## Part III --- Administrative, Miscellaneous, and Procedural

Update for Weighted Average Interest Rates, Yield Curves, and Segment Rates
Notice 2012-66
This notice provides guidance as to the corporate bond weighted average interest rate and the permissible range of interest rates specified under § 412(b)(5)(B)(ii)(II) of the Internal Revenue Code as in effect for plan years beginning before 2008. It also provides guidance on the corporate bond monthly yield curve (and the corresponding spot segment rates), and the 24-month average segment rates under § 430(h)(2). In addition, this notice provides guidance as to the interest rate on 30-year Treasury securities under § 417(e)(3)(A)(ii)(II) as in effect for plan years beginning before 2008, the 30-year Treasury weighted average rate under § 431(c)(6)(E)(ii)(I), and the minimum present value segment rates under § 417(e)(3)(D) as in effect for plan years beginning after 2007. These rates reflect certain changes implemented by the Moving Ahead for Progress in the 21st Century Act, Public Law 112-141 (MAP-21). MAP-21 provides that for purposes of $\S$ $430(\mathrm{~h})(2)$, the segment rates are limited by the applicable maximum percentage or the applicable minimum percentage based on the average of segment rates over a 25 year period.

## CORPORATE BOND WEIGHTED AVERAGE INTEREST RATE

Sections 412 (b)(5)(B)(ii) and 412(I)(7)(C)(i) provide that the interest rates used to calculate current liability and to determine the required contribution under §412(I) for plan years beginning in 2004 through 2007 must be within a permissible range based on the weighted average of the rates of interest on amounts invested conservatively in long term investment grade corporate bonds during the 4 -year period ending on the last day before the beginning of the plan year.

Notice 2004-34, 2004-1 C.B. 848, provides guidelines for determining the corporate bond weighted average interest rate and the resulting permissible range of interest rates used to calculate current liability. That notice establishes that the corporate bond weighted average is based on the monthly composite corporate bond rate derived from designated corporate bond indices. The methodology for determining the monthly composite corporate bond rate as set forth in Notice 2004-34 continues to apply in determining that rate. See Notice 2006-75, 2006-2 C.B. 366.

The composite corporate bond rate for October 2012 is 3.93 percent. Pursuant to Notice 2004-34, the Service has determined this rate as the average of the monthly yields for the included corporate bond indices for that month.

The following corporate bond weighted average interest rate was determined for plan years beginning in the month shown below.


YIELD CURVE AND SEGMENT RATES
Generally, except for certain plans under sections 104 and 105 of the Pension Protection

Act of 2006, $\S 430$ of the Code specifies the minimum funding requirements that apply to single employer plans pursuant to § 412. Section 430(h)(2) specifies the interest rates that must be used to determine a plan's target normal cost and funding target. Under this provision, present value is generally determined using three 24-month average interest rates ("segment rates"), each of which applies to cash flows during specified periods. To the extent provided under § 430(h)(2)(C)(iv), these segment rates are adjusted by the applicable percentage of the 25 -year average segment rates for the period ending September 30 of the year preceding the calendar year in which the plan year begins. However, an election may be made under § 430(h)(2)(D)(ii) to use the monthly yield curve in place of the segment rates.

Notice 2007-81, 2007-44 I.R.B. 899, provides guidelines for determining the monthly corporate bond yield curve, and the 24-month average corporate bond segment rates used to compute the target normal cost and the funding target. Pursuant to Notice 2007-81, the monthly corporate bond yield curve derived from October 2012 data is in Table I at the end of this notice. The spot first, second, and third segment rates for the month of October 2012 are, respectively, $0.96,3.57$, and 4.58 . The three 24 -month average corporate bond segment rates applicable for November 2012, without adjustment by the applicable percentage of the 25 -year average segment rates, are as follows:

## 24-Month Segment Rates Without Adjustment by 25-Year Average Segment Rates



For plan years beginning in 2012, the 24-month average segment rates determined under $\S 430(\mathrm{~h})(2)(\mathrm{C})$ (iv) must be not less than $90 \%$ nor greater than $110 \%$ of the 25 -year average segment rates. Pursuant to Notice 2012-55, I.R.B. 2012-36, the first, second, and third 25 -year segment rates applicable for plan years beginning in 2012 are $6.15,7.61$, and 8.35 , respectively. Therefore, for plan years beginning in 2012, the three adjusted 24 -month average corporate bond segment rates applicable for November 2012, taking into account the applicable percentage of the 25-year average segment rates, are as follows:

Adjusted 24-Month Average Segment Rates, Using Applicable Percentage of 25-Year Average Segment Rates

| Applicable Month | For Plan Years Beginning in | First Segment | Second Segment | Third Segment |
| :---: | :---: | :---: | :---: | :---: |
| November 2012 | 2012 | 5.54 | 6.85 | 7.52 |

The 25-year average segment rates for the period ending September 30, 2012 have not been determined yet. The Service will issue additional guidance on the November 2012 adjusted 24month average segment rates applicable for plan years beginning in 2013 when those 25 -year average segment rates are determined.

## 30-YEAR TREASURY SECURITIES INTEREST RATES

Section 417(e)(3)(A)(ii)(II) (prior to amendment by PPA) defines the applicable interest rate, which must be used for purposes of determining the minimum present value of a participant's benefit under § 417(e)(1) and (2), as the annual rate of interest on 30-year Treasury securities for the month before the date of distribution or such other time as the Secretary may by regulations prescribe. Section $1.417(\mathrm{e})-1(\mathrm{~d})(3)$ of the Income Tax Regulations provides that the applicable interest rate for a month is the annual rate of interest on 30-year Treasury securities as specified by the Commissioner for that month in revenue rulings, notices or other guidance published in the Internal Revenue Bulletin.

The rate of interest on 30-year Treasury securities for October 2012 is 2.90 percent. The Service has determined this rate as the average of the daily determinations of yield on the 30 -year Treasury bond maturing in August 2042.

Generally for plan years beginning after 2007, § 431 specifies the minimum funding requirements that apply to multiemployer plans pursuant to § 412. Section 431(c)(6)(B) specifies a minimum amount for the full-funding limitation described in section 431(c)(6)(A), based on the plan's current liability. Section 431(c)(6)(E)(ii)(I) provides that the interest rate used to calculate current liability for this purpose must be no more than 5 percent above and no more than 10 percent below the weighted average of the rates of interest on 30-year Treasury securities during the fouryear period ending on the last day before the beginning of the plan year. Notice 88-73, 1988-2 C.B. 383, provides guidelines for determining the weighted average interest rate. The following rates were determined for plan years beginning in the month shown below.

| For Plan Years <br> Beginning in <br> Month |  | Year | $30-$-Year <br> Treasury <br> Weighted <br> Average |
| :--- | :--- | :--- | :--- | :--- |

## miNIMUM PRESENT VALUE SEGMENT RATES

In general, the applicable interest rates under § 417(e)(3)(D) are segment rates computed without regard to a 24 -month average. For plan years beginning in 2008 through 2011, the applicable interest rates are the monthly spot segment rates blended with the applicable rate under $\S 417(\mathrm{e})(3)(\mathrm{A})(\mathrm{ii})(\mathrm{II})$ as in effect for plan years beginning in 2007. Notice 2007-81 provides guidelines for determining the minimum present value segment rates. Pursuant to that notice, the minimum present value transitional segment rates determined for October 2012, taking into account the October 2012 30-year Treasury rate of 2.90 stated above, are as follows:

| For Plan Years Beginning in | First Segment | Second Segment | Third Segment |
| :---: | :---: | :---: | :---: |
| 2011 | 1.35 | 3.44 | 4.24 |
| 2012 | 0.96 | 3.57 | 4.58 |
| 2013 | 0.96 | 3.57 | 4.58 |

## DRAFTING INFORMATION

The principal author of this notice is Tony Montanaro of the Employee Plans, Tax Exempt and Government Entities Division. Mr. Montanaro may be e-mailed at RetirementPlanQuestions@irs.gov.

## Table I

Monthly Yield Curve for October 2012

## Derived from October 2012 Data

| Maturity | Yield |
| :---: | :---: |
| 0.5 | 0.32 |
| 1.0 | 0.51 |
| 1.5 | 0.68 |
| 2.0 | 0.82 |
| 2.5 | 0.94 |
| 3.0 | 1.04 |
| 3.5 | 1.14 |
| 4.0 | 1.25 |
| 4.5 | 1.38 |
| 5.0 | 1.54 |
| 5.5 | 1.70 |
| 6.0 | 1.88 |
| 6.5 | 2.07 |
| 7.0 | 2.26 |
| 7.5 | 2.45 |
| 8.0 | 2.64 |
| 8.5 | 2.82 |
| 9.0 | 2.99 |
| 9.5 | 3.15 |
| 10.0 | 3.30 |
| 10.5 | 3.44 |
| 11.0 | 3.56 |
| 11.5 | 3.67 |
| 12.0 | 3.77 |
| 12.5 | 3.86 |
| 13.0 | 3.94 |
| 13.5 | 4.01 |
| 14.0 | 4.07 |
| 14.5 | 4.12 |
| 15.0 | 4.17 |
| 15.5 | 4.21 |
| 16.0 | 4.24 |
| 16.5 | 4.27 |
| 17.0 | 4.29 |
| 17.5 | 4.31 |
| 18.0 | 4.33 |
| 18.5 | 4.34 |
| 19.0 | 4.36 |
| 19.5 | 4.37 |
| 20.0 | 4.38 |
|  |  |


| Maturity | Yield |
| :---: | :---: |
| 20.5 | 4.39 |
| 21.0 | 4.40 |
| 21.5 | 4.41 |
| 22.0 | 4.41 |
| 22.5 | 4.42 |
| 23.0 | 4.43 |
| 23.5 | 4.43 |
| 24.0 | 4.44 |
| 24.5 | 4.45 |
| 25.0 | 4.45 |
| 25.5 | 4.46 |
| 26.0 | 4.46 |
| 26.5 | 4.47 |
| 27.0 | 4.48 |
| 27.5 | 4.48 |
| 28.0 | 4.49 |
| 28.5 | 4.50 |
| 29.0 | 4.50 |
| 29.5 | 4.51 |
| 30.0 | 4.51 |
| 30.5 | 4.52 |
| 31.0 | 4.53 |
| 31.5 | 4.53 |
| 32.0 | 4.54 |
| 32.5 | 4.54 |
| 33.0 | 4.55 |
| 33.5 | 4.55 |
| 34.0 | 4.55 |
| 34.5 | 4.56 |
| 35.0 | 4.56 |
| 35.5 | 4.57 |
| 36.0 | 4.57 |
| 36.5 | 4.58 |
| 37.0 | 4.58 |
| 37.5 | 4.58 |
| 38.0 | 4.59 |
| 38.5 | 4.59 |
| 39.0 | 4.59 |
| 39.5 | 4.60 |
| 40.0 | 4.60 |
|  |  |
| 2 |  |


| Maturity | Yield |
| :---: | :---: |
| 40.5 | 4.60 |
| 41.0 | 4.61 |
| 41.5 | 4.61 |
| 42.0 | 4.61 |
| 42.5 | 4.62 |
| 43.0 | 4.62 |
| 43.5 | 4.62 |
| 44.0 | 4.62 |
| 44.5 | 4.63 |
| 45.0 | 4.63 |
| 45.5 | 4.63 |
| 46.0 | 4.63 |
| 46.5 | 4.64 |
| 47.0 | 4.64 |
| 47.5 | 4.64 |
| 48.0 | 4.64 |
| 48.5 | 4.65 |
| 49.0 | 4.65 |
| 49.5 | 4.65 |
| 50.0 | 4.65 |
| 50.5 | 4.65 |
| 51.0 | 4.66 |
| 51.5 | 4.66 |
| 52.0 | 4.66 |
| 52.5 | 4.66 |
| 53.0 | 4.66 |
| 53.5 | 4.67 |
| 54.0 | 4.67 |
| 54.5 | 4.67 |
| 55.0 | 4.67 |
| 55.5 | 4.67 |
| 56.0 | 4.68 |
| 56.5 | 4.68 |
| 57.0 | 4.68 |
| 57.5 | 4.68 |
| 58.0 | 4.68 |
| 58.5 | 4.68 |
| 59.0 | 4.68 |
| 59.5 | 4.69 |
| 60.0 | 4.69 |
|  |  |


| Maturity | Yield |
| :---: | :---: |
| 60.5 | 4.69 |
| 61.0 | 4.69 |
| 61.5 | 4.69 |
| 62.0 | 4.69 |
| 62.5 | 4.69 |
| 63.0 | 4.70 |
| 63.5 | 4.70 |
| 64.0 | 4.70 |
| 64.5 | 4.70 |
| 65.0 | 4.70 |
| 65.5 | 4.70 |
| 66.0 | 4.70 |
| 66.5 | 4.70 |
| 67.0 | 4.71 |
| 67.5 | 4.71 |
| 68.0 | 4.71 |
| 68.5 | 4.71 |
| 69.0 | 4.71 |
| 69.5 | 4.71 |
| 70.0 | 4.71 |
| 70.5 | 4.71 |
| 71.0 | 4.71 |
| 71.5 | 4.72 |
| 72.0 | 4.72 |
| 72.5 | 4.72 |
| 73.0 | 4.72 |
| 73.5 | 4.72 |
| 74.0 | 4.72 |
| 74.5 | 4.72 |
| 75.0 | 4.72 |
| 75.5 | 4.72 |
| 76.0 | 4.72 |
| 76.5 | 4.72 |
| 77.0 | 4.73 |
| 77.5 | 4.73 |
| 78.0 | 4.73 |
| 78.5 | 4.73 |
| 79.0 | 4.73 |
| 79.5 | 4.73 |
| 80.0 | 4.73 |
|  |  |


| Maturity | Yield |
| :---: | ---: |
| 80.5 | 4.73 |
| 81.0 | 4.73 |
| 81.5 | 4.73 |
| 82.0 | 4.73 |
| 82.5 | 4.73 |
| 83.0 | 4.74 |
| 83.5 | 4.74 |
| 84.0 | 4.74 |
| 84.5 | 4.74 |
| 85.0 | 4.74 |
| 85.5 | 4.74 |
| 86.0 | 4.74 |
| 86.5 | 4.74 |
| 87.0 | 4.74 |
| 87.5 | 4.74 |
| 88.0 | 4.74 |
| 88.5 | 4.74 |
| 89.0 | 4.74 |
| 89.5 | 4.74 |
| 90.0 | 4.75 |
| 90.5 | 4.75 |
| 91.0 | 4.75 |
| 91.5 | 4.75 |
| 92.0 | 4.75 |
| 92.5 | 4.75 |
| 93.0 | 4.75 |
| 93.5 | 4.75 |
| 94.0 | 4.75 |
| 94.5 | 4.75 |
| 95.0 | 4.75 |
| 95.5 | 4.75 |
| 96.0 | 4.75 |
| 96.5 | 4.75 |
| 97.0 | 4.75 |
| 97.5 | 4.75 |
| 98.0 | 4.75 |
| 98.5 | 4.76 |
| 99.0 | 4.76 |
| 99.5 | 4.76 |
| 100.0 | 4.76 |
|  |  |

