(i) The total benefits (i.e., the sum of employer-provided and employee-provided benefits) under the plan would satisfy § 1.401(a)(4)–3 if all benefits were treated as employer-provided benefits; and

(ii) The plan's contribution requirements satisfy paragraph (b)(2)(ii)(A) of this section.

(4) *Grandfather rules for plans in existence on May 14, 1990*—(i) *In general.* This requirement is satisfied for a plan year if the plan contained provisions as of May 14, 1990, that meet the requirements of paragraph (c)(4)(ii) or (c)(4)(iii) of this section.

(ii) *Graded contribution rates.* The plan's provisions meet the requirements of this paragraph (c)(4)(ii) if all the following requirements are met:

(A) The provisions require employee contributions at a greater rate (expressed as a percentage of compensation) at higher levels of compensation than at lower levels of compensation.

(B) The required rate of employee contributions is not increased after May 14, 1990, although the level of compensation at which employee contributions are required may be increased or decreased.

(C) All employees are permitted to make employee contributions under the plan at a uniform rate with respect to all compensation, beginning no later than the last day of the first plan year to which these regulations apply, as set forth in § 1.401(a)(4)–13 (a) and (b).

(D) The benefits provided on account of employee contributions at lower levels of compensation are comparable to those provided on account of employee contributions at higher levels of compensation.

(iii) *Prior year compensation.* The plan's provisions meet the requirements of this paragraph (c)(4)(iii) if they are part of a plan maintained by more than one employer that requires employee contributions and the rate of required employee contributions, expressed as a percentage of compensation for the last calendar year ending before the beginning of the plan year, is the same for all employees.

[T.D. 8485, 58 FR 46802, Sept. 3, 1993]

§ 1.401(a)(4)–7 Imputation of permitted disparity.

(a) *Introduction.* In determining whether a plan satisfies section 401(a)(4) with respect to the amount of contributions or benefits, section 401(a)(5)(C) allows the disparities permitted under section 401(l) to be taken into account. For purposes of satisfying the safe harbors of §§ 1.401(a)(4)–2(b)(2) and 1.401(a)(4)–3(b), permitted disparity may be taken into account only by satisfying section 401(l) in form in accordance with § 1.401(l)–2 or 1.401(l)–3, respectively. For purposes of the general tests of §§ 1.401(a)(4)–2(c) and 1.401(a)(4)–3(c), permitted disparity may be taken into account only in accordance with the rules of this section. In general, this section allows permitted disparity to be arithmetically imputed with respect to employer-provided contributions or benefits by determining an adjusted allocation or accrual rate that appropriately accounts for the permitted disparity with respect to each employee. Paragraph (b) of this section provides rules for imputing permitted disparity with respect to employer-provided contributions by adjusting each employee's unadjusted allocation rate. Paragraph (c) of this section provides rules for imputing permitted disparity with respect to employer-provided benefits by adjusting each employee's unadjusted accrual rate. Paragraph (d) of this section provides rules of general application.

(b) *Adjusting allocation rates*—(1) *In general.* The rules in this paragraph (b) produce an adjusted allocation rate for each employee by determining the excess contribution percentage under the hypothetical formula that would yield the allocation actually received by the employee, if the plan took into account the full disparity permitted under section 401(l)(2) and used the taxable wage base as the integration level. This adjusted allocation rate is used to determine whether the amount of contributions under the plan satisfies the general test of § 1.401(a)(4)–2(c) and to apply the average benefit percentage test on the basis of contributions under § 1.410(b)–5(d). Paragraphs (b)(2) and (b)(3) of this section apply to employees whose plan year compensation does

not exceed and does exceed, respectively, the taxable wage base, and paragraph (b)(4) of this section provides definitions.

(2) *Employees whose plan year compensation does not exceed taxable wage base.* If an employee's plan year compensation does not exceed the taxable wage base, the employee's adjusted allocation rate is the lesser of the A rate and the B rate determined under the formulas below, where the permitted disparity rate and the unadjusted allocation rate are determined under paragraph (b)(4) (ii) and (iv) of this section, respectively.

A Rate = 2×unadjusted allocation rate

B Rate = unadjusted allocation rate + permitted disparity rate

(3) *Employees whose plan year compensation exceeds taxable wage base.* If an employee's plan year compensation exceeds the taxable wage base, the employee's adjusted allocation rate is the lesser of the C rate and the D rate determined under the formulas below, where allocations and the permitted disparity rate are determined under paragraph (b)(4) (i) and (ii) of this section, respectively.

$$\text{C Rate} = \frac{\text{allocations}}{\text{plan year compensation} - \frac{1}{2}\ \text{taxable wage base}}$$

$$\text{D Rate} = \frac{\text{allocations} + (\text{permitted disparity rate} \times \text{taxable wage base})}{\text{plan year compensation}}$$

(4) *Definitions.* In applying this paragraph (b), the following definitions govern—

(i) *Allocations.* Allocations means the amount determined by multiplying the employee's plan year compensation by the employee's unadjusted allocation rate.

(ii) *Permitted disparity rate*—(A) *General rule.* Permitted disparity rate means the rate in effect as of the beginning of the plan year under section 401(l)(2)(A)(ii) (e.g., 5.7 percent for plan years beginning in 1990).

(B) *Cumulative permitted disparity limit.* Notwithstanding paragraph (b)(4)(ii)(A) of this section, the permitted disparity rate is zero for an employee who has benefited under a defined benefit plan taken into account under § 1.401(l)–5(a)(3) for a plan year that begins on or after one year from the first day of the first plan year to which these regulations apply, as set forth in § 1.401(a)(4)–13 (a) and (b), if imputing permitted disparity would result in a cumulative disparity fraction for the employee, as defined in § 1.401(l)–5(c)(2), that exceeds 35. See § 1.401(l)–5(c)(1) for special rules for determining whether an employee has benefited under a defined benefit plan for this purpose.

(iii) *Taxable wage base.* Taxable wage base means the taxable wage base, as defined in § 1.401(l)–1(c)(32), in effect as of the beginning of the plan year.

(iv) *Unadjusted allocation rate.* Unadjusted allocation rate means the employee's allocation rate determined under § 1.401(a)(4)–2(c)(2)(i) for the plan year (expressed as a percentage of plan year compensation), without imputing permitted disparity under this section.

(5) *Example.* The following example illustrates the rules in this paragraph (b):

Example. (a) Employees M and N participate in a defined contribution plan maintained by Employer X. Employee M has plan year compensation of $30,000 in the 1990 plan year and has an unadjusted allocation rate of five percent. Employee N has plan year compensation of $100,000 in the 1990 plan year and has an unadjusted allocation rate of eight percent. The taxable wage base in 1990 is $51,300.

(b) Because Employee M's plan year compensation does not exceed the taxable wage base, Employee M's A rate is 10 percent (2×5 percent), and Employee M's B rate is 10.7 percent (5 percent+5.7 percent). Thus, Employee M's adjusted allocation rate is 10 percent, the lesser of the A rate and the B rate.

(c) Employee N's allocations are $8,000 (8 percent×$100,000). Because Employee N's plan year compensation exceeds the taxable wage base, Employee N's C rate is 10.76 percent ($8,000 divided by ($100,000−(½×$51,300))), and Employee N's D rate is 10.92 percent (($8,000+(5.7 percent×$51,300)) divided by $100,000). Thus, Employee N's adjusted allocation rate is 10.76 percent, the lesser of the C rate and the D rate.

(c) *Adjusting accrual rates*—(1) *In general.* The rules in this paragraph (c) produce an adjusted accrual rate for each employee by determining the excess benefit percentage under the hypothetical plan formula that would yield the employer-provided accrual actually received by the employee, if the plan took into account the full permitted disparity under section 401(l)(3)(A) in each of the first 35 years of an employee's testing service under the plan and used the employee's covered compensation as the integration level. This adjusted accrual rate is used to determine whether the amount of employer-provided benefits under the plan satisfies the alternative safe harbor for flat benefit plans under §1.401(a)(4)–3(b)(4)(i)(C)(*3*) or the general test of §1.401(a)(4)–3(c), and to apply the average benefit percentage test on the basis of benefits under §1.410(b)–5. Paragraphs (c)(2) and (c)(3) of this section apply to employees whose average annual compensation does not exceed and does exceed, respectively, covered compensation, and paragraph (c)(4) of this section provides definitions. Paragraph (c)(5) of this section provides a special rule for employees with negative unadjusted accrual rates.

(2) *Employees whose average annual compensation does not exceed covered compensation.* If an employee's average annual compensation does not exceed the employee's covered compensation, the employee's adjusted accrual rate is the lesser of the A rate and the B rate determined under the formulas below, where the permitted disparity factor and the unadjusted accrual rate are determined under paragraph (c)(4)(iii) and (v) of this section, respectively.

$$\text{A Rate} = 2 \times \text{unadjusted accrual rate}$$

$$\text{B Rate} = \text{unadjusted accrual rate} + \text{permitted disparity factor}$$

(3) *Employees whose average annual compensation exceeds covered compensation.* If an employee's average annual compensation exceeds the employee's covered compensation, the employee's adjusted accrual rate is the lesser of the C rate and D rate determined under the formulas below, where the employer-provided accrual and the permitted disparity factor are determined under paragraph (c)(4)(ii) and (iii) of this section, respectively.

$$\text{C Rate} = \frac{\text{employer-provided accrual}}{\text{average annual compensation} - \frac{1}{2}\ \text{covered compensation}}$$

$$\text{D Rate} = \frac{\text{employer-provided accrual} + (\text{permitted disparity factor} \times \text{covered compensation})}{\text{average annual compensation}}$$

(4) *Definitions.* For purposes of this paragraph (c), the following definitions apply.

(i) *Covered compensation.* Covered compensation means covered compensation as defined in §1.401(l)–1(c)(7). Notwithstanding §1.401(l)–1(c)(7)(iii), an employee's covered compensation must be automatically adjusted each plan year for purposes of applying this paragraph (c).

(ii) *Employer-provided accrual.* Employer-provided accrual means the amount determined by multiplying the

employee's average annual compensation by the employee's unadjusted accrual rate.

(iii) *Permitted disparity factor*—(A) *General rule.* Permitted disparity factor for an employee means the sum of the employee's annual permitted disparity factors determined under paragraph (c)(4)(iii)(B) of this section for each of the years in the measurement period used for determining the employee's accrual rate in §1.401(a)(4)–3(d)(1), divided by the employee's testing service during that measurement period.

(B) *Annual permitted disparity factor*—(*1*) *Definition.* An employee's annual permitted disparity factor is generally 0.75 percent adjusted, pursuant to §1.401(l)–3(e), using as the age at which benefits commence the lesser of age 65 or the employee's testing age. No adjustments are made in the annual permitted disparity factor unless an employee's testing age is different from the employee's social security retirement age. An annual permitted disparity factor that is less than the annual permitted disparity factor described in the first sentence of this paragraph (c)(4)(iii)(B)(*1*) may be used if it is a uniform percentage of that factor (e.g., 50 percent of the annual permitted disparity factor) or a fixed percentage (e.g., 0.65 percent) for all employees.

(*2*) *Annual permitted disparity factor after 35 years.* For purposes of determining the sum described in paragraph (c)(4)(iii)(A) of this section, the annual permitted disparity factor for each of the employee's first 35 years of testing service is the amount described in paragraph (c)(4)(iii)(B)(*1*) of this section, and the annual permitted disparity factor in any subsequent year equals zero. This rule applies regardless of whether the end of the measurement period extends beyond an employee's first 35 years of testing service. Thus, for example, if the measurement period is the current plan year and the employee completed 35 years of testing service prior to the beginning of the current plan year, under this paragraph (c)(4)(iii)(B)(*2*) the annual permitted disparity factor in the current plan year (and hence the sum of the annual permitted disparity factors for each year in the measurement period) is zero.

(*3*) *Cumulative permitted disparity limit.* The 35 years used in paragraph (c)(4)(iii)(B)(*2*) of this section must be reduced by the employee's cumulative disparity fraction, as defined in §1.401(l)–5(c)(2), but determined solely with respect to the employee's total years of service under all plans taken into account under §1.401(l)–5(a)(3) during the measurement period, other than the plan being tested.

(iv) *Social security retirement age.* Social security retirement age means social security retirement age as defined in section 415(b)(8).

(v) *Unadjusted accrual rate.* Unadjusted accrual rate means the normal or most valuable accrual rate, whichever is being determined for the employee under §1.401(a)(4)–3(d), expressed as a percentage of average annual compensation, without imputing permitted disparity under this section.

(5) *Employees with negative unadjusted accrual rates.* Notwithstanding the formulas in paragraph (c)(2) and (c)(3) of this section, if an employee's unadjusted accrual rate is less than zero, the employee's adjusted accrual rate is deemed to be the employee's unadjusted accrual rate.

(6) *Example.* The following example illustrates the rules in this paragraph (c):

Example. (a) Employees M and N participate in a defined benefit plan that uses a normal retirement age of 65. The plan is being tested for the plan year under §1.401(a)(4)–3(c), using unadjusted accrual rates determined using a plan year measurement period under §1.401(a)(4)–3(d)(1)(iii)(A). Employee M has an unadjusted normal accrual rate of 1.48 percent, average annual compensation of $21,000, and an employer-provided accrual of $311 (1.48 percent×$21,000). Employee N has an unadjusted normal accrual rate of 1.7 percent, average annual compensation of $106,000, and an employer-provided accrual of $1,802 (1.7 percent×$106,000). The covered compensation of both Employees M and N is $25,000, and social security retirement age for both employees is 65. Neither employee has testing service of more than 35 years and neither has ever participated in another plan.

(b) Because Employee M's average annual compensation does not exceed covered compensation, Employee M's A rate is 2.96 percent (2.0×1.48 percent), and Employee M's B

rate is 2.23 percent (1.48 percent+0.75 percent). Thus, Employee M's adjusted accrual rate is 2.23 percent, the lesser of the A rate and the B rate.

(c) Because Employee N's average annual compensation exceeds covered compensation, Employee N's C rate is 1.93 percent ($1,802/($106,000 − (0.5×$25,000))), and Employee N's D rate is 1.88 percent (($1,802+(0.75 percent×$25,000))/$106,000). Thus, Employee N's adjusted accrual rate is 1.88 percent, the lesser of the C rate and the D rate.

(d) *Rules of general application*—(1) *Eligible plans.* The rules in this section may be used only for those plans to which the permitted disparity rules of section 401(l) are available. See § 1.401(l)–1(a)(3).

(2) *Exceptions from consistency requirements.* A plan does not fail to satisfy the consistency requirements of § 1.401(a)(4)–2(c)(2)(vi) or § 1.401(a)(4)–3(d)(2)(i) merely because the plan does not impute disparity for some employees to the extent required to comply with paragraph (d)(3) of this section, or because the plan does not impute disparity for any employees (including self-employed individuals within the meaning of section 401(c)(1)) who are not covered by any of the taxes under section 3111(a), section 3221, or section 1401.

(3) *Overall permitted disparity.* The annual overall permitted disparity limits of § 1.401(l)–5(b) apply to the employer-provided contributions and benefits for an employee under all plans taken into account under § 1.401(l)–5(a)(3). Thus, if an employee who benefits under the plan for the current plan year also benefits under a section 401(l) plan for the plan year ending with or within the current plan year, permitted disparity may not be imputed for that employee for the plan year. See § 1.401(l)–5(b)(9), *Example 4.* Similarly, if an employee who benefits under the plan for the current plan year also benefits under another plan of the employer for the plan year ending with or within the current plan year, disparity may be imputed for that employee under only one of the plans.

[T.D. 8485, 58 FR 46804, Sept. 3, 1993]

§ 1.401(a)(4)–8 Cross-testing.

(a) *Introduction.* This section provides rules for testing defined benefit plans on the basis of equivalent employer-provided contributions and defined contribution plans on the basis of equivalent employer-provided benefits under § 1.401(a)(4)–1(b)(2). Paragraphs (b)(1) and (c)(1) of this section provide general tests for nondiscrimination based on individual equivalent accrual or allocation rates determined under paragraphs (b)(2) and (c)(2) of this section, respectively. Paragraphs (b)(3), (c)(3), and (d) of this section provide additional safe-harbor testing methods for target benefit plans, cash balance plans, and defined benefit plans that are part of floor-offset arrangements, respectively, that generally may be satisfied on a design basis.

(b) *Nondiscrimination in amount of benefits provided under a defined contribution plan*—(1) *General rule and gateway*—(i) *General rule.* Equivalent benefits under a defined contribution plan (other than an ESOP) are nondiscriminatory in amount for a plan year if—

(A) The plan would satisfy § 1.401(a)(4)–2(c)(1) for the plan year if an equivalent accrual rate, as determined under paragraph (b)(2) of this section, were substituted for each employee's allocation rate in the determination of rate groups; and

(B) For plan years beginning on or after January 1, 2002, the plan satisfies one of the following conditions—

(*1*) The plan has broadly available allocation rates (within the meaning of paragraph (b)(1)(iii) of this section) for the plan year;

(*2*) The plan has age-based allocation rates that are based on either a gradual age or service schedule (within the meaning of paragraph (b)(1)(iv) of this section) or a uniform target benefit allocation (within the meaning of paragraph (b)(1)(v) of this section) for the plan year; or

(*3*) The plan satisfies the minimum allocation gateway of paragraph (b)(1)(vi) of this section for the plan year.

(ii) *Allocations after testing age.* A plan does not fail to satisfy paragraph (b)(1)(i)(A) of this section merely because allocations are made at the same rate for employees who are older than their testing age (determined without regard to the current-age rule in paragraph (4) of the definition of *testing age*