

# Pension Benefit Guaranty Corporation

## 2008 Actuarial Report

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## **ACTUARIAL VALUATION REPORT – 2008 FISCAL YEAR**

The 2008 Annual Report of the Pension Benefit Guaranty Corporation (PBGC) contains a summary of the results of the September 30, 2008 actuarial valuation. The purpose of this separate Actuarial Valuation Report is to provide greater detail concerning the valuation of future benefits than is presented in PBGC's Annual Report.

### **Overview**

PBGC calculated and validated the present value of future benefits (PVFB) for both the single-employer and multiemployer programs and of nonrecoverable financial assistance under the multiemployer program. These calculations reflect the present value of claims as of the date of the financial statements. They present a snapshot of the liabilities as of a point in time and do not include liability projections over the period subsequent to the date of the financial statements.

For the single-employer program, the liability as of September 30, 2008 consisted of:

- (1) \$57.32 billion for the 3,850 plans that have terminated; and
- (2) \$12.61 billion for the 27 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 a note to the financial statements of PBGC's 2008 Annual Report. A discussion of PBGC's potential claims and net financial condition over the next ten years is also presented in that report.

For the multiemployer program, the liability as of September 30, 2008 consisted of:

- (1) \$1 million for 10 pension plans that terminated before the passage of the Multiemployer Pension Plan Amendments Act (MPPAA) and of which PBGC is trustee; and
- (2) \$1,768 million for probable and estimable post-MPPAA losses due to financial assistance to 90 multiemployer pension plans that were, or were expected to become, insolvent.

The results of the valuation (the present value of future benefits and nonrecoverable financial assistance) are presented in Table 1 and are displayed in the graphs on pages 7 and 8.

**Table 1:  
Present Value of Future Benefits and Nonrecoverable Future Financial Assistance - 2008**

	Number of Plans	Number of Participants (in thousands)	Liability (in millions)
<b>I. Single-Employer Program</b>			
<b>A. Terminated plans</b>			
1. Seriatim at fiscal year-end (FYE)	3,549	705	\$27,038
2. Seriatim at DOPT, adjusted to FYE	48	40	1,875
3. Nonseriatim <sup>1</sup>	253	388	28,361
4. Missing Participants Program (seriatim) <sup>2</sup>	--	19	46
Subtotal	3,850	1,152	\$57,320
<b>B. Probable terminations (nonseriatim)<sup>3</sup></b>	27	117	12,606
<b>Total<sup>4</sup></b>	3,877	1,269	\$69,926
<b>II. Multiemployer Program</b>			
A. Pre-MPPAA termination (seriatim)	10	*	\$1
B. Post-MPPAA liability (net of plan assets)	90	122	1,768
Total	100	122	\$1,769

\* Fewer than 500 participants

Notes:

- 1) The liability for terminated plans has been increased by \$56 million for settlements.
- 2) The Missing Participants Program refers to a liability that PBGC assumed for unlocated participants in standard plan terminations.
- 3) The net claims for probable plans reported in the financial statements include \$59 million for not-yet-identified probable terminations. The assets for these probable plans, including the expected value of recoveries on employer liability and due-and-unpaid employer contributions claims, are \$9,452 million. Thus, the net claims for probables as reported in the financial statements are \$12,606 million less \$9,452 million, or \$3,154 million.
- 4) The PVFB in the financial statements (\$59,996 million) is net of estimated plan assets and recoveries on probables (\$9,452 million), estimated recoveries on terminated plans (\$165 million), and estimated assets for plans pending trusteeship (\$313 million), or, \$69,926 million less \$9,452 million less \$165 million less \$313 million = \$59,996 million.

### **Single-Employer Program**

PBGC calculated the single-employer program's liability for benefits for each of the terminated plans and for each of the plans considered to be a probable termination using one of three methods:

- (1) seriatim at fiscal year-end (FYE);
- (2) seriatim at date of plan termination (DOPT), adjusted to FYE; and
- (3) nonseriatim.

In addition, PBGC included liabilities for incurred but not reported (IBNR) plans, for the Missing Participants Program, and for the Collins Settlement, but did not include the Rettig Settlement liabilities.

#### **Seriatim at FYE Method**

The liability for each participant's benefit was calculated separately at FYE for plans for which PBGC had sufficiently complete and accurate data. This was termed the seriatim at FYE method. PBGC selected plans to be valued using the seriatim at FYE method according to two criteria:

- (1) completeness - whether PBGC's computer system contained enough of the plan's participant records and whether enough of those records had been finalized; and
- (2) accuracy - whether the participant's record contained enough of the critical elements of data that were necessary to perform an actuarial valuation.

For this valuation, these criteria were met by 3,549 pension plans (92% of the single-employer plans) representing \$27,038 million (39%) in liabilities and about 705,000 (56%) participants. This was an increase of 105 plans over the 3,444 plans valued seriatim at FYE last

year.

While the critical error rates for 305 plans or 8.6% of the seriatim plans exceeded 5%, the overall error rate for the group of 3,549 seriatim plans was 1.6%.

### **Seriatim at DOPT Method**

There were 48 plans for which a final seriatim valuation as of date of plan termination (DOPT) had been completed, but the Benefits Administration and Payment Department of PBGC had not finished processing the case as of year-end (e.g., participant data had not been fully loaded into PBGC's computer database, or the data lacked too many critical elements to be valued by the seriatim at FYE method). When PBGC benefit calculations were finalized but not ready for seriatim valuation as of fiscal year-end, PBGC valued the plan's liability seriatim as of the plan's termination date and brought the total amounts forward to September 30, 2008 using the nonseriatim method outlined below. Because PBGC had finalized and valued these benefits for each participant and valued them using PBGC assumptions and regulations as of each plan's date of termination, these amounts are more accurate than similar calculations for plans whose benefits are not final.

### **Nonseriatim Method**

If calculations of benefits guaranteed by PBGC were not final, PBGC based the liability calculations on the plan's most recent actuarial valuation performed before the termination date that is available to PBGC. For the 253 terminated plans valued nonseriatim, PBGC obtained the liability for each plan as of the most recent available actuarial valuation date for each category of participant: retired, active, or terminated vested. These liabilities were adjusted to reflect such

factors as:

- (1) benefits accrued between the valuation and plan termination dates;
- (2) differences between the interest rates assumed by the plans' actuaries and those assumed by PBGC;
- (3) differences between the mortality, retirement age, and expense assumptions used by the plans' actuaries and those used by PBGC; and
- (4) the effect on the liability of time elapsed between the valuation date and September 30, 2008.

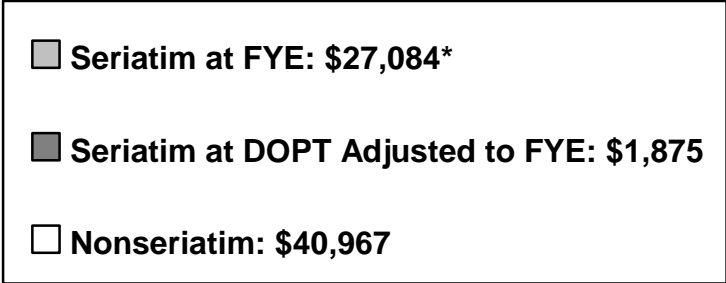
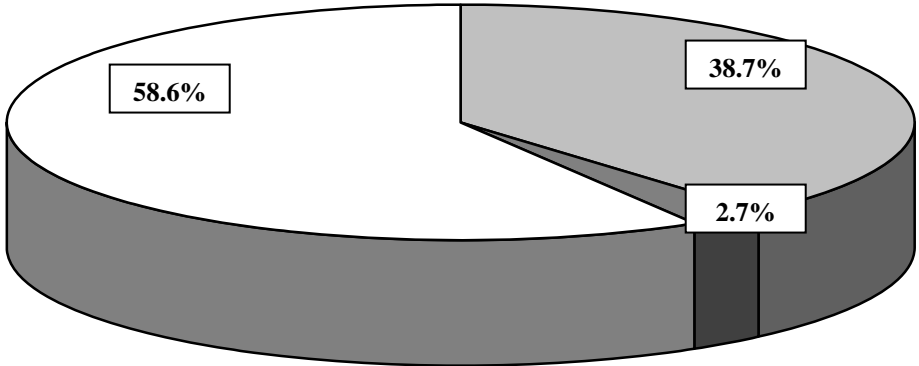
PBGC based the adjustment factors used in the nonseriatim procedure on its experience in routinely estimating the liability for benefits for administrative purposes.

For each of the 27 probable terminations, PBGC calculated the liability as of September 30, 2008 using the nonseriatim method with an assumed date of plan termination.



**Distribution of FYE08 Single-Employer Liability by Method of Calculation**

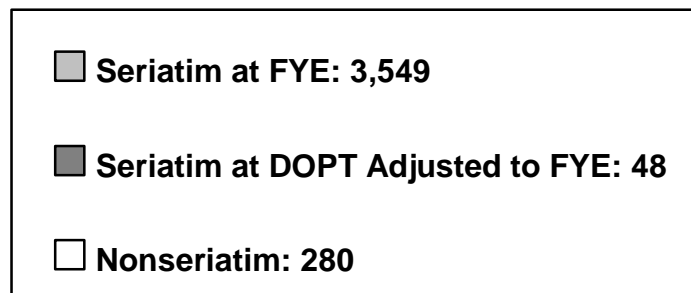
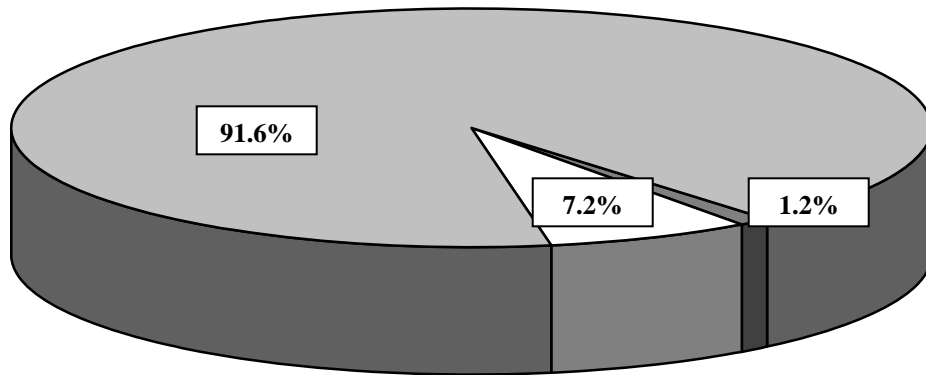
**Liability for Benefits: \$69,926**  
(Dollars in Millions)



\*Seriatim at FYE includes the Missing Participants Program

**Distribution of FYE08 Single-Employer Plans by Method of Calculation**

**Total Plans: 3,877**



The Rettig Settlement refers to the liability for benefits that PBGC incurred as a result of the settlement of a class action lawsuit in 1984. Since the vast majority of these benefits have been paid and the remaining liability is immaterial, we have removed the remaining liability from our presentation for 9/30/08 and subsequent valuations.

### **Missing Participants Program**

The Missing Participants Program refers to a responsibility that PBGC has assumed under the Retirement Protection Act of 1994 to act as a clearinghouse for unlocated participants in standard plan terminations. As with other parts of the PVFB, only the liabilities are shown here. Because plan administrators have transferred a corresponding asset amount to PBGC, the net increase in liabilities of PBGC due to this program, if any, will be negligible. Changes to this program due to the Pension Protection Act of 2006 have not yet been implemented.

### **Collins Settlement**

The Collins Settlement refers to the liability for benefits that PBGC incurred as a result of the settlement of a class action lawsuit during fiscal year 1996. This settlement provides benefits for participants in plans which terminated between January 1, 1976 and December 31, 1981 without having been amended to conform to ERISA's vesting requirements. The liability under this settlement is included in the nonseriatim portion of the liability.

### **Multiemployer Program**

There were a total of 10 pre-MPPAA terminations, 9 of which were granted discretionary coverage under the provisions of ERISA as passed in 1974. The remaining plan terminated when coverage under Title IV was mandatory (from August 1, 1980 until September 25, 1980). PBGC calculated the liability for these 10 terminations under the seriatim at FYE method using the same assumptions as for the single-employer program.

The post-MPPAA portion of the liability represented the present value, as of September 30, 2008, of net losses that PBGC expected to incur from non-recoverable future financial assistance to 90 pension plans, that were, or were expected to become, insolvent. The liability for each plan was calculated (using the cash flow method) as the present value of future guaranteed benefit and expense payments, net of the present value of future employer contributions and withdrawal liability payments. This liability was determined as of the later of September 30, 2008 and the actual or projected date of insolvency, and then discounted back to September 30, 2008 using interest only. The most recent available actuarial reports and information provided by representatives of the affected plans served as the basis for the valuations.

Projected benefit payments were estimated based on liabilities, current benefit payments and estimated average ages for actives, terminated vesteds and retirees from the most recent actuarial reports, combined with assumptions of retirement ages and of future rates of mortality and termination. Projected expense payments were estimated as a constant percentage of the projected benefit payments; this percentage is equal to the ratio of current expense payments to current benefit payments. The projected date of insolvency was then established using a cashflow model with initial assets, expense payments, contributions, projected benefit and withdrawal liability payments as inputs, estimated when necessary.

The post-MPPAA liability as of September 30, 2008 is about \$356 million lower than it

was a year earlier. This decrease in liability is mostly attributable to the fact that there are four fewer plans classified as post-MPPAA probable plans in FY 2008 and to the large increase in the liability discount factor, offset by a modest net increase due to the combined effect of the passage of time, data changes, mortality assumptions and assumed rate of return. The calculation this year reflected further refinements to the multiemployer cash flow model in its treatment of future withdrawal liability payments.

## **Actuarial Assumptions, Methods, and Procedures**

PBGC continues to review the actuarial assumptions used in the valuation to assure that they remain consistent with current market conditions in the insurance industry and with PBGC's experience. The actuarial assumptions, which are used in both the single-employer and multiemployer valuations, are presented in Table 2A. Assumptions concerning data that were not available are discussed in the data section of this report.

As in previous valuations, the select and ultimate interest factors used to value PBGC's liabilities were derived using an assumed underlying mortality basis and current annuity purchase prices. The interest factors so determined for the 2008 valuation were 6.66% for the first 20 years after the valuation date and 6.47% thereafter. For the 2007 valuation the interest factors were 5.31% for the first 20 years and 4.88% thereafter. These interest factors are dependent upon 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 2008 valuation is the 1994 Group Annuity Mortality Table, set forward one year, projected 24 years to 2018 using Scale AA. The 24 years recognizes the 14 years from 1994 to 2008 plus the 10 year

duration of the 9/30/07 liabilities. The 2007 assumption incorporated a 23 year projection, determined as the sum of the 13 year from 1994 to 2007 and the 10 year duration of the 9/30/06 liabilities.

Retirement age assumptions were not changed.

The SPARR (Small Plan Average Recovery Ratio) assumptions as shown in Table 2B were updated to reflect the SPARRs calculated in FY2008. The FY2008 SPARR of 4.26% is used for the 9/30/08 valuation.

PBGC used the same explicit loading factors as used in FY2007 for expenses in all terminated plans and single-employer probable terminations. The reserve for expenses was assumed to be 1.37% of the liability for benefits plus additional reserves for cases whose plan asset determinations, participant database audits, and actuarial valuations were not yet complete. The factors to determine the additional reserves were based on case sizes (large/small), number of participants, and time since trusteeship. The factors used in the expense reserve formula are shown in Table 2C.

During the 2008 fiscal year, we improved the IPVFB system: (1) to include a historical DOPT mortality table which allows the automatic use of blended mortality tables based on the DOPT (2) to allow the input of SPARR rates for current fiscal year, now published before the end of the fiscal year and (3) to encrypt files and reports stored on the server containing personal participant information.

We continue 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.

**Table 2A**  
**Actuarial Assumptions**

	<b>Previous Valuation as of 9/30/07</b>	<b>Current Valuation as of 9/30/08</b>
<b>Interest Factors</b>	Select & Ultimate: 5.31% for 20 years, 4.88% thereafter	Select & Ultimate: 6.66% for 20 years, 6.47% thereafter
<b>Mortality</b>		
Healthy Lives	1994 Group Annuity Mortality Static Table (with margins), set forward one year, projected 23 years to 2017 using Scale AA	1994 Group Annuity Mortality Static Table (with margins), set forward one year, projected 24 years to 2018 using Scale AA
Disabled Lives	Healthy Lives Table set forward 6 years	Healthy Lives Table set forward 6 years
<b>SPARR</b>	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 (FY05 = 4.39%).	Calculated SPARR through current fiscal year. See Table 2B for values and notes.
<b>Retirement Ages</b>	(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 3 years to reflect lower likelihood of payment.	Same
<b>Expenses</b>	All terminated plans and single-employer probable terminations: 1.37% 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



**Table 2B**

**Small Plan Average Recovery Ratio (SPARR) Assumptions**

The SPARR is used in the calculation of the liability for benefits determined under section 4022(c) of ERISA, which provides participants with a portion of PBGC's recoveries. The SPARR has been determined by PBGC for terminations initiated in a given fiscal year based on actual recoveries and unfunded benefit liabilities for plan terminations initiated during the preceding 5 years. The Pension Protection Act of 2006 changed the SPARR calculation time frame to use a period two years earlier than previous calculations. As a result, the SPARR for the two week period from 9/16/06 to 9/30/06 was changed from 4.13% to 3.50%. Because this change resulted in a negligible impact to a handful of PBGC plans, we have assumed in the financial valuation that the 4.13% SPARR applies for all of Fiscal Year 2006. As of the end of fiscal year 2008, the SPARR had been calculated for plan terminations initiated in fiscal years 1991-2008. The 2008 SPARR is also assumed for probable plans affected by future SPARRs.

<b>Fiscal Year</b>	<b>SPARR</b>	<b>Fiscal Year</b>	<b>SPARR</b>
1991	12.01%	2000	4.58%
1992	7.73%	2001	4.94%
1993	7.44%	2002	9.60%
1994	7.04%	2003	7.86%
1995	7.22%	2004	3.42%
1996	7.90%	2005	4.39%
1997	5.98%	2006	4.13%
1998	6.84%	2007	4.35%
1999	8.01%	2008	4.26%

**Table 2C**

**Reserve Factors for Expenses\***

<b>Large Plans (more than 100 participants)</b>							
	Plan Asset Determination	Participant Database	Actuarial Valuation				Interim Benefits Administration
Years Since Trusteeship	Per Large Plan	Per Large Plan	Per Large Plan	Per Participant for the First 100 Participants in Plan	Per Participant for the Next 400 Participants in Plan	Per Participant for the Remaining Participants in Plan	Per Participant
0<=y<1	\$23,020	\$78,290	\$118,640	\$1,130	\$370	\$15	\$330
1<=y<2	15,270	48,470	69,450	660	220	10	190
2<=y<3	12,050	35,970	40,380	380	130	5	110
3<=y	8,570	33,130	31,730	300	100	5	90

<b>Small Plans (100 or fewer participants)</b>							
	Plan Asset Determination	Participant Database	Actuarial Valuation				Interim Benefits Administration
Years Since Trusteeship	Per Small Plan	Per Small Plan	Per Small Plan	Per Participant for the First 100 Participants in Plan	Per Participant for the Next 400 Participants in Plan	Per Participant for the Remaining Participants in Plan	Per Participant
0<=y<1	\$11,500	\$21,470	\$118,640	\$1,130	N/A	N/A	\$330
1<=y<2	7,320	18,060	69,450	660	N/A	N/A	190
2<=y<3	5,550	15,130	40,380	380	N/A	N/A	110
3<=y	5,040	11,430	31,730	300	N/A	N/A	90

\* In addition to the reserve factors shown, an expense reserve equal to 1.37% of the liability for benefits applies to both Large Plans and Small Plans.

### **Data Sources and Assumptions**

The seriatim portion of this valuation was based on participant data maintained by PBGC's Benefits Administration & Payment Department. For the seriatim liability, benefit amounts have been determined for each participant using plan documents, together with ERISA and PBGC regulations relating to guaranteed benefits and the allocation of assets. If specific data were not available for deferred vested participants under the seriatim method, participants were assumed to be married and to elect the qualified Joint and Survivor (J&S) benefit; wives were assumed to be four years younger than their husbands. When certain other data elements for a participant were missing, they were replaced by the average for the plan. When the plan average was not available, the average for all plans valued seriatim was used.

The nonseriatim liability was based on the plan's most recent actuarial valuation performed before the termination date that is available to PBGC. The valuation information generally was obtained from actuarial reports or Schedule B filings. For nonseriatim plans and probable terminations, provision generally has been made to reduce benefits to guaranteed levels. Attained ages for active participants, terminated vested participants, and retired participants were assumed to be ages 50, 50 and 65 respectively for new nonseriatim plans when plan data were unavailable. For post-MPPAA multiemployer plans, the assumed ages are 55, 57 and 65, respectively.

### **Auditors' Opinion**

PBGC's 2008 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.

### **Valuation Statistics**

The FY 2008 valuation for the single-employer program included approximately 1,152,000 participants owed future payments in terminated plans as of September 30, 2008 and approximately 117,000 participants in plans that will probably terminate. For the multiemployer program, the FY 2008 valuation included, as of September 30, 2008, 193 participants in terminated pre-MPPAA plans and approximately 122,000 participants in plans receiving or expected to receive financial assistance. Of these, about 654,000 participants from terminated single-employer plans and 178 participants from terminated multiemployer plans were receiving benefits from PBGC at fiscal year-end.

The average monthly benefit paid by PBGC for participants in pay status during FY 2008 was \$549 (including supplemental benefits) for the single-employer program and \$131 for the multiemployer program.

Tables 3 through 6 summarize the detailed results of the seriatim and nonseriatim valuations for both the single-employer and multiemployer programs.

**Table 3:  
Liability for Pay-Status Recipients in "Seriatim at FYE" Method**

Single-Employer						Multiemployer			
Age	Number of Benefit Recipients**	Average Monthly Benefit	Average			Number of Benefit Recipients	Average Monthly Benefit	Liability (Millions)	Percent of Liability
			Supplemental Monthly Benefit	Liability (Millions)	Percent of Liability				
Under 50	1,508	\$254	\$114	\$59	*%	0	-	\$0	0%
50-54	5,872	502	172	482	2	0	-	0	0
55-59	29,608	419	194	1,896	9	0	-	0	0
60-64	64,843	447	91	4,074	20	0	-	0	0
65-69	89,208	427	36	4,815	23	0	-	0	0
70-74	84,461	427	44	4,025	19	1	\$165	*	1
75-79	74,876	400	52	2,813	14	4	105	*	3
80-84	62,188	352	49	1,665	8	39	136	*	31
85-89	39,398	312	44	735	4	52	151	*	35
Over 89	17,220	251	44	187	1	82	118	*	30
<b>TOTAL</b>	<b>469,182</b>	<b>\$399</b>	<b>\$70</b>	<b>\$20,751</b>	<b>100%</b>	<b>178</b>	<b>\$131</b>	<b>\$1</b>	<b>100%</b>

\* Less than 0.5% or less than \$500,000

\*\* Approximately 12% of participants are receiving supplemental benefits.

Note: The liability in this table does not include the liability for the Missing Participants Program.

**Table 4:  
Liability for Deferred Participants in "Seriatim at FYE" Method**

Single-Employer						Multiemployer			
Age	Number of Benefit Recipients**	Average Monthly Benefit	Average			Number of Benefit Recipients	Average Monthly Benefit	Liability (Millions)	Percent of Liability
			Supplemental Monthly Benefit	Liability (Millions)	Percent of Liability				
Under 40	3,418	\$205	\$0	\$25	*%	0	-	\$0	0%
40-44	12,039	242	72	157	3	0	-	0	0
45-49	27,160	284	34	604	10	0	-	0	0
50-54	50,306	293	56	1,535	24	0	-	0	0
55-59	50,403	288	137	2,010	32	0	-	0	0
60-64	30,351	261	123	1,359	22	0	-	0	0
Over 64	4,327	234	164	211	3	0	-	0	0
Other***	57,762	--	--	386	6	15	-	*	100
<b>TOTAL</b>	<b>235,766</b>	<b>\$278</b>	<b>\$122</b>	<b>\$6,287</b>	<b>100%</b>	<b>15</b>	<b>-</b>	<b>\$*</b>	<b>100%</b>

\* Less than 0.5% or less than \$500,000

\*\* Approximately 1% of participants (not including others) will receive supplemental benefits.

\*\*\* "Other" refers to participants scheduled at year-end for lump sum payments.

Note: The liability in this table does not include the liability for the Missing Participants Program.

**Table 5:  
Seriatim at DOPT and Nonseriatim Liability**

<b>Plans with Final DOPT Benefits</b>			
	Number of Plans	Liability (millions)	Percent of Liability
A. Large	17	\$1,812	4.2%
B. Other	<u>31</u>	<u>\$63</u>	<u>0.2%</u>
Subtotal	48	\$1,875	4.4%
<b>Plans with Non-Final DOPT Benefits</b>			
	Number of Plans	Liability (millions)	Percent of Liability
A. Large	83	\$27,875	65.2%
B. Other	<u>170</u>	<u>\$430</u>	<u>1.0%</u>
Subtotal	253	\$28,305	66.2%
<b>Probable Plans</b>			
	Number of Plans	Liability (millions)	Percent of Liability
A. Large	23	\$12,523	29.3%
B. Other	<u>4</u>	<u>\$24</u>	<u>0.1%</u>
Subtotal	27	\$12,547	29.4%
Total	328	\$42,727	100.0%

Notes:

- 1) Final DOPT benefits refer to those benefits that PBGC has determined and valued seriatim as of DOPT for the plan. Non-Final DOPT benefits are estimates of these final DOPT benefits.
- 2) Large Plans in this table are those whose present value of Title IV benefits at DOPT equals or exceeds \$10 million.
- 3) The liability shown in this table does not include the liability for settlements.
- 4) The liability for probable plans is shown as a gross amount (i.e., plan assets and collections on employer liabilities are not subtracted from the liability for benefits). Also, the numbers in this table do not include the liability for not yet identified probable terminations.

**Table 6A:****Distribution of Single-Employer Liability (including 4022(c)) by Trusteeship Status, Recipient Status, and Valuation Method**  
(Dollars in millions)

<b>Recipient Status</b>	<b>Seriatim/ Missing Participants</b>	<b>Nonseriatim/ Collins</b>	<b>Total Terminated Liability</b>	<b>Probables/ IBNR</b>	<b>Total Liability</b>	<b>Percent of Total Liability</b>
<b>Receiving Payments</b>						
Trusteed	\$20,750	\$13,257	\$34,007	\$0	\$34,007	48.6%
Pending Trusteeship	<u>1</u>	<u>175</u>	<u>176</u>	<u>8,606</u>	<u>8,782</u>	<u>12.6%</u>
Total	\$20,751	\$13,432	\$34,183	\$8,606	\$42,789	61.2%
<b>Not Receiving Payments</b>						
Trusteed	\$6,333	\$16,395	\$22,728	\$0	\$22,728	32.5%
Pending Trusteeship	<u>0</u>	<u>409</u>	<u>409</u>	<u>4,000</u>	<u>4,409</u>	<u>6.3%</u>
Total	\$6,333	\$16,804	\$23,137	\$4,000	\$27,137	38.8%
<b>All Payment Statuses</b>						
Trusteed	\$27,083	\$29,652	\$56,735	\$0	\$56,735	81.1%
Pending Trusteeship	<u>1</u>	<u>584</u>	<u>585</u>	<u>12,606</u>	<u>13,191</u>	<u>18.9%</u>
Total	\$27,084	\$30,236	\$57,320	\$12,606	\$69,926	100.0%
Percent of Terminated	47.3%	52.7%	100.0%			
Percent of Total	38.7%	43.3%	82.0%	18.0%	100%	

## Notes:

- 1) Recipient status for Seriatim, Missing Participants, IBNR and Collins liabilities refers to status as of 9/30/08. For Nonseriatim and Probable liabilities, recipient status refers to the status as of the most recent actuarial valuation report (date of plan termination if benefits are "final"). The term "final" is defined in the notes to Table 5.
- 2) The Probable liabilities are shown as gross amounts (i.e., plan assets and collections on employer liabilities are not subtracted from the liability for benefits)



**Table 6B:**  
**Distribution of Single-Employer Populations (including 4022(c)) by Trusteeship Status, Recipient Status, and Valuation Method**  
(Populations in thousands)

<b>Recipient Status</b>	<b>Seriatim/ Missing Participants</b>	<b>Nonseriatim</b>	<b>Total Terminated Population</b>	<b>Probables</b>	<b>Total Population</b>	<b>Percent of Total Population</b>
<b>Receiving Payments</b>						
Trusteed	469	181	650	0	650	51.2%
Pending Trusteeship	<u>0</u>	<u>4</u>	<u>4</u>	<u>70</u>	<u>74</u>	<u>5.9%</u>
Total	469	185	654	70	724	57.1%
<b>Not Receiving Payments</b>						
Trusteed	255	235	490	0	490	38.6%
Pending Trusteeship	<u>0</u>	<u>8</u>	<u>8</u>	<u>47</u>	<u>55</u>	<u>4.3%</u>
Total	255	243	498	47	545	42.9%
<b>All Payment Statuses</b>						
Trusteed	724	416	1,140	0	1,140	89.8%
Pending Trusteeship	<u>0</u>	<u>12</u>	<u>12</u>	<u>117</u>	<u>129</u>	<u>10.2%</u>
Total	724	428	1,152	117	1,269	100.0%
Percent of Terminated	62.8%	37.2%	100.0%			
Percent of Total	57.1%	33.7%	90.8%	9.2%	100%	

Notes:

- 1) Recipient status for Seriatim and Missing Participants liabilities refers to status as of 9/30/08. For Nonseriatim and Probable liabilities, recipient status refers to the status as of the most recent actuarial valuation report (date of plan termination if benefits are "final"). The term "final" is defined in the notes to Table 5.
- 2) Participant counts for IBNR and Collins are not included.

### **Reconciliation of Results**

Table 7 reconciles the FY 2008 valuation with the FY 2007 valuation. It shows that the \$11,028 million decrease in the liability for the Single-Employer program was the net effect of:

- (1) decreased liability for probable plans = (\$2,204) million
- (2) new plan terminations as of the beginning of the year = \$657 million
- (3) expected interest on the liability = \$3,400 million
- (4) decreased liability from change in interest rates = (\$7,564) million
- (5) change in mortality assumptions = \$125 million
- (6) actual benefit payments = (\$4,292) million
- (7) other changes = (\$1,150) million.

The Multiemployer columns reconcile both the liability for the pre-MPPAA terminated plans and the liability for the post-MPPAA financial assistance to insolvent plans.

**Table 7:**  
**Reconciliation of the Present Value of Future Benefits (dollars in millions)**

	Total Single Employer	Pre-MPPAA Multiemployer	Post-MPPAA Multiemployer
<b>1. Liability at BOY (09/30/07)</b>			
(a) Present Value of Future Benefits for all Plans	\$80,954	\$2	\$2,124
(b) Liability for Probable Plans (gross liability including unreported)	(14,810)	0	(1,196)
(c) Liability for Unreported Terminated Plans and other settlements	(55)	0	0
(d) 09/30/07 Liability for Terminated Plans (a + b + c)	\$66,089	\$2	\$928
<b>2. Change in Valuation Software</b>			
(a) Effect on Liability as of DOPT	\$1	\$0	\$0
(b) Projection of (a) from DOPT to BOY + post-DOPT changes	(1)	0	1
(c) Total (a + b)	\$0	\$0	\$1
<b>3. Net New Plans and Missing Participant Liability</b>			
(a) New Missing Participant Liability	\$5	\$0	\$0
(b) New Termination Inventory as of DOPT	625	0	27
(c) Deletions as of DOPT	0	0	(1)
(d) Projection of (b + c) from DOPT to BOY	32	0	0
(e) Total (a + b + c + d)	\$662	\$0	\$26
<b>4. Nonseriatim Data Changes and Effect of DOPT Seriatim Valuation</b>			
(a) Effect on Liability at DOPT	(\$324)	\$0	\$4
(b) Projection of (a) from DOPT to BOY	(58)	0	0
(c) Total (a + b)	(\$382)	\$0	\$4
<b>5. Actuarial Charges/Credits</b>			
(a) Expected Interest	\$3,400	\$0	\$48
(b) Change in Interest Rate (from 5.31% for 20 years; 4.88% thereafter to 6.66% for 20 years; 6.47% thereafter)	(7,564)	0	(84)
(c) Change in Mortality Assumption	125	0	3
(d) Change in Method (Current Year: Seriatim at DOPT to Seriatim at FYE)	(723)	0	0
(e) Effect of Experience*	66	(1)	(6)
(f) Change in Other Assumptions (SPARR)	0	0	0
(g) Total (a + b + c + d + e + f)	(\$4,696)	(\$1)	(\$39)
<b>6. Expected Expense Payments</b>	(\$117)	\$0	\$0
<b>7. Actual Benefit Payments</b>	(\$4,292)	\$0	(\$79)
<b>8. Liabilities at End of Period (9/30/08)</b>			
(a) Liability for all Terminated Plans = (1d) + (2c) + (3e) + (4c) + (5g) + (6) + (7)	\$57,264	\$1	\$841
(b) Liability for Unreported Terminated Plans and other settlements	56	0	0
(c) Liability for all Terminated Plans (a + b)	57,320	1	841
(d) Liability for Probable Plans (gross liability including unreported) **	12,606	0	927
(e) 9/30/08 Present Value of Future Benefits for all Plans (c + d)	\$69,926	\$1	\$1,768

Notes:

\* Includes change from expected benefits (\$4,125 million) to actual benefits (\$4,292 million) in Total Single Employer.  
Includes change from expected benefits (\$86 million) to actual benefits (\$79 million) in Post-MPPAA Multiemployer.  
Actual does not include payments made by employers.

\*\* Includes \$59 million for unidentified probable terminations. Financial statements show a probable liability of \$12,606 million, less assets of \$9,452 million, for a net claim of \$3,154 million.

### **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, 2008.

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.

Joan M. Weiss, FSA, EA  
*Chief Valuation Actuary, PBGC*  
*Member, American Academy of Actuaries*

January 14, 2009