

(iii) If the recomputed aggregate charges exceed the recomputed aggregate credits to the funding standard account as of the end of the first plan year for which the plan uses its new method, an additional contribution to the plan may be necessary to avoid an accumulated funding deficiency in that year. The use of the retroactive recomputation method may also result in an accumulated funding deficiency for years prior to that first year. In such cases, the rules of section 412(c)(10), relating to the time when certain contributions are deemed to have been made, apply.

(6) *Prospective gain or loss adjustment method.* (i) Under this method of adjustment the plan values its assets under its new method no later than the valuation date for the first plan year beginning after [the publication date of this section]

(ii) Regardless of the type of funding method used by a plan, the difference in the value of the assets under the old and the new asset valuation methods may be treated as arising from an experience loss or gain; or alternatively it may be treated as arising from a change in actuarial assumptions.

(iii) The treatment of this difference as an experience gain or loss or as a change in actuarial assumptions must be consistent with the treatment of such gains, losses, or changes under the funding method used by the plan. Thus, if a plan uses a spread gain type funding method other than the aggregate cost method, the difference in the value of assets under the old and the new asset valuation methods may be either amortized or spread over future periods as a part of normal cost. Examples of this type of funding method are the frozen initial liability cost method and the attained age normal cost method. With an aggregate method, the difference in the value of assets under the old and the new asset valuation methods must be spread over future periods as a part of normal cost.

(Secs. 412(c)(2) and 7805 of the Internal Revenue Code of 1954 (88 Stat. 916 and 68A Stat. 917; 26 U.S.C. 412(c)(2) and 7805))

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### § 1.412(c)(3)-1 Reasonable funding methods.

(a) *Introduction*—(1) *In general.* This section prescribes rules for determining whether or not, in the case of an ongoing plan, a funding method is reasonable for purposes of section 412(c)(3). A method is unreasonable only if it is found to be inconsistent with a rule prescribed in this section. The term “reasonable funding method” under this section has the same meaning as the term “acceptable actuarial cost method” under section 3(31) of the Employee Retirement Income Security Act of 1974 (ERISA).

(2) *Computations included in method.* See § 1.412(c)(1)-1(b) for a discussion of matters that are, and are not, included in the funding method of a plan.

(3) *Plans using shortfall.* The shortfall method is a method of determining charges to the funding standard account by adapting the underlying funding method of certain collectively bargained plans in the manner described in § 1.412(c)(1)-2. As such, the shortfall method is a funding method. The underlying method of a plan that uses the shortfall method must be a reasonable funding method under this section. The rules contained in this section, relating to cost under a reasonable funding method, apply in the shortfall method to the annual computation charge under § 1.412(c)(1)-2(d).

(4) *Scope of funding method.* Except for the shortfall method, a reasonable funding method is applied to the computation of—

(i) The normal cost of a plan for a plan year; and, if applicable,

(ii) The bases established under section 412(b)(2)(B), (C), and (D), and (3)(B) (“amortizable bases”).

(b) *General rules for reasonable funding methods*—(1) *Basic funding formula.* At any time, except as provided by the Commissioner, the present value of future benefits under a reasonable funding method must equal the sum of the following amounts:

(i) The present value of normal costs (taking into account future mandatory employee contributions, within the meaning of section 411(c)(2)(C), in the case of a contributory plan) over the future working lifetime of participants;

(ii) The sum of the unamortized portions of amortizable bases, if any, treating credit bases under section 412(b)(3)(B) as negative numbers; and

(iii) The plan assets, decreased by a credit balance (and increased by a debit balance) in the funding standard account under section 412(b).

(2) *Normal cost.* Normal cost under a reasonable funding method must be expressed as—

(i) A level dollar amount, or a level percentage of pay, that is computed from year to year on either an individual basis or an aggregate basis; or

(ii) An amount equal to the present value of benefits accruing under the method for a particular plan year.

(3) *Application to shortfall.* Paragraph (b)(2) will not fail to be satisfied merely because an amount described in (i) or (ii) is expressed as permitted under the shortfall method.

(c) *Additional requirements—(1) Inclusion of all liabilities.* Under a reasonable funding method, all liabilities of the plan for benefits, whether vested or not, must be taken into account.

(2) *Production of experience gains and losses.* If each actuarial assumption is exactly realized under a reasonable funding method, no experience gains or losses are produced.

(3) *Plan population—(i) In general.* Under a reasonable funding method, the plan population must include three classes of individuals: participants currently employed in the service of the employer; former participants who either terminated service with the employer, or retired, under the plan; and all other individuals currently entitled to benefits under the plan. See § 1.412(c)(3)-1(d)(2) for rules concerning anticipated future participants.

(ii) *Limited exclusion for certain recent participants.* Under a reasonable funding method, certain individuals may be excluded from the first class of individuals described in paragraph (c)(3)(i) of this section unless otherwise provided by the Commissioner. The excludable individuals are participants who would be excluded from participation by the minimum age or service requirement of section 410 but who, under the terms of the plan, participate immediately upon entering the service of the employer.

(iii) *Special exclusion for “rule of parity” cases.* Under a reasonable funding method, certain individuals may be excluded from the second class of individuals described in paragraph (c)(3)(i) of this section. The excludable individuals are those former participants who have terminated service with the employer without vested benefits and whose service might be taken into account in future years because the “rule of parity” of section 411(a)(6)(D) does not permit that service to be disregarded. However if the plan’s experience as to separated employees’ returning to service has been such that the exclusion described in this subparagraph would be unreasonable, the exclusion would no longer apply.

(4) *Use of salary scale—(i) General acceptability.* The use of a salary scale assumption is not inappropriate merely because of the funding method with which it is used. Therefore, in determining whether actuarial assumptions are reasonable, a salary scale will not be considered to be prohibited merely because a particular funding method is being used.

(ii) *Projection to appropriate salary.* Under a reasonable funding method, salary scales reflected in projected benefits must be the expected salary on which benefits would be based under the plan at the age when the receipt of benefits is expected to begin.

(5) *Treatment of allocable items.* Under a reasonable funding method that allocates assets to individual participants to determine costs, the allocation of assets among participants must be reasonable. An initial allocation of assets among participants will be considered reasonable only if it is in proportion to related liabilities. However, the Commissioner may determine, based on the facts and circumstances, that it is unreasonable to continue to allocate assets on this basis beyond the initial year. Under a reasonable funding method that allocates liabilities among different elements of past and future service, the allocation of liabilities must be reasonable.

(d) *Prohibited considerations under a reasonable funding method*—(1) *Anticipated benefit changes*—(i) *In general.* Except as otherwise provided by the Commissioner, a reasonable funding method does not anticipate changes in plan benefits that become effective, whether or not retroactively, in a future plan year or that become effective after the first day of, but during, a current plan year.

(ii) *Exception for collectively bargained plans.* A collectively bargained plan described in section 413(a) may on a consistent basis anticipate benefit increases scheduled to take effect during the term of the collective-bargaining agreement applicable to the plan. A plan's treatment of benefit increases scheduled in a collective bargaining agreement is part of its funding method. Accordingly, a change in a plan's treatment of such benefit increases (for example, ignoring anticipated increases after taking them into account) is a change of funding method.

(2) *Anticipated future participants.* A reasonable funding method must not anticipate the affiliation with the plan of future participants not employed in the service of the employer on the plan valuation date. However, a reasonable funding method may anticipate the affiliation with the plan of current employees who have not satisfied the participation requirements of the plan.

(e) *Special rules for certain funding methods*—(1) *Applicability of special rules.* Paragraph (e) of this section applies to a funding method that determines normal cost under paragraph (b)(2)(ii) of this section.

(2) *Use of salary scale.* For rules relating to use of a salary scale assumption, see paragraph (c)(4) of this section.

(3) *Allocation of liabilities.* In determining a plan's normal cost and accrued liability for a particular plan year, the projected benefits of the plan must be allocated between past years and future years. Except in the case of a career average pay plan, this allocation must be in proportion to the applicable rates of benefit accrual under the plan. Thus, the allocation to past years is effected by multiplying the projected benefit by a fraction. The numerator of the fraction is the participant's credited years of service. The denominator

is the participant's total credited years of service at the anticipated benefit commencement date. Adjustments are made to account for changes in the rate of benefit accrual. An allocation based on compensation is not permitted. In the case of a career average pay plan, an allocation between past and future service benefits must be reasonable.

(f) *Treatment of ancillary benefit costs*—(1) *General rule.* Under a reasonable funding method, except as otherwise provided by this paragraph (f), ancillary benefit costs must be computed by using the same method used to compute retirement benefit costs under a plan.

(2) *Ancillary benefit defined.* For purposes of this paragraph an ancillary benefit is a benefit that is paid as a result of a specified event which—

- (i) Occurs not later than a participant's separation from service, and
- (ii) Was detrimental to the participant's health.

Thus, for example, benefits payable if a participant dies or becomes disabled prior to separation from service are ancillary benefits because the events giving rise to the benefits are detrimental to the participant's health. However, an early retirement benefit, a social security supplement (as defined in §1.411(a)-7(c)(4)(ii)), and the vesting of plan benefits (even if more rapid than is required by section 411) are not ancillary benefits because those benefits do not result from an event which is detrimental to the participant's health.

(3) *Exception for certain insurance contracts.* Under a reasonable funding method, regardless of the method used to compute retirement benefit costs, the cost of an ancillary benefit may equal the premium paid for that benefit under an insurance contract if—

- (i) The ancillary benefit is provided under the contract, and
- (ii) The benefit is guaranteed under the contract.

(4) *Exception for 1-year term funding and other approved methods.* [Reserved]

(5) *Section 401(h) benefits.* Section 412 does not apply to benefits that are described in section 401(h) and for which a separate account is maintained.

(g) *Examples.* The principles of this section are illustrated by the following examples:

*Example 1.* Assume that a plan, using funding method A, is in its first year. No contributions have been made to the plan, other than a nominal contribution to establish a corpus for the plan's trust. There is no past service liability, and the normal cost is a constant percentage of an annually determined amount. The constant percentage is 99 percent, and the annually determined amount is the excess of the present value of future benefits over plan assets. The present value of future benefits is \$10,000. Under paragraph (b)(1) of this section, the present value of future benefits must equal the present value of future normal costs plus plan assets. (No amortizable bases exist, nor are there credit or debit balances.) Under method A, the present value of future normal costs would equal the sum of a series of annually decreasing amounts. Because of the constant percentage factor, the present value of future normal costs over the years can never equal \$10,000, the present value of future benefits. In effect, then, assets under method A can never equal the present value of future benefits if all assumptions are exactly realized. Therefore, method A is not a reasonable funding method.

*Example 2.* Assume that a plan, using funding method B, determines normal cost by computing the present value of benefits expected to be accrued under the plan by the end of 10 years after the valuation date and adding to this the present value of benefits expected to be paid within these 10 years. Plan assets are subtracted from the sum of the two present value amounts. The difference then is divided by the present value of salaries projected over the 10 years. Under paragraph (c)(1) of this section, all liabilities of a plan must be taken into account. Because method B takes into account only benefits paid or accrued by the end of 10 years, it is not a reasonable funding method.

*Example 3.* Assume that a plan, using funding method C, determines normal cost as a constant percentage of compensation. (This percentage is determined as follows: The excess of projected benefits over accrued benefits is computed. Then the present value of this excess is divided by the present value of future salaries.) However, the accrued liability is computed each year as the present value of accrued benefits. (This computation does not reflect normal cost as a constant percentage of compensation. Thus, normal cost under the plan does not link accrued liabilities under the plan for consecutive years as would be the case, for example, under a unit credit cost method.) In determining gains and losses, method C compares the actual unfunded liability (the accrued liability

less assets) with the expected unfunded liability (the sum of the actual unfunded liability in the previous year and the normal cost for the previous year less the contribution made for the previous year, all adjusted for interest). Under paragraph (c)(2) of this section, if actuarial assumptions are exactly realized, experience gains and losses must not be produced. Under method C, the use of a constant percentage in computing normal cost (and the expected unfunded liability) coupled with the manner of computing the accrued liability (and the actual unfunded liability) generally produces gains in the earlier years and losses in the later years if each actuarial assumption is exactly realized. Therefore, method C is not a reasonable funding method.

*Example 4.* Assume that a plan, using funding method D, bases benefits on final average pay. Under method D, the past service liability on any date equals the present value of the accrued benefit on that date based on compensation as of that date. The normal cost for any year equals the present value of a certain amount. That amount is the excess of the projected accrued benefit as of the end of the year over the actual accrued benefit at the beginning of the year. Accrued benefits, projected as of the end of a year, reflect a 1-year salary projection. Under paragraph (c)(4) of this section, salary scales reflected in projected benefits must project salaries to the salary on which benefits would be based under the plan at the age when the receipt of benefits under the plan is expected to begin. Because the plan is not a career average pay plan and compensation is projected only 1 year, method D is not a reasonable funding method. (Under paragraph (c)(4) of this section, the use of a salary scale assumption could be required with a unit credit method if, without the use of a salary scale, assumptions in the aggregate are unreasonable.)

*Example 5.* Assume that a plan, using method E, a unit credit funding method, calculates a participant's accrued benefit according to the following formula: 2 percent of final salary for the first 10 years of service and 1 percent of final salary for the years of service in excess of 10. Under the plan, no employee may be credited with more than 25 years of service. The actuarial assumptions for the valuation include a salary scale of 5 percent per year. For a participant at age 40 with 15 years of service, a current salary of \$20,000 and a normal retirement age of 65, the accrued liability for the retirement benefit is the present value of an annuity of \$16,932 per year, commencing at age 65. The \$16,932 is calculated as follows:

$$\$20,000 \times 3.3864 \times 35\% \times \frac{(10 \times 2) + (5 \times 1)}{(10 \times 2) - (15 \times 1) + (15 \times 0)}$$

(3.3864 is 1.05 raised to the 25th power; the 25th power reflects the difference between normal retirement age and attained age (65-40).)

Salary under this method is projected to the age when the receipt of benefits is expected to begin. Therefore, method E meets the requirement of paragraph (c)(4) of this section. Also, the allocation of benefits under method E between past and future years of service meets the requirements of paragraph (e)(3) of this section.

*Example 6.* Assume that a plan that has two participants and that previously used the unit credit cost method wishes to change the funding method at the beginning of the plan year to funding method F, a modification of the aggregate cost method. The modification involves determining normal cost for each of the two participants under the plan. Therefore, it requires an allocation of assets to each participant for valuation purposes. The actuary proposes to allocate the assets on hand at the beginning of the plan year of the change in funding method in proportion to the accrued liabilities calculated under the unit credit cost method. The relevant results of the calculations are shown below:

|   | Employees |      | Totals |
|---|-----------|------|--------|
|   | M         | N    |        |
| Accrued Liabilities (unit credit method): |           |      |        |
| Dollar amount .....                       | 15,670    | 906  | 16,576 |
| Per cent of total .....                   | 94.53     | 5.47 | 100.00 |
| Assets:                                   |           |      |        |
| Dollar amount .....                       | 7,835     | 453  | 8,288  |
| per cent of total .....                   | 94.53     | 5.47 | 100.00 |

The proposed allocation in proportion to the accrued liabilities under the unit credit cost method satisfies the requirements of paragraph (c)(5) of this section at the beginning of the first plan year for which the new method is used.

*Example 7.* The facts are the same as in Example 6. However, the actuary proposes to allocate all the assets to employee M, the older employee. Method F, under these facts, is not an acceptable funding method because the allocation is not in proportion to related liabilities as required under paragraph (c)(5) of this section.

[T.D. 7746, 45 FR 86430, Dec. 31, 1980]

**§ 1.412(c)(3)-2 Effective dates and transitional rules relating to reasonable funding methods.**

(a) *Introduction.* This section prescribes effective dates for rules relating to reasonable funding methods, under section 412(c)(3) and § 1.412(c)(3)-1. Also, this section sets forth rules concerning adjustments to a plan's funding standard account that are necessitated by a change in funding method, and a provision setting forth procedural requirements for use of an optional phase-in of required changes.

(b) *Effective date—(1) General rule.* Except as otherwise provided by subparagraph (2) of this paragraph, § 1.412(c)(3)-1 applies to any valuation of a plan's liabilities (within the meaning of section 412(c)(9)) as of a date after April 30, 1981.

(2) *Exception.* If a collective bargaining agreement which determines contributions to a plan is in effect on April 30, 1981, then § 1.412(c)(3)-1 applies to any valuation of that plan's liabilities as of a date after the earlier of the date on which the last such collective bargaining agreement expires or April 30, 1984.

(3) *Transitional rule.* The reasonableness of a funding method used in making a valuation of a plan's liability as of a date before the effective date determined under subparagraph (1) or (2) of this paragraph is determined on the basis of such published guidance as was available on the date as of which the valuation was made.

(c) *Change of funding method without approval—(1) In general.* A plan that is required to change its funding method to comply with § 1.412(c)(3)-1 is not required to submit the change of funding method for approval as otherwise required by section 412(c)(5). However, this change must be described on Form 5500, Schedule B for the plan year with respect to which the change is first effective.

(2) *Amortization base.* An amortization base must be established in the plan year of the change in method equal to the change in the unfunded liability