

of section 4971(c)(4)(B) apply for purposes of determining the plan year for which a contribution is made.

(2) *Current year contributions made before valuation date.* In the case of a plan with a valuation date that is not the first day of the plan year, for purposes of determining the value of plan assets under paragraph (c) of this section, if an employer makes a contribution for a plan year before that year's valuation date, that contribution (and any interest on the contribution for the period between the contribution date and the valuation date, determined using the effective interest rate under section 430(h)(2)(A) for the plan year) must be subtracted from plan assets in determining the value of plan assets as of the valuation date. If the result of this subtraction is a number less than zero, the value of plan assets as of the valuation date is equal to zero.

(e) *Examples.* [Reserved]

(f) *Effective/applicability dates and transition rules—(1) Statutory effective date/applicability date.* Section 430 generally applies to plan years beginning on or after January 1, 2008. The applicability of section 430 for purposes of determining the minimum required contribution is delayed for certain plans in accordance with sections 104 through 106 of PPA '06.

(2) *Effective date/applicability date of regulations—(i) In general.* This section applies to plan years beginning on or after January 1, 2010, regardless of whether section 430 applies to determine the minimum required contribution for the plan year. For plan years beginning before January 1, 2010, plans are permitted to rely on the provisions set forth in this section for purposes of satisfying the requirements of section 430.

(ii) *Permission to use averaging for 2008.* For purposes of determining the actuarial value of assets for a plan year beginning during 2008 using the averaging rules of paragraph (c)(2) of this section, a plan is permitted to apply an assumed earnings rate of zero under paragraph (c)(2)(ii)(E) of this section (even if zero is not the actuary's best estimate of the anticipated annual rate of return on plan assets).

(3) *Approval for changes in the valuation date and valuation method.* Any

change in a plan's valuation date or asset valuation method that satisfies the rules of this section and is made for either the first plan year beginning in 2008, the first plan year beginning in 2009, or the first plan year beginning in 2010 is treated as having been approved by the Commissioner and does not require the Commissioner's specific prior approval. In addition, a change in a plan's valuation date or asset valuation method for the first plan year to which section 430 applies to determine the plan's minimum required contribution (even if that plan year begins after December 31, 2010) that satisfies the rules of this section is treated as having been approved by the Commissioner and does not require the Commissioner's specific prior approval.

[T.D. 9467, 74 FR 53053, Oct. 15, 2009]

§ 1.430(h)(2)-1 Interest rates used to determine present value.

(a) *In general—(1) Overview.* This section provides rules relating to the interest rates to be applied for a plan year under section 430(h)(2). Section 430(h)(2) and this section apply to single employer defined benefit plans (including multiple employer plans as defined in section 413(c)) that are subject to section 412 but do not apply to multiemployer plans (as defined in section 414(f)). Paragraph (b) of this section describes how the segment interest rates are used for a plan year. Paragraph (c) of this section describes those segment rates. Paragraph (d) of this section describes the monthly corporate bond yield curve that is used to develop the segment rates. Paragraph (e) of this section describes certain elections that are permitted to be made under this section. Paragraph (f) of this section describes other rules related to interest rates. Paragraph (g) of this section contains examples. Paragraph (h) of this section contains effective/applicability dates and transition rules.

(2) *Special rules for multiple employer plans.* In the case of a multiple employer plan to which section 413(c)(4)(A) applies, the rules of section 430 and this section are applied separately for each employer under the plan as if each employer maintained a separate plan. Thus, each employer under such a multiple employer plan

may make elections with respect to the interest rate rules under this section that are independent of the elections of other employers under the plan. In the case of a multiple employer plan to which section 413(c)(4)(A) does not apply (that is, a plan described in section 413(c)(4)(B) that has not made the election for section 413(c)(4)(A) to apply), the rules of section 430 and this section are applied as if all participants in the plan were employed by a single employer.

(b) *Interest rates for determining plan liabilities*—(1) *In general.* The interest rates used in determining the present value of the benefits that are included in the target normal cost and the funding target for the plan for a plan year are determined as set forth in this paragraph (b).

(2) *Benefits payable within 5 years*—(i) *Plans with valuation dates at the beginning of the plan year.* If the valuation date is the first day of the plan year, in the case of benefits expected to be payable during the 5-year period beginning on the valuation date for the plan year, the interest rate used in determining the present value of the benefits that are included in the target normal cost and the funding target for the plan is the first segment rate with respect to the applicable month, as described in paragraph (c)(2)(i) of this section.

(ii) *Plans with valuation dates other than the first day of the plan year.* [Reserved]

(3) *Benefits payable after 5 years and within 20 years.* In the case of benefits expected to be payable during the 15-year period beginning after the end of the period described in paragraph (b)(2) of this section, the interest rate used in determining the present value of the benefits that are included in the target normal cost and the funding target for the plan is the second segment rate with respect to the applicable month, as described in paragraph (c)(2)(ii) of this section.

(4) *Benefits payable after 20 years.* In the case of benefits expected to be payable after the period described in paragraph (b)(3) of this section, the interest rate used in determining the present value of the benefits that are included in the target normal cost and the funding target for the plan is the third seg-

ment rate with respect to the applicable month, as described in paragraph (c)(2)(iii) of this section.

(5) *Applicable month.* Except as otherwise provided in paragraph (e) of this section, the term *applicable month* for purposes of this paragraph (b) means the month that includes the valuation date of the plan for the plan year.

(6) *Special rule for certain airlines*—(i) *In general.* Pursuant to section 6615 of the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007, Public Law 110-28 (121 Stat. 112), for a plan sponsor that makes the election described in section 402(a)(2) of the Pension Protection Act of 2006 (PPA '06), Public Law 109-280 (120 Stat. 780), the interest rate required to be used to determine the plan's funding target for each of the 10 years under that election is 8.25 percent (rather than the segment rates otherwise described in this paragraph (b) or the full yield curve as permitted under paragraph (e)(4) of this section).

(ii) *Special interest rate not applicable for other purposes.* The special interest rate described in paragraph (b)(6)(i) of this section does not apply for other purposes such as the determination of the plan's target normal cost.

(c) *Segment rates*—(1) *Overview.* This paragraph (c) sets forth rules for determining the first, second, and third segment rates for purposes of paragraph (b) of this section. The first, second, and third segment rates are set forth in revenue rulings, notices, or other guidance published in the Internal Revenue Bulletin. See §601.601(d)(2) relating to objectives and standards for publishing regulations, revenue rulings and revenue procedures in the Internal Revenue Bulletin. See paragraph (h)(4) of this section for a transition rule under which the definition of the segment rates is modified for plan years beginning in 2008 and 2009.

(2) *Definition of segment rates*—(i) *First segment rate.* For purposes of this section, except as otherwise provided under the transition rule of paragraph (h)(4) of this section, the *first segment rate* is, with respect to any month, the single rate of interest determined by the Commissioner on the basis of the average of the monthly corporate bond

yield curves (described in paragraph (d) of this section) for the 24-month period ending with the month preceding that month, taking into account only the first 5 years of each of those yield curves.

(ii) *Second segment rate.* For purposes of this section, except as otherwise provided under the transition rule of paragraph (h)(4) of this section, the *second segment rate* is, with respect to any month, the single rate of interest determined by the Commissioner on the basis of the average of the monthly corporate bond yield curves (described in paragraph (d) of this section) for the 24-month period ending with the month preceding that month, taking into account only the portion of each of those yield curves corresponding to the 15-year period that follows the end of the 5-year period described in paragraph (c)(2)(i) of this section.

(iii) *Third segment rate.* For purposes of this section, except as otherwise provided under the transition rule of paragraph (h)(4) of this section, the *third segment rate* is, with respect to any month, the single rate of interest determined by the Commissioner on the basis of the average of the monthly corporate bond yield curves (described in paragraph (d) of this section) for the 24-month period ending with the month preceding that month, taking into account only the portion of each of those yield curves corresponding to the 40-year period that follows the end of the 15-year period described in paragraph (c)(2)(ii) of this section.

(d) *Monthly corporate bond yield curve*—(1) *In general.* For purposes of this section, the *monthly corporate bond yield curve* is, with respect to any month, a yield curve that is prescribed by the Commissioner for that month based on yields for that month on investment grade corporate bonds with varying maturities that are in the top three quality levels available.

(2) *Determination and publication of yield curve.* A description of the methodology for determining the monthly corporate bond yield curve is provided in guidance issued by the Commissioner that is published in the Internal Revenue Bulletin. The yield curve for a month will be set forth in revenue rulings, notices, or other guidance pub-

lished in the Internal Revenue Bulletin. See §601.601(d)(2) relating to objectives and standards for publishing regulations, revenue rulings and revenue procedures in the Internal Revenue Bulletin.

(e) *Elections*—(1) *In general.* This paragraph (e) describes elections for a plan year that a plan sponsor can make to use alternative interest rates under this section. Any election under this paragraph (e) must be made by providing written notification of the election to the plan's enrolled actuary. Any election in this paragraph (e) may be adopted for a plan year without obtaining the consent of the Commissioner, but, once adopted, that election will apply for that plan year and all future plan years and may be changed only with the consent of the Commissioner.

(2) *Election for alternative applicable month.* As an alternative to defining the applicable month as the month that includes the valuation date for the plan year, a plan sponsor that is using segment rates as provided under paragraph (b) of this section may elect to use one of the 4 months preceding that month as the applicable month.

(3) *Election not to apply transition rule.* The plan sponsor may elect not to apply the transition rule in paragraph (h)(4) of this section.

(4) *Election to use full yield curve*—(i) *In general.* For purposes of determining the plan's funding target and target normal cost, and for all other purposes under section 430 (including the determination of shortfall amortization installments, waiver installments, and the present values of those installments as described in paragraph (f)(2) of this section), the plan sponsor may elect to use interest rates under the monthly corporate bond yield curve described in paragraph (d) of this section for the month preceding the month that includes the valuation date in lieu of the segment rates determined under paragraph (c) of this section. In order to address the timing of benefit payments during a year, reasonable approximations are permitted to be used to value benefit payments that are expected to be made during a plan year.

(ii) *Reasonable techniques permitted.* In the case of a plan sponsor using the

monthly corporate bond yield curve under this paragraph (e)(4), if with respect to a decrement the benefit is only expected to be paid for one-half of a year (because the decrement was assumed to occur in the middle of the year), the interest rate for that year can be determined as if the benefit were being paid for the entire year. See §1.430(d)-1(f)(7) for additional reasonable techniques that can be used in determining present value.

(5) *Plan sponsor.* For purposes of the elections described in this section, any reference to the plan sponsor generally means the employer or employers responsible for making contributions to or under the plan. In the case of plans that are multiple employer plans to which section 413(c)(4)(A) does not apply, any reference to the plan sponsor means the plan administrator within the meaning of section 414(g).

(f) *Interest rates used for other purposes—(1) Effective interest rate—(i) In general.* Except as otherwise provided in paragraph (f)(2) of this section, the effective interest rate determined under section 430(h)(2)(A) for the plan year is the single interest rate that, if used to determine the present value of the benefits that are taken into account in determining the plan's funding target for the plan year, would result in an amount equal to the plan's funding target determined for the plan year under section 430(d) as described in §1.430(d)-1(b)(2) (without regard to calculations for plans in at-risk status under section 430(i)).

(ii) *Zero funding target.* If, for the plan year, the plan's funding target is equal to zero, then the effective interest rate determined under section 430(h)(2)(A) for the plan year is the single interest rate that, if used to determine the present value of the benefits that are taken into account in determining the plan's target normal cost for the plan year, would result in an amount equal to the plan's target normal cost determined for the plan year under section 430(b) as described in §1.430(d)-1(b)(1) (without regard to calculations for plans in at-risk status under section 430(i)).

(2) *Interest rates used for determining shortfall amortization installments and waiver amortization installments.* The in-

terest rates used to determine the amount of shortfall amortization installments and waiver amortization installments and the present value of those installments are determined based on the dates those installments are assumed to be paid, using the same timing rules that apply in determining target normal cost as described in paragraph (b) of this section. Thus, for a plan that uses the segment rates described in paragraph (c) of this section, the first segment rate applies to the installments assumed to be paid during the first 5-year period beginning on the valuation date for the plan year, and the second segment rate applies to the installments assumed to be paid during the subsequent 15-year period. For purposes of this paragraph (f)(2), the shortfall amortization installments for a plan year are assumed to be paid on the valuation date for that plan year. For example, for a plan that uses the segment rates described in paragraph (c) of this section, the shortfall amortization installment for the fifth plan year following the current plan year (the sixth installment) is assumed to be paid on the valuation date for that year so that such shortfall amortization installment will be determined using the second segment rate.

(g) *Examples.* The following examples illustrate the rules of this section:

Example 1. (i) The January 1, 2009, valuation of Plan P is performed using the segment rates applicable for September 2008 (determined without regard to the transition rule of section 430(h)(2)(G)), and the 2009 annuitant and nonannuitant (male and female) mortality tables as published in Notice 2008-85. See §601.601(d)(2) relating to objectives and standards for publishing regulations, revenue rulings and revenue procedures in the Internal Revenue Bulletin. Plan P provides for early retirement benefits as early as age 50, and offers a single-sum distribution payable immediately at retirement. The single-sum payment is equal to the present value of the participant's accrued benefit, based on the applicable interest rates and the applicable mortality table under section 417(e)(3). Participant E is the only participant in the plan, and is a male age 46 as of January 1, 2009, with an annual accrued benefit of \$23,000 payable beginning at age 65. The actuary assumes a 100% probability that Participant E will terminate at age 50 and will elect to receive his benefit in the form of a single-sum payment.

(ii) Plan P's funding target is \$68,908 as of January 1, 2009. This figure is based on the male nonannuitant rates for ages prior to age 50, the applicable mortality rates under section 417(e)(3) for ages 50 and later, and segment interest rates of 5.07% for the first 5 years after the valuation date, 6.09% for the next 15 years, and 6.56% for periods more than 20 years after the valuation date. (See § 1.430(d)–1(f)(9), *Example 10*, for additional details.)

(iii) The present value of Participant E's benefits as of January 1, 2009, is \$68,908 if a single interest rate of 6.52805% is substituted for the segment interest rates but all other assumptions remain the same. Thus (rounded), the effective interest rate for Plan P is 6.53% for 2009.

Example 2. (i) The facts are the same as for *Example 1*, except that Plan P offers a single-sum distribution equal to the present value of the accrued benefit based on the applicable interest rates under section 417(e)(3) or an interest rate of 6.25%, whichever produces the higher amount. The applicable mortality table under section 417(e)(3) is used for both calculations.

(ii) The present value of Participant E's age-50 single-sum distribution as of January 1, 2009 (when Participant E is age 46) is \$77,392. This amount is determined by calculating the projected single-sum distribution at age 50 using the applicable mortality table under section 417(e)(3) and an interest rate of 6.25%, and discounting the result to January 1, 2009, using the first segment rate of 5.07% and male nonannuitant mortality rates for 2009. Because this amount is larger than the present value of Participant E's single-sum payment based on the applicable interest rates under section 417(e)(3) (that is, \$68,908), the funding target for Plan P is \$77,392 as of January 1, 2009. (See § 1.430(d)–1(f)(9), *Example 12* for additional details.)

(iii) The effective interest rate is the single interest rate that will produce the same funding target if substituted for the segment interest rates keeping all other assumptions the same, including the fixed interest rate used by the plan to determine single-sum payments. The only segment interest rate used to develop the funding target of \$77,392 was the first segment rate of 5.07%. Therefore, considering only this calculation, the single interest rate that would produce the same funding target would be 5.07%.

(iv) However, the effective interest rate must also reflect the fact that the single-sum payment under Plan P is equal to the greater of the present value of Participant E's accrued benefit based on the fixed rate of 6.25% or the applicable interest rates under section 417(e)(3). If the single rate of 5.07% is substituted for the segment rates used to calculate the present value of the single-sum payment based on the applicable interest

rates, the resulting funding target would be higher than \$77,392.

(v) Using a single interest rate of 6.0771%, the January 1, 2009, present value of Participant E's single-sum payment based on the applicable interest rates is \$77,392, and the present value of Participant E's single sum payment based on the plan's interest rate of 6.25% is \$74,494. Plan P's funding target is the larger of the two, or \$77,392, which is the same as the funding target based on the segment interest rates used for the 2009 valuation. Therefore, Plan P's effective interest rate for 2009 (rounded) is 6.08%.

(h) *Effective/applicability dates and transition rules*—(1) *Statutory effective date/applicability date.* Section 430 generally applies to plan years beginning on or after January 1, 2008. The applicability of section 430 for purposes of determining the minimum required contribution is delayed for certain plans in accordance with sections 104 through 106 of PPA'06.

(2) *Effective date/applicability date of regulations.* This section applies to plan years beginning on or after January 1, 2010, regardless of whether section 430 applies to determine the minimum required contribution for the plan year. For plan years beginning before January 1, 2010, plans are permitted to rely on the provisions set forth in this section for purposes of satisfying the requirements of section 430.

(3) *Approval for changes in interest rate.* Any change to an election under paragraph (e) of this section that is made for the first plan year beginning in 2009 or the first plan year beginning in 2010 is treated as having been approved by the Commissioner and does not require the Commissioner's specific prior approval.

(4) *Transition rule*—(i) *In general.* Notwithstanding the general rules for determination of segment rates under paragraph (c)(2) of this section, for plan years beginning in 2008 or 2009, the first, second, or third segment rate for a plan with respect to any month is equal to the sum of—

(A) The product of that rate for that month determined without regard to this paragraph (h)(4), multiplied by the applicable percentage; and

(B) The product of the weighted average interest rate determined under the rules of paragraph (h)(4)(iii) of this section, multiplied by a percentage equal

to 100 percent minus the applicable percentage.

(ii) *Applicable percentage.* For purposes of this paragraph (h)(4), the applicable percentage is 33½ percent for plan years beginning in 2008 and 66⅔ percent for plan years beginning in 2009.

(iii) *Weighted average interest rate.* The weighted average interest rate for purposes of paragraph (h)(4)(i)(B) of this section is the weighted average interest rate under section 412(b)(5)(B)(ii)(II) (as that provision was in effect for plan years beginning in 2007) as of—

(A) The month which contains the first day of the plan year;

(B) The month which contains the valuation date (if the applicable month is determined under paragraph (b)(5) of this section); or

(C) The applicable month (if the applicable month is determined under paragraph (e)(2) of this section).

(iv) *New plans ineligible.* The transition rule of this paragraph (h)(4) does not apply if the first plan year of the plan begins on or after January 1, 2008.

[T.D. 9467, 74 FR 53055, Oct. 15, 2009]

§ 1.430(h)(3)-1 Mortality tables used to determine present value.

(a) *Basis for mortality tables—(1) In general.* This section sets forth rules for the mortality tables to be used in determining present value or making any computation under section 430. Generally applicable mortality tables for participants and beneficiaries are set forth in this section pursuant to section 430(h)(3)(A). In lieu of using the mortality tables provided under this section with respect to participants and beneficiaries, plan-specific substitute mortality tables are permitted to be used for this purpose pursuant to section 430(h)(3)(C) provided that the requirements of § 1.430(h)(3)-2 are satisfied. Mortality tables that may be used with respect to disabled individuals are to be provided in guidance published in the Internal Revenue Bulletin. See § 601.601(d)(2)(ii)(b) of this chapter.

(2) *Static tables or generational tables permitted.* The generally applicable mortality tables provided under section 430(h)(3)(A) are the static tables described in paragraph (a)(3) of this

section and the generational mortality tables described in paragraph (a)(4) of this section. A plan is permitted to use either of those sets of mortality tables with respect to participants and beneficiaries pursuant to this section.

(3) *Static tables.* The static mortality tables that are permitted to be used pursuant to paragraph (a)(2) of this section are updated annually to reflect expected improvements in mortality experience as described in paragraph (c)(2) of this section. Static mortality tables that are to be used with respect to valuation dates occurring during 2008 are provided in paragraph (e) of this section. The mortality tables to be used with respect to valuation dates occurring in later years are to be provided in guidance published in the Internal Revenue Bulletin. See § 601.601(d)(2)(ii)(b) of this chapter.

(4) *Generational mortality tables—(i) In general.* The generational mortality tables that are permitted to be used pursuant to paragraph (a)(2) of this section are determined pursuant to this paragraph (a)(4) using the base mortality tables and projection factors set forth in paragraph (d) of this section. Under the generational mortality tables, the probability of an individual's death at a particular age is determined as the individual's base mortality rate (that is, the applicable mortality rate from the table set forth in paragraph (d) of this section for the age for which the probability of death is being determined) multiplied by the mortality improvement factor. The mortality improvement factor is equal to $(1 - \text{projection factor for that age})^n$, where n is equal to the projection period. For this purpose, the projection period is the number of years between 2000 and the year for which the probability of death is being determined.

(ii) *Examples of calculation.* As an example of the use of generational mortality tables under paragraph (a)(4)(i) of this section, for purposes of determining the probability of death at age 54 for a male annuitant born in 1974, the base mortality rate is .005797, the projection factor is .020, and the projection period (the period from the year 2000 until the year the participant will attain age 54) is 28 years, so that the mortality improvement factor is