Pension Section News

April 2005 – Issue No. 58

Pension News

Issue Number 58 • April 2005

Published by the Pension Section Council of the Society of Actuaries
475 N. Martingale Road, Suite 600
Schaumburg, IL 60173-2226

phone: (847) 706-3500
fax: (847) 706-3599
world wide web: http://www.soa.org

This newsletter is free to section members. A subscription is $15.00 for nonmembers. Current-year issues are available from the Communications Department. Back issues of section newsletters have been placed in the SOA library and on the SOA Web site: (*www.soa.org*). Photocopies of back issues may be requested for a nominal fee.

Arthur J. Assantes, Newsletter Editor
Hooker & Holcombe
65 LaSalle Road
West Hartford, CT 06107
phone: (860) 521-8400
fax: (860) 521-3742
e-mail: ajassantes@hhconsultants.com

Clay Baznik, Publications Director
e-mail: cbaznik@soa.org

Sue Martz, Project Support Specialist
e-mail: smartz@soa.org

Joe Adduci, DTP Coordinator
e-mail: jadduci@soa.org

Excerpts from the PBGC Actuarial Valuation Report—2004

by Joan M. Weiss

Editor's Note: The 2004 Annual Performance and Accountability Report, the 2004 Annual Report of the PBGC, and the complete 2004 Actuarial Valuation Report, including additional actuarial data tables, are available under Publications at www.PBGC.gov.

The 2004 Pension Benefit Guaranty Corporation (PBGC) Annual Performance and Accountability Report and the 2004 Annual Report of the PBGC each contain a summary of the results of the September 30, 2004 actuarial valuation. The purpose of the separate Actuarial Valuation Report is to provide greater detail concerning the valuation of future benefits than is presented in the PBGC's annual report.

Overview

The PBGC calculated and validated the present value of future benefits (PVFB) for both single-employer and multiemployer programs and of nonrecoverable financial assistance under the multiemployer program. For the single employer program, the liability as of September 30, 2004, consisted of:

- $44.95 billion for the 3,469 terminated plans
- $30.95 billion for the 45 probable terminations

Liabilities for "probable terminations" reflected reasonable estimates of the losses for plans that are likely to terminate in a future year. These estimated losses were based on conditions that existed as of PBGC's fiscal year-end. It is likely that one or more events subsequent to PBGC's fiscal year-end will occur, confirming the loss. In addition, the liability for reasonably possible terminations has been calculated and is discussed in Note 7—Contingencies to the financial statements on page 33 of PBGC's 2004 Annual Performance and Accountability Report. A discussion of PBGC's program exposure and net financial condition is presented on pages 4 through 10 of that report. For the multiemployer program, the liability as of September 30, 2004, consisted of:

- $3 million for 10 pension plans that terminated before passage of the Multiemployer Pension Plan Amendments Act (MPPAA) of which PBGC is trustee.
- $1,295 million for probable and estimable post-MPPAA losses due to financial assistance to 67 multiemployer pension plans that were, or expected to become, insolvent.

Actuarial Assumptions, Methods, and Procedures

The PBGC continues to review the actuarial assumptions used in the valuation to ensure that they remain consistent with current market conditions in the insurance industry and with PBGC's experience. The actuarial assumptions that are used in both the single-employer and multiemployer valuations are presented in the table on page 14 of the 2004 Actuarial Report. Assumptions concerning data that were not available are discussed in the data section of the report.

As in previous valuations, the select and ultimate interest rates used to value PBGC liabilities were derived using an assumed underlying mortality basis and current annuity purchase prices. The interest rates so determined for the 2004 valuation were 4.80 percent for

(continued on page 10)

We note a major change in calculation procedure for FY2004. For both the single-employer and multi-employer probable plans, we developed and began using a standard rate of return calculation program to project assets to the evaluation date.

the first 25 years after the valuation date and 5.00 percent thereafter. These interest rates are dependent upon the PBGC's mortality assumption, which changed from FY 2003 to FY 2004 (see below).

An independent consulting firm reviewed the PBGC's financial statement mortality assumptions for the FY2004 valuation. Their study recommended that when conducting valuations for its financial statements, the PBGC use the male and female 1994 Group Annuity Mortality Static Table (with margin), set forward one year, for healthy males and females. This table replaced the male and female 1994 Group Annuity Mortality Static Table (with margins), set forward two years, for healthy males and females used in the September 30, 2003 valuation. Changes were also made to the tables for valuing disabled lives mortality. This study also recommended that continuing mortality improvements be taken into account by using Projection Scale AA to project these tables a fixed number of years. At each valuation date, the fixed number of years will be determined as the sum of the elapsed time from the date of the table (1994) to the valuation date, plus the period of time from the valuation date to the average date of payment of future benefits (the duration). This is an approximation to a fully projected table.

Thus, the mortality table used for healthy lives in the 2004 valuation is the 1994 Group Annuity Mortality Table, set forward one year, projected 20 years to 2014 using Scale AA. The 20 years recognizes the 10 years from 1994 to 2004 plus the 10-year duration of the 9/30/03 liabilities. The 2003 assumption incorporated an 18-year projection, determined as the sum of the nine years from 1994 to 2003 and the nine-year duration of the 9/30/02 liabilities.

The model used to determine the reserve for future administrative expenses was last changed in FY 2000 based on a study by an independent consultant. There was no change in the assumptions for retirement ages in 2004.

The Small Plan Average Recovery Ratio (SPARR) assumptions as shown in the table on page 15 were updated to reflect the actual SPARR calculated for FY 2002 (9.60 percent). The SPARRs for subsequent years are assumed to equal the FY 2002 SPARR.

We note a major change in calculation procedure for FY2004. For both the single-employer and multiemployer probable plans, we developed and began using a standard rate of return calculation program to project assets to the valuation date. The program computes annualized rates of return between two dates based on the blend of stocks and bonds the user selects. In addition, we added a general cash-flow projection capability and a computerized system to track the receipt of multiemployer information.

We continued our ongoing efforts to improve the quality of the seriatim data and, as in other years, made various changes to improve the accuracy, speed, security and auditability of the calculations and to integrate with the evolving PBGC computer environment.

Statement of Actuarial Opinion

This valuation has been prepared in accordance with generally accepted actuarial principles and practices and, to the best of my knowledge, fairly reflects the actuarial present value of the corporation's liabilities for the single-employer and multiemployer plan insurance programs as of September 30, 2004.

In preparing this valuation, I have relied upon information provided to me regarding plan provisions, plan participants, plan assets and other matters.

In my opinion, (1) the techniques and methodology used for valuing these liabilities are generally accepted within the actuarial profession; (2) the assumptions used are appropriate for the purposes of this statement and are individually my best estimate of expected future experience discounted using current settlement rates from insurance companies; and (3) the resulting total liability represents my best estimate of anticipated experience under these programs. ◆

Joan M. Weiss, FSA, is chief valuation actuary at Pension Benefit Guaranty Corporation in Washington, D.C. She can be reached at weiss.joan@pbgc.gov.

ACTUARIAL ASSUMPTIONS		
	Previous Valuation as of 9/30/03	**Current Valuation as of 9/30/04**
Interest Rate	Select and Ultimate • 4.40% for 20 years. • 4.50% thereafter.	Select and Ultimate • 4.80% for 25 years. • 5.00% thereafter.
Mortality • Healthy Lives	• 1994 Group Annuity Mortality Static Table (with margins), set forward two years, projected 18 years to 2012 using Scale AA.	• 1994 Group Annuity Mortality Static Table (with margins), set forward one year, projected 20 years to 2014 using using Scale AA.
• Disabled Lives Not Receiving Social Security • Disabled Lives Receiving Social Security	• Healthy Lives Table set forward three years. • Social Security disability table as described in subpart B of PBGC Regulations on Allocation of Assets in Single-Employer Plans for persons up to age 64, adjusted to parallel the table for disabled lives not receiving Social Security benefits for ages above 64.	• Healthy Lives Table set forward seven years. • Healthy Lives Table set forward seven years.
Small Plan Average Recovery Ratio (SPARR)	Calculated SPARR for fiscal years for which it has been calculated. The most recent calculated SPARR is assumed for years for which the calculation is not yet completed (most recent SPARR: FY 2001 =4.94%).	Calculated SPARR for fiscal years for which it has been calculated. The most recent calculated SPARR is assumed for years for which the calculation is not yet completed (most recent SPARR: FY 2000=9.60%).
Retirement Ages	(a) Earliest possible for shutdown companies. (b) Expected retirement age (XRA) tables from 29 CFR 4044 for ongoing companies. (c) Participants past XRA are assumed to be in pay status. (d) Unlocated participants past normal retirement age (NRA) are phased out over three years to reflect lower likelihood of payment.	Same
Expenses	All terminated plans and single-employer probable terminations; 1.18% of the liability for benefits plus additional reserves for cases where plan asset determinations, participant database audits and actuarial valuations were not completed.	Same