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PENSION SECTION

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Pension Section News

Excerpts from the PBGC Actuarial Valuation Report—2005

by Joan M. Weiss

Editor's Note: The 2005 PBGC Annual Performance and Accountability Report, the 2005 Annual Report of the PBGC and the complete 2005 Actuarial Valuation Report, including additional actuarial data tables, are available under Publications at www.PBGC.gov.

The 2005 Pension Benefit Guaranty Corporation (PBGC) Annual Performance and Accountability Report and the 2005 Annual Report of the PBGC each contain a summary of the results of the Sept. 30, 2005, 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 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 non-recoverable financial assistance under the multiemployer program. For the single employer program, the liability as of Sept. 30, 2005, consisted of:

- $62.65 billion for the 3,585 terminated plans
- $23.92 billion for the 44 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. Management believes it is likely that one or more events subsequent to PBGC's fiscal year-end will occur, confirming the fact of 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 pages 36-37 of PBGC's 2005 Annual Report. A discussion of PBGC's program exposure and net financial condition is presented on pages 10 through 11 of that report. For the multiemployer program, the liability as of Sept. 30, 2005, consisted of:

- $2 million for 10 pension plans that terminated before passage of the Multiemployer Pension Plan Amendments Act (MPPAA) of which PBGC is trustee.
- $1,485 million for probable and estimable post-MPPAA losses due to financial assistance to 77 multiemployer pension plans that were, or are expected to become, insolvent.

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Actuarial Assumptions

	Previous Valuation as of 9/30/04	Current Valuation as of 9/30/05
Interest Factors	Select & Ultimate: • 4.8 percent for 25 years • 5.0 percent thereafter	Select & Ultimate: • 5.2 percent for 25 years • 4.5 percent thereafter
Mortality **Healthy Lives**	1994 Group Annuity Mortality Static Table (with margins), set forward one year, projected 20 years to 2014 using Scale AA.	1994 Group Annuity Mortality Static Table (with margins), set forward one year, projected 22 years to 2016 using Scale AA.
Disabled Lives Not Receiving Social Security	Healthy Lives Table set forward six years.	SAME
Disabled Lives Receiving Social Security	Healthy Lives Table set forward six years.	SAME
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 (FY 2002 = 9.60 percent)	Calculated SPARR for fiscal year 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 2003 = 7.86 percent). See Table 2B on page 15 the 2005 Actuarial Report for values.
Retirement Age	(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 percent of the liability for benefits plus additional reserves as shown in Table 2C for cases where plan-asset determinations, participant database audits and actuarial valuations were not complete.	SAME

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 Table 2A on page 14 of the 2005 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 by using an assumed underlying mortality basis and current annuity purchase prices. The interest rates so determined for the 2005 valuation were 5.20 percent for the first 25 years after the valuation date and 4.50 percent thereafter. For the 2004 valuation the interest factors were 4.8 percent for the first 25 years and 5.0 percent thereafter. These interest rates are dependent upon the PBGC's mortality assumption.

Beginning with the FY 2004 valuation, the mortality assumptions were updated by adopting the recommendations from a study by an independent consulting firm. The study recommended that, when conducting valuations for its financial statements, the PBGC use the male and female 1994 Group Annuity Mortality Tables, set forward one year, for healthy males and females. The 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 generational mortality table. Thus, the mortality table used for healthy lives in the 2005 valuation is the 1994 Group Annuity Mortality Table, set forward one year, projected 22 years to 2016 using Scale AA. The 22 years recognizes the 11 years from 1994 to 2005 plus the 11-year duration of the 9/30/04 liabilities. The 2004 assumption incorporated a 20-year projection, determined as the sum of the 10 years from 1994 to 2004 and the 10-year duration of the 9/30/03 liabilities.

The model used to determine the reserve for future administrative expenses was updated in FY 2000 based on a study by an independent consultant. The same model was used in FY 2005. The factors used in the expense reserve formula are shown in Table 2C on page 16. Retirement age assumptions were not changed.

The Small Plan Average Recovery Ratio (SPARR) assumptions as shown in Table 2B on page 15 were updated to reflect the SPARR calculated for FY 2003 (7.86 percent). The SPARRs for subsequent years are assumed to equal the FY 2003 SPARR.

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.

Auditors' Opinion

PBGC's 2005 financial statements have received an unqualified opinion from PBGC's auditors, Clifton Gunderson, LLP. The Present Value of Future Benefits and Nonrecoverable Future Financial Assistance and its underlying data are covered by this opinion. The auditors performed numerous tests of both data and procedures to support this opinion.

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 Sept. 30, 2005.

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 acceptable 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. ◆

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