Priority Category 2 Benefits Calculation

Issue Date	08/30/2012

A. Background

In a pension plan with mandatory employee contributions (MEC), a participant's accrued benefit is allocated between an employee-derived benefit and an employer-derived benefit. Section 411(c) of the Internal Revenue Code (IRC) prescribes this allocation. Section 411(c)(2)(B) specifies that accumulated mandatory employee contributions (AMEC) must be converted to an annuity using an interest rate which would be used by the plan under IRC §417(e)(3). For a summary of IRC §411(c) and IRC §417(e)(3) provisions, see Appendix A.

29 CFR PT4044 prescribes the rules that PBGC follows in calculating and valuing a participant's accrued benefit derived from MEC. The interest and mortality assumptions required for PBGC's valuation of the employee-derived annuity and the pre-retirement death benefit derived from AMEC are different from those provided under IRC §417(e)(3). As a result, the combined value of the employee-derived benefit and the pre-retirement death benefit as of DOPT may not be equal to the AMEC as of DOPT.

In a PBGC-trusteed plan, the accrued benefit derived from MEC, whether to be paid as an annuity with a pre-retirement death benefit or as a lump sum, is a priority category 2 (PC2) benefit. AMEC as of DOPT are only guaranteeable up to the combined value of the employee-derived annuity and the pre-retirement death benefit. Therefore, the combined value of the employee-derived annuity and the pre-retirement death benefit is the basic-type benefit in PC2. If AMEC at DOPT exceed the combined value of the employee-derived annuity and the pre-retirement death benefit, whether PC2 includes the value of the nonbasic-type benefit depends on whether the AMEC are withdrawn.

The Pension Protection Act of 2006 (PPA 2006) changed the interest and mortality assumptions under IRC §417(e)(3) that plans must use in converting AMEC to an employee-derived benefit. For a legislative history of the applicable rules for converting AMEC to an employee-derived benefit, see Appendix B.

B. Scope and Effective Date

This internal guidance provides the rules under which PC2 benefits are calculated for the purpose of valuing and paying benefits when a trusteed plan has mandatory employee contributions. With this edition of the internal guidance, PBGC:

- Removes the rules on the payment of PC2 benefits that were included in the previous edition of this internal guidance and are now located in PBGC Internal Guidance Priority Category 2 Benefits Payment
- Clarifies its method for calculating an employee-derived benefit when a plan's provisions comply (or substantially comply) with IRC §411(c)(2)(B),
- Eliminates use of the "default rule" described in the previous edition of this internal guidance that applied when a plan's provisions did not comply with IRC §411(c)(2)(B), and instead, provides for conforming plan provisions only to the extent necessary to bring them into compliance (or substantially into compliance) with IRC §411(c)(2)(B);
- Updates its rules to incorporate the interest and mortality assumptions in IRC §417(e)(3) as amended under PPA 2006; and
- Establishes PBGC's method for calculating accumulated mandatory employee contributions as of the annuity starting date for plans that provide a modified cash refund.

This internal guidance is effective upon issuance.

C. Definitions

As used in this internal guidance:

1. **Accumulated mandatory employee contributions** (AMEC) means the sum of mandatory employee contributions (MEC) and interest credited on those contributions as of the determination date.
2. **Determination date** means the earliest of 1) the date AMEC are withdrawn, 2) the annuity starting date (ASD), or 3) the DOPT. The IRC and Internal Revenue regulations describe the determination date as the date a distribution of MEC or AMEC is made as a withdrawal or as an annuity. However, for PBGC purposes, 29 CFR §4044.12 limits the determination date to no later than DOPT.

   There may be more than one determination date, for instance, if the plan erred in calculating AMEC and correction of the error results in residual AMEC, as described in section I. Residual Accumulated Mandatory Employee Contributions.

   Example 1: Determination Dates

Participant	Withdrawal Date	ASD	DOPT	Determination Date
Participant A: • Withdrew AMEC before DOPT. • Retired before DOPT.	05/01/2009	07/01/2010	09/01/2012	Withdrawal Date: 05/01/2009
Participant B: • Did not withdraw AMEC. • Retired before DOPT.	N/A	07/01/2010	09/01/2012	ASD: 07/01/2010
Participant C: • Withdrew AMEC before DOPT. • Did not retire before DOPT.	05/01/2009	N/A	09/01/2012	Withdrawal Date: 05/01/2009
Participant D: • Did not withdraw AMEC • Did not retire before DOPT	N/A	N/A	09/01/2012	DOPT: 09/01/2012

1. **Employee-derived benefit** means the portion of the accrued benefit derived from AMEC. The employee-derived benefit may be less than, greater than, or equal to the accrued benefit calculated using the plan's benefit formula. The minimum vesting provisions in ERISA and the IRC provide that a participant is always 100% vested in his or her employee-derived benefit.
2. **Employer-derived benefit** means the portion of the accrued benefit, calculated using the plan's benefit formula, in excess of the employee-derived benefit. If the amount of the employee-derived benefit is greater than or equal to the accrued benefit, calculated using the plan's benefit formula, an employer-derived benefit is not payable (i.e., the amount of the employer-derived benefit is zero).
3. **Mandatory employee contributions** (MEC) means employee contributions that are required as a condition of employment with the plan sponsor, participation in the plan, or obtaining benefits under the plan attributable to employer contributions. MEC are the balance of the contributions without interest.

4. **§411(c)(2) interest rate(s)** means the interest rate(s) under §411(c)(2)(C) used to credit interest on MEC until the determination date. For the appropriate §411(c)(2) interest rates, see Appendix C.

D. General Rules

In calculating and valuing benefits in a plan with MEC, PBGC applies the following rules:

1. **Allocation of Accrued Benefit Between Employee-derived and Employer-derived Benefits**

   In allocating a participant's accrued benefit between an employee-derived benefit and an employer-derived benefit, PBGC follows plan provisions and IRC §411(c) as provided in this internal guidance.

   > Note that as used in this internal guidance, references to IRC §411(c) generally include IRC §411(c)(1), §§411(c)(2)(B)-(D), §411(c)(3), §417(e)(3), and other relevant Internal Revenue guidance.

2. **PBGC Acceptance of Plan Provisions and Administration**

   PBGC generally assumes, absent evidence to the contrary, that a plan's provisions for accumulating MEC and calculating the employee-derived and employer-derived benefits comply with IRC §411(c) and that the plan was correctly administered in accordance with those provisions.

   a. **Plan calculations.** PBGC generally accepts the plan administrator's calculation of AMEC prior to DOPT and the calculation of the employee-derived and employer-derived benefits for a pre-DOPT retiree, unless convincing evidence demonstrates that the plan administrator did not correctly calculate benefits in accordance with plan provisions, IRC §411(c), and/or as described in section F.2. Acceptable Variance with IRC §411(c)(2)(B).

   b. **PBGC correction of plan errors.** PBGC corrects an erroneous accumulation of MEC and/or calculation of the employee-derived and employer-derived benefits in accordance with plan provisions, IRC §411(c), and as provided in this internal guidance.

   > **Note:** Correction of an error under the provisions in this internal guidance may result in residual AMEC, as described in section I. Residual Accumulated Mandatory Employee Contributions.

3. **Withdrawal of AMEC**

   A plan may permit a participant (or other individual) to withdraw all or part of the participant's AMEC in a single installment or series of installments. If all of the AMEC are withdrawn as of the determination date, only the employer-derived benefit, if any, is due. Under 29 CFR §4044.12, the amount of a benefit that is a benefit in PC2 depends on whether the AMEC are withdrawn or paid as an annuity.

   a. **Withdrawal before DOPT.** If all of the AMEC were withdrawn before DOPT, there is no benefit in PC2.

b. **Withdrawal after DOPT.** PBGC may permit withdrawal of AMEC as of DOPT in a single installment under PBGC Internal Guidance Priority Category 2 Benefits Payment. If the AMEC are withdrawn, the value of the benefit in PC2 is the amount of the AMEC as of DOPT.

c. **AMEC not withdrawn.** If the plan does not permit withdrawal of AMEC or the AMEC are not withdrawn as of the annuity starting date, the benefit in PC2 consists only of the employee-provided annuity and the pre-retirement death benefit.

d. **Valuation assumptions.** For valuation purposes, PBGC determines the benefit in PC2 based on an actual election to withdraw the AMEC or to receive the AMEC as an annuity, as previously described in this section 3.

   If an election has not been made, PBGC establishes assumptions as to whether to treat the AMEC as having been withdrawn as of DOPT based on the facts and circumstances of the case.

4. **Application of PBGC Limitations on Guaranteed Benefits.**

   PBGC applies its limitations on guaranteed benefits to an accrued benefit without regard to the allocation of the benefit between the employee-derived benefit and employer-derived benefit.

5. **Plan Amended to Become Noncontributory**

   PBGC recognizes a valid plan amendment that allows AMEC to be withdrawn without a reduction in the accrued benefit calculated under the plan's benefit formula. The amendment is treated as a benefit increase for phase-in purposes.

   If a participant did not withdraw AMEC before DOPT under the provision described in the above paragraph, PBGC will offer the participant the option to withdraw the AMEC as provided in PBGC Internal Guidance Priority Category 2 Benefits Payment. If the AMEC are not withdrawn, PBGC will pay an employee-derived benefit, calculated as provided in this internal guidance, in addition to the accrued benefit provided under the plan's benefit formula.

E. Calculation of Accumulated Mandatory Employee Contributions

PBGC must compute AMEC, for example, to determine:

- The amount of AMEC at DOPT that may be withdrawn in a single installment when permitted under PBGC Internal Guidance Priority Category 2 Benefits Payment,
- A participant's employee-derived benefit, or
- The amount of the post-death retirement death benefit, if any, payable under a modified cash refund.

PBGC calculates AMEC as follows:

1. **Plan Accumulation of Mandatory Employee Contributions (AMEC)**

a. **Pre-DOPT calculation of AMEC.** PBGC generally accepts the amount of AMEC last calculated under plan provisions by the plan administrator prior to DOPT unless convincing evidence demonstrates that plan provisions did not correctly provide for the calculation of AMEC or the plan otherwise erred in calculating the AMEC.

b. **Corrections.** If PBGC concludes that the plan erred in calculating AMEC, PBGC will correct the accumulation of the MEC using the appropriate §411(c)(2) interest rate(s). For the appropriate §411(c)(2) interest rates, see Appendix C.

> **Note:** Correction of an error in the calculation of AMEC may result in residual AMEC, as described in section I. Residual Accumulated Employee Contributions.

2. PBGC Interest Accumulation on Mandatory Employee Contributions

When applicable, PBGC further accumulates the AMEC beginning with the date the plan last accumulated the AMEC until the determination date using the appropriate §411(c)(2) interest rate(s). For the appropriate §411(c)(2) interest rates, see Appendix C.

3. Reduction for Prior Withdrawal of AMEC

PBGC reduces the amount of the AMEC by the amount of any previous withdrawal of AMEC, whether made before or after DOPT, including the interest that would have been credited on the withdrawal had that withdrawal not been made.

> **Note:** If a participant elects to withdraw AMEC, when permitted under PBGC Internal Guidance Priority Category 2 Benefits Payment, the amount of the withdrawal is calculated as provided in this section E. and as otherwise provided in section I. Amount of Withdrawal Payment or Other Single-Sum Payment of AMEC, of PBGC internal guidance

F. Calculation of Employee-derived Benefit

The method PBGC uses in computing the employee-derived benefit depends on whether the plan's interest and mortality assumptions, used to convert AMEC to an employee-derived benefit, comply (or substantially comply) with IRC §411(c)(2)(B).

- Under sections F.1. and F.2., below, if the determination date is before the first day of the first plan year beginning on or after January 1, 2008, follow the provisions in PBGC Internal Guidance Calculation and Payment of Priority Category 2 Benefits in PBGC Trusteed Plans, 1st Edition.
- IRC §417(e)(3) requires that the present value of a benefit derived from AMEC be no less than the present value calculated using the §417(e)(3) interest and mortality assumptions. A plan can provide for use of interest and mortality assumptions that are more generous than those under §417(e)(3) (although most do not). The following rules are premised on interest and mortality assumptions that are not more generous than those provided under §417(e)(3). If a plan's interest and mortality assumptions are more generous than those provided under §417(e)(3), request guidance by emailing PSDGuidance@pbgc.gov.

1. Plan Provisions Comply with IRC §411(c)(2)(B)

If PBGC concludes that the plan's provisions comply with IRC §411(c)(2)(B), PBGC calculates the employee-derived benefit using the plan's interest and mortality assumptions in effect as of the determination date, as follows:

a. AMEC is calculated until the determination date as provided in section E.
b. The AMEC at the determination date is then converted to a straight life annuity (SLA) at normal retirement date (NRD) by dividing the AMEC by a deferred present value factor (PVF) determined using the plan's §417(e)(3) interest rate with no mortality during the deferral period and the applicable mortality under §417(e)(3) thereafter. For applicable §417(e)(3) interest and mortality assumptions, see Appendix C.

Note that the applicable mortality under §417(e)(3) is projected to the annuity starting date.

c. The resulting SLA is converted to the benefit payable at the actual or expected annuity starting date (ASD) and applicable benefit form using the plan's early or late retirement factors and form conversion factors.

Example 2: The plan terminated on January 1, 2011. A participant was age 55 at DOPT. The participant has not withdrawn his/her AMEC. The plan's normal retirement age (NRA) is 65 and the participant has a NRD of January 1, 2021. The plan year is January 1 – December 31 (a calendar year). The plan provides that:

1) Interest is accumulated on the MEC using the §411(c)(2) interest rates until the determination date.
2) The AMEC is then converted to an SLA at NRD using the plan's interest and mortality assumptions under §417(e)(3) as of the determination date.
3) The stability period is the calendar year, and the lookback month is the second month preceding the first day of the stability period.

PBGC concludes that the plan's interest and mortality assumptions comply with IRC §411(c)(2)(B). PBGC calculates the participant's employee-derived benefit as follows:

(1) Following the provisions in section E., PBGC calculates that the participant had AMEC of $24,000 as of DOPT.

(2) The participant's NRD is 10 years after DOPT; therefore, PBGC uses the 10-year deferred PVF calculated using the plan's applicable §417(e)(3) segment rates, with no mortality applied during the deferral period, and applicable mortality under §417(e)(3) thereafter.

(3) The applicable segment rates based on the determination date, in this case DOPT, and the plan year, stability period, and lookback month are the November 2010 rates for the 2011 plan year:

- 2.16% for the first segment (for payments within the first 5 years after DOPT),

- 4.77% for the second segment (for payments in the next 15 years), and
- 6.05% for the third segment (for all payments thereafter).

(4) Using the above mortality and interest rates, PBGC calculates a 10-year deferred PVF of 7.0180.

(5) To determine the monthly employee-derived annuity, PBGC divides the AMEC of $24,000 by the PVF of 7.0180 (multiplied by 12 months).

$24,000 / (7.0180 x 12 months) =
$284.98/month in the form of an SLA at NRD

2. Acceptable Variances with IRC §411(c)

A plan's method for converting AMEC to the employee-derived benefit may vary from the method described in IRC §411(c)(2)(B). The method under §411(c)(2)(B) requires the AMEC to be converted to an SLA at NRD. Some plans convert to the employee-provided benefit in a form other than an SLA and/or at a time other than NRD.

PBGC treats a plan as substantially complying with §411(c)(2)(B) if the plan's interest and mortality assumptions otherwise comply with §417(e)(3) and the plan consistently calculated employee-derived benefits following the plan's methodology. PBGC calculates an employee-derived benefit in accordance with a plan's methodology in the following situations.

a. The plan's interest and mortality assumptions comply with §417(e)(3) and are used to convert directly to another form at NRD or to convert to either the SLA or another form at the elected ASD, instead of converting the AMEC to an SLA at NRD and applying the plan's early or late retirement factors and/or benefit form conversion factor.

For instance, PBGC would treat a plan as substantially complying with §411(c)(2)(B) if the plan's automatic form for unmarried participants is a 10-year certain and continuous annuity (10C&C) and the plan used a deferred PVF for a 10C&C (calculated in accordance with §417(e)(3)) to calculate participants' benefits as a 10C&C.

Example 3: The plan terminated on January 1, 2011. The participant was age 55 as of DOPT. The participant has not withdrawn his/her AMEC. The participant is not married and the plan's automatic form for an unmarried participant is a 10C&C. The plan's NRA is 65, and the participant's NRD is January 1, 2021. The plan year is a calendar year. The plan's stability period is a calendar year, and the lookback month is the second month preceding the first day of the stability period.

(1) Following the provisions in section E**.**, PBGC calculates that the participant had AMEC of $24,000 as of DOPT.

(2) Following the plan's methodology, PBGC calculates a PVF of 7.2768 for a 10C&C as of the participant's NRD.

(3) To determine the employee-derived annuity, PBGC divides the AMEC by the PVF of 7.2768 (multiplied by 12 months).

$24,000 / (7.2768 x 12 months) =
$274.85/month in the form of a 10C&C at NRD

b. Based on a facts and circumstances evaluation of the plan's provisions and practice, PBGC determines that the plan substantially complies with IRC §411(c)(2).

3. Plan Provisions Do Not Comply with IRC §411(c)(2)(B)

If a plan's provisions do not comply or do not substantially comply with §411(c)(2)(B) as described above in section F.1. or F.2. (e.g., the plan uses incorrect §417(e)(3) interest and/or mortality assumptions for a given determination date), PBGC conforms the plan's provisions only to the extent necessary to bring them into compliance with §411(c)(2)(B) and calculates the employee-derived benefit, as described in section F.1., or when applicable, section F.2. For the applicable §417(e)(3) interest and mortality assumptions, see Appendix C.

For instance, if a plan continued to use the pre-PPA 2006 interest and mortality assumptions (e.g., the 30-year treasury rate and GAR 94) for determination dates on or after the first day of the first plan year beginning on or after January 1, 2008, PBGC would calculate the benefit using the applicable §417(e) interest and mortality, as revised under PPA 2006.

The default rule in section F.B. of PBGC Internal Guidance Priority Category 2 Benefits Calculation (1st Edition) no longer applies, regardless of the determination date or the DOPT.

G. Determination of Employer-derived Benefit

The employer-derived benefit, if any, is assigned to priority category 3 through priority category 6, as applicable.

1. Forfeiture of Employer-Provided Benefit

A plan may provide that the employer-derived benefit is forfeited if the participant withdraws all of his or her AMEC and is less than 50% vested in the employer-derived benefit as of the date of the withdrawal. PBGC honors this provision.

2. Calculation of Employer-Derived Benefit

PBGC calculates the employer-derived benefit as provided in IRC §411(c)(1) (see Appendix A). It is the difference between the accrued benefit calculated using the plan's benefit formula and the employee-derived benefit calculated as otherwise provided in this internal guidance without reduction of the AMEC for any pre- or post-DOPT withdrawal of the AMEC.

Example 4: The participant has an accrued benefit of $500.00/month (calculated using the plan's benefit formula) in the form of a straight life annuity (SLA) at normal retirement date (NRD). The employee-derived annuity is $284.98/month in the form of an SLA at NRD, as calculated under section F. To determine the employer-derived benefit, PBGC subtracts the employee-derived benefit from the accrued benefit:

$500.00 - $284.98 = $215.02 per month as an SLA at NRD.

H. Calculation of Death Benefits Attributable to Mandatory Employee Contributions

1. **Pre-Retirement Death Benefits**

   PBGC pays pre-retirement death benefits derived from AMEC as provided in section G. *Pre-Retirement Death Benefits* of PBGC Internal Guidance Priority Category 2 Benefits Payment. For purposes of determining the amount of a pre-retirement death benefit derived from MEC, PBGC calculates the AMEC, the employee-derived benefit and the employer-derived benefit as provided in this internal guidance.

2. **Post-Retirement Death Benefits**

   a. **Post-retirement death benefit payable under plan provisions.** PBGC pays post-retirement death benefits derived from AMEC as provided in section H***.*** Post-Retirement Death Benefits of PBGC Internal Guidance Priority Category 2 Benefits Payment. The type and amount of the post-retirement death benefit, if any, is based on the deceased payee's annuity benefit form. For purposes of determining the amount of a post-retirement death benefit, if any, derived from AMEC, PBGC calculates the AMEC, the employee-derived benefit, and the employer-derived benefit as provided in this internal guidance.

   b. **Modified cash refund.** If a participant's benefit form is a modified cash refund (MCR) or the plan provides an MCR feature, for purposes of determining the balance of AMEC, if any, remaining as of the participant's date of death:

      1) PBGC further accumulates the AMEC as of DOPT to the participant's annuity starting date (ASD) using the plan's §417(e)(3) segment rate that applies as of the participant's normal retirement date (NRD).

      2) The total of the benefits paid or due prior to the participant's death are then subtracted from the AMEC as of the ASD.

Note: Although plans must provide a pre-retirement death benefit derived from the AMEC, they need not provide such a post-retirement death benefit. For additional guidance, see section H***.*** Post-Retirement Death Benefits of PBGC Internal Guidance Priority Category 2 Benefits Payment Example *5*: DOPT was January 1, 2011. The participant's NRD was January 1, 2021. The participant retired on January 1, 2020 and elected an MCR. As of DOPT, the participant had AMEC of $24,000. The monthly benefit calculated under the plan's benefit formula was $490.00/month.

The participant died on December 31, 2024 after receiving payments for 60 months (January 1, 2020 - December 1, 2024). The participant's AMEC as of his ASD must be calculated to determine if the lump-sum death benefit provided under the MCR is payable, and if so, the amount. The stability period is the calendar year, and the lookback month is the second month preceding the first day of the stability period.

(1) The AMEC as of DOPT is accumulated to the ASD using the segment rate in effect as of the participant's NRD, January 1, 2021.

(2) Since the NRD occurs in the second segment, PBGC uses the second segment rate, 4.77%, to accumulate the AMEC to the ASD.

(3) The AMEC as of DOPT accumulated to the ASD (9 years after DOPT) are $24,000 x $(1 + 0.0477)^9$ = $24,000 x 1.5210 = $36,504.

(4) Payments to the participant totaled $29,400 ($490 x 60 months) as of the date of death.

(5) The lump-sum death benefit payable under the MCR is $7,104 ($36,504 - $29,400).

I. Residual Accumulated Mandatory Employee Contributions

Residual AMEC means a remaining balance of AMEC as of a later determination date after AMEC have been withdrawn or benefits are in pay status. Residual AMEC may result, for example, because an incorrect 411(c)(2) interest rate was used to accumulate interest on the MEC.

1. **Determination Date**

   When a participant has residual AMEC, there is more than one determination date.

   Example 6

In this case, the participant:	Initial Withdrawal Date	Annuity Starting Date	DOPT	Determination Dates
• Withdrew AMEC before DOPT. • Retired before DOPT. • Has residual AMEC as of DOPT.	12/01/2009	03/01/2010	04/01/2010	Withdrawal Date: 12/01/2009 DOPT: 04/01/2010

1. **Additional Benefit in Priority Category 2**

   If the participant has residual AMEC as of DOPT, the participant may have a benefit in PC2 despite having previously withdrawn the AMEC.

   a. If the participant has residual AMEC as of DOPT, the amount of the employee-derived benefit will be calculated following the rules in section F.

b. The benefit in PC2 will be established, as provided under section D.3. of this internal guidance, depending on whether the residual AMEC is paid in a single sum or paid as an annuity. Residual AMEC are paid as provided in section F.4, Residual AMEC, of PBGC Internal Guidance Priority Category 2 Benefits Payment.

Appendix A: Summary of IRC §411(c) and §417(e)(3) Provisions

IRC §411(c) prescribes the rules for crediting interest on mandatory employee contributions and converting those accumulated contributions (AMEC) to an annuity. IRC §417(e)(3) prescribes the minimum interest rates and mortality that must be applied in converting AMEC to an annuity.

§411(c)	**Allocation of accrued benefits between employer and employee contributions**
§411(c)(1)	**Accrued benefit derived from employer contributions.** The excess, if any, of the accrued benefit over the accrued benefit derived from employee contributions.
§411(c)(2)(B)	**Accrued benefit derived from employee contributions.** The amount equal to the participant's accumulated contributions converted to an annual benefit commencing at normal retirement age (NRA),* using an interest rate under the plan (as of the determination date) that complies with IRC §417(e)(3). For the applicable interest rates (and mortality tables) under IRC §417(e)(3), see Appendix C. *PBGC uses normal retirement date (NRD). **Note:** § 411(c)(2)(A) applies to plans that are not defined benefit plans.

§411(c)(2)(C)	**Definition of accumulated contributions.** Accumulated contributions means the total of – i. all mandatory contributions made by the participant, ii. interest (if any) under the plan until the date that the rate of 120 percent of the Federal mid-term rate became effective, and iii. interest on the sum of the amounts determined under (i) and (ii) compounded annually— I. at the rate of 120 percent of the Federal mid-term rate until the determination date, and II. at the interest rate which would be used under the plan under §417(e)(3) (as of the determination date) for the period beginning with the determination date and ending on the date the participant attains NRA.* For the appropriate interest rates and effective dates, see Appendix C. *PBGC uses NRD.
§411(c)(2)(D)	**Adjustments to conversion factors.** The Secretary of the Treasury may adjust by regulation the conversion factor described in § 411(c)(2)(B) as deemed necessary.
§411(c)(3)	**Actuarial adjustment.** If the accrued benefit is to be determined as commencing at other than at NRA* or if the employee-derived benefit is to be calculated as other than an annual benefit in the form of a single life annuity** commencing at NRA, the accrued benefit or the employee-derived benefit must be the actuarial equivalent of the benefit calculated under §411(c)(1) or §411(c)(2). *PBGC uses NRD. **PBGC uses straight life annuity.
§417(e)(3)	**Determination of present value**
§417(e)(3)(A)	**In general.** The present value of a benefit cannot be less than the present value calculated using the mortality tables under §417(e)(3)(B) and the interest rates under §417(e)(3)(C) and (D).

Appendix B: Legislative Background

ERISA and the IRC prescribe the rules for crediting interest on MEC and calculating the employee-derived benefit and employer-derived benefit. The following legislation amended the interest rates used to accumulate the MEC and conversion factors used to convert AMEC to the employee-derived benefit.

The IRC citations used below reference the sections of the IRC in effect under the described legislation.

A. Employment Retirement Security Act (ERISA)

ERISA, enacted September 2, 1974, added §411(c) to the IRC. Section 411(c) provided for the crediting of interest on MEC and the conversion of AMEC to a single-life annuity at normal retirement age (NRA).

- For plans not in existence on January 1, 1974, IRC §411(c) applied to plan years beginning after September 2, 1974.
- For plans in existence on January 1, 1974, IRC §411(c) applied to plan years beginning after December 31, 1975.

1. Before §411(c) became effective, interest, if any, was credited on MEC at the rate provided under the plan until the date provided under the plan.
2. Beginning with the first plan year that IRC §411(c) was effective, interest under IRC §411(c) had to be credited to MEC at 5% per year until the participant's NRA.
3. If the 5% interest rate resulted in an employee-derived benefit that exceeded the participant's accrued benefit, the interest rate was limited to the rate that would result in the employee-derived benefit being equal to the participant's accrued benefit. However, in no event, could the employee-derived benefit be less than the annuity that would be provided by the participant's MEC without interest.
4. ERISA also specified a factor of 10%, for converting the AMEC to a single-life annuity at NRA, specified as age 65. Benefits payable in other annuity benefit forms and/or at other ages had to be actuarially equivalent to the single-life annuity at age 65.

B. Omnibus Budget Reconciliation Act of 1987 (OBRA '87)

OBRA '87 was effective for plan years beginning after December 31, 1987.

1. The interest rate at which MEC were accumulated for plan years prior to normal retirement age was changed to 120% of the applicable Federal mid-term rate.
2. The ERISA exception that allowed a lower interest rate to be credited to avoid providing an employee-derived benefit that exceeded the participant's accrued benefit continued to apply.
3. The 10% conversion factor prescribed under ERISA was not changed.

C. Omnibus Budget Reconciliation Act of 1989 (OBRA '89)

OBRA '89 was effective for plan years beginning after December 31, 1987.

1. OBRA '89 retroactively changed the interest rate used to credit interest on AMEC from the determination date to normal retirement age to the interest rate that would be used under the plan to calculate the present value of accrued benefits under IRC §417(e) (the '417(e) rate'). Prior to GATT, the §417(e)(3) interest rate was the rate used by PBGC to calculate the lump-sum value of a benefit.
2. The interest rate used to credit interest before the determination date remained 120% of the applicable Federal mid-term rate.
3. The interest rate used to convert AMEC to an annuity changed from 10%, as prescribed under ERISA, to the §417(e) interest rate.
4. The ERISA exception that had allowed a lower interest rate to be credited to avoid providing an employee-derived benefit that exceeded the participant's accrued benefit was eliminated.

D. General Agreement on Tariffs and Trade (GATT)

The changes under GATT generally were effective for plan years beginning after December 31, 1994. However, for plans in effect before December 8, 1994, employers could delay the effective date until the first day of the first plan year beginning after December 31, 1999.

1. The §417(e)(3) interest rate changed from the rate used by PBGC to value lump sums to the annual rate of interest on 30-year Treasury securities for the month before the date of distribution or as provided under IRS regulations. To prevent monthly changes in interest rates, IRS regulations permitted the use of a stability period and lookback month to stabilize the interest rate.
2. The interest rate used to credit interest before the determination date remained 120% of the applicable Federal mid-term rate.
3. A mortality table was specified under IRC §417(e)(3) for calculating minimum present values.
    - For determination dates on and after December 31, 2002, or earlier if required by plan amendment, the applicable mortality table is 94 GAR (see Rev. Rul. 2001-62).
    - Before 94 GAR became applicable, the applicable mortality table was 83 GAM (see Rev. Rul. 95-6).

E. Pension Protection Act of 2006 (PPA 2006)

Effective for plan years beginning after December 31, 2007, PPA 2006 changed IRC §417(e)(3) as follows:

1. The applicable mortality table changed to mortality tables, modified as appropriate by the Secretary of the Treasury, based on the mortality tables specified for the plan year under IRC §430(h)(3)(A), the RP-2000 Mortality Tables (projected and blended).
2. The applicable interest rate was changed to three segment rates based on the corporate bond yield curve, where the:
    - First segment rate applies to payments on or before 5 years.

- Second segment rate applies to payments after 5 years and on or before 20 years.
- Third segment rate applies to payments after 20 years.

The plan or calendar year, stability period, and lookback month are used to determine the applicable §417(e)(3) segment rates.

3. The interest rate used to credit interest before the determination date, established under OBRA 87, remains 120% of the applicable Federal mid-term rate.

Appendix C: Interest Rates and Conversion Factors

Pre-ERISA
Effective: • Plan not in existence on 01/01/1974: Plan years beginning before 09/03/1974. • Plan in existence on 01/01/1974: Plan years beginning before 01/01/1976. **Pre-§411(c)(2) Interest Rate:** The rate under plan provisions, if any, until the date specified under the plan. **§417(e)(3) Interest Rate:** N/A **Conversion Factor(s)/Methodology:** The factors or methodology provided under the plan.
ERISA
Effective: • Plan not in existence on 01/01/1974: Plan years beginning on or after 09/03/1974. • Plan in existence on 01/01/1974: Plan years beginning on or after 01/01/1976. **§411(c)(2) Interest Rate:** 5% compounded annually through normal retirement date (NRD). If this rate provided an employee-derived benefit in excess of the accrued benefit under the plan's benefit formula, a lower rate could be used to provide an employee-derived benefit that was equal to the accrued benefit. However, the employee-derived benefit could not be less than that provided by the MEC without interest. **§417(e)(3) Interest Rate:** N/A **Conversion Factor:** 10% factor to convert AMEC to a straight life annuity (SLA) at age 65.

OBRA 87/89
Effective: Plan years beginning on or after 01/01/1988. **§411(c)(2) Interest Rate:** 120% of the applicable Federal mid-term rate compounded annually until the determination date. **§417(e)(3) Interest Rate:** The rate used by PBGC to calculate the lump-sum value of a benefit, beginning on the determination date and ending on NRD. **Conversion Factor:** §417(e)(3) interest rate and the mortality table provided under the plan.
GATT

Applicable Period: Plan years beginning on or after 01/01/1995.
Exception: If plan was in effect before 12/08/1984, the plan sponsor could delay the effective date until the plan year beginning on or after 01/01/2000.
§411(c)(2) Interest Rate: 120% of the applicable Federal mid-term rate compounded annually until the determination date.
§417(e)(3) Interest Rate: Annual rate on 30-year Treasury securities, beginning on the determination date and ending on NRD.
Conversion Factor:
• §417(e)(3) interest rate based on the lookback month and stability period provided under the plan.
• Mortality table for calculating minimum present values:
    • 94 GAR (IRS Rev. Rul. 2001-62) for determination dates on and after 12/31/2002 or earlier if required under a plan amendment.
    • 83 GAM (IRS Rev. Rul. 95-6) before 94 GAR became applicable.

PPA 2006
Effective: Plan years beginning on or after 01/01/2008. **§411(c)(2) Interest Rate:** 120% of the applicable Federal mid-term rate compounded annually until the determination date. **§417(e)(3) Interest Rate:** Beginning on the determination date and ending on NRD, the three segment rates based on the corporate bond yield curve, where the: • 1st segment apples to payments on or before 5 years. • 2nd segment applies to payments after 5 years and on or before 20 years. • 3rd segment applies to payments after 20 years. **Conversion Factor:*** • §417(e)(3) interest rate based on the lookback month and stability period provided under the plan. • RP-2000 Mortality Tables (projected and blended). *Rather than separately accumulating AMEC from the determination date through NRD and then converting this AMEC to the employee-derived benefit, PBGC includes this interest accumulation in its conversion factor (see section F.1.).