

The following material is based upon updates to the 2008 EA-2B syllabus as required by the Joint Board Examination Booklet, effective January 2008. The link to the latest Joint Board program document on the Society of Actuaries web site is <http://www.soa.org/files/pdf/edu-jbe-booklet.pdf>.

The additional material provided in this supplement consists of the following:

- Outline material concerning funding based limits on benefits and benefit accruals under single employer defined benefit plans (IRC section 436). (Note that there are proposed regulations for IRC section 436 (regulation 1.436-1), released in August of 2007. It has never been the policy of the Joint Board to test material covered in proposed regulations, and these regulations were not added to the recommended reading list. It is not expected that material from this regulation will be tested to the extent that it differs from the Internal Revenue Code. However, it may help the understanding of the topic to review the regulation. Items in the outline that come only from the proposed regulations and not the Internal Revenue Code are indicated as such.) This outline begins on page 1 of this supplement.
- Additional questions and solutions regarding IRC section 436. These questions begin on page 8 of this supplement.
- Revisions to Summary of Revenue Rulings, Notices, Procedures, and Announcements from pages 308 – 315 in the original outline. These revisions begin on page 12 of this supplement.

Funding-Based Benefit Limits for Single Employer Plans (IRC section 436)

- Requirements of IRC section 436 apply only to single employer or multiple employer plans (not multiemployer plans) and are needed to satisfy the plan qualification requirement of IRC section 401(a)(29).
- The rules for multiple employer plans are applied as if each employer maintained its own plan.
- The requirements of IRC section 436 do not apply to plans in existence for less than 5 years (including years of a predecessor plan), other than the limitations on accelerated benefit distributions.
- The basic purpose of IRC section 436 is to limit increases in plan liabilities or large distributions that may drain the plan's assets when the plan is under-funded.
- The *adjusted funding target attainment percentage* (AFTAP) for purposes of IRC section 436 is equal to the funding target attainment percentage (FTAP) under IRC section 430, except that the total amount of annuity purchases for NHCEs made during the past 2 years is added to both the numerator and denominator. Recall that the FTAP under IRC section 430 is equal to the ratio of the actuarial assets (reduced by the carryover and pre-funding balances) to the funding target.
 - The AFTAP for 2007 (used for estimation purposes for 2008) is to be based upon the current liability (rather than the funding target) and the actuarial value of assets used in the 2007 valuation. (Proposed regulations.)
 - The actuarial value of assets used for the 2007 AFTAP is reduced by the credit balance in the funding standard account on the 2007 valuation date, unless the value of plan assets before reduction is greater than or equal to 90% of the current liability).
 - The actuarial value of assets (before subtracting the credit balance) must be within 10% of the market value of assets. If it is more than 10% above or below the market value, then it is increased/decreased so that is within 10%.

- If the FTAP is at least 100% (92% for 2008, 94% for 2009, and 96% for 2010), determined without reduction for the carryover and pre-funding balances, then the AFTAP should be based upon the assets unreduced by the carryover and pre-funding balance. Note that the 94% for 2009 and 96% for 2010 can only be substituted for the 100% if the FTAP under IRC section 430 for each of those years is more than the FTAP for the preceding year.
- Security provided by the plan sponsor can be treated as an asset for purposes of determining the AFTAP.
 - The form of security can be:
 - A surety bond,
 - Cash (or US obligations with no more than a 3-year maturity date) held in escrow, or
 - Other forms under IRS regulations.
 - The security can be required to be used upon the earliest of:
 - The date of plan termination,
 - The minimum funding due date upon failure to meet minimum funding, or
 - The valuation date in the 7th year if the AFTAP for 7 consecutive years is less than 60%.
 - The security can be released under IRS regulations.
- Certification of AFTAP by enrolled actuary (proposed regulations)
 - IRC section 436 *measurement date* is the date which stops or starts the restrictions under IRC section 436.
 - An enrolled actuary must certify the AFTAP, and the date of certification becomes the measurement date provided it occurs during the first 9 months of the plan year. See the section on “Presumed under-funding” for the impact of a lack of enrolled actuary certification within the 9-month period.

- Shutdown benefits and other unpredictable contingent event (UCE) benefits
 - A UCE benefit is any benefit payable on account of:
 - A plant shutdown, or
 - Any event other than attainment of an age, performance of service, receipt of compensation, death, or disability.
 - UCE benefit cannot be paid to a participant if either:
 - AFTAP is less than 60%, or
 - AFTAP would be less than 60% after taking the UCE into account (including it as part of the funding target).
 - The restriction of payment of the UCE benefit is exempted if a contribution in addition to the minimum occurs equal to one of the following:
 - In the case where the AFTAP is less than 60%, an amount equal to the increase in the funding target due to the occurrence of the UCE, or
 - In the case where the AFTAP would be less than 60% after taking the UCE into account (including it as part of the funding target), an amount necessary to make the AFTAP equal to 60%.
 - The contribution must be adjusted with interest at the plan's effective rate for the year if it is paid on a date other than the valuation date (increasing it with interest if it is made after the valuation date, and decreasing it with interest if it is made before the valuation date). (Proposed regulations.)
 - The limitation of payment of UCE benefits does not apply during the first 5 years of a plan.
 - The pre-funding and funding standard carryover balances cannot be used to pay for or avoid this limitation.

- Plan amendments increasing liability for benefits
 - No increases in plan benefit by amendment can take effect if either:
 - AFTAP is less than 80%, or
 - AFTAP would be less than 80% after reflecting the amendment.
 - The restriction on account of benefit increases is exempted if a contribution in addition to the minimum occurs equal to one of the following:
 - In the case where the AFTAP is less than 80%, an amount equal to the increase in the funding target due to the plan amendment, or
 - In the case where the AFTAP would be less than 80% after taking the amendment into account (including it as part of the funding target), an amount necessary to make the AFTAP equal to 80%.
 - The contribution must be adjusted with interest at the plan's effective rate for the year if it is paid on a date other than the valuation date (increasing it with interest if it is made after the valuation date, and decreasing it with interest if it is made before the valuation date). (Proposed regulations.)
 - The restriction does not apply if:
 - The benefit formula is not salary based, and
 - The rate of the benefit increase does not exceed the rate of average salary increase for the plan participants covered by the amendment.
 - The limitation on account of benefit increases does not apply during the first 5 years of a plan.
 - The pre-funding and funding standard carryover balances cannot be used to pay for or avoid this limitation.
 - Examples of restricted plan amendments
 - Increase in benefit or rate of accrual
 - Establishment of new benefits
 - Change in vesting (other than statutorily required change)

- Accelerated benefit distributions
 - Benefit payments that are considered to be prohibited payments cannot be paid to participants whose annuity starting date occurs during any period for which benefit distributions are limited under IRC section 436(d).
 - A prohibited payment is defined to be:
 - Any payment in excess of a life annuity (including social security supplements) paid during a prohibited period.
 - A payment to purchase an annuity from an insurance company.
 - Any other payment to be specified under IRS regulations.
 - Prohibited period cannot be paid after the valuation date on which:
 - AFTAP is less than 60%, or
 - The plan sponsor is in Chapter 11 bankruptcy (if AFTAP is less than 100%).
 - Limited payments can be made if the AFTAP is at least 60% but less than 80%.
 - Plan can make what would otherwise be a prohibited payment provided it does not exceed the smaller of:
 - 50% of the payment that could be paid without restriction.
 - The present value of the guaranteed PBGC benefit, using IRC section 417(e) assumptions.
 - Only one prohibited payment can be made to any participant during any period of consecutive years for which this section applies (including years where the AFTAP was less than 60% or the plan sponsor was in bankruptcy).
 - The limitation of accelerated benefit distributions does not apply for any plan whose benefits have been frozen since 9/1/2005.

- Participant can elect to defer payment of benefit until later date (when plan is not subject to restrictions) provided that this does not cause a violation of any other qualification requirement (for example, minimum distributions required by IRC section 401(a)(9)).
- Limitations of accelerated benefit payments are not considered a violation of the protected benefit rules of IRC section 411(d)(6).
- Benefit accruals for plans with severe funding shortfalls
 - Benefit accruals must be frozen as of the valuation date if the AFTAP is less than 60%.
 - The restriction of benefit accruals for plans with severe funding shortfalls is exempted if a contribution (in addition to the minimum) is made equal to an amount that would increase the AFTAP to 60%.
 - The contribution must be adjusted with interest at the plan's effective rate for the year if it is paid on a date other than the valuation date (increasing it with interest if it is made after the valuation date, and decreasing it with interest if it is made before the valuation date). (Proposed regulations.)
 - The limitation of benefit accruals for plans with severe funding shortfalls does not apply during the first 5 years of a plan.
 - The pre-funding and funding standard carryover balances cannot be used to pay for or avoid this limitation.
 - Benefit accruals must resume as of the date on which the restriction no longer applies. The plan can also be amended to restore benefit accruals that were not allowed during the period of time when IRC section 436 provided that the accruals must be frozen. However, that amendment is subject to the IRC section 436 limitations on plan amendments that increase benefit liabilities. (Proposed regulations.)

- Presumed under-funding for benefit limitations
 - If any of the limitations applied for the prior year, under-funding is presumed with regard to that limitation for the current year based upon prior year AFTAP until the actuary determines (certifies) the current year AFTAP.
 - If the current year AFTAP is not determined as of the 1st day of the 10th month of the plan year, then the AFTAP for the current year is assumed to be less than 60% as of that date.
 - Nearly under-funded plans
 - A plan is deemed to be nearly under-funded if in the prior year none of the limitations applied, but the AFTAP was not more than 10 percentage points above the percentage that would have caused a limitation to apply.
 - If the current year AFTAP is not determined as of the 1st day of the 4th month of the plan year, then the AFTAP for the current year is assumed to be 10 percentage points less than the prior year AFTAP as of that date.
- Required use of funding standard carryover and pre-funding balances to avoid limitations of IRC section 436 for collectively bargained plans
 - Reduce the pre-funding and funding standard carryover balances as allowed under IRC section 430 to the extent that the reduction would avoid a limitation of IRC section 436 (other than for restricted distributions).
 - Do not reduce the pre-funding and funding standard carryover balances if a total elimination of the balances would still result in this limitation being applicable.
- Methods of avoiding IRC section 436 limitations
 - Reduce the pre-funding and funding standard carryover balances.
 - Make additional contribution for current year as required for specific limitation.
 - Make additional contribution for prior year by the minimum funding due date.
 - Provide security to be included as a plan asset.

Question 124

Effective date of plans X, Y, and Z: 1/1/1995

The normal retirement benefit is determined as a percentage of salary under the terms of each plan.

2008 funding target attainment percentage for each plan:

Plan X: 50%

Plan Y: 70%

Plan Z: 95%

2008 adjusted funding target attainment percentage for each plan:

Plan X: 60%

Plan Y: 85%

Plan Z: 100%

A plan amendment is considered that would decrease the adjusted funding target attainment percentage for each plan by 7 percentage points.

For which (if any) of the above plans can the plan amendment be applied without violating the limitations on plan amendments under IRC section 436(c)?

Solution to question 124

A plan amendment can be applied to a plan without violating the limitations on plan amendments under IRC section 436(c) if the adjusted funding target attainment percentage both before and after the application of the amendment are at least 80%.

For Plan X, the adjusted funding target attainment percentage is already less than 80% before application of the amendment, so the plan amendment cannot be applied to Plan X.

For Plan Y, the adjusted funding target attainment percentage is greater than 80% before application of the amendment, but would reduce by 7 percentage points to 78% after the amendment. So, the plan amendment cannot be applied to Plan Y.

For Plan Z, the adjusted funding target attainment percentage is greater than 80% before application of the amendment, and would remain larger than 80% even after the amendment. So, the plan amendment can be applied to Plan Z without violating the rules of IRC section 436(c).

Question 125

2009 adjusted funding target attainment percentage for Plan X: 75%

The adjusted funding target attainment percentage for Plan X has always been above 80% prior to 2009.

2009 participant data for retired participant Smith:

Annuity starting date	7/1/2009
Monthly life annuity	\$4,000
PBGC guaranteed monthly benefit	\$3,500
IRC section 417(e)(3) present value factor	98.00

Smith elects to receive a lump sum distribution from the plan for 2009.

What is the largest single sum that Smith can receive from Plan X on 7/1/2009?

Solution to question 125

Under IRC section 436(d)(3), since the adjusted funding target attainment percentage (AFTAP) for plan X is between 60% and 80% in 2009, the plan can pay a participant with an annuity starting date in 2009 no more than an amount equal to the smaller of 50% of the lump sum value of the accrued benefit (without regard to IRC section 436) or the present value of the PBGC guaranteed benefit (determined using IRC section 417(e)(3) assumptions).

50% of the lump sum value of the accrued benefit is:

$$50\% \times \$4,000 \times 98.00 = \$196,000$$

Present value of the PBGC guaranteed benefit is:

$$\$3,500 \times 98.00 = \$343,000$$

The largest single sum that can be paid to Smith in 2009 is \$196,000.

Question 126

Plan effective date: 1/1/2000

Valuation date for Plan A: 1/1/2009

2009 adjusted funding target attainment percentage for Plan A: 75%

2009 adjusted funding target: \$3,000,000

Plan A does not have a prefunding balance or funding standard carryover balance.

A plan amendment increasing benefits is adopted and effective on 1/1/2009 that results in an increase in the funding target of \$200,000.

The plan sponsor elects to make an additional contribution for 2009 of \$X on 1/1/2009 in order to avoid the limitations on plan amendments required by IRC section 436(c).

What is the smallest value of \$X?

Solution to question 126

The adjusted value of the assets can be determined using the adjusted funding target attainment percentage (AFTAP) and the adjusted funding target.

$$\text{Assets}/3,000,000 = 75\% \quad \Rightarrow \quad \text{Assets} = 2,250,000$$

In order to avoid the limitations on the plan amendment increasing benefits, the plan sponsor can make a contribution equal to the increase in the funding target due to the amendment. If this addition to the assets increases the AFTAP to at least 80%, then the plan is exempt from the limitation of IRC section 436(c).

$$(2,250,000 + 200,000)/3,000,000 = 81.67\%$$

Since the revised AFTAP is at least as large as 80%, the value of \$X is \$200,000.

Note under the proposed regulations that if the contribution of \$X was deposited after 1/1/2009, the \$200,000 would have been increased with interest at the 2009 effective rate to determine the actual amount of contribution required to be made.

**Revisions to Summary of Revenue Rulings, Notices, Procedures, and
Announcements** (from pages 308 – 315 in the original outline)

Revenue Ruling 2007-67 has been added to the reading list. The following is a summary of the ruling:

2007-67 The ruling deals with the impact of using the PPA 2006 interest rates (segmented interest rates) and mortality table beginning in 2008 with regard to distributions under IRC section 417(e)(3). The segmented interest rates that apply will continue to be based upon the stability period and look-back month as applied under the pre-PPA 2006 rules. The mortality table to be used for 2008 distributions under IRC section 417(e)(3) is provided in the revenue ruling. Finally, a change to the interest rate and/or mortality table required to be used for IRC section 417(e)(3) distributions by PPA 2006 are not deemed to be a cutback in benefits under IRC section 411(d)(6).

Revenue Notice 2004-78 is still included on the reading list. It is not clear why this would still be included because it is outdated (it applied to the 2004 and 2005 years) and it applies to IRC section 415, which is an EA-2A topic, but the following is the summary of the notice:

2004-78 This notice is in question and answer format, and discusses the application of the 5.5% interest rate that applies to the determination of the maximum lump sum (or other IRC section 417(e)(3) benefit) payable under IRC section 415 for years beginning after 2003. The 5.5% interest rate replaces the applicable interest rate, used prior to 2004. There is a transition rule for 2004.

PBGC Technical Updates 96-3, 97-6, and 00-4 have been removed from the reading list. Technical Updates 07-2 and 07-3 have been added to the reading list, and are summarized below. A summary of Technical Update 00-7 has also been included on this page, and this page can be printed and used as a replacement page for page 315 of the original outline.

00-7 This technical update describes the increase in the PBGC benefit guaranteed for multiemployer plans beginning on December 22, 2000.

07-2 This technical update covers issues with regard to ERISA section 4010 and ERISA section 4043. Regarding the annual reporting requirement under ERISA 4010 for grossly under-funded plans, the update indicates that for years prior to 2008, the old method of determining the unfunded vested benefits is used. Rules to implement this under PPA for years beginning in 2008 will be forthcoming.

Regarding the reportable event requirements of ERISA 4043, to the extent that the determination of unfunded bested benefits is required to be made, for an event year beginning in 2008, the pre-2008 rules should be used.

07-3 This technical update indicates that for plan terminations that occur prior to the plan year beginning in 2008, the actuarial assumptions used to determine the lump sum value of the benefits are based upon the pre-PPA 2006 assumptions, even if the distribution occurs after the beginning of 2008.