 449,519 |

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TABLE 8 (continued)

| Maximum Additional Funding Charge--Phase-in | | OBRA 1987 | RPA 1994 |
|---|---|-----------|-------------|
| Q | Prior-year Maximum = (D) in 1995 | | 78.92% |
| R | Maximum Required Funded Percentage = 100% (no phase-in) | | 100.00% |
| S | Contribution required to reach Maximum Required % = (R) × [(A) + (L)] - (B) | | \$2,578,839 |
| T | 412(b) Offset = (N) | | 404,771 |
| U | Preliminary Maximum Additional Charge (with interest) = MAX((S) - (N)) + interest | | 2,346,472 |
| V | OBRA 1987 AFC = (P) from OBRA 1987 column | | 160,336 |
| W | Maximum Additional Charge = MAX((U),(V)) | | 2,346,472 |
| Minimum Required Contribution | | Old Law | New Law |
| X | Additional Funding Charge = MIN(P,W), not less than (V) if option rule elected | \$160,336 | \$449,519 |
| Y | 412(b) Charges (with interest) | 441,200 | 441,200 |
| Z | Credit Balance (with interest) | 0 | 0 |
| AA | Minimum Contribution = (X) + (Y) - (Z) | 601,536 | 890,719 |

I'm not going to spend much time on the fourth example either. We can talk about it later if anybody wants to. This is the same as the baseline case except I've changed the composition of the unfunded liability (Table 9). Instead of amortizing large plan amendments and gains, the plan is amortizing smaller plan amendments and actuarial losses. This is a plan that was forced to double-count losses under the old law rules. Again, just skipping to the bottom-line results, we see that the old law and new law contributions are the same. Actually, in most cases, where plans were double-counting losses under the old rules, we will find that the new rules are actually more beneficial and result in a lower contribution.

Chart 4 shows a projection of what happens in the future, if you look at the first three alternatives compared with the baseline and compared with old law rules. What happens in 1995 is not the whole story. I'll just point out a couple interesting things. Under alternatives 1 and 2 (those were the ones where we accelerated contributions for 1994), we wind up with a much lower contribution in 1995. This is due in part to the credit balance that we created and in part to the fact that we passed the threshold test and avoided the additional funding charge. With alternative 1, however, the 1996 contribution jumps way up, because in 1996 we're below 80% funded, and we don't pass the threshold test. We avoided contributing much in 1995, so our plan isn't very well funded. We have a much higher additional funding charge in 1996. That pattern holds for a number of years until the plan becomes better funded further on down the projection. Under alternative 2, however, the 1996 contribution is still fairly low. The primary reason is the phase-in—we lower our maximum required percentage by choosing a low interest rate in 1995. We see that the contribution remains low for a number of years. Then further on down in the projection period it jumps way up because under that scenario we have avoided putting assets in the plan. We have to pay for it later on. Under alternative 3, (without the phase-in), we see a much higher up-front contribution pattern and a much lower contribution down the road. Notice that in the later years a number of the bars are the same. That's because the plan in those later years has gotten above 90% funded, it passes the

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That's because the plan in those later years has gotten above 90% funded, it passes the threshold, and it has no additional funding charges, just the ERISA charges, which are the same for all scenarios.

TABLE 9
ALTERNATIVE 4: SAME AS BASELINE,
BUT PLAN IS AMORTIZING LOSSES RATHER THAN GAINS

| Measure | Mortality | Interest | Current Liability | Current Liability Normal Cost |
|--|---|----------|-------------------|--------------------------------|
| OBRA 1987 | GAM-71 | 8.00% | \$9,576,139 | \$377,990 |
| Threshold | GAM-83 | 7.93 | 10,298,257 | |
| RPA 1994 | GAM-83 | 7.93 | 10,298,257 | 407,813 |
| 1993 Assumption | GAM-71 | 8.00 | 9,576,139 | |
| Actuarial Asset Value | | | \$8,127,231 | |
| Credit Balance | | | 0 | |
| 412(b) Interest Rate | | | 9.00% | |
| 412 (b) Amortization Charges | | | | |
| Amendments | | | 33,994 | |
| Other | | | 86,400 | |
| 412(b) Normal Cost | | | 349,304 | |
| Threshold Calculation | | | | |
| A | Current Liability | | 10,298,257 | |
| B | Actuarial Asset Value | | 8,127,231 | |
| C | Funded CL% = (B) / (A) | | 78.92% Fail | |
| Plan passes if (1) FCL % $\geq 90\%$ or (2) FCL% $\geq 80\%$ and FCL% was $\geq 90\%$ for any two consecutive years in the prior three (for 1995, any two of 1992, 1993, or 1994 can be $\geq 90\%$) (for 1996, same as 1995 or 1994 and 1995 $\geq 90\%$) | | | | |
| Additional Funding Charge | | | OBRA 1987 | RPA 1994 |
| A | Current Liability | | \$9,576,139 | \$10,298,257 |
| B | Adjusted Assets (MVA - CB) | | 8,127,231 | 8,127,231 |
| C | Unfunded CL = (A) - (B) | | 1,448,908 | 2,171,026 |
| D | Funded CL% = (B) / (A) | | 84.87% | 78.92% |
| Unfunded Old Liability Amount | | | | |
| E | OBRA 1987 UOL | | 0 | 0 |
| F | Additional UOL = excess of (A) over 1993 assumption CL; = (C) if optional rule elected | | #N/A | 722,118 |
| G | Total UOL = (E) + (F) | | 0 | 722,118 |
| H | Unfunded Old Liability Amount = (G) amortized over 12 years | | 0 | 88,459; 11 years in 1996, etc. |
| Unfunded Old Liability Amount | | | | |
| I | Unfunded New Liability = (C) - (G) | | \$1,448,908 | \$1,448,908 |
| J | Applicable Percentage = 30% - MAX (0, (D) - 35%) \times 25% = 30% - MAX (0, (D) - 60%) \times 40% | | 17.53% | 22.43% |
| K | Unfunded New Liability Amount = (I) \times (J) | | 253,994 | 324,990 |

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TABLE 9—Continued

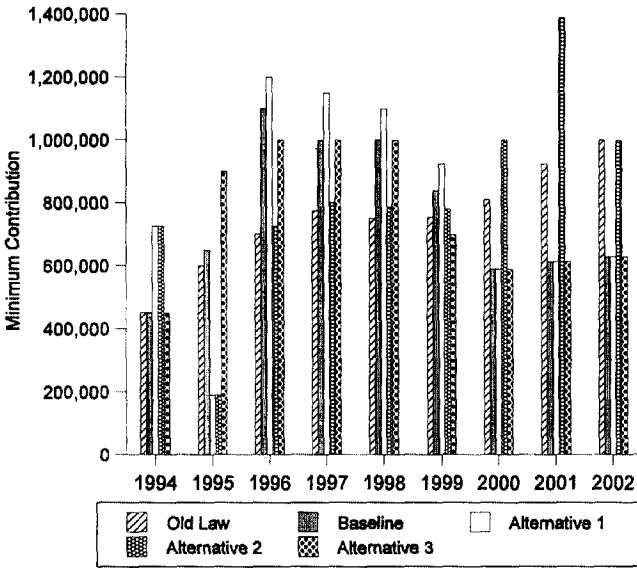
| Preliminary Additional Funding Charge | | | |
|--|--|-----------|-----------|
| L | Current Liability NC | #N/A | \$407,813 |
| M | Deficit Reduction Contribution = (H) + (K) + (L) | \$253,994 | 821,262 |
| N | 412(b) Offset | 33,994 | 469,698 |
| O | Additional Funding Charge = MAX(0,(M) - (N)) | 220,000 | 351,564 |
| P | AFC with interest to year-end | 237,600 | 379,443 |
| Maximum Additional Funding Charge—Phase-in | | OBRA 1987 | RPA 1987 |
| Q | Prior-year Maximum = (D) in 1995 | | 78.92% |
| R | Maximum Required Funded % = (Q) + 2% + 1% in 2000, MIN(1%, MAX(0, 85% - (Q)) × 0.1) | | 81.53% |
| S | Contribution required to reach Maximum Required % = (R) × [(A) + (L)] - (B) | | \$601,428 |
| T | 412(b) Offset = (N) | | 469,698 |
| U | Preliminary Maximum Additional Charge (with interest) = MAX(0, (S) - (N)) + interest | | 237,600 |
| V | OBRA 1987 AFC = (P) from OBRA 1987 column | | 237,600 |
| W | Maximum Additional Charge = MAX((U), (V)) | | 237,600 |
| Minimum Required Contribution | | Old Law | New Law |
| X | Additional Funding Charge = MIN(P,W), not less than (V) if optional rule elected | \$237,600 | \$237,600 |
| Y | 412(b) Charges (with interest) | 511,971 | 511,971 |
| Z | Credit Balance (with interest) | 0 | 0 |
| AA | Minimum Contribution = (X) + (Y) - (Z) | 749,571 | 749,571 |

Chart 5 compares what would happen under the baseline scenario if you had elected the optional rule. All my examples assume the optional rule is not elected. Well, if you do make that election, in this case it does help out in 1996–97, and then you pay for it in 1998, 1999, and 2000. It doesn't make too much of a difference, though. In many cases you'll see that it really doesn't make much of a difference at all.

Just a couple quick words about two of the other issues. Under the law, in calculating the 90% of current liability full-funding limit floor, it specifically states that assets are not reduced by the credit balance. That's even for both 412-404 purposes, as the law is written. That means that if I'm affected by this limit, each additional dollar I contribute for 1994 is going to lower my 1995 full-funding limit. It also creates a credit balance, which I can then use to further reduce my contribution. So each dollar I contribute in 1994, if I'm affected by these rules, will reduce my contribution by \$2.

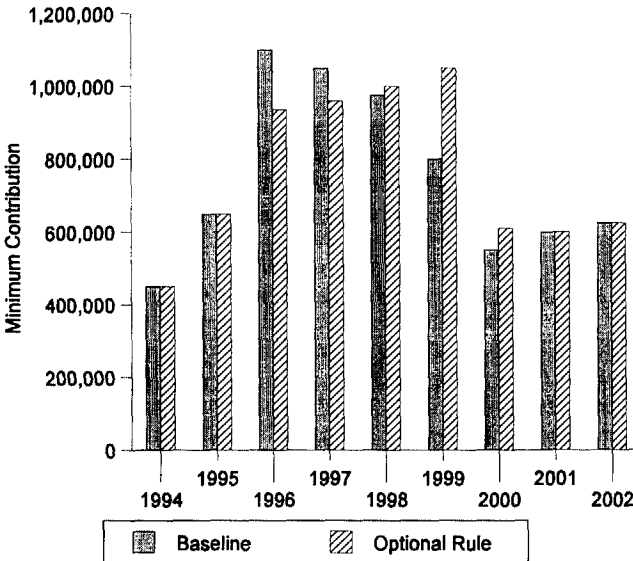
Regarding PBGC premiums, we just went through examples that show how to do many different things to affect the timing of your contribution requirements. In one example we were able to defer them considerably. Well, you do pay for that. With the phase-out of the cap on premiums, you're now going to be paying much higher premiums. Every dollar that you put into the plan will reduce your premium by 0.9 of a cent.

CHART 4
RPA 1994 CASH-FLOW COMPARISON*



*Note: Assets return 8% every year with no other gain/loss; valuation assumptions remain constant; 4-year average 30-year Treasury yield drops to 7%; and highest current liability rate used for 1996 and beyond.

CHART 5
RPA 1994 CASH-FLOW COMPARISON



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Every dollar you don't contribute increases your premium. So if you look at it as a choice between two competing investments—putting money in your pension plan versus investing in the business (or making some other investment)—that other investment has to beat your pension return by almost a full percentage on an after-tax basis to make sense.

So what is this law going to do? Well, for overfunded plans it's really not going to make much of a difference at all. For underfunded plans, it's certainly going to make things much more complicated, and it gives us an opportunity to play around with different options. Some of you might think that's fun, but I have to ask if it's worth it.

MR. KENNEY: It sounds like, based on what you were saying, if I have a plan that is over 90% funded, one of the smartest things I could do would be to use the lowest interest rate in the corridor for my 1995 valuation. Is that correct?

MR. CADENHEAD: You are asking if you would want to use the lowest interest rate if you're already 90% funded?

MR. KENNEY: If I could pass the gateway test so I don't have to do the deficit reduction calculation and if I use the lowest interest rate, I generate a favorable situation for myself later, is that correct?

MR. CADENHEAD: That's correct. Remember you will have to pay for it in higher PBGC premiums, but otherwise, yes, unless the IRS decides that it will treat your unfunded old liability as fully amortized and not let you use the phase-in, in which case it has no effect. But there isn't a downside that I'm aware of.

MR. DONALD J. SEGAL: I would agree with that last comment that if when you hit the 90% the IRS considers all your old liability to be fully amortized, then everything is new liability, and I guess we don't know the answer to that. The point I want to make is a clarification. You seem to have it right in the example, but it wasn't clear in the tables. The additional funding charge due to the deficit reduction contribution is subject to that 100% that additional amount is after recognition of the minimum funding requirement under 412(b). This is a change from the OBRA 1987 law. Before you almost could get a double-count because they said "the amount necessary to bring it up to 100%," and they ignored the minimum funding charge so you would wind up above 100%. Here in that additional piece some language in there says that after taking into account the minimum—words that mean minimum funding requirements—prior to recognizing the DRC.

MR. CADENHEAD: That's correct, that's a good point.

MR. RICHARD W. PRESCOTT: We have already filed the PBGC Form 1 with current liability numbers on it, and we picked an interest rate and had to disclose that. Now we're doing the Schedule B; can we use a different current liability for Schedule B purposes than what we used for PBGC Form 1 purposes in the calendar-year 1994 valuation? Last September 15 we filed a PBGC Form 1; we have current liability on the PBGC Form 1. Can we now file our 1994 Schedule B with different current liability numbers and a different interest rate?

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MR. CADENHEAD: I believe that you can do that. You probably want to perhaps refile the PBGC form. You wouldn't actually show a different value of adjusted benefits, but you would show a different current liability on that form.

MS. SCAHILL: Are you using the alternate method or the general method for your PBGC filing?

MR. PRESCOTT: General method.

MS. SCAHILL: So your calculations on your PBGC form, when you use the general method, don't work off your prior valuation.

MR. PRESCOTT: January 1, 1994 valuation; January 1, 1994 premium payment.

MS. SCAHILL: But there's a required interest rate for your PBGC filing.

MR. PRESCOTT: Yes, I know.

MS. SCAHILL: So it doesn't use the current liability calculation from your actual valuation.

MR. PRESCOTT: No it doesn't, but you still have to put them there.

MR. CADENHEAD: Right.

MR. PRESCOTT: You just stick them on the form. They don't use them for anything. You use the PBGC premium valuation for it. I agree with you. So, therefore, it really has no impact on the PBGC.

MS. SCAHILL: Do you even show the current liability interest rate from the Schedule B when you use the general method?

MR. PRESCOTT: Yes.

MS. SCAHILL: I see somebody says no.

MR. PRESCOTT: I thought they asked for it; I could be wrong. I haven't filled any out for this year.

MS. SCAHILL: I thought you skipped that whole section and just—

MR. PRESCOTT: Maybe you don't show the interest rate; maybe you show the number. I know that I had to put current liability numbers on there someplace.

MR. CADENHEAD: Yes, it does ask for the interest rate and the number. The other alternative, I suppose, is not to refile it.

MR. PRESCOTT: Explain it then.

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MR. JAY B. HANSELMANN: I've been through this process only once. As I understand the law, the determination of what your unfunded old liability amount will be is an option that the employer is given. Once you've done that, the employer also has the option to apply phase-in. My question is, what is the employer's minimum funding requirement for Schedule B? Under those conditions, has the IRS come close to answering that question? I understand we're going to have a 6-12-page Schedule B to complete for 1995.

MR. CADENHEAD: I'm not sure I understand the question.

MR. HANSELMANN: How are you going to complete the FSA? Until the employer makes its decisions with respect to what it will contribute, what is the minimum funding standard?

MR. CADENHEAD: For 1995, we won't know until the 1994 contributions are complete. And until then, the employer makes the 1995 elections, which we will—

MR. HANSELMANN: We're completing actuarial valuation reports, and we're telling the employer it has perhaps three, maybe four different levels of contribution that it could make, depending on its options with respect to unfunded old liability amount and whether it wants to apply phase-in. But what is its minimum funding standards?

MR. CADENHEAD: That's correct, you can't answer that question until you go through all the choices and an employer decides what course of action it wants to take.

MS. SCAHILL: But at least there are choices that are available. It could have been worse. Maybe not.

