

Chapter 10

Coverage and Nondiscrimination – Demo 6

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TAX EXEMPT AND GOVERNMENT ENTITIES*

Introduction

Purpose of chapter

Coverage and Nondiscrimination has been the subject of major CPE Chapters in 1997 (Chapter 1 – Guide to Coverage and Discrimination Issues), 2002 (Chapter 7 – Coverage and nondiscrimination with Emphasis on determinations processing) and 2003 (Chapter 1 – Nondiscrimination – detailed review of demonstrations). The understanding of Coverage and Nondiscrimination is vital. This chapter contains traditional coverage rules, current updates and an emphasis on Demonstration 6 – “New Comparability”, including the Gateways, and Cross-Testing.

This chapter contains republished material from the CPE 2002 and 2003 texts on coverage and nondiscrimination. The information and rules comprehensively covered in the CPE 2002 and 2003 chapters remain the same and are still relevant when processing determination letter applications.

Overview

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Focus of chapter

Focus of this chapter

IRC 410(b) provides the minimum coverage requirements for a qualified plan and IRC 401(a)(4) provides that contributions or benefits may not discriminate in favor of highly compensated employees within the meaning of section 414(q).

This chapter focuses on the relationship of IRC 410(b) and 401(a)(4) in dealing with Demonstration 6.

Overview of Coverage Rules – IRC 410(b)

Three basic tests

There are three basic tests for satisfying coverage.

- The 70% Test (IRC410(b)(1)(A))
- The Ratio percentage test (IRC410(b)(1)(B))
- The Average benefits test (IRC410(b)(1)(C))

First, try to satisfy either the 70% test or the ratio percentage test.

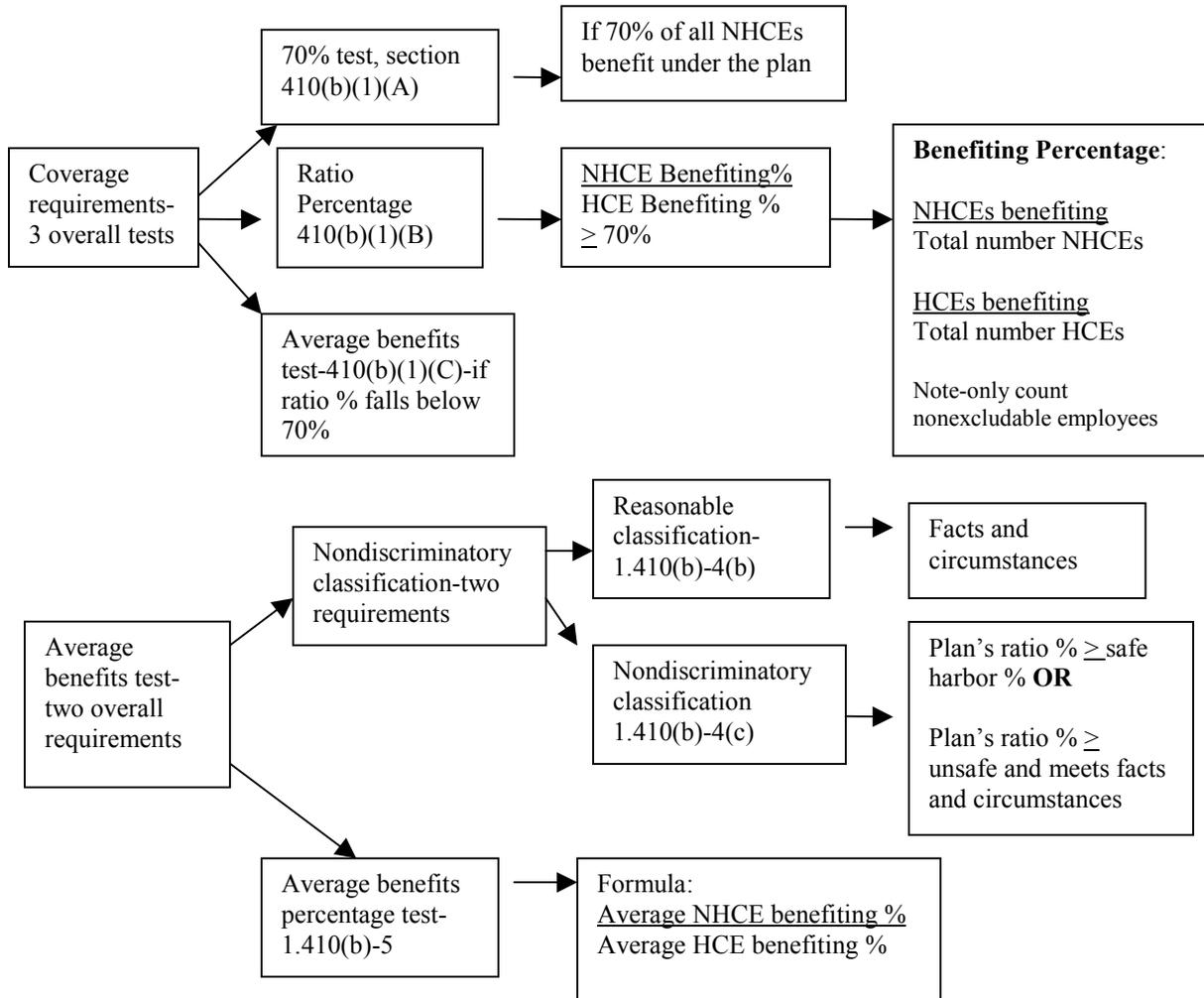
If the ratio percentage test is not met the average benefits test must be satisfied.

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Overview of Coverage Rules – IRC 410(b), Continued

“Picture” of coverage

The following diagram provides a flowchart of coverage.



The Ratio Percentage Test

Introduction The ratio percentage test is satisfied if the plan's "ratio percentage" is greater than or equal to 70%. In measuring coverage, the level or ratio of NHCEs benefiting under the plan are compared with the level or ratio of HCEs benefiting. Thus, the **relative number** of NHCEs and HCEs benefiting are compared under the plan, and the plan is not required to benefit an absolute percentage of NHCEs of the employer.

Determining a plan's ratio percentage The ratio percentage is determined by dividing the NHCEs' benefiting percentage by the HCEs' benefiting percentage, which is

$$\frac{\text{The NHCEs' benefiting percentage}}{\text{The HCEs' benefiting percentage}}$$

If this ratio percentage falls below 70%, the average benefits test must be applied.

Benefiting percentage defined

The NHCE benefiting percentage is a ratio:

$$\frac{\text{\# of NHCE's benefiting under the plan}}{\text{Total \# of nonexcludable NHCE's}}$$

The HCE benefiting percentage uses the same ratio:

$$\frac{\text{\# of HCE's benefiting under the plan}}{\text{Total nonexcludable HCE's}}$$

Example

Employer Y has the following demographics:

	# of NHCEs	# of HCEs
Nonexcludable Employees benefiting	100	5
Total nonexcludable	2,000	100

Continued on next page

The Ratio Percentage Test, Continued

**Example—
calculating
Benefiting
percentages**

NHCE benefiting percentage is calculated as follows:

$$\frac{\text{\# of NHCE's benefiting under the plan (100)}}{\text{Total \# of nonexcludable NHCE's (2,000)}}$$

or 5%

The HCE benefiting percentage is calculated as follows:

$$\frac{\text{\# of HCE's benefiting under the plan (5)}}{\text{Total non-excludable HCE's (100)}}$$

or 5%

**Calculation of
Ratio
percentage**

The plan satisfies the ratio percentage test since the ratio percentage is 100% (5%/5%). Thus, a plan can satisfy coverage even though it covers only fraction of the non-excludable employees.

**Excludable
employees
defined**

The concept of nonexcludable and excludable employees is important for determining who is counted for coverage and nondiscrimination. If an employee is considered excludable, that employee is not counted for coverage and nondiscrimination purposes. Income Tax Regulation section 1.410(b)-6. Thus, these employees are “invisible” and are not counted in either the numerator or denominator of the NHCE or HCE benefiting percentages. Excludable employees are as follows:

- Employees who have not met the minimum age and service,
- Nonresident aliens,
- Collectively bargained Employees,
- Employees of QSLOB's, and
- Certain terminating employees.

Application

See Form 5300 #13, Form 5307 #11 and Form 5310 #13

The Average Benefits Test

The average benefits test

If the plan does not satisfy the ratio percentage test, the average benefits test must be applied. The average benefits test has two parts:

1. nondiscriminatory classification test
 2. average benefits percentage test
-

First Part-Nondiscriminatory classification test

Introduction

The nondiscriminatory classification test has two tests,

1. the reasonable classification, and
 2. the nondiscriminatory classification.
-

1. Reasonable classification test

This is a facts and circumstances analysis, whether the classification satisfies “reasonable business criteria”. Under Treas. Reg. Section 1.410(b)-4(b), the classification must be reasonable and established under objective business criteria that identify the category of employees who benefit under the plan.

Reasonable classifications generally include specified job categories, nature of salary (hourly vs. salaried), geographical location or similar bona fide business criteria. An enumeration of employees by name or other specific criteria having the same effect as an enumeration by name is not considered a reasonable classification.

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First Part-Nondiscriminatory classification test, Continued

2. Nondiscriminatory classification test

There are a series of steps to determine if the plan satisfies the nondiscriminatory classification test.

- First, determine the NHCE concentration percentage:

$$\frac{\text{Total nonexcludable NHCE's}}{\text{Total nonexcludable employees}}$$

- Second, with the concentration percentage, refer to the chart in Income Tax regulations Section 1.401(b)-4(c)(4)(iv), to determine the safe harbor and unsafe harbor percentages.
 - Third, compare the plan's ratio percentage with the safe harbor and unsafe harbor percentages.
-

Three possibilities when comparing plan's ratio with safe and unsafe harbor

1. If the plan's ratio percentage is equal or above the Safe Harbor percentage, then the plan satisfies the nondiscriminatory classification test.
2. If the plan's ratio percentage is **below** the Safe Harbor percentage, but **above** the Unsafe Harbor percentage, then the nondiscrimination classification test must be satisfied based on the facts and circumstances, including the factors described in section 1.410(b)-4(c)(3).

The employer can request a ruling on their average benefits test, (with their determination letter application) including a ruling on the facts and circumstances portion of the Nondiscriminatory Classification Test. This is required if the ratio falls below the Safe Harbor but is above the Non-Safe-Harbor.

3. If the plan's ratio percentage is equal or below the unsafe harbor %, then the plan fails the nondiscriminatory test, and thus fails coverage.
-

Second part-the average benefits test

The Average Benefits Percentage test

On this portion of the overall average benefits test, the plan's average benefit percentage has to be equal to or greater than 70%. The average benefit percentage is calculated:

$$\frac{\text{Average benefit \% of NHCE's}}{\text{Average benefit \% of HCE's}}$$

Determining the average benefit percentage-section 1.410(b)-5

The average benefit percentage of the NHCE's, determined individually for each NHCE, is the average of all the NHCE's actual benefit percentages, as a percentage of their compensation. The plans considered for this test is all of the employer's plans (including controlled groups), in the "testing group" for that testing period. The same calculation is used for the HCE average benefit percentage.

Note that for purposes of this test, all non-excludable NHCEs and HCEs are taken into account even if they are not benefiting under any plan that is taken into account, Treas. Reg. Section 1.410(b)-5(c).

Defining employee benefit Percentages

The benefit percentage, for each participant, is defined as the normal accrual rate or allocation rate determined under the 401(a)(4) regulations, and expressed as either a percent of annual average compensation or a dollar amount. For defined contribution plans, plan year compensation can be used.

How Employee Benefit percentages are calculated

The employee benefit percentage is calculated in the same manner as the accrual and allocation rates for nondiscrimination. Thus, the employer can utilize the same optional rules such as cross testing (under 1.401(a)(4)-8), imputing permitted disparity, (under 1.401(a)(4)-7), and restructuring (under 1.401(a)(4)-9) etc. that are used to determine the accrual rates and allocation rates under the general test of sections 1.401(a)(4)-2(c) and -3(c). However, the employer does not have to utilize the same optional rules for the average benefits percentage (for purposes of IRC410(b) testing) as those that are used for nondiscrimination testing, (for purposes of IRC401(a)(4)).

Remember, all non-excludable employees of the employer (or controlled group) are counted. Thus, if a non-excludable NHCE does not benefit under the plan, the NHCE benefit percentage is 0% and is part of the calculation, even if that employee is part of another company of the controlled group.

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Second part-the average benefits test, Continued

How Employee Benefit percentages are calculated
(continued)

When determining employee benefit percentages, only employer-provided contributions and benefits are taken into account. Thus, employee contributions (both allocated to separate accounts and not allocated to separate accounts) and benefits derived from such contributions are not taken into account for determining employee benefit percentages.

Not all aggregated plans may use optional rules

Note that not all aggregated plans may use these optional rules when determining the employee benefit percentage for the average benefit percentage test. For example, ESOPs, cannot use cross testing to determine the employee benefit percentages, since ESOPs cannot be cross tested in determining the allocation rates for the general test.

Testing group defined

The testing group for purposes of the average benefits percentage test is the group of plans that are included when determining the employee benefit percentages. The average benefit test has a very broad definition of which plans are included in the testing group. Overall, there are two parts of this definition:

- 1) Plans that can be permissively aggregated are part of the testing group, and
 - 2) 401k and ESOP plans that otherwise must be mandatorily disaggregated are part of the testing group to calculate the average benefits percentage test..
-

Testing group includes all plans that can be permissively aggregated

Under Treas. Reg. Section 1.410(b)-7(e), the testing group is the plan and all other plans that can be permissively aggregated with that plan. Under the general rule for permissive aggregation, the employer may designate two separate plans as a single plan under Treas. Reg. Section 1.410(b)-7(d). However, certain plans cannot be aggregated under section 1.410(b)-7(c).

Testing group includes ESOPs and 401k plans

Section 1.410(b)-7(e) also provides that the mandatory disaggregation rules with respect to ESOPs and 401(k)/(m) plans are inapplicable. Thus, allocations under those plans would be included in determining the employee benefit percentages for purposes of the average benefits percentage test of Section 1.410(b)-5. For example, deferrals to a 401(k) plan are counted as employer contributions for the Average Benefits Test, see section 1.410(b)-5(d) and 1.410(b)-7(e).

The Average Benefits Test Continued

**Introduction-
disaggregation**

For background purposes, the following paragraphs identify contributions or types of plans that are generally required to be disaggregated.

**Contributions
disaggregated
for coverage**

The following are considered separate plans under Income Tax Regulations the 1.410(b)-7(c) disaggregation rules. The separate plans are the portion of the employer's defined contribution plan that provides:

- employer nonelective contributions,
- elective contributions under 401(k),
- matching contributions under 401(m),
- employee after tax contributions under 401(m), and
- ESOP contributions.

Please note that the average benefits percentage test exception above applies to these items.

**Defining
disaggregation**

Contributions that are disaggregated are not part of the other disaggregated contributions' coverage test. For example, if a plan has a profit sharing component and 401k elective deferrals, these types of contributions are treated as two separate plans must each separately pass coverage.

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The Average Benefits Test Continued, Continued

Plans that are disaggregated

- A Defined Benefit plan must be disaggregated with respect to the allocations made to individual participant accounts under IRC 414(k), within a defined benefit plan.
 - A DB plan must also be disaggregated where employee voluntary contributions are permitted, under 401(m).
 - Plans benefiting Collectively bargained and non-collectively bargained employee.
 - Plans benefiting employees of one or more than Qualified Separate Lines of Business,
 - Plans maintained by more than one employer,
 - Restructured component plans, and
 - If an employer applies section 410(b) separately to the portion of a plan that benefits employees who satisfy age and service conditions under the plan, (that are lower than the greatest minimum age and service conditions permissible under section 410(a)), then, the otherwise excludable employees are to be disaggregated from the part of the plan that benefits non-excludable employees.
-

Demo 5

A determination letter application can request a ruling on the Average Benefits Test, for purposes of satisfying IRC410(b), through submission of a Demonstration 5, (e.g. for plans that seek to satisfy the requirements of IRC410(b), through use of the Average Benefits Test). For ongoing plans, submission is discretionary. For terminating plans, submission is mandatory if there has not been a ruling on the Average Benefits Test in the last 3 years.

EXAMPLE Illustrating Coverage

Facts

Rainbow Co. has a total of 305 employees in divisions A, B, and C.

- Division A has 60 NHCEs benefiting and 72 HCEs benefiting.
- Division B has 65 NHCEs and 8 HCEs.
- Division C has 100 NHCEs who are covered under a collective bargaining agreement.

Rainbow Co. maintains a profit sharing plan (covering only Division A) and provides a three percent allocation each year for Division A employees.

Does the plan satisfy coverage?

Determine non-excludable NHCEs and HCEs

First, determine the total number of non-excludable NHCEs and HCEs. Since Division C employees are covered under a collective bargaining agreement, these employees are excludable and not considered when testing coverage.

Thus, there are 205 total non-excludable employees:

- 125 NHCEs, (60 from Division A, and 65 from Division B), and
 - 80 HCEs (72 from Division A and 8 from Division B).
-

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EXAMPLE Illustrating Coverage, Continued

Determine the benefiting percentages

Remember, the ratio percentage is a fraction:

$$\frac{\% \text{ NHCEs benefiting under the plan}}{\% \text{ HCEs benefiting under the plan}}$$

Before you can calculate the ratio percentages, the NHCE benefiting percentages have to be calculated. The benefiting percentage for NHCEs (or HCEs) is:

$$\frac{\text{NHCEs (or HCEs) benefiting under the plan}}{\text{Total Nonexcludable NHCEs (or HCEs) of the employer}}$$

Applying the above facts, the NHCE benefiting percentage in division A is:

$$\frac{60 \text{ NHCEs benefiting (Division A NHCEs)}}{125 \text{ total Nonexcludable NHCEs}}$$

or 48%.

The HCE benefiting percentage under the plan is:

$$\frac{72 \text{ HCEs benefiting (Division A HCEs)}}{80 \text{ total Nonexcludable HCEs}}$$

or 90%.

Calculating the plan's ratio percentage

Once the benefiting percentages are determined, you can now calculate the ratio percentage:

$$\frac{48\% \text{ (NHCE benefiting percentage)}}{90\% \text{ (HCE benefiting percentage)}}$$

or 53%.

Plan fails ratio percentage test

Since the plan's ratio percentage test is below 70%, it fails the ratio percentage test. Thus, the average benefits test must be applied.

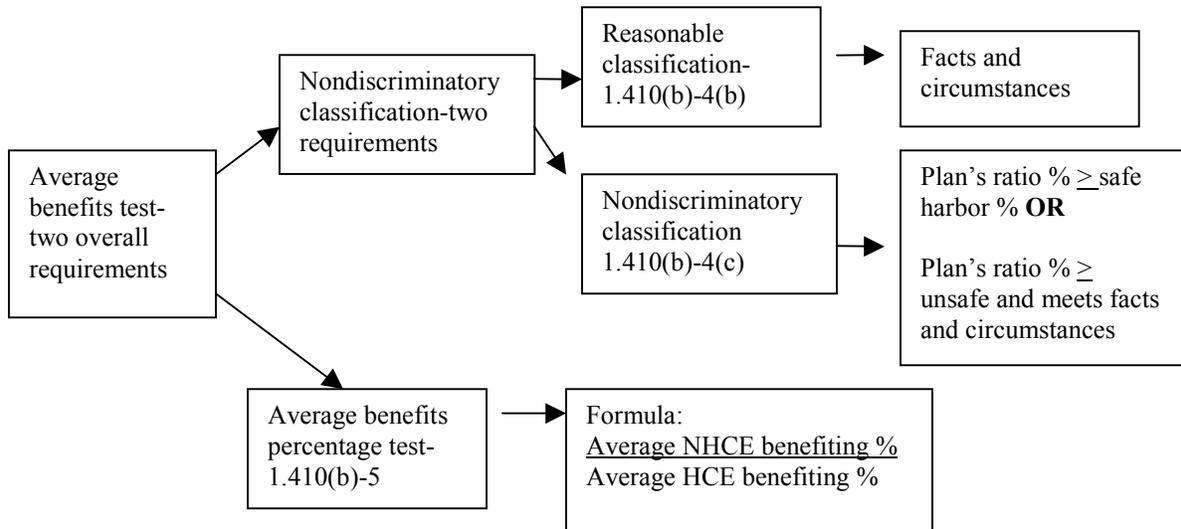
Example continues-illustrating overall average benefits test

Average benefits test, Demo 5

The Average Benefits Test is submitted on a Demonstration 5, specifically to demonstrate compliance with IRC410(b). It is optional for an ongoing plan that desires a ruling on IRC410(b), using the Average Benefits Test. Demonstration 5 is required for terminating plans, if the plan relies on the Average Benefits Test to satisfy IRC410(b), and it has not been ruled on in the last 3 years. The Demonstration 5 must show both parts, the nondiscriminatory classification test and the average benefits percentage test.

Review of average benefits test

The following diagram provides the average benefit requirements.



Two parts of average benefits test

As the diagram shows, there are two parts of the average benefits test:

- The nondiscriminatory classification test and
- The average benefits percentage test.

Example -illustrating nondiscriminatory classification test

**the
nondiscriminat
ory
classification
test**

This test also has two pieces:

- Reasonable classification, and
 - Nondiscriminatory classification
-

**Reasonable
classification--
Example**

Applying the above facts, the employees who benefit under the plan are classified by division (only Division A employees participate). Classification by a division would be considered a reasonable classification.

**Nondiscriminat
ory
classification--
determine
NHCE
concentration
percentage**

There are a number of steps to determine if the plan satisfies the nondiscriminatory classification test.

First step, determine the NHCE concentration percentage.

The NHCE concentration percentage is $125/205$ or 60.9%.

**Determine the
Safe and unsafe
harbor
percentages--
background**

Second step, using the concentration percentage, determine the safe and unsafe harbor percentages by referring to the table in the regulations. In this case, the NHCE Concentration percentage of 60.9% is not rounded to 61%, but is considered 60%.

Section 1.410(b)-4 of regulations requires that the safe and unsafe harbor percentage start at 50% and 40% respectively for a 60% NHCE concentration percentage. There is a chart in the regulations provide for the safe and unsafe harbor percentages for concentration percentages above 60%.

Note that the safe harbor and unsafe harbor percentages of 50% and 40% can be calculated by reducing them by .75% for each whole percentage point by which the NHCE concentration percentage exceeds 60%. For example, if the NHCE concentration percentage is 61%, the safe and unsafe harbor percentages are 49.25 and 39.25 respectively.

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Example -illustrating nondiscriminatory classification test, Continued

Example- determining safe and unsafe harbor

Since 60.9% does not exceed 60% by a whole percentage point, the safe and unsafe harbor percentages are determined using 60%. Thus, the plan's safe and unsafe harbor percentage under Section 1.410(b)-4 are 50% and 40% respectively.

Conclusion- plan passes the nondiscriminat ory classification test

Once the safe and unsafe harbors are determined, the plan's ratio percentage is compared with the safe and unsafe harbor percentages. Remember, there are three choices. If the plan's ratio percentage test:

- is equal to or above the safe harbor, the plan satisfies the nondiscriminatory classification test.
- is below the safe harbor, but is equal or above the unsafe harbor, then the plan can satisfy this test based on facts and circumstances.
- falls below the unsafe harbor, then the plan fails this test.

Since the plan's ratio percentage of 53% is above the safe harbor percentage, the nondiscriminatory classification test is satisfied.

Example-illustrating average benefits percentage test

Formula

The basic average benefit percentage is calculated as follows:

$$\frac{\text{Actual benefit \% of NHCEs}}{\text{Actual benefit \% of HCEs}}$$

Continued on next page

Example-illustrating average benefits percentage test,

Continued

Defining actual benefit percentage

The “actual” benefit percentage of the NHCEs is the average of all the employer's nonexcludable NHCE's employee benefit percentages.

The employee percentage is determined under the 401(a)(4) regulations, on either a contributions or benefits basis, for each participant, which then averaged taking into account all non-excludable NHCEs . The same methodology is used to determine the HCE average benefit percentage.

If a nonexcludable employee does not benefit under the plan, their benefit percentage is 0%.

The NHCE actual benefit percentage

Assume the allocation rate under the plan is 3% of compensation and no optional rules were applied. The NHCE average benefit percentage is:

- 60 NHCEs @ 3% (180%) (Division A employees)
- 65 NHCEs @ 0% (0%) (Division B employees who do not benefit under the plan.)

The actual benefit percentage is averaged over the **total number** of nonexcludable employees or 125 employees. Thus, the average benefit percentage for NHCEs is 180%/125 employees or 1.44%.

Note any disaggregated 401k or ESOP allocations would be included in this allocation. For example, if Division B was eligible for a 401k plan, the employees who received allocations would be counted.

The HCE actual benefit percentage

The average benefit percentage for the HCEs is:

- 72 HCEs @ 3% (216%) (Division A ees)
- 8 HCEs @ 0% (0%) (Division B ees)

Thus, the average benefit percentage for HCEs are 216%/80 or 2.7%

Continued on next page

Example-illustrating average benefits percentage test,

Continued

Determining whether plan satisfies average benefit percentage test

The average benefit percentage of the plan is:

$$\frac{1.44\% \text{ (NHCE average benefit percentage)}}{2.7\% \text{ (HCE average benefit percentage)}}$$

This equals 53%, which is less than the required 70%. Therefore, this plan fails the average benefit percentage test under Section 1.410(b)-5, since the average benefit percentage of the NHCEs was not at least 70% of the average benefit percentage of the HCEs. The plan, therefore, fails coverage under IRC 410(b) and IRC 401(a)(3), and is thus disqualified under IRC 401(a) and IRC 501(a)

Example-plan provides for a 401k plan for Division B employees

If employer had a 401k plan for Division B

Same facts as previous example. However, under the plan, Division B employees were eligible to make elective deferrals of up to 4%.

Mandatory disaggregation for Division A profit sharing and Division B 401k

With respect to coverage, the profit sharing component is considered separate from the 401k component.

With respect to the profit sharing (Division A), the component is treated as a separate plan for coverage and nondiscrimination purposes. Thus, the ratio percentage of the Division A component is calculated in the same manner.

Thus, as stated above, the profit sharing component (Division A) has the same

- NHCE and HCE benefiting percentage (see above) and
 - ratio percentage of 53%.
 - Result with respect to the reasonable classification test.
-

Continued on next page

Example-plan provides for a 401k plan for Division B employees, Continued

Average benefit percentage test for Division A

Remember, for purposes of the average benefit percentage test, the profit sharing component and the 401k component is treated as part of the same testing group—the mandatory disaggregation rule does not apply.

The following table provides the 401k contributions made by Division B employees. The 8 HCEs made elective deferrals of 4%. The breakdown of NHCEs are as follows:

NHCEs	Elective deferrals	Total Percentage of compensation
20	0	0
17	1%	17%
12	2%	24%
10	3%	30%
6	4%	24%
Total		95%

The NHCE actual benefit percentage

The NHCE actual (average) benefit percentage is calculated as follows:

- 180% for Division A employees (3% x 60), and
- 95% for Division B employees.

Or 275%

These percentages are then divided over the total number of nonexcludable NHCEs:

$$\frac{180\% + 95\%}{65} \text{ or } 4.23\% \text{ actual benefit percentage}$$

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Example-plan provides for a 401k plan for Division B employees, Continued

**The HCE
actual benefit
percentage**

The HCE actual benefit percentage is calculated as follows:

Division A employees-216% (72 x 3%), and

Division B employees-401k- 32% (8 x 4%)

Or 248%.

The actual benefit percentage is:

$$\frac{216\% + 32\%}{80} \text{ or } 3.1\%$$

**Average
Benefits
Percentage test
is satisfied**

The average benefit percentage of the plan is as follows:

$$\begin{array}{l} 4.23\% \text{ (NHCE average benefit percentage)} \\ 3.1\% \text{ (HCE average benefit percentage)} \end{array}$$

Since the average benefit percentage exceeds 70%, the plan satisfies coverage.

Note that the example does not determine whether the 401k plan satisfies the ADP test. In addition,

**Coverage for
401k
component**

Since the 401k component is disaggregated and treated separately for coverage and nondiscrimination purposes, this component must also pass coverage. As stated above, all Division B nonexcludable employees are eligible to participate in the 401k.

Continued on next page

Example-plan provides for a 401k plan for Division B employees, Continued

**NHCE
benefiting
percentage for
the 401k
component**

Under Treas. Reg. Section 1.410(b)-3(a)(2), an employee is treated as benefiting under a 401k plan if the employee is eligible to participate in the plan.

Since all of Division B employees are eligible to participate, they are treated as benefiting under the plan. Thus, the NHCE benefiting percentage is:

$$\frac{65 \text{ NHCEs benefiting}}{125 \text{ total nonexcludable NHCEs}}$$

Or 52%.

Note that the Division A employees do not benefit under the Division B disaggregated component. However, the Division A employees are part of the total nonexcludable NHCEs of the employer.

**HCE benefiting
percentage**

The HCE benefiting percentage for Division B 401k plan is the following:

$$\frac{8 \text{ NHCEs benefiting}}{80 \text{ nonexcludable HCEs}}$$

Or 10%/ As stated above, the Division A HCEs do not benefit under the Division B 401k plan. However, the Division A HCEs are part of the total nonexcludable HCEs and are in the denominator of the benefiting percentage calculation.

**Ratio
Percentage of
401k
component**

The ratio percentage of the 401k component is the following:

$$\frac{52\% \text{ (NHCE benefiting percentage)}}{10\% \text{ (HCE benefiting percentage)}}$$

Or 520%. Thus, the 401k component satisfies the ratio percentage test.

Nondiscrimination – Overview of safe harbor and general test

Overview-safe harbor vs. general test

The plan automatically satisfies IRC401(a)(4), if the plan:

- allocates contributions pursuant to a Design Based Safe-Harbor Defined Contribution Plan Formula found in I.T. Regs. 1.401(a)(4)-2(b)(2), or
- accrues benefits pursuant to a Designed Based Safe-Harbor Defined Benefit accrual formula found in I.T. Regs. 1.401(a)(4)-3(b)(2), (3), (4) and (5).

If the plan uses:

- a Non-Design Based Safe-Harbor allocation or accrual formula as found in I.T. Regs. 1.401(a)(4)-2(b)(3), or 1.401(a)(4)-3(b)(4)(i)(C)(3), or
- a General Test allocation or accrual formula, as found in I.T.Reg. 1.401(a)(4)-2(c) and 1.401(a)(4)-3(c),

then, the employer must submit a Demonstration 6 to receive a ruling with respect to the nondiscrimination requirements. Demonstration 6 is used to demonstrate compliance with IRC401(a)(4) for the plan year.

As stated above, submission of a Demonstration 6 with the employer's determination letter application is discretionary for ongoing plans but is required for terminating plans that have not received a ruling on a Demonstration 6 in the preceding 3 years.

Overview-DC safe harbor

Introduction- Defined Contribution safe harbor

A Defined Contribution plan must provide for either type of allocation formula to be a Safe Harbor plan:

- Uniform allocation formula (design based safe harbor) or
 - Uniform points allocation formula (non-design based safe harbor).
-

A Defined Contribution Design Based Safe-Harbor

A Defined Contribution Design Based Safe-Harbor requires a uniform allocation formula that allocates to each employee:

- The same percentage of plan year compensation,
 - the same dollar amount, or
 - the same dollar amount for each uniform unit of service (not to exceed one week).
-

Nondesign based safe harbor

A non-Design-Based Safe-Harbor utilizes a Demonstration 6 to test the Non-Design Based Safe-Harbor under 401(a)(4). However, a non-design based safe harbor does not utilize Rate Groups. Instead, for a Defined Contribution plan, the average of all NHCEs individual allocations, as a percentage of their individual compensation, are compared to the average of all HCEs individual allocations as a percentage of their individual compensation under the plan.

The average allocation percentage of NHCEs cannot be less than the average allocation percentage of the HCEs.

In a Defined Benefit Non-Design Based Safe-Harbor plan, the average accrual increases for the NHCEs as a percentage of their individual average annual compensation must be at least 70% of the average annual accrual increases for the HCEs as a percentage of their individual average annual compensation for a plan year.

Requirements for uniform points allocation

Each employee must receive the same points for each year of age, for each year of service and/or for each unit of compensation. In addition, the plan cannot impute permitted disparity or use grouping to pass. (I.T.Reg. 1.401(a)(4)-2(b)(3)).

Continued on next page

Overview-DC safe harbor, Continued

**Uniform Points
allocation
formula**

A uniform points allocation formula allows allocations to be based on units of compensation, years of service and/or age. Points can be assigned for units of compensation (not to exceed \$200), units for each year of service and/or units for each year of age. Any combination of these 3 points' methods can be used. However, the formula must provide that Points are assigned for either age or service. The points are totaled for each employee and an allocation is made based on the ratio:

$$\frac{\text{Individual Employee points}}{\text{Total points of all employees}}$$

Once allocations are determined, the average allocation rate for highly compensated employees (HCEs), as a percentage of their 414(s) compensation, cannot exceed the average allocation rate for non-highly compensated employees (NHCEs).

**Demo 6
required**

A modified Demonstration 6 is required to demonstrate compliance with this average allocation percentage test.

Overview-DB safe harbor

Introduction- DB safe harbor

In order for a DB plan to be considered a safe harbor plan, the formula has to satisfy two requirements:

1. the uniformity requirements under 1.401(a)(4)-3(b)(2) and
 2. one of the accrual requirements under 1.401(a)(4)-3(b)(3), (4) or (5)
-

Defined Benefit Design Based Safe-Harbor Uniformity requirements

In order for a Defined Benefit Plan to be a Design Based Safe Harbor formula it must satisfy the uniformity rules, the formula must satisfy each of the following five requirements:

1. Uniform normal retirement benefit formula,
2. Uniform post normal retirement benefit,
3. Uniform subsidies,
4. No contributory DB plans allowed, and
5. The period of accrual must be uniform and uniformly applied

See CPE 2002 Chapter 7 pages 30-42 for detailed explanations and examples.

Defined Benefit Design Based Safe-Harbor accrual requirement

The Defined Benefit Design Based Safe Harbor Benefit Accrual Rules are as follows:

- 1.401(a)(4)-3(b)(3) for unit credit plans,
- 1.401(a)(4)-3(b)(4) for fractional accrual rule plans (Note: if less than 25 years is required at normal retirement to receive an unreduced benefit, the plan is utilizing a nondesign based safe harbor formula – 1.401(a)(4)-3(b)(4)(i)((C)(3)), or
- 1.401(a)(4)-3(b)(5) for fully insured plans under IRC 412(i)

See CPE 2002 Chapter 7 pages 43-55 for detailed explanations and examples.

General Test – Demo 6

Major steps for running general test	<p>Plans that use a General Test benefit formula, can request a ruling, covering IRC401(a)(4), as part of their determination letter application. There are three steps involved:</p> <ol style="list-style-type: none">1. The allocation or accrual rates for each participant must be determined.2. Once the allocation or accrual rates are determined, they are used to form rate groups.3. Once the rate groups are determined, each rate group must satisfy one of the IRC section 410(b) coverage tests.
Overview of rate groups	<p>In order to determine whether a plan satisfies the general test, the plan is broken down into rate groups, or “mini plans”. Each HCE who receives an allocation or an accrual rate forms a rate group. Every other participant who has an equal or greater allocation rate or accrual rate than the HCE is a member of that rate group.</p> <p>This information is to be provided on a Demonstration 6 for a determination letter application seeking a ruling on IRC401(a)(4). If the plan is under examination, a General Test must be provided for each year under audit. A General Test provided during an audit must mirror the requirements of the Demonstration 6.</p>
DC plans—rate group based on allocation rates	<p>In a Defined Contribution plan, a rate group consists of</p> <ul style="list-style-type: none">• an HCE, and• every other participant who has an allocation rate greater than or equal to such HCE.

Allocations included in The General Test

What allocations are included in the general test

The following chart describes the allocations that are taken into account to calculate the allocation rate, of each participant, as a percentage of their compensation. This is used for purposes of forming rate groups.

Note that if one of the rate groups fails the ratio percentage test, then the rate group must satisfy nondiscriminatory classification test and the plan must satisfy the average benefits test, as a whole.

The General Test, (Demonstration 6), may use annual additions to determine the allocation or accrual rates. However, this term can be inconclusive as to whether the proper allocations/accrual rates were calculated for purposes of determining the allocation/accrual rates.

Allocations Included in General Test Continued

Type of allocation included for purposes of the general test	
Counted	Not Counted
"The amounts taken into account in determining allocation rates for a plan year include all employer contributions ... that are allocated or treated as allocated to the account of an employee under the plan for the plan year, other than amounts described in 1.401(a)(4)-2(c)(2)(iii). "Employer contributions include annual additions described in 1.415-6(b)(1) and 1.415-6(b)(2)(i) (regarding amounts arising from certain transactions between the plan and the employer)." See §1.401(a)(4)-2(c)(2)(ii). Section 1.415-6(b)(2)(i)	Excludes the Portion of the plan that is an ESOP or is not included in the general test because of Mandatory Disaggregation, See Treasury Regulation 1.401(a)(4)-1(c)(4)(i) and 1.410(b)-7(c).
Includes QNECs as described in Treasury Regulation §1.401(k)-1(b)(5). See Treasury Regulation §1.401(a)(4)-1(b)(2)(ii)(B).	Excludes allocations of income gains and expenses. §1.401(a)(4)-2(c)(2)(iii).
Includes QMACS as described in Treasury Regulation §1.401(m)-1(b)(5). See Treasury Regulation §1.401(a)(4)-1(b)(2)(ii)(B).	Excludes Employee contributions §1.401(a)(4)-1(c)(7).
Includes Employer nonelective contributions See Treasury Regulation §1.401(a)(4)-1(b)(1)(ii)(A) and §1.401(a)(4)-2(c)(2)(ii). Also, includes Safe Harbor nonelective and Safe Harbor matching contributions to a safe harbor 401(k) plan as per notice 98-52 and Section 613 of EGTRRA.	Excludes contribution to a qualified CODA, See Treasury Regulation §§1.401(a)(4)-1(b)(2)(ii)(B), 1.401(a)(4)-1(c)(4)(i) and 1.410(b)-7(c) (Mandatory Disaggregation).

Continued on next page

Allocations Included in General Test Continued, Continued

What allocations are included in the general test (continued)

Type of allocation included for purposes of the general test	Type of allocation included for purposes of the general test
Includes Forfeitures allocated see Treasury Regulation §1.401(a)(4)-1(b)(1)(ii)(A) and §1.401(a)(4)-2(c)(2)(ii) For the rate group test, "The amounts taken into account in determining allocation rates for a plan year include forfeitures that are allocated or treated as allocated to the account of an employee under the plan for the plan year, other than amounts described in 1.401(a)(4)-2(c)(2)(iii)." See §1.401(a)(4)-2(c)(2)(ii). Section 1.415-6(b)(2)(i) includes Forfeitures allocated see Treasury Regulation §1.401(a)(4)-1(b)(1)(ii)(A) and §1.401(a)(4)-2(c)(2)(ii).	Excludes allocations of matching contributions. See Treasury Regulation §§1.401(a)(4)-1(b)(2)(ii)(B). , 1.401(a)(4)-1(c)(4)(i) and 1.410(b)-7(c) (Mandatory Disaggregation)
Includes contributions to a nonqualified CODA, See Treasury Regulation §§1.401(a)(4)-1(b)(2)(ii)(B).	
Includes allocations of Elective contributions described in Treasury Regulation §1.401(k)-1(b)(4)(iv) that <u>fail</u> to satisfy the allocation and compensation requirements of §1.401(k)-1(b)(4)(i). See §§1.401(a)(4)-1(b)(2)(ii)(B).	
Includes allocations of matching contributions that <u>fail</u> to satisfy Treasury Regulation §1.401(m)-1(b)(4)(ii)(A). See Treasury Regulation §§1.401(a)(4)-1(b)(2)(ii)(B).	

DB accrual rates

Two accrual rates when general testing DB plans

For defined benefit plans , there are two different types of accrual rates

- Normal accrual rates and
- Most valuable accrual rates.

To determine these accrual rates, the **accrual increase** must be determined, for each participant for both their Normal Form of Benefit and their Most Valuable Form of Benefit. These benefits are determined as of Normal Retirement Age, and are then divided by their Testing Service. The formulas are as follows:

$$\frac{\text{Accrued benefit}}{\text{Testing service}} \quad \frac{\text{Most valuable optional form of benefit}}{\text{Testing service}}$$

The accrued benefit, most valuable optional form of benefit and testing service are measured during the measurement period. The normal and most valuable accrual rate is expressed as either a dollar amount or as a percentage of the employee's average annual compensation.

DB plan-rate group

The rate group consists of the HCE with a normal and most valuable accrual rate and every other r participant whose normal and most valuable accrual rate equal or exceeds those rates of the HCE.

Normal accrual rate

The normal accrual rate for an employee for the plan year is the **increase** in the employee's accrued benefit (within the meaning of section 411(a)(7)(A)(i) during the measurement period.

Most valuable accrual rate

The most valuable optional form of benefit used to determine the most valuable accrual rate reflects the value of all Optional Forms of Benefits accrued or treated as accrued that are payable in any form and at any time under the plan.

Continued on next page

DB accrual rates, Continued

- Measurement period**
- The measurement period is the period over which the testing service and the increase in the accrued benefit, are measured. There are three possible measurement periods that can be chosen by the plan:
 1. Current plan year method
 2. Accrued to date method
 3. Projected method
-

Testing service The testing service comprises the years of service in which the employee benefits under the plan (and can include other service taken into account by the plan).

Determining normal accrual rates

Introduction This section illustrates how normal accrual rates are developed using the three measurement periods, current, accrued to date and projected methods. After each measurement period is defined, an example illustrates the measurement period.

Current plan year measurement period If the measurement period is the current plan year (the annual method), the accrued benefit earned for that year is calculated and is divided by the amount of the testing service earned during that year. The testing service is "1" under Treas. Reg. section 1.401(a)(4)-3(d)(1)(iv)(B)(2).

Since the accrued benefit earned for that year is divided by "1", the accrual rate is the accrued benefit earned during the plan year. Again, the measurement period determines the amount of accrued benefit and the years of service to be taken into account in order to determine the accrual rate.

Continued on next page

Determining normal accrual rates, Continued

**Example -
plan's benefit
formula**

The Foster Defined Benefit plan has the following benefit formula:

- 2% x years of service x high 3 years average annual compensation for the first 10 years,
- 1.5% x years of service x high 3 years average annual compensation for the next 10 years, and
- 1% x years of service x high 3 years average annual compensation for all years thereafter.

Note that the plan uses average annual compensation that satisfies the requirements of section 1.401(a)(4)-3(e)(2). Thus, the definition of compensation is nondiscriminatory under I.R.C. section 414(s).

**Determining
normal accrual
rate for an
employee**

Normal retirement age is 65. Mr. Jenkins is age 40 and worked for the company for 15 years. His high 3 years "average annual compensation" is \$50,000. The measurement period is the current plan year.

The accrual rate would be determined based on applying the formula:

$1.5\% \times 1 \text{ year of service} \times 50,000$ (or \$750 per year) divided by "1" (the testing service) or \$750 per year.

This benefit can be expressed as either a dollar amount (\$750) or as percentage of average annual compensation, which would be 1.5% ($\$750/\$50,000$).

**Average annual
compensation**

Please note that average annual compensation is not required when applying the plan's formula to determine the increase in a participant's accrued benefit. Thus, when providing for a benefit, a "general test" plan's formula can utilize any definition of compensation.

However, if the accrual rates are going to be expressed as a percentage of compensation when forming rate groups etc., the compensation used must be average annual compensation, that is using a 414(s) definition over a specified period of time.

The definition and explanation of average annual compensation can be found in Treas. Reg. section 1.401(a)(4)-3(e)(2).

Continued on next page

Determining normal accrual rates, Continued

Accrued to date method-defined If the measurement period is the current plan year and all prior years (the accrued to date method), the accrued benefit taken into account is the total accrued benefit earned by the employee up to the current plan year. The testing service is also determined by looking at all past years up to the current plan year.

Example - plan's benefit formula Same facts as previous example, although the plan takes into account the current plan years and all prior years. The Foster Defined Benefit plan has the following benefit formula:

- 2% x years of service x high 3 years average annual compensation for the first 10 years,
- 1.5% x years of service x high 3 years average annual compensation for the next 10 years, and
- 1% x years of service x high 3 years average annual compensation for all years thereafter.

Example illustrating accrued to date With the accrued to date method, the accrual rate would be based on the benefit earned by Mr. Jenkins up to the current plan year. The testing service would be 15 years, taking into account the current and all prior years. The accrual rate is calculated as follows:

$$\frac{\text{Accr. ben.} - 2\% \times 10 \text{ years} \times \$50,000 \text{ plus } 1.5\% \times 5 \text{ years} \times \$50,000}{\text{Testing service} - 15 \text{ years}}$$

or a benefit of \$917 per year, which can be expressed as either a dollar amount or a percentage of average annual compensation. The percentage would be 1.83% ($\$917/\$50,000$).

Projected method If the measurement period is the current year and all prior and future years (the projected method), the accrued benefit taken into account is the total accrued benefit projected to be earned by the employee up to the employee's testing age.

The testing service is determined by using all years up to the employee's testing age. Testing Age is generally the Participant's Normal Retirement Age, under the plan.

Continued on next page

Determining normal accrual rates, Continued

**Example -
plan's benefit
formula**

Same facts as the previous example although the plan takes into account the current plan years and all prior and future years. The Foster Defined Benefit plan has the following benefit formula:

- 2% x years of service x high 3 years average annual compensation for the first 10 years,
 - 1.5% x years of service x high 3 years average annual compensation for the next 10 years, and
 - 1% x years of service x high 3 years average annual compensation for all years thereafter.
-

**Example
illustrating
projected
method**

Thus, the accrual rate would be based on the benefit earned by Mr. Jenkins up to the testing age or 65.

The testing service would be 40 years, taking into account the current, all prior and future years. The accrual rate is calculated as follows:

$$\frac{\text{accr. ben.} \cdot (2\% \times 10 \text{ yrs}) + (1.5\% \times 10 \text{ yrs}) + (1\% \times 20 \text{ yrs}) \times \$50,000}{\text{Testing service}-40 \text{ years}}$$

or \$688 per year.

This benefit can be expressed as either a dollar amount or a percentage of average annual compensation (defined below). The percentage would be 1.38% (\$688/\$50,000), assuming \$50,000 is the participant's average annual compensation.

Most valuable accrual rate

Most valuable accrual rate defined

Treas. Reg. Section 1.401(a)(4)-3(d) defines the most valuable accrual rate as the increase in the employee's most valuable optional form of payment based upon their accrued benefit during the measurement period. This benefit is divided by the employee's testing service during the measurement period, and expressed either as a dollar amount or as a percentage of the employee's average annual compensation.

The most valuable accrual rate reflects the value of all the benefits accrued or treated as accrued under section 411(d)(6) that are payable in any form and at any time under the plan, including:

- early retirement benefits,
- retirement-type subsidies,
- early retirement window benefits, and
- QSUPPs.

Example of most valuable optional benefit

A participant's QJSA benefit is payable upon the plan's Early Retirement Age, which is age 60. The most valuable benefit is based upon the participant's accrued benefit and that is potentially payable in the current or any future plan year under the plan. If the QJSA at Early Retirement Age is actuarially the more valuable benefit, (per year of testing service) than the Normal Form of Benefit at Normal Retirement Age, then the plan has to develop most valuable accrual rates for the participants when running the general test.

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Most valuable accrual rate, Continued

Determining whether there are most valuable benefit calculations

Generally, if the plan provides an early retirement benefit, it is more valuable than the normal form, therefore, a most valuable benefit calculation would be required. If an early retirement benefit is the actuarial equivalent of the normal retirement benefit, however, then a most valuable benefit calculation may not be needed.

The following table indicates whether a plan requires a most valuable benefit calculation.

PROBABLY MORE VALUABLE BENEFIT	PROBABLY NOT MORE VALUABLE BENEFIT
Early retirement benefit based on a schedule	Only early retirement benefit is one that is the actuarial equivalent of normal form
Early retirement benefit based on decimal fraction e.g. Early retirement for those attained age 55 and 10 year of service in amount of 50 percent of normal retirement benefit.	The plan provides no early retirement benefit.

Optional Rules to adjust the accrual rates

Major steps for running general test

Plans that use a General Test benefit formula, can request a ruling, covering IRC401(a)(4), as part of their determination letter application. There are three steps involved:

1. The allocation or accrual rates for each participant must be determined.
 2. Once the allocation or accrual rates are determined, they are used to form rate groups.
 3. Once the rate groups are determined, each rate group must satisfy one of the IRC section 410(b) coverage tests.
-

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Optional Rules to adjust the accrual rates, Continued

Determining the allocation or accrual rates

The most involved or difficult step is to determine the allocation or accrual rates, especially with DB plans. Once the initial allocation or accrual rates are determined, there are several optional rules that the employers can use to adjust these rates before forming rate groups and running the coverage test with respect to these rate groups. Once the allocation or accrual rates are determined, steps 2 and 3 are relatively mechanical.

Introduction

As the accrual rates are being calculated, there are there are four optional rules that impact these rate:

- Fresh Start
 - Grouping
 - Imputing permitted disparity
 - Cross testing
-

Fresh start

Fresh Start - brief explanation

As noted above, a Defined Benefit plan may choose a measurement period that includes (in addition to the current year), all prior years. If the plan benefit was amended at some point in the past, the plan may want to test over a period that includes some past years, but excludes the period before the amendment.

Under certain circumstances, to perform the general test, the plan can ignore accruals before a given date.

A Defined Benefit Plan using the general test may limit the measurement period to the period after a fresh start date with respect to a fresh start-group if the consistency requirement is satisfied (See Treas. Reg. section 1.401(a)(4)-3(d)(3)(iii)). The plan need not freeze the benefits nor use a fresh start formula.

If the plan, however, wants to ignore increases in accrued benefits prior to the fresh start date due to compensation increases taking place after the fresh start date, the plan must satisfy additional requirements.

Grouping

Grouping - Introduction

Grouping is used when the participants have allocation or accrual rates that are fairly close to each other. When forming rate groups, grouping enables the employer to treat different allocation or accrual rates as equivalent if they fall within a narrow range around a midpoint.

The employer chooses a midpoint, and regulations establish a range around that midpoint. Accrual and allocation rates above and below the midpoint rate are treated as being equal to the midpoint rate.

Accrual rates or allocation rates may not be grouped if the accrual rates or allocation rates of HCEs **within the range** are significantly higher than the accrual rates or allocation rates of NHCEs in the range.

Thus, if most of the HCEs' accrual rates or allocation rates are substantially above the midpoint rate, and most of the NHCEs' accrual rates or allocation rates are substantially below the midpoint rate, these accrual rates may not be grouped, (see 1.401(a)(4)-2(c)(2)(v) and 1.401(a)(4)-3(d)(3)(ii)).

Grouping for Allocation Rates (DC Plans)

**Grouping-
Allocation
rates-specified
range-general
rule**

For allocation rates, the specified range is that the lowest and highest allocation rates in the range must be within 5% (not 5 percentage points) of the midpoint rate. See Treas. Reg. Section 1.401(a)(4)-2(c)(2)(v).

For example, if a midpoint rate of 3% is chosen by the employer, allocation rates that are treated as equivalent to 3% has to be within 5% of 3% above or below 3%.

5% of 3% is .15%. Thus, the allocation rates have to fall between the range of 2.85% and 3.15% to be considered equal to 3%.

**Optional rule
for grouping
range for
allocation rates**

If allocation rates are determined as a percentage of plan year compensation, the lowest and highest allocation rates need not be within 5% of the midpoint rate if they are not more than one quarter of a percentage point above or below the midpoint rate.

For example, if the midpoint rate is 3% and the allocation rates are determined based on plan year compensation, the range $\frac{1}{4}$ percentage point or .25%.

Thus, using 3% of the midpoint rate, the range would be 2.75% to 3.25% (instead of 2.85% and 3.15% if 5% was being used).

Grouping for accrual rates (DB plans)

Grouping range for accrual rates-general rule

Under Treas. Reg. section 1.401(a)(4)-3(ii)(B), for Defined Benefit plans utilizing the “General Test”, the grouping range for Normal Accrual Rates and Most Valuable Accrual Rates are as follows:

- For normal accrual rates, the lowest and highest accrual rates in the range must be within five percent (not five percentage points) of the midpoint rate.
- For most valuable accrual rates, the lowest and highest accrual rates in the range must be within 15 percent (not 15 percentage points) of the midpoint rate.

For example, the midpoint for normal accrual rate is 2% and the midpoint for most valuable accrual rate is 4%. The ranges are as follows:

For normal accrual rate, the range is .1% above and below the midpoint rate. Thus, the range is from 1.9% to 2.1%.

For most valuable accrual rate, the range is .6%. Thus, the range is 3.4% through 4.6%.

Remember, any normal or most valuable accrual rate that is within the range is treated as being equal to the midpoint. Thus, a normal accrual rate of 1.93% is treated as being equal to 2%.

Optional rule for grouping accrual rates

If accrual rates are determined as a percentage of average annual compensation, the lowest and highest accrual rates can be below or above the midpoint rate by one twentieth of a percentage point (.05% or .0005). Thus, this range can be used for either the normal accrual rate or the most valuable accrual rate. See 1.401(a)(4)-3(d)(3)(ii)(B).

For example, the normal and most valuable accrual rate midpoint rate is .5% and .75%. The ranges using the optional rule would be as follows:

.5% midpoint—range .45%-.55%

.75% midpoint-range .70%-.8%

Note that the employer may use either the general or the optional rule, depending on which rule produces the large range.

Example-Grouping-DB plan

Facts

Assume the employer maintains a defined benefit plan. The employees of the A&L Company have the following normal accrual and most valuable accrual rates (determined as a percentage of average annual compensation), as follows:

Employee	Normal Accrual Rate	Most Valuable Accrual Rate
A	.8%	.85%
B	.83%	.9%
C	.9%	.97%
D	1.9%	2.05%
E	2.0%	2.15%
F	2.1%	2.25%

Choosing midpoint—A, B, and C

For the first three employees (A, B, and C), the employer chooses a midpoint rate of .85%. Note that within this range of rates, the accrual rates of the HCEs cannot be significantly higher than the accrual rates of the NHCEs.

Using the first range (.95% x .85 x 1.05%), the range is .807 to .8925. Using the alternative, the range is (.85 + .05 and .85 - .05), the range is .8 to .9. The larger range is .8 to .9. Employees A, B, and C's normal accrual rates would fit within that range. The range for the Most Valuable Accrual Rate would be: (.85 x .85 and .85 x 1.15) = a range of .7225 to .9775. Employees A, B, and C's, Most Valuable Accrual Rates would fit within that range. Therefore, A, B, and C are deemed to have a Normal Accrual Rate and Most Valuable Accrual Rate of .85.

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Example-Grouping-DB plan, Continued

Determining the range under the general rule-

The range under the general rule, i.e. using 5% below and above the normal accrual rate and 15% below and above for the most valuable accrual rate, and a midpoint rate for of .85% for both the normal and most valuable accrual rate, the ranges are as follows:

Employee	Normal accrual rate	Lower Range (.85% x .95)	Upper Range (.85% x 1.05)	Most Valuable Accrual rate	Lower range (.85 x .85)	Upper range .85x 1.15
A	1.9%	.8075%	.8925%	.85%	.7225%	.9775%
B	2.0%	.8075%	.8925%	.90%	.7225%	.9775%
C	2.1%	.8075%	.8925%	.97%	.7225%	.9775%

Employee A

Employee A's normal accrual rate does not fall within the ranges above, and would not be treated as having a normal accrual rate of .85%. However, all employees fall within the most valuable accrual rate range and would be treated as having .85% as their most valuable accrual rate.

Alternative for normal accrual rate

Since the normal and most valuable accrual rate is determined as a percentage of average annual compensation, the optional rule of determining the range by 1/20th of a percent (.5%) can be used. As shown with the general rule, Employee A did not fall within the range for the normal accrual rate. However, using the optional rule produces a greater range (.8%-.9%). Thus, A would be included as part of this range and would be treated as having a midpoint of .85%. Thus, A, B and C would be treated as having an accrual rate of .85%

Employee	Normal accrual rate	Lower Range (.85% - .5%)	Upper Range (.85% + .5%)
A	.8%	.8%	.9%
B	.83%	.8%	.9%
C	.9%	.8%	.9%

Continued on next page

Example-Grouping-DB plan, Continued

Employees D, E and F The employer establishes a second group to include D, E and F, and chooses a midpoint rate of 2.0%. As shown in the table below, the range for the normal accrual rate is 1.9% (2.0% x .95) through 2.1% (2.0% x 1.05). For the most valuable accrual rate, the range is from 1.7% is (2.0% x .85) through 2.3% (2.0x 1.15).

Employee	Normal accrual rate	Lower Range (2.0% x .95)	Upper Range (2.0% x .85)	Most Valuable Accrual rate	Lower range (2.0x 1.15)	Upper range (2.0x 1.15)
D	1.9%	1.9%	2.1%	2.05%	1.7%	2.3%
E	2.0%	1.9%	2.1%	2.15%	1.7%	2.3%
F	2.1%	1.9%	2.1%	2.25%	1.7%	2.3%

D, E, and F As shown in the table above, D, E, and F fall into the ranges for both the normal and most valuable accrual rate. Thus, D, E, and F are deemed to have both a normal and most valuable accrual rate of 2.0%.

Imputing Permitted Disparity

Theory of permitted disparity Section 401(l) of the Code permits a plan to provide a higher allocation or accrual rate to participants with compensation above a certain level, known as the integration level.

Under social security, benefits provided are based upon the average of a participant's Taxable Wage Bases over their working life, or their Covered Compensation. Compensation in excess of the Taxable Wage Base is not taken into account for purposes of determining Social Security Benefits.

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Imputing Permitted Disparity, Continued

Theory of permitted disparity
(continued)

Looking at the overall scheme, the employer is funding part of the social security benefit through FICA taxes and is also providing benefits through a retirement plan. Looking at both these programs together, Social Security is providing more benefits, as a percentage of compensation, to the employees earning at the taxable wage base. Thus, due to this “disparity” in which the participants below the integration level are getting a higher percentage of compensation than the participants above the integration level, section 401(l) allows an employer to provide a larger benefit through the retirement plan, that is over the Taxable Wage Base in a Defined Contribution Plan or, above the participant’s Covered Compensation in a Defined Benefit Plan.

The rationale for this higher benefit is that all employees receive a benefit equal to their percentage of compensation when taking into account **both** the social security benefit and the plan benefit.

Theory of imputing permitted disparity

A safe harbor plan is allowed to provide for permitted disparity under section 401(l), that is providing a higher benefit for participants above the integration level and still satisfy the safe harbor requirements under section 1.401(a)(4).

A general test plan does not satisfy the safe harbor requirements. However, a general test plan should be permitted to utilize the permitted disparity rule that is providing a higher benefit for the people above the integration level. If a plan is utilizing the general test under Sections 1.401(a)(4)-2(c) (DC plans) or 1.401(a)(4)-3(c) (DB plans), to satisfy section IRC 401(a)(4), that plan may use imputed permitted disparity, under 1.401(a)(4)-7, to take into account the permitted disparity rules.

Thus, Imputed Permitted Disparity under Section 1.401(a)(4)-7 approximates IRC 401(l) Permitted Disparity by adjusting the allocation or accrual rates by the formulas provided in Treas. Reg. 1.401(a)(4)-7. The accrual rates are adjusted to take out any difference in the rates that can be attributed to permitted disparity.

Note that the allocation or accrual rates are adjusted for purposes of both the general test and the average benefit test under section 1.410(b)-5(d).

Imputing Permitted Disparity-DC plans

Introduction to imputing permitted disparity

The rules for adjusting the allocation rates for Defined Contribution plans, by use of Imputed Permitted Disparity, are found in Treas. Reg. Section 1.401(a)(4)-7(b). For DC plans, the Imputed Permitted Disparity formulas are based on the employee's plan year compensation, and whether it exceeds the taxable wage base. Thus, there are two separate sets of formulas:

- One set for employees whose plan year compensation does not exceed the taxable wage base,
 - The second set for employees whose plan year compensation exceeds the taxable wage base.
-

DC Formulas not exceeding taxable wage base

For employees whose plan year compensation does not exceed the taxable wage base, the employee's adjusted allocation rate is the **lesser of the A and the B rate** determined under the following formulas:

- **A Rate**- 2 x unadjusted allocation rate
 - **B Rate** is unadjusted allocation rate plus permitted disparity factor (5.7%).
-

DC formulas exceeding the taxable wage base

For participant's whose compensation exceeds the Taxable Wage Base for the year, the participant's adjusted allocation rate is the lesser of the C and D rates as follows:

C rate:

$$\frac{\text{Allocation}}{\text{Plan year compensation minus } \frac{1}{2} \text{ taxable wage base}}$$

D rate

$$\frac{\text{Allocations plus (permitted disparity x taxable wage base)}}{\text{Plan year compensation}}$$

Continued on next page

Imputing Permitted Disparity-DC plans, Continued

Plan year compensation defined

Plan year compensation means 414(s) compensation for the plan year determined by measuring 414(s) compensation during:

- The plan year,
 - A 12 month period ending in the plan year
 - A period of plan participation during the plan year.
-

Definition of permitted disparity rate

Permitted disparity rate means the rate in effect as of the beginning of the plan year under section 401(l)(2)(A)(ii), i.e. 5.7%

Definition-taxable wage base

Taxable wage base means the taxable wage base, as defined in section 1.401(l)-(2)(d)(2), in effect as of the beginning of the plan year. The Taxable wage base is the contribution and benefit base under section 230 of the Social Security Act (42 U.S.C. Section 430).

Definition-unadjusted allocation rate

Unadjusted allocation rate means the employee's allocation rate determined under Treas. Reg. Section 1.401(a)(4)-2(c)(2)(i) for the plan year, expressed as a percentage of plan year compensation, without imputing permitted disparity.

Example-DC Permitted Disparity

Facts

Employee 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 5%.
 - Employee N has plan year compensation of \$100,000 in the 1990 plan year and has an unadjusted allocation rate of 8%. The taxable wage base in 1990 is \$51,300.
-

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Example-DC Permitted Disparity, Continued

Adjusting allocation rate- Compensation below taxable wage base

Employee M's plan year compensation does not exceed the taxable wage base. Thus, Employee M's adjusted allocation rate is the lesser of:

- Twice the allocation rate (2 x 5%) = 10% or
- 5% plus 5.7 or 10.7%.

Thus, the adjusted allocation rate is 10%.

Adjusting allocation rate- compensation above taxable wage base

Employee N's plan year compensation exceeds the taxable wage base. Employee N's allocation is \$8,000 or 8% x 100,000.

- N's D rate is 10.92% or $(\$8,000 + (5.7\% \times \$51,300)/100,000)$.

Thus, N's C rate of 10.76% is used.

Compensation above taxable wage base—C rate formula

Remember the C Rate formula:

$$\frac{\text{Allocation}}{\text{Plan year compensation minus } \frac{1}{2} \text{ taxable wage base}}$$

Employee N's C rate is **10.76%**, which is

$$\frac{\$8,000}{\$100,000 - (1/2 \times \$51,300)}$$

D Rate formula for compensation above taxable wage base

Remember the D Rate Formula

$$\frac{\text{Allocations plus (permitted disparity x taxable wage base)}}{\text{Plan year compensation}}$$

Employee N's D rate is **10.92%**, which is calculated as follows:

$$\frac{\$8,000 + (5.7\% \times \$51,300)}{\$100,000}$$

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Example-DC Permitted Disparity, Continued

N's adjusted allocation rate

N's adjusted allocation rate is the lesser of the C and D rate, which is 10.76%.

Summary of adjustment

Remember the original facts:

- Employee M has plan year compensation of \$30,000 in the 1990 plan year and has an unadjusted allocation rate of 5%.

Using imputed permitted disparity, M's adjusted allocation rate is now 10%. This is the rate that the

- Employee N has plan year compensation of \$100,000 in the 1990 plan year and has an unadjusted allocation rate of 8%. The taxable wage base in 1990 is \$51,300.

Using imputed permitted disparity, N's adjusted rate is now 10.76%, which is the rate that employer will use to run the general test and the average benefits test.

Note that the difference of 5% and 8% between the two rates has now been reduced to a difference of 10% and 10.76%. The difference in the rates due to the effect of permitted disparity has been eliminated.

Imputing Permitted disparity, DB plans

Formula for DB plans

Similarly, for Defined Benefit plans, there is one set of formulas for employees whose average annual compensation does not exceed their covered compensation and another set of formulas for employees whose average annual compensation exceeds their covered compensation.

Covered compensation is the integration level. If an employee's average annual compensation is greater than their covered compensation, then one set of formulas apply. If an employee's average annual compensation is less than their covered compensation, then another formulas apply.

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Imputing Permitted disparity, DB plans, Continued

Definition of covered compensation

Treas. Reg. section 1.401(l)-1(c)(7) defines covered compensation as the average of the taxable wage bases (without indexing) in effect for each calendar year during the 35 year period ending with the last day of the calendar year in which the employee attains (or will attain) social security retirement age.

Note that the covered compensation is different for each employee (since the 35 year period will be different for each employee). The taxable wage base is the contribution and benefit base under section 230 of the Social Security Act (42 U.S.C. Section 430).

Example of covered compensation

The actual calculation of covered compensation in 1997 for a 65 year old individual is completed as follows:

The sum of the taxable wage bases for the years 1963 through 1997 is 1,025,900.

$$1,025,900 / (35 \times 12) = 2442.62$$

2442.62 is truncated to 2442

$$2442 \times 12 = 29,304$$

\$29,304 is the covered compensation in 1997 for an individual that is 65 years old in 1997, (e.g. born in 1932).

The Permitted Disparity Factor is .75%, as adjusted.

Formulas if employee's average annual compensation does not exceed covered compensation

If the employee's average annual compensation does not exceed their covered compensation, the employee's accrual rate is adjusted, using the annual accrual rate that would be lesser of the A and B rate as follows:

- **A Rate**--2 x the employee's accrual rate, or
 - **B Rate**--the employee's accrual rate plus the permitted disparity factor.
-

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Imputing Permitted disparity, DB plans, Continued

Formula if employee's 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 and D rate as follows:

C Rate

$$\frac{\text{Employer provided accrual}}{\text{Average Annual Compensation}-1/2 \text{ covered compensation}}$$

D Rate

$$\frac{\text{Employer provided accrual} + (\text{the permitted disparity factor} \times \text{covered compensation})}{\text{Average Annual Compensation}}$$

Permitted disparity factor

For defined benefit plans, the permitted disparity factor is .65%, .70% or .75%, depending on participant's the social security retirement age. There is an optional rule for using .65% for all participants at age 65—see 1.401(l)-3(e)(3).

There are no adjustments to the permitted disparity factor when the employee's testing age is the same as the employee's social security retirement age. However, if the ages are different, an adjustment may be required under 1.401(l)-3(e).

Permitted disparity factor is averaged if multiple years are used in the measurement period

The permitted disparity factor is required to be averaged over the measurement period if multiple years are taken into account in the Measurement Period, (such as accrued to date or projected method)

The permitted disparity factor is the average of the permitted disparity factors over the measurement period. This factor is calculated by adding the annual permitted disparity factors for each of the years in the measurement period and dividing that sum by the employee's testing service during that measurement period.

Example-Imputing permitted disparity-DB plans

Facts

Asbury Travel, Inc. has a Defined Benefit plan which uses the current plan year as the measurement period, and has age 65 as its Normal Retirement Age. Assume Plan Year 2002 is being reviewed. This example illustrates two employees, Norton, who earns less than the covered compensation level and Trixie who earns above the covered compensation level.

Neither employee has ever participated in another plan. Normal Retirement Age under the plan is 65. The employer has elected to use .65 as the permitted disparity factor under Table IV of Section 1.401(l)-3(e)(3), for all participants rather than adjusting for Social Security Retirement Age. Neither employee has testing service of more than 35 years.

**Employee-
Norton-below
covered
compensation**

Norton has a normal accrual rate of 1.48%, under the plan.

Average Annual Compensation of \$21,000.

The employer provided accrual is \$311 ($.0148 \times \$21,000 = \310.80).

Norton was born in 1948, and has Covered Compensation of \$64,248, based upon the 2002 Covered Compensation Table, Revenue Ruling 2001-55.

**Norton's
adjusted
accrual rate
using A rate
formula**

Remember the A rate adjustment:

2 x the employee's accrual rate.

Using the formula, Norton's adjusted accrual rate is:

2.96% (2×1.48).

**Norton's B
Rate**

Remember the B Rate formula

the employee's accrual rate plus the permitted disparity factor, which is 2.13% ($1.48\% + .65\%$).

**Norton's
Adjusted Rate**

Norton's adjusted rate is the less of 2.96% or 2.13% or 2.13%

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Example-Imputing permitted disparity-DB plans, Continued

Employee-Trixie

Trixie has a normal accrual rate of 1.7%, based upon Average Annual Compensation of \$106,000, for an employer provided accrual of \$1,802.

Trixie was born in 1951 and has Covered Compensation of \$69,012, based upon the 2002 Covered Compensation Table.

Trixie's C rate

Remember the C rate formula:

$$\frac{\text{Employer provided accrual}}{\text{Average Annual Compensation}-1/2 \text{ covered compensation}}$$

Thus, the C rate is calculated as follows:

$$\frac{1,802}{\$106,000-(.5 \times \$69,012)}$$

Or 2.52%

Trixie's D rate

Remember the D Rate formula:

$$\frac{\text{Employer provided accrual} + (\text{the permitted disparity factor} \times \text{covered compensation})}{\text{Average Annual Compensation}}$$

$$\frac{1,802 + (.0065 \times \$69,012)}{\$106,000}$$

Or 2.12%.

Lesser of the two rates

Trixie's adjusted rate would be 2.12%

Continued on next page

Example-Imputing permitted disparity-DB plans, Continued

Recap of rates Trixie's original normal accrual rate was 1.7% and Norton's original normal accrual rate was 1.48%.

After imputing permitted disparity, when the general test is applied and the rate groups are determined, Norton's normal accrual rate, (2.13%), **is now higher** than Trixie's, normal accrual rate is (2.12%).

Imputed Permitted Disparity would then be applied to adjust Trixie's and Norton's Most Valuable Accrual Rate.

Other points about example In the example, only the normal accrual rate was adjusted. Note that both the normal and most valuable rates are adjusted by imputing permitted disparity.

Generally, the permitted disparity factor is .75%, if Social Security Retirement Age is the Normal Retirement Age under the plan. However, under 1.401(l)-3(e) an adjustment must be made to this factor where Social Security Retirement Age and Normal Retirement Age are not the same, (Tables I, II, and III).

A Simplified Table IV allows an employer to use .65 where 65 is the Normal Retirement Age under the plan. In this example, the Simplified Table, Table IV, was used.

Before the imputed permitted disparity calculation is made, the covered compensation, for each employee has to be determined. Note that covered compensation will differ for each employee unless they were born in the same year.

Cross Tested Plans

**Introduction-
Testing DC
plans on a
contributions
basis**

As covered above, for DC plans that are tested on a contributions-basis, determine each participant's allocation rate, by dividing each participant's allocation, for the plan year, by their plan year compensation. Rate Groups are then formed based upon each HCEs and NHCEs allocation percentage rates.

**Theory of cross
testing**

Section 401(a)(4) requires that the contributions **or the** benefits provided under the plan not discriminate in favor of highly compensated employees (within the meaning of section 414(q)). To implement this language, the regulations under section 401(a)(4) provides that a plan can satisfy the nondiscrimination requirements on either a "contributions" or "benefits" basis.

Allocations under a defined contribution plan can be converted to equivalent accruals test such accruals to determine whether the plan satisfies the nondiscrimination requirements. Thus, a defined contribution plan is tested on a benefits basis.

Accruals under a defined benefit plan can be converted to equivalent allocations be tested to determine whether the plan satisfies the nondiscrimination requirements. Thus, the defined benefit plan is tested on a contributions basis. The process of conversion is called "normalization".

**Cross tested
plans**

Cross testing is the method by which allocations to a defined contribution plan are converted into "equivalent accruals, so that they are tested on a benefits basis. Once converted to an equivalent accrual, they are divided by compensation to determine the rate. These rates must satisfy the general test.

**Normalizing or
converting the
allocations to
equivalent
benefits**

Normalization is accomplished in two steps:

1. Calculate the future value or the amount available to purchase an annuity at Normal Retirement Age, (e. g. Testing Age).
 2. Then, annuitize this future value by dividing this amount by the Annuity Purchase Rate used by the plan or chosen by the plan's actuary.
-

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Cross Tested Plans, Continued

**First step,
calculating the
future value**

The first step is to calculate the future value of each allocation. The plan's actuary selects a standard interest rate. This interest rate is used to project the allocation from the year in which the allocation is made to Normal Retirement Age. The allocation is increased by compounding the interest each year from the year of allocation to normal retirement age, (testing age). The younger the participant, the more years there are to normal retirement age, and the more compounded interest that can be added to the allocation.

A standard interest rate is within the range between 7.5%-8.5%.

Example

The allocation for an HCE for a given plan year is \$30,000, and they have 15 years until they reach normal retirement age.

Assuming an interest rate of 8.5%, the \$30,000 will be worth $(\$30,000 \times 1.085^{15})$ or \$101,992.22 when that HCE reaches age 65.

**Second step-
annuitizing the
future benefit**

The future value of a single plan year's allocation will be used to buy an annuity. This theoretical annuity would be the accrual increase for a single plan year, as part of the total accrued benefit. This assumes a standard mortality table and a standard interest rate will be used. (The Standard Interest Rates and Mortality Tables are found in 1.401(a)(4)-12).

Note that the assumptions used for the General Test, (Demonstration 6), can change from year to year and need not be the same assumptions as those used by the plan, as defined in the Actuarial Equivalents section of the plan document. However, the General Test must state which interest rate is being used to project the allocations, and which Annuity Purchase Rate is being used, to convert the single sums into an annuitized benefit. They must be applied on a uniform basis.

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Cross Tested Plans, Continued

Example

For this example, assume the Annuity Purchase Rate or the cost to purchase a \$1 annuity starting at age 65 is \$7.948575.

The HCE's future value of \$101,992.77 is divided by \$7.948575 to get an annuity (or an accrual increase at Normal Retirement Age) of \$12,832. This dollar amount can then be divided by the plan year compensation to calculate the participant's Equivalent Accrual Rate.

If the HCE's compensation is \$150,000, the Equivalent Accrual Rate is 8.55% ($\$12,832/\$150,000$).

Each allocation is normalized for each participant

This calculation is performed for each participant, by applying the assumptions used by the General Test, (Demonstration 6), for the plan year, to all participant's on a uniform basis. Thus, the Equivalent Accrual Rate is determined for each participant, such that the formation of Rate Groups can take place. The same Interest Rate and Annuity Purchase Rate must be used for each participant.

For more information as to any of the above requirements, including the calculation of the Equivalent Accrual Rates, please see the alert guidelines, and the 1993 CPE, 4213-013, chapter 6, Cross Testing.

Allocation projected to normal retirement age

In order to convert an allocation into an annuitized benefit at normal retirement age, the contribution must first be projected to Normal Retirement Age, using a specified interest rate, which is applied uniformly to all participants' allocations.

Allocations are projected to Testing Age, which is generally deemed to be the plan's Normal Retirement Age.

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Cross Tested Plans, Continued

Example illustrating normalization

An Employee, age 21, receives an allocation of \$1,000, which, using an 8.5% interest rate, would grow to \$36,216.67 at age 65, (e.g. by projecting the \$1,000 at 8.5% each year for 44 years).

By the same token, an employee, age 59, receives \$22,198.83 which will grow to \$36,216.67 at age 65, (by projecting \$22,198.83 at 8.5% each year for 6 years).

If both participants stay with the employer until Normal Retirement Age, (e.g. age 65), both will have \$36,216.67 at Normal Retirement Age, based on the contribution, made for that single plan year. The \$36,216.67 would then be converted into an annuitized benefit, representing the accrual or accrual increase for that plan year.

The final step in normalization is to make a theoretical purchase of an annuity which represents the accrual increase, for that plan year. This is done by dividing the theoretical lump sum of \$36,216.67, at Normal Retirement Age, by the annuity purchase rate.

The Annuity Purchase Rate is an assumed price of an annuity per dollar. The accrual increase for that plan year, on a benefits basis, is the theoretical lump sum divided by the Annuity Purchase Rate, (example 11.8). This amount is then divided by the participant's plan year compensation. In this way, the plan can determine the Equivalent Benefit Accrual Rate, (EBAR), for each participant.

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Cross Tested Plans, Continued

Example illustrating cross testing

Starr Inc. has 3 employees, 1 HCE and 2 NHCEs. Starr's profit sharing plan has been in effect for 2 years, has a normal retirement age of 65. The plan has the following contribution and compensation data for the current year.

Using a measurement period of one year, show that the plan is nondiscriminatory in amount testing on a benefits basis.

Table of Employees

EMPLOYEE	CURRENT AGE	CURRENT COMPENSATION	YEAR 2 ALLOCATION	ALLOCATION RATE
HCE	55	\$100,000	\$20,000	20%
NHCE 1	45	\$50,000	\$5,000	10%
NHCE 2	25	\$35,000	\$3,500	10%

If employer tested on an allocation basis

Note, that if tested on the basis of contributions, the rate group for the HCE has only one employee, the HCE, because the HCE has an allocation rate of 20%, and the NHCEs have an allocation rate of 10%.

Thus, the plan cannot pass the ratio test of IRC section 410(b) as its ratio would be zero (which is also below the midpoint of the safe and unsafe harbor percentage for the plan, for purposes of passing the nondiscriminatory classification test of Income Tax Regulations 1.410(b)-4).

If employer tested on a benefits basis

Testing on the basis of benefits, this plan uses a pre- and post-retirement interest rate of 8%, and the UP-1984 Mortality Table (which at age 65 has an Annuity Purchase Rate of 8.1958).

As the table below indicates, when tested on a benefits basis, the HCE's rate group satisfies IRC410(b). The Rate Group on a Benefits Basis covers 100% of the NHCEs and 100% of the HCEs which automatically satisfies the ratio test of IRC section 410(b). Therefore, this plan would satisfy 401(a)(4).

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Cross Tested Plans, Continued

Cross testing results

The following table provides the results of cross testing:

Employee	Increase-projected to Age 65	Equivalent Annuity Benefit	Equivalent Accrual Rate
HCE 1	$(20,000)(1.08)^{10} = 43,179 / 8.1958$	\$5,268/HCE 1's Comp.	5.27%
NHCE 1	$(5,000)(1.08)^{20} = 23,305 / 8.1958$	\$2,844/NHCE 1's Comp.	5.69%
NHCE 2	$(3,500)(1.08)^{40} = 76,036 / 8.1958$	\$9,277/ NHCE 2's Comp.	26.51%

Cross tested plans may not use projected date

A cross-tested plan may not use projected data i.e. data based on future years. However, the plan may use estimated data based on the current year. In other words, the General Test (Demonstration 6) for 2004, can be based upon estimated data. However, projected average allocations for plan year 2005 can not be used until 2005..

New Comparability

New comparability requirements--background

For years beginning on or after January 1 2002, cross tested plans must satisfy the requirements Income Tax Regulations 1.401(a)(4)-8(b), the “New Comparability” rules.

Certain plans rely solely on the cross-testing method to demonstrate compliance with the nondiscrimination rules. These plan designs were viewed as defeating the purpose of the nondiscrimination regulations. The reason for this is that the plan allocation formula is able generally to provide higher rates of employer contributions to HCEs as a percentage of compensation, as long as the allocations satisfy the General Test when cross-tested, on a benefits basis. The employer is able to do this since, NHCEs, who are generally younger, have their allocations projected, at the plan’s interest rate, for many more years (e. g. to Normal Retirement Age), than do the HCEs.

The disparity of allocations between HCEs and NHCEs on an allocations basis, tends to discriminate in favor of HCEs. As a result, the Treasury Department and IRS became concerned that these plans were not consistent with the basic purpose of the nondiscrimination rules under section 401(a)(4).

New comparability – Introduction

Final regulations under section 401(a)(4), published in the Federal Register on June 29, 2001 (the "final cross-testing regulations") amended sections 1.401(a)(4)-8, 1.401(a)(4)-9 and 1.401(a)(4)-12 of the Income Tax Regulations.

The final cross-testing regulations describe the conditions under which defined contribution plans, and defined contribution and defined benefit plans (that are aggregated and tested together), are permitted to demonstrate compliance with nondiscrimination requirements, on a benefits basis.

The regulations are effective for plan years beginning on or after January 1, 2002.

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New Comparability, Continued

**Determination
letter
applications**

Under Announcement 2001-77, and the Final 401(a)(4) Regulations published on 6-29-2001, determination letter applications filed on or after August 22, 2001, may request a determination that takes into account the final cross-testing regulations. The regulations can be satisfied in two ways:

1. Defined Contribution Plans, subject to IRC412, that utilize a General Test allocation formula, (that is then tested on a benefits basis to satisfy 401(a)(4)), must contain language that satisfies the “New Comparability” minimums requirement.
2. The General Test, (Demonstration 6), must clearly show that the “New Comparability” minimums have been satisfied.

A General Test, (Demonstration 6), that involves a Defined Contribution Plan or an aggregated Defined Contribution and Defined Benefit Plan that is testing on a benefits basis, for the 2002 plan year, or later plan years, must satisfy the requirements of the “New Comparability” Regulations. Estimated data for the current plan year may be used for purposes of this demonstration.

**Technical
background**

A defined contribution plan, (other than an ESOP), may satisfy the nondiscrimination regulations of IRC401(a)(4), on the basis of benefits by use of cross-testing, pursuant to rules provided in Income Tax Regulations Section 1.401(a)(4)-8.

As stated above, cross testing allows employer contributions to a defined contribution plan to be tested as if it were a defined benefit plan. Employer contributions are converted to Equivalent Accruals, using the actuarial assumptions, selected by the plan administrator or the plan’s actuary. These Equivalent Accruals are then tested on a benefits basis, (e.g. the hypothetical accrual increase for the plan year, determined at Normal Retirement Age, is determined and then divided by the participant’s compensation to derive the participant’s Equivalent Annual Accrual Rate, for the plan year.)

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New Comparability, Continued

New Comparability and other plans rely on cross testing to satisfy non-discrimination

Cross-tested plans demonstrate compliance with the nondiscrimination rules by comparing the actuarially projected value of the employer contributions for the younger NHCEs with the actuarial projections of the larger contributions (as a percentage of compensation) for the older HCEs. The plan is then tested for nondiscrimination on the basis of equivalent accrual rates rather than on the basis of allocation rates.

These plans are generally able to provide higher rates of employer contributions to HCEs, than NHCEs. The difference in the allocation rates is possible due to the fact that NHCEs, who are generally younger, have their allocations, projected at the plan's interest rate, for many more years than HCEs, (e.g. to normal retirement age which is the testing age), since the HCEs are generally older.

New regulations published to address these plans

Although "Cross-Tested" plans met the prior IRC401(a)(4) regulations requirements, these plans seemed to defeat the purpose of nondiscrimination testing. This was primarily due to the fact that, on its face, the allocation formula appears to discriminate in favor of HCEs. In fact, under some plan designs, the NHCEs could never grow into the higher contribution rates. As a result of these problems, the Treasury Department and IRS became concerned that these plans were not consistent with the basic premise of IRC401(a)(4), (e.g. that plans not discriminate in favor of HCEs).

The final 401(a)(4) regulations remedy this situation by requiring that these plans provide minimum allocations to all NHCEs.

Structure of new comparability regulations

Introduction- Plan must satisfy one of three conditions

Section 1.401(a)(4)-8(b)(1)(i)(B) requires that for plan years beginning on or after January 1, 2002, a defined contribution plan, (that is not aggregated with a defined benefit pension plan), may NOT be tested on a benefits basis unless the plan satisfies one of the three following "methods":

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Structure of new comparability regulations, Continued

**Method 1-
minimum
allocation
gateway**

The Primary Method used by plans, is one of the Minimum Allocation Gateways of 1.401(a)(4)-8(b)(1)(vi). This Gateway requires cross-tested plans to provide to each NHCE, either an allocation of 5% of their IRC415(c) compensation or, the requirement can be satisfied if the NHCE with the lowest allocation rate, as a percentage of their IRC414(s) compensation, is at least 1/3 of the allocation rate of the HCE with the highest allocation rate, as a percentage of their IRC414(s) compensation.

**Method 2,
broadly
available
allocation rate**

The Second Method provided is the “Broadly Available” Allocation Method of 1.401(a)(4)-8(b)(1)(iii). This method requires that each allocation rate must be currently available to a group satisfies IRC410(b),(without regard to the Average Benefits Percentage Test). Two allocation rates may be aggregated if the higher allocation rate satisfies IRC410(b) (without regard to the Average Benefits Percentage Test), only then can the lower allocations rate be aggregated with the higher rate and be treated as a single allocation rate, for purposes of satisfying IRC410(b). Transition allocations, such as pre-existing merger and acquisition allocations, pre-existing replacement allocations, and defined benefit replacement allocations can be disregarded to the extent that they are Transition Allocations for the plan year and are not amended.

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Structure of new comparability regulations, Continued

Method 3-plans that automatically satisfy new comparability rules

Certain plan allocation formulas automatically satisfy the “New Comparability” Rules. These Gradual Age or Service Schedules, apply if there is a single allocation schedule that applies to all participants, on a uniform basis.

Increases in the allocation formula can only be based on age, years of service, or the number of points representing the sum of age and service. A smoothly increasing schedule of allocation rates, at regular intervals, would satisfy this rule, if it applies uniformly to all participants, provides, that each allocation band is of equal length, (e.g. 5 years); provides that each increase in the allocation percentage, (from one band to the next, as a percentage of the participant’s compensation), is not more than the lesser of 200% times the prior allocation percentage or 5 percent.

The allocation increase cannot exceed the ratio of the prior two allocation rates. The initial allocation percentage cannot be less than 1% of compensation. Age-Weighted formulas, where the only variable is age will automatically satisfy these rules, if the formula applies to all employees in a uniform manner. A uniform Target Benefit Pension Plan allocation formula will automatically satisfy the “New Comparability” requirements. (see 1.401(a)(4)-8(b)(1)(iv) and 1.401(a)(4)-8(b)(v).

New comparability requirements for aggregated DB/DC plans

Introduction The final 401(a)(4) regulations permit an aggregated Defined Benefit and Defined Contribution plan to test on a benefits basis only if one of the following “New Comparability” requirements is met:

Method 1 The most common method that these aggregated plans use to satisfy the “New Comparability” minimums, is by use of the Gateway Test. Under the Gateway Test, the plan must first determine the Aggregate Normal Allocation Rates of each participant as follows: The allocations under the Defined Contribution Plan must be added to the Equivalent Annual Allocations from the Defined Benefit Plan, (e.g. the Equivalent Annual Allocation is the annual accrual increase at normal retirement age multiplied by the Annuity Purchase Rate and then discounted by the interest rate to attained age).

The test will automatically be satisfied if each NHCE receives an Aggregate Normal Allocation Rate of at least 7 ½% of their 415(c)(3) compensation. Otherwise, the plans can use a modified 1/3 rule as follows: if the HCE with the highest Aggregate Normal Allocation Rate is less than 15% then the Aggregate Normal Allocation Rate of all NHCEs must be at least one third of the highest HCEs allocation rate. If the highest HCE Aggregate Normal Allocation Rate is between 15% and 25%, the Aggregate Normal Allocation Rate for all NHCEs must be at least 5%.

If the highest HCE Aggregate Normal Allocation exceeds 25% but not 30%, all NHCEs must have a Normal Allocation rate of 6%; if the highest HCE Aggregate Normal Allocation Rate exceeds 30% but not 35%, all NHCEs must have a Normal Allocation rate of 7%, if the highest HCE Aggregate Normal Allocation Rate exceeds 35% but not 40%, then all NHCEs must have a normal allocation rate of 8%, etc. The plan can use the average Equivalent Allocation Rate of all NHCEs benefiting under the defined benefit plan, rather than using the individual rates of the NHCE’s.

Continued on next page

New comparability requirements for aggregated DB/DC plans, Continued

Method 2 Aggregated Defined Benefit and Defined Contribution plans will automatically satisfy the “New Comparability” rules if the plans are “Primarily Defined Benefit” in character. A Defined Benefit Plan is “Primarily Defined Benefit” in character if over 50% of the NHCEs are benefiting under the Defined Benefit Plan and the NHCE’s Normal Accrual Rate under the Defined Benefit Plan exceeds their Equivalent Accrual Rate under the Defined Contribution Plan. The assumptions used to determine the Equivalent Accrual Rates must be the same assumptions used for the General Test (Demonstration 6).

Method 3 New Comparability”can also be satisfied by “Broadly Available Separate Plans”. “Broadly Available Plans” are aggregated Defined Benefit/Defined Contribution plans that separately satisfy IRC410(b) (without application of the average benefits percentage test of 1.410(b)-5); and the plans must each separately satisfy the nondiscrimination rules of 1.401(a)(4)-1(b)(2). Imputed Permitted Disparity cannot be used for any of the options.

Refer 2002 CPE text for a detailed explanation Please refer to Chapter 7, section IX, page 155 through 175 for a detailed explanation of these new regulations.

Sample Gateway Amendment

**Sample
Gateway
amendment**

BY THIS AGREEMENT, _____ Plan (hereinafter referred to as the “Plan”) is hereby amended, effective as of Plan Years and Limitation Years beginning on or after January 1, 2002, as follows:

Gateway Contribution.

If this is a Money Purchase Pension Plan, notwithstanding the allocation formula, each benefiting NHCE shall receive an allocation of 5% of their IRC415(c)(3) compensation.

If this is a Profit Sharing Plan, the Employer may make an additional discretionary Employer contribution in an amount necessary to satisfy the minimum allocation gateway requirement described in Regulation 1.401(a)(4)-8(b)(1)(vi), (e.g. each benefiting NHCE must receive an allocation of 5% of their IRC415(c)(3) compensation or, the NHCE with the lowest allocation rate must be at least at least 1/3 of the HCE with the highest allocation rate). The term “Employer Contributions” shall include any Forfeitures that are allocated to a Participant.

(1) Eligibility for Gateway Contribution. Each NHCE who is benefiting must receive the “New Comparability Minimum”. Pursuant to Regulation 1.410(b)-7(c)(3), participant’s who have not satisfied the greatest minimum age and service conditions required by Code Section 410(a) shall not be eligible to receive an allocation of the Gateway Contribution

NOTE: The plan language is required for Defined Contribution Plans subject to IRC412. Profit Sharing Plans can satisfy the “New Comparability” minimums in operation, plan language is not required.

Continued on next page

Sample Gateway Amendment, Continued

**Sample
Gateway
amendment
continued**

(2) The Compensation definition for the 5% Gateway allocation is as follows: Compensation for purposes for the 5% gateway contribution, means IRC 415(c)(3) Compensation, measured over a period of time permitted under the definition of plan year compensation.

(4) The definition of Compensation used for determining the required allocation to satisfy the 1/3 rule, is as follows: For purposes of the 1/3 gateway contribution alternative, the Administrator will (a) determine the allocation rates, using a definition of Compensation that satisfies Income Tax Regulation 1.414(s). The allocation rate for each benefiting Participant is determined by dividing the total "Employer contribution" made on behalf of such Participant by the Participant's IRC 414(s) Compensation. The HCEs and NHCEs are then determined so that the highest HCE allocation rate and the lowest NHCE allocation rate can be determined.

This Amendment has been executed this _____ day of _____

General Test – Quick Review

Major steps for running general test

Plans that use a General Test benefit formula, can request a ruling, covering IRC401(a)(4), as part of their determination letter application. There are three steps involved:

1. The allocation or accrual rates for each participant must be determined.
 2. Once the allocation or accrual rates are determined, they are used to form rate groups.
 3. Once the rate groups are determined, each rate group must satisfy one of the IRC section 410(b) coverage tests.
-

Overview of rate groups

In order to determine whether a plan satisfies the general test, the plan is broken down into rate groups, or “mini plans”. Each HCE who receives an allocation or an accrual rate forms a rate group. Every other participant who has an equal or greater allocation rate or accrual rate than the HCE is a member of that rate group.

This information is to be provided on a Demonstration 6 for a determination letter application seeking a ruling on IRC401(a)(4). If the plan is under examination, a General Test must be provided for each year under audit. A General Test provided during an audit must mirror the requirements of the Demonstration 6.

DC plans—rate group based on allocation rates

In a Defined Contribution plan, a rate group consists of

- an HCE, and
 - every other participant who has an allocation rate greater than or equal to such HCE.
-

DB accrual rates

Two accrual rates when general testing DB plans

For defined benefit plans , there are two different types of accrual rates

- Normal accrual rates and
- Most valuable accrual rates.

To determine these accrual rates, the **accrual increase** must be determined, for each participant for both their Normal Form of Benefit and their Most Valuable Form of Benefit. These benefits are determined as of Normal Retirement Age, and are then divided by their Testing Service. The formulas are as follows:

$$\frac{\text{Accrued benefit}}{\text{Testing service}} \quad \frac{\text{Most valuable optional form of benefit}}{\text{Testing service}}$$

The accrued benefit, most valuable optional form of benefit and testing service are measured during the measurement period. The normal and most valuable accrual rate is expressed as either a dollar amount or as a percentage of the employee's average annual compensation.

DB plan-rate group

The rate group consists of the HCE with a normal and most valuable accrual rate and every other r participant whose normal and most valuable accrual rate equal or exceeds those rates of the HCE.

Normal accrual rate

The normal accrual rate for an employee for the plan year is the **increase** in the employee's accrued benefit (within the meaning of section 411(a)(7)(A)(i) during the measurement period.

Most valuable accrual rate

The most valuable optional form of benefit used to determine the most valuable accrual rate reflects the value of all Optional Forms of Benefits accrued or treated as accrued that are payable in any form and at any time under the plan.

Continued on next page

DB accrual rates, Continued

Introduction

As the accrual rates are being calculated, there are there are four optional rules that impact these rate:

- Fresh Start
 - Grouping
 - Imputing permitted disparity
 - Cross testing
-

Overview of rate groups

In order to determine whether a plan satisfies the general test, the plan is broken down into rate groups, or “mini plans”. Each HCE who receives an allocation or an accrual rate forms a rate group. Every other participant who has an equal or greater allocation rate or accrual rate than the HCE is a member of that rate group.

This information is to be provided on a Demonstration 6 for a determination letter application seeking a ruling on IRC401(a)(4). If the plan is under examination, a General Test must be provided for each year under audit. A General Test provided during an audit must mirror the requirements of the Demonstration 6.

DC plans—rate group based on allocation rates

In a Defined Contribution plan, a rate group consists of

- an HCE, and
 - every other participant who has an allocation rate greater than or equal to such HCE.
-

Rate groups must satisfy coverage

Once the rate groups are determined, each rate group must satisfy coverage

The rate group is treated as if it were a separate plan that benefits only the employees included in the rate group for the plan year. To satisfy the General Test, each rate group must satisfy section 410(b). To determine whether the rate group satisfies 410(b), the rate group must take into account all nonexcludable employees regardless of whether they benefit under the plan.

Under section 401(a)(4), if the rate group does not satisfy the ratio percentage test of IRC410(b)(1)(B), then the rate group, and the plan, can attempt to satisfy the average benefit test of IRC410(b)(1)(C) under Income Tax Regulations 1.410(b)-4 and 1.410(b)-5. This test is modified under the 401(a)(4) regulations.

If the rate group does not satisfy the ratio percentage test

**If the rate group does not satisfy the ratio percentage test ($\geq 70\%$), the rate group must satisfy both the nondiscriminatory classification test and the average benefits percentage test.

How a rate group satisfies the average benefits percentage test

Under Section 1.401(a)(4)-2(c)(3)(iii), if the plan must satisfy the average benefits test, due to one of the rate groups falling below the 70% threshold of the IRC410(b)(1)(B) ratio percentage test, the regulations require the following:

“A rate group satisfies the average benefit percentage test of 1.410(b)-5 if the plan of which is it a part satisfies 1.410(b)-5 (without regard to 1.410(b)-5(f)).”

Therefore, the plan as a whole must satisfy the average benefit percentage test of 1.410(b)-5, taking into account all nonexcludable HCEs and NHCEs.

Defined Benefit Plan Safety Valve - Overview

**Defined Benefit
Safety Valve –
Overview**

A plan is deemed to satisfy the general test if the plan would satisfy the test by excluding (treat as not benefiting), no more than five percent of the HCEs (e.g. 5% of the rate groups), in the plan. To use this exception the Commissioner must determine that, on the basis of all the relevant facts and circumstances, the plan does not discriminate with respect to the amount of employer provided benefits. The Commissioner may consider in making the determination,

- (i) the extent to which the plan has failed general test;
 - (ii) The extent to which the failure is for reasons other than the design of the plan;
 - (iii) Whether the HCEs causing the failure are five percent owners or are among the highest paid nonexcludable employees;
 - (iv) Whether the failure is attributable to an event that is not expected to recur (plant closing), and
 - (v) The extent to which the failure is attributable to benefits accrued under a prior benefit structure or to benefits accrued when a participant was not an HCE.
-

Procedural tips

Ensure proper information is submitted for average benefits test

If the Demonstration 6 indicates that one rate group fails the ratio percentage test, the determination application must also demonstrate that the plan satisfies the average benefits test.

Although the allocation or normal accrual rates can be used for the employee benefit percentages, (testing on either a contributions or benefits basis), the employee benefit percentages must take into account all allocations or accruals in the testing group, as a whole, which includes the following:

As stated above, elective deferrals under 401(k) plans and allocations under an ESOP must be included when applying the average benefits percentage test.

How a rate group satisfies the non-discriminatory classification test

Under Section 1.401(a)(4)-2(c)(3)(ii), a rate group satisfies the nondiscriminatory classification test of 1.410(b)-4 (including the reasonable classification requirement of 1.410(b)-4(b)) if and only if the ratio percentage of the rate group is greater than or equal to the lesser of:

- (A) the midpoint between the safe and the unsafe harbor percentages applicable to the plan, and
 - (B) The ratio percentage of the plan.
-

CASE STUDY – DEMO 6 – Defined Contribution Plans

**Case Study –
Demo 6 - DC**

The following case study involves a discretionary profit sharing plan combined with a Safe-Harbor 401(k) and 401(m) plan. A General Test ruling was requested, and a Demonstration 6 was provided. Cross testing was utilized to allow the Rate Groups to satisfy IRC401(a)(4). Keep in mind, that the profit sharing structure, the IRC401(k) and the IRC401(m) structures are required to be disaggregated under Income Tax Regulations 1.410(b)-7(c).

**Application
filed**

Form 5300 #14 answered “no”.

Form 5307 #12 answered “no”

Form 5310 #14e(1) answered “yes”, e(2) or e(3) answered “no”

Note: This Demo 6 could be utilized with any of these applications.

Schedule Q

#6 answered “yes” with a type “B” indicated (General test, not involving “safety valve” rule). (Note: Had the allocation formula been a nondesign-based safe harbor, type “C” would be indicated).

Continued on next page

Case Study-DC plan-Plan provisions

Introduction	The following are the plan provisions relative to the Defined Contribution General Test.
Compensation	A definition of compensation under IRC415(c)(3) is utilized, using the definition under Income Tax Regulations section 1.415-2(d)(1).
401k deferral	A Participant may defer up to 25% of his compensation.
401(m) matching	A discretionary match, as a percentage of each employee's elective deferral up to 25% of that deferral, as the Employer shall determine, for each Plan year, (not to exceed a dollar amount of 4% of each participant's compensation, in accordance with Notice 98-52, section VI, B.4.b)..
Safe harbor contribution	The Employer will contribute 3% of each participant's IRC415(c)(3) compensation, as a IRC 401(k) safe harbor non-elective contribution. There is no last day requirement pursuant to the requirements of IRC401(k)(12). Every NHCE who is eligible to make an elective deferral during the plan year shall receive a Non-Elective Contribution based on the portion of the plan year they are eligible. In accordance with Notice 98-52, section VIII B. an employer nonelective, 401(k) safe-harbor contribution, can be taken into account for purposes of determining whether a plan satisfies 401(a)(4); However, the Safe Harbor Nonelective Contribution can NOT be taken into account under any plan for purposes of section 401(l) (including the imputation of permitted disparity under section 1.401(a)(4)-7).
Normal retirement age	<u>Normal Retirement Age</u> : 65
Employer contributions	Employer Contributions: Discretionary.

Continued on next page

Case Study-DC plan-Plan provisions, Continued

**Allocation
formula**

Employer Discretionary Contributions shall be allocated to the Participants in each class in the same proportion that each Participant's Compensation in his class for such Plan Year bears to the total Compensation of all Entitles Participants in such class for such Plan Year.

The classes of Employees shall be:

- Class I: Owners (for 2003 allocated 12% of Comp)
 - Class II: Non Owners (for 2003 allocated 2% of Comp)
-

**Demo 6
assumptions**

Demonstration 6: The assumptions used on the Demonstration 6 are as follows:

- Interest Rate: 8.5%
 - Mortality Table: UP 84'
-

Case Study - DC plan-Demonstration 6

Introduction The following was submitted with the Form 5300 Application for a Determination Letter

Demo 6 - General Test

A request for a determination that a plan satisfies the general tests in Regulations sections 1.401(a)(4)-2(c), 1.401(a)(4)-3(c). must include a nondiscrimination test showing that the plan passes the relevant general test, and provide the information listed under **All Plans (unless otherwise noted)**, and if applicable, under DBP's Only or Cross- Tested Plans Only. However, the IRS may request that additional information be submitted if necessary.

All Plans (unless otherwise noted)

All plans must submit the information requested in items 1 through 11.

1. Provide the portion of the nondiscrimination test that provides the data for each participant and demonstrates that the plan satisfies 401(a)(4). Participants need not be identified by name. Tests that include two or more component plans (such as profit sharing, money purchase, 401(k) and 401(m)) should show the allocations or benefits under each component plan.

See attached for necessary data that demonstrates the plan satisfied section 401(a)(4).

2. "Identify each rate group under the plan and include a demonstration of how each rate group satisfies section 410(b). If the plan is a DBP that is being tested on the basis of the amount of benefits, rate groups must be determined on the basis of both normal and most valuable accrual rates which are expressed as a dollar amount or a percentage of compensation. If the most valuable accrual rate is determined in accordance with the special rule in Regulations section 1.401(a)(4)-3(d)(3)(iv) (floor on most valuable accrual rate), this must be indicated."

Each non-excludable Highly Compensated Employee forms his or her own rate group. The members of a particular rate group are Highly Compensated non-excludable Employee and each other non-excludable employee having an Allocation Rate equal to or greater than that of the particular highly Compensated Non-excludable employee.

If each rate group passes the ratio percentage test under Treasury regulation § 1.410(b)-2(b)(2), testing is completed and the plan satisfies IRC section 401(a)(4). Any rate group that fails the 70% ratio percentage test must satisfy the nondiscriminatory classification for the rate group and the average benefit percentage test under Treasury regulation § 1.410(b)-2(b)(3) must be run for the plan as a whole.

3. "State whether the plan is being tested on a contributions or benefits basis."

The Plan is being tested on a benefits basis.

4. "Provide the plan year being tested."

The testing year is the Plan Year ended 12/31/03.

Continued on next page

Case Study - DC plan-Demonstration 6, Continued

5. Provide a description of the method of determining allocation or accrual rates, and if the plan is tested on a benefits basis, the measurement period and definition of testing service (including imputed and pre-participation service).

Allocation rates are determined in accordance with Section 5.2(b) of the Plan.
The Plan is tested on a benefits basis
The measurement period is each Plan Year.

6. State whether the test is imputing permitted disparity under Regulations section 1.401(a)(4)-7.

The Plan does not impute disparity..

7. Provide an explanation of how allocation or accrual rates are grouped.

Allocation rates are not grouped

8. Provide an demonstration of how benefits are normalized on the test, including the actuarial assumptions used (not applicable to defined contribution plans testing on a contributions basis).

Benefits are normalized by treating each year's contribution allocation as a single sum benefit that is immediately and unconditionally credited to the Participant's account.
Actuarial assumptions used to normalize benefits are the UP-84 Mortality Table and 8.5% interest.

9. State the definition of section 414(s) compensation used in determining plan year compensation or average annual compensation and a demonstration showing the definition as nondiscriminatory. If plan year compensation or average annual compensation is determined using a definition of compensation that satisfies Regulations sections 1.414(s)-1(c)(2) or (3) state whether the definition satisfies 1.414(s)-1(c)(2) or whether the definition satisfies 1.414(s)-1(c)(3). See the guidelines under Demo 9 Instructions pertaining to nondiscriminatory compensation for guidance pertaining to this demonstration.

414(s) Compensation is defined in Section 4.1(x) of the Plan. This definition of 414(s) compensation would satisfy 1.414(s)-1(c)(2), except that it excludes compensation paid during that portion of the Plan Year that an employee is not an Eligible Participant for the portion of the Plan Year being tested. This exclusion will not cause the definition to be discriminatory due to Regulation Section 1.401(a)(4)-12 (the definition of Plan year Compensation) and the "period of plan participation" provided. Therefore demonstration 9 is not needed.

10. Provide the method of determining average annual compensation used in testing the plan for nondiscrimination as defined in Regulations section

Compensation is as defined in Section 1.2(L) of the Plan for each Plan Year and is not averaged over a period of more than one year.

Continued on next page

Case Study - DC plan-Demonstration 6, Continued

11. Provide the testing age of employees; include fractions of year if test is based on fractional age (not applicable to DCPs testing on a contributions basis).

Fractional Years do not apply.

Testing age is age attained at testing year-end.

Testing age is attainment of age 65 or actual age, if older.

Defined Benefit Plans Only

All DBP's must also provide the following information if applicable.

12. State whether accruals after normal retirement age are taken into account, and if such accruals are disregarded as provided in Regulations section 1.401(a)(4)-3(f)(3), provide the basis on which they are disregarded.

NA

13. State whether early retirement window benefits are taken into account in determining accrual rates and whether such benefits are being disregarded under Regulations section 1.401(a)(4)-3(f)(4)(ii). Also provide the basis on which they are disregarded.

NA

14. State whether any unpredictable contingent event benefits were taken into account in determining accrual rates under Regulations section 1.401(a)(4)-3(f)(5) and provide the basis on which they are taken into account.

NA

15. "State whether the plan disregards offsets described in Regulations section 1.401(a)(4)-3(f)(9), provide a description of such offsets, and show how they satisfy Regulations section 1.401(a)(4)-3(f)(9)."

NA

16. "State whether any disability benefits are taken into account in determining employees' accrued benefits under Regulations section 1.401(a)(4)-3(f)(2), and if so, cite the plan provisions that permit these disability benefits to be taken into account."

NA

Continued on next page

Case Study - DC plan-Demonstration 6, Continued

17. “State whether any other special rules in Regulations section 1.401(a)(4)-3(f) are applied in testing a plan for nondiscrimination in amount, for example:

- The rules applicable to the determination of benefits on other than a plan-year basis described in Regulations section 1.401(a)(4)-3(f)(6),
- The adjustment for certain plan distributions provided in Regulations section 1.401(a)(4)-3(f)(7), and
- The adjustment for certain qualified pre-retirement survivor annuity charges as provided in Regulations section 1.401(a)(4)-3(f)(8). “

NA

18. “Plans with employee contribution not allocated to separate accounts should include:

- A description of the method for determining whether employee-provided accrued benefits are nondiscriminatory under Regulations section 1.401(a)(4)-6(c),
- The method for determining the employer-provided accrued benefit under Regulations section 1.401(a)(4)-6(b), and
- The location of relevant plan provisions.

If the method for determining the employer-provided accrued benefit is the composition-of-workforce method, the demonstration must show that the eligibility requirements of Regulations section 1.401(a)(4)-6(b)(2)(ii) are satisfied. If the grandfather rule of Regulations section 1.401(a)(4)-6(b)(4) is used, the demonstration must show, if applicable, that 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. “

NA

19. If the plan would otherwise fail to satisfy the general test in Regulations section 1.401(a)(4)-3(c)(1), and a determination is being sought that the failure may be disregarded as permitted by the special rule in Regulations section 1.401(a)(4)-3(c)(3), describe the relevant facts and circumstances that support the use of this rule.

NA

Cross- Tested Plans Only

20. “Provide a description of the method used to determine equivalent allocations and benefits.”

Using the assumed interest rate of 8.5%, the future value (at the Participant’s testing age) of each Participant’s contribution allocation is first determined. That amount is converted into an annual life annuity, using the annuity factor from the UP 84’ Table. The life annuity amount is divided by the Participant’s compensation to determine the equivalent benefit accrual rate. See attached.

21. “Defined contribution plans: The demonstration must list each participant’s allocation rate for the plan being tested and list the equivalent benefit accrual rate (including component plans) for each participant. “

See Attached

DC Plan-Case Study-General Test calculations

PROFIT SHARING PLAN ALLOCATION OF EMPLOYER CONTRIBUTIONS BY PLAN FEATURE FOR YEAR END 12/31/2003

<u>Employee</u>	<u>(1) HCE</u>	<u>(2) Age</u>	<u>(3) 414(s) Total Comp</u>	<u>(4) PS Alloc</u>	<u>(5) Safe Harbor 3%</u>	<u>(6) 25% Match</u>	<u>(7) 401(k)</u>	<u>(8) Total Alloc</u>
A	Yes	60	\$ 150,000	\$18,000	\$4,500	\$3,500	\$14,000	\$ 40,000
B	No	33	60,000	1,200	1,800	300	1,200	4,500
C	No	36	48,000	960	1,440	150	600	3,150
D	No	34	38,000	760	1,140	150	600	2,650
E	No	36	38,000	760	1,140	150	600	2,650
F	No	47	52,000	1,040	1,560	150	600	3,350
G	No	49	<u>30,000</u>	<u>600</u>	<u>900</u>	<u>150</u>	<u>600</u>	<u>2,250</u>
			\$416,000	\$23,320	\$12,480	\$4,550	\$18,200	\$58,550

EQUIVALENT BENEFIT ACCRUAL RATES FOR RATE GROUP TESTING

<u>Employee</u>	<u>Allocations subject To Rate Group Cols. (4) & (5)</u>	<u>Future Value 8.5% at Test Age 65</u>	<u>UP 84 – 8.5% Annuity Pur Factor</u>	<u>Yrly Benefit Amount Per Year</u>	<u>Equivalent Benefit Accrual Rate</u>
A	\$ 22,500.00	\$ 33,832.28	95.38	\$ 4,256.53	2.838% *
B	3,000.00	40,819.99	95.38	5,135.67	8.559% **
C	2,400.00	25,566.64	95.38	3,216.60	6.701%
D	1,900.00	23,827.34	95.38	2,997.78	7.889%
E	1,900.00	20,240.26	95.38	2,546.48	6.701%
F	2,600.00	11,290.38	95.38	1,420.47	2.732%
G	<u>1,500.00</u>	5,533.08	95.38	696.13	2.320%
Total	<u>\$ 35,800.00</u>				

The Profit Sharing contribution plus the 3% 401(k) Safe-Harbor contribution, for each NHCE, using IRC415(c)(3) compensation, satisfies the “New Comparability” rules of 1.401(a)(4)-8(b), (e.g. each NHCE received an allocation of at least 5% of their 415(c)(3) compensation)

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

* Sample computation of HCE Accrual rate (Employee A):

Total allocations subject to rate group analysis	\$ 22,500
X	X
Accumulation factor- Years Until Testing Age Calculated at 8.5% (See Table 4 below)	1.503657
=	=
<u>Future Value 8.5% at Testing Age 65</u>	<u>\$ 33,832.28</u>
Future Value / Annuity Purchase Factor x 12 = <u>Yearly Benefit</u>	\$ 4,256.53
Yearly Benefit / Total Compensation = <u>Accrual Rate</u>	<u>2.838%</u>

** Sample computation of NHCE Accrual rate (Employee B):

Total allocations subject to rate group analysis	\$ 3,000
X	X
Accumulation factor – Years Until Testing Age Calculated at 8.5% (See Table 4 below)	13.606663
=	=
<u>Future Value 8.5% at Testing Age 65</u>	<u>\$40,819.99</u>
Future Value / Annuity Purchase Factor x 12 = <u>Yearly Benefit</u>	\$ 5,135.67
Yearly Benefit / Total Compensation = <u>Accrual Rate</u>	<u>8.559%</u>

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

Sample Annuity Purchase Factors

MONTHLY LIFE ANNUITY @ 65 FACTORS PAYABLE ANNUALLY (MALE)							
Interest Rate	83 IAM(m)	71 GAM(m)	U.P. '84	83 GAM(m)	GATT	GAR	71 IAM(m)
7.5%	9.459	8.399	8.457	8.935	9.524	9.695	9.056
8.0%	9.134	8.143	8.196	8.647	9.196	9.354	8.757
8.5%	8.828	7.900	7.949	8.375	8.889	9.035	8.476

MONTHLY LIFE ANNUITY @ 65 FACTORS PAYABLE MONTHLY (MALE)							
Interest Rate	83 IAM(m)	71 GAM(m)	U.P. '84	83 GAM(m)	GATT	GAR	71 IAM(m)
7.5%	113.508	100.788	101.484	107.22	114.288	116.34	108.672
8.0%	109.608	97.716	98.352	103.764	110.352	112.248	105.084
8.5%	105.936	94.800	95.388	100.500	106.668	108.420	101.712

MONTHLY LIFE ANNUITY @ 65 FACTORS PAYABLE ANNUALLY (FEMALE)							
Interest Rate	83 IAM(F)	71 GAM(F)	U.P. '84	83 GAM(F)	GATT	GAR	71 IAM(F)
7.5%	10.369	9.716	8.458	10.219	9.524	9.695	9.969
8.0%	9.980	9.377	8.196	9.843	9.196	9.354	9.614
8.5%	9.616	9.059	7.949	9.491	8.889	9.035	9.280

MONTHLY LIFE ANNUITY @ 65 FACTORS PAYABLE MONTHLY (FEMALE)							
Interest Rate	83 IAM(F)	71 GAM(F)	U.P. '84	83 GAM(F)	GATT	GAR	71 IAM(F)
7.5%	124.428	116.592	101.496	122.628	114.288	116.34	119.628
8.0%	119.76	112.524	98.352	118.116	110.352	112.248	115.368
8.5%	115.392	108.708	95.388	113.892	106.668	108.420	111.36

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

**Table 4 Accumulation Factors
Years Until Testing Age (65) Calculated at 8.5%
(1.085ⁿ)**

<u>n Years</u>	<u>Factor</u>	<u>n Years</u>	<u>Factor</u>	<u>n Years</u>	<u>Factor</u>
1	1.085000	21	5.546570	41	28.354322
2	1.177225	22	6.018028	42	30.764439
3	1.277289	23	6.529560	43	33.379416
4	1.385859	24	7.084573	44	36.216666
5	1.503657	25	7.686762	45	39.295083
6	1.631468	26	8.340137	46	42.635165
7	1.770143	27	9.049049	47	46.259154
8	1.920605	28	9.818218	48	50.191182
9	2.083856	29	10.652767	49	54.457432
10	2.260984	30	11.558252	50	59.086314
11	2.453168	31	12.540703	51	64.108651
12	2.661687	32	13.606663	52	69.557886
13	2.887930	33	14.763229	53	75.470306
14	3.133404	34	16.018103	54	81.885282
15	3.399743	35	17.379642	55	88.845531
16	3.688721	36	18.856912	56	96.397401
17	4.002262	37	20.459750	57	104.591180
18	4.342454	38	22.198829	58	113.481430
19	4.711563	39	24.085729	59	123.127352
20	5.112046	40	26.133016	60	133.593177

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

RATE GROUP TESTING UNDER 410(b) FOR CROSS TESTING

<u>Employee</u>	<u>Equivalent Benefit Accrual Rate (EBAR)</u>	<u>Rate Group Number # 1 - 2.838</u>
A	2.838%	Yes – HCE
B	8.559%	Yes – NHCE
C	6.701%	Yes – NHCE
D	7.889%	Yes – NHCE
E	6.701%	Yes – NHCE
F	2.732%	No – NHCE
G	2.320%	No – NHCE

Number of HCE's in each Rate Group	1
Number of NHCE's in each Rate Group	4
Percent of Benefiting HCE's in each Rate Group (1/1)	100%
Percent of Benefiting NHCE's in each Rate Group (4/6)	66.67%
The Ratio of the NHCE's percentage to the HCE's percentage for the Rate Group	66.67%
(Since it is less than the 70% the ratio percentage test is not met)	
IRC 410(b) Threshold for Rate Group Testing (see following page)	26.25%

(Since the above rate group ratio percentage is greater than the Threshold, the rate group passes the nondiscriminatory classification test; however, the average benefits percentage test must still be passed by the plan as a whole)

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

IRC 410(b) Nondiscriminatory Classification Test minimum Ratio Percentage for the plan's Rate Groups

NHCE Concentration Percentage: (Regs. 1.410(b)-4(c)(4))

Total # of NHCE's / Total # of Employees

$$6 \quad / \quad 7 \quad = \quad 85.71 \text{ (always round down)}$$

Safe Harbor Percentage: 31.25%

Unsafe Harbor Percentage: 21.25%

Midpoint Percentage: 26.25%

IRC 410(b) Ratio Percentage for the Plan: 100%
(7 eligible employees and 7 participating employees)

Lesser of Midpoint Percentage or IRC 410(b) Ratio % 26.25

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

Regs. 1.410(b)-4(c)(4) Safe Harbor Table

<u>NHCE Concentration %</u>	<u>Safe Harbor %</u>	<u>Unsafe Harbor %</u>	<u>Midpoint %</u>
0-60	50.00	40.00	45.00
61	49.25	39.25	44.25
62	48.50	38.50	43.50
63	47.75	37.75	42.75
64	47.00	37.00	42.00
65	46.25	36.25	41.25
66	45.50	35.50	40.50
67	44.75	34.75	39.75
68	44.00	34.00	39.00
69	43.25	33.25	38.25
70	42.50	32.50	37.50
71	41.75	31.75	36.75
72	41.00	31.00	36.00
73	40.25	30.25	35.25
74	39.50	29.50	34.50
75	38.75	28.75	33.75
76	38.00	28.00	33.00
77	37.25	27.25	32.25
78	36.50	26.50	31.50
79	35.75	25.75	30.75
80	35.00	25.00	30.00
81	34.25	24.25	29.25
82	33.50	23.50	28.50
83	32.75	22.75	27.75
84	32.00	22.00	27.00
85	31.25	21.25	26.25
86	30.50	20.50	25.50
87	29.75	20.00	24.88
88	29.00	20.00	24.50
89	28.25	20.00	24.13
90	27.50	20.00	23.75

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

Regs. 1.410(b)-4(c)(4) Safe Harbor Table - Continued

<u>NHCE Concentration %</u>	<u>Safe Harbor %</u>	<u>Unsafe Harbor %</u>	<u>Midpoint %</u>
91	26.75	20.00	23.38
92	26.00	20.00	23.00
93	25.25	20.00	22.63
94	24.50	20.00	22.25
95	23.75	20.00	21.88
96	23.00	20.00	21.50
97	22.25	20.00	21.13
98	21.50	20.00	20.75
99	20.75	20.00	20.38

EQUIVALENT BENEFIT ACCRUAL RATES FOR AVERAGE BENEFIT PERCENTAGE TEST

<u>Employee</u>	<u>Contribution + Forfeitures to all Plans – Columns (4), (5), (6) & (7)</u>	<u>Future Value 8.5% at Test Age 65</u>	<u>Annuity Purch. Factor</u>	<u>Benefit Accrual Amount</u>	<u>HCE Accrual Rate</u>	<u>NHCE Accrual Rate</u>
A	\$ 40,000	\$ 60,146.28	95.38	\$7,567.15	5.0448%*	-
B	4,500	61,229.98	95.38	7,703.50	-	** 12.8392%
C	3,150	33,556.22	95.38	4,221.79	-	8.7954%
D	2,650	33,232.86	95.38	4,181.11	-	11.003%
E	2,650	28,229.83	95.38	3,551.67	-	9.3465%
F	3,350	14,547.22	95.38	1,830.22	-	3.5197%
G	<u>2,250</u>	8,299.62	95.38	1,044.20		<u>3.4807%</u>
	\$ 58,550				5.0448%	48.9845%
Number of Eligible Employees:					1	6
Averages:					5.04%	8.16%

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

*Sample computation of HCE Equivalent Accrual Rate for Average Benefits Percentage Testing (Employee A):

Total allocation to all plans	\$ 40,000
X	X
Accumulation factor – Years Until Testing Age Calculated at 8.5%	1.503657
=	=
Future Value 8.5% at Testing Age 65	\$ 60,146.28
Future Value / Annuity Purchase Factor x 12 = Yearly Benefit	\$ 7,567.15
Yearly Benefit / Total Compensation = Accrual Rate	<u>5.0448%</u>

**Sample computation of NHCE Equivalent Accrual Rate for Average Benefits % Testing (Employee B):

Total allocation to all plans	\$ 4,500
X	X
Accumulation factor – Years Until Testing Age Calculated at 8.5%.	13.606663
=	=
Future Value 8.5% at Testing Age 65	\$ 61,229.98
Future Value / Annuity Purchase Factor x 12 = Yearly Benefit	\$ 7,703.50
Yearly Benefit / Total Compensation = Accrual Rate	<u>12.8392</u>

Continued on next page

DC Plan-Case Study-General Test calculations, Continued

AVERAGE BENEFIT PERCENTAGE TEST – CROSS TESTED DETERMINATION

Average Benefit Percentage for NHCE's:	8.16%
Average Benefit Percentage for HCE's:	5.04%
Ratio of NHCE Percentage to HCE Percentage:	161.9%

Conclusion: Average Benefit Percentage Test is PASSED,
Because the ratio of percentages exceeds 70%.

Overall Conclusions about DC Demonstration 6

- Conclusion 1** The methodology used satisfies Income Tax Regulations section 1.401(a)(4)-2(c). **Equivalent Accrual rates were properly determined and rate groups properly established.**
-
- Conclusion 2** The “New Comparability” Gateway minimums were satisfied. (The employer 2% discretionary contribution and the 3% 401(k) safe harbor contribution based upon IRC415(c)(3) compensation, met the “New Comparability” requirements. This was accomplished by the employer contribution, to each NHCE, of 5% of their IRC415(c)(3) compensation thus, satisfying the minimum “New Comparability” gateway requirement for cross testing).
-
- Conclusion 3** The Rate Groups satisfy the Average Benefits Percentage Test, as demonstrated above.
-

Tips to review Demonstration 6

**Tips to review a
Demo 6 - DC**

1. Look on the application form for other plans. Note, a Form 5310 will not indicate if there are other plans.
 2. Look at the schedule Q, if provided, (required for Form 5310), to determine if a demonstration Six was provided or required (Form 5310).
 3. Look at all related demonstrations in the case file, e.g. Demos. 1, 3, 4, 5, 7, and 9
 4. If a Demonstration 6 is provided, look for the spreadsheet calculations of Equivalent Benefit Accrual Rate (“EBARs”), if cross-tested.
 5. Read narrative and note:
 - the testing basis,
 - the testing year,
 - imputed permitted disparity,
 - the interest rate used to project the calculations to the plan’s testing age,
 - the APRs used to convert those amounts into EBARs , and
 - the compensation definition to ensure they do not need demo 9
 6. Check testing age and Normal Retirement Age in the plan.
 7. Look at the calculation of the EBARs, for rate group testing and for the average benefit percentage test.
 8. Check for the use of the appropriate APR.
 9. Check the allocation formula and determine whether the allocation formula is an age weighted or points allocation formula and whether the formula in the plan is being followed.
-

CASE STUDY – Demo 6–DB plan-Introduction

Introduction The following case study involves a flat benefit defined benefit plan. A ruling was requested for the Non-Designed Safe Harbor for Flat Benefit Plans, as required by Income Tax Regulations 1.401(a)(4)-3(b)(4)(C)(3). A modified Demonstration 6, as required by I.T. Regs. 1.401(a)(4)-3(b)(4)(C)(3) was provided.

Application filed Form 5300 #14 answered “no”.
Form 5307 #12 answered “no”
Form 5310 #14e(1) answered “yes”, e(2) or e(3) answered “no”.

Schedule Q #6 answered “yes” with a type “C” indicated (Nondesign-based safe harbor). Note: No additional user fee is required if “C” is indicated.

NonDesign Based Safe Harbor for Flat Benefit Plans The demonstration of the Nondesign Based Safe Harbor for flat benefit plans in section 1.401(a)(4)-3(b)(4)(i)(C)(3) of the regulations must set forth the average of the normal accrual rates for all nonhighly compensated nonexcludable employees and the average of the normal accrual rates for all highly compensated nonexcludable employees. In addition, the demonstration should provide the additional information described in “General Test” relating to the determination of normal accrual rates, except for the information described in “a”, “b”, “f”, “r”, and “s”. Note: the revised instructions to Schedule Q Demonstrations Rev.8-2001 uses numbers rather than letters for these sections.

Case Study-DB plan-Plan Provisions

Introduction For purposes of this case study, the defined benefit pension plan has the following plan provisions:

Compensation Compensation: is a definition of IRC 415(3)(C) Compensation, as defined by Income Tax Regulations 1.415-2(d)(1). (i.e., the amount reported in the “Wages, tips, and other compensation” box of the Participant’s Form W-2, and Earned Income).including Employer Contributions made pursuant to a salary reduction agreement which are not includable in the gross income of the Employee under Code Sections 125, 402(e)(3) 402(h)(1)(B) and 403(b).

Average Monthly Compensation: shall be averaged over the highest 3 consecutive years of the employee’s compensation.

Normal retirement date The later of the date a Participant attains his 65th birthday or the 5th anniversary of the Plan Year in which the Participant commenced participation in the Plan, if later.

Normal retirement benefit form Normal Retirement Benefit Form: a Straight Life Annuity.

Benefit formula A Participant’s Monthly Retirement Benefit under the Plan shall be equal to 110% of such Participant’s Average Monthly Compensation, reduced pro rata for possible accrual years less than 20. NOTE: if at least 25 was utilized, this formula would be a design based safe harbor formula.

NOTE: The 110% of compensation formula is permitted since 1.401(a)(4)-2(b)(4)(C)(2) and (3) allows the benefit formula to be determined without regard to IRC415(b). However, keep in mind that the plan provisions applying the IRC 415(b) limits, over-ride the other provisions of the plan.

Case Study – DB plan-Demo 6 information

Introduction

The following information was provided with the Form 5300 application.

Demo 6 attachment

The following schedule demonstrates that the plan complies with the requirements of the Non-Design Based Safe Harbor for flat benefit plans as of September 30, 2002.

- a. The identification of each rate group - **NA**
- b. Whether the plan is being tested on a contributions or benefits basis - **NA**
- c. The plan year being tested is the plan year including the testing date of September 30, 2002.
- d. Benefit rates were determined using the Annual Method

Under this method the accrual rate is equal to the normalized benefit described in g) divided by the average annual compensation (described in i). The benefit that is normalized is the actual increase in accrued benefit between the beginning and the end of the plan year. For the normal accrual rate, the benefit used is the benefit payable in the plan's primary form, at the plan's normal retirement age. The most valuable accrual rate is the largest accrual rate calculated using the benefit payable at each possible age between the participant's current age on their testing date and their testing age, in the form of a joint and 100% survivor benefit. The IRC415(b) limits have been taken into account. See Demo – 6D for a sample calculation.

e. Permitted disparity has not been imputed into the benefit rates.

f. A demonstration of how accrual rates are grouped – **NA**

g. Normalization of benefits:

First the benefit to be normalized is determined. This benefit is then multiplied by an annuity rate equal to the value of payments in the form that the benefit is paid in, determined using reasonable assumptions. Lastly, this amount is divided by a life only annuity rate at the testing age, using reasonable assumptions.

Continued on next page

Case Study – DB plan-Demo 6 information, Continued

**Demo 6
attachment
continued**

g. Normalization of benefits: continued

Annuity rate calculated based on 7.50% interest and 1983 IAM FEMALE interest adjustment factor based on 8.50% interest.

See Demo – 6G for a sample calculation of normalized benefit

h. 415(c)(3) compensation (subject to the limits of 401(a)(17)) was used as plan year compensation, which satisfies 1.414(s)-1(c)(2)

i. Current Plan Year Compensation was used in determining the benefit rates

j. The testing age is determined as the later of the following:
Attainment of age 65 or The 5th anniversary of plan participation.

k. Accruals after normal retirement age are taken into account, if the participant has not separated from service.

l. The plan provides no early retirement window benefits

m. The plan provides no unpredictable contingent event benefits

n. The plan has no offsets as described in 1.401(a)(4)-11(d)(3)(i)(D).

o. The plan has no disability benefits as described in 1.401(a)(4)-3(f)(2).

p. No other special rules described in 1.401(a)(4)-3(f) were used.

q. The plan does not allow for employee contributions.

r. Safety Valve utilized - **NA**

s. Cross testing utilized - **NA**

Note: The above format relies upon Revenue Procedure 93-39, and Schedule Q and Schedule Q instructions, at that time.

Case Study-DB plan, employee data and calculation

Employee Data

Employee Data
Determined as of September 30, 2002
Using the Annual Method

<u>Participant</u>	<u>Date of Hire</u>	<u>Test Age</u>	<u>HCE</u>	<u>NHCE</u>	<u>Normal Ben Rate</u>	<u>Most Val Ben Rate</u>
A	10/3/73	65	X		6.201	6.474
B	2/28/96	65		X	4.691	5.980
C	11/2/86	65		X	9.285	12.376
Total for Highly Compensated Employees					<u>6.201</u>	<u>6.474</u>
Total for Non Highly Compensated Employees					<u>13.976</u>	<u>18.356</u>
Average for NHCE's (rates divided by 2)					6.988	9.178
Average for HCE's (rates divided by 1)					6.201	6.474
Average Benefit % - NHCE % / HCE's %					<u>112.692%</u>	<u>141.767%</u>
Ratio Percentage					100%	
Concentration % (2/3)					66.67%	
Safe Harbor % (see safe harbor table)					45.50	
Unsafe Harbor %					35.50	
Midpoint					40.50	

(Note: Midpoint information was not needed for the Non-Design Based Safe Harbor testing but was provided by the employer)

Since the Average Benefit Percentage is greater than 70%, the nondiscrimination test is met. IRC 1.401(a)(4)-3(b)(4)(i)(c)(3)

Continued on next page

Case Study-DB plan, employee data and calculation, Continued

Demo 6 exhibit
6G

Normalization of Benefits
Determined as of September 30, 2002

Illustration for Employee A

A. Benefit to Normalize	\$ 33,000
Benefit Payable Starting at age	65
Benefit Payable for the Participant's Life	
B. Annuity rate for Benefit (See Sample Annuity Purchase Factors chart)	10.37
C. Testing Age	65
D. Life only Annuity Rate at Testing Age	10.3695
Normalized Benefit (A x B x C / D)	<u>\$ 33,000</u>

Annuity Rate Calculated based on 7.50% interest and 1983 IAM Female.

Demo 6 Exhibit
6D

Determination of Accrual Rates
Determined as of September 30, 2002

Illustration for Employee A

A. Normalized beginning of year accrued benefit	\$ 22,458.36
B. Normalized end of year accrued benefit	33,000.00
C. Normalized benefit accrued during year (B-A)	10,541.64
D. Plan Average compensation	\$170,000
E. Normal Accrual Rate (100 x C / D)	<u>6.20</u>

Continued on next page

Case Study-DB plan, employee data and calculation, Continued

Conclusion for the Non-Design Based Safe Harbor

Since the average benefit percentage for the normal accrual rate is greater than 70%, the nondiscrimination is met. The methodology for determining the accrual rate and average benefit percentages was correct.

Additional information provided – most valuable illustration

Determination of Most Valuable Accrual Rate
Illustration for Employee A - Age 59

Payment Date	Normalized B-O-Y	Normalized E-O-Y	Normalized	Plan	Accrual Rate
	Most Val Accrued Ben	Most Val Accrued Ben	Most Val Accrued Ben	Average Comp.	
9/30/02	23,448.73	34,455.23	11,006.50	170,000	6.47
9/30/03	23,204.14	34,095.83	10,891.69	170,000	6.41
9/30/04	22,966.73	33,747.99	10,780.26	170,000	6.34
9/30/05	22,735.37	33,407.03	10,671.66	170,000	6.28
9/30/06	22,509.81	33,075.59	10,565.78	170,000	6.22
9/30/07	22,292.16	32,755.79	10,463.63	170,000	6.16
9/30/08	21,702.53	31,889.39	10,186.86	170,000	5.99
Most Valuable Accrual Rate (Largest Actual Rate) = <u>6.47</u>					

Continued on next page

Case Study-DB plan, employee data and calculation, Continued

Imputing permitted disparity illustration

Section e. of the Demonstration 6 indicated that permitted disparity had not been imputed, but the following illustration was provided.

Illustration for Employee A

A. Covered Compensation	\$ 53,568
B. Testing Age (1.00 reduced by 1/15 for each of the first five years, 1/30 for each of the next five years, and actuarially for years over 10)	65
C. Number of Prior years in an integrated plan	0
D. Adjustment for More than 35 prior years (1 if C is 35 or less, 0 if more than 35 years)	1.00
E. Maximum Imputed Disparity	.70
F. Average Annual Compensation	\$170,000
G. Unadjusted Normal Accrual Rate	6.20
H. C Rate = $F \times G / (F - .5 \times A)$	7.36
I. D Rate = $(F \times G + E \times A) / F$	6.42
J. Accrual Rate if using imputed disparity (Lesser of H of I)	<u>6.42</u>

CASE STUDY-DB plan-Demo 6, general test

Introduction Had this been a General Test Plan Pursuant to Income Tax Regulations 1.401(a)(4)-3(c), rather than a Non-Design Based Safe-Harbor, (under 1.401(a)(4)-2(b)(4)(C)(3)), the following would have been required:

**Rate Group
Demo 6A**

Rate Groups Determined as of September 30, 2002
HCE A
Normal Benefit Rate 6.201 and Most Valuable Benefit Rate 6.474

<u>Employee</u>	<u>Normal Benefit Rate</u>	<u>Most Val Benefit Rate</u>	<u>HCE</u>	<u>NHCE</u>
A	6.201	6.474	X	
C	9.285	12.376		X
Total employees in rate group			1	1
Total nonexcluded employees of the Employer			1	2
Percent of Nonexcluded employees in rate group			100%	50%
Ratio Percentage (NHCE% / HCE%)				50%

Since the plan passes the average benefit percentage test and the ratio percentage is greater than the midpoint between the safe and unsafe harbor percentages, the rate group satisfies 410(b). The methodology utilized was correct.

Continued on next page

CASE STUDY-DB plan-Demo 6, general test, Continued

**Tips to review a
Demo 6 - DB**

1. Look at application form to determine if there are other plans. If the application form is a 5310, it will not indicate if there are other plans.
 2. Look at the schedule Q to see if a Demonstration 6 was provided.
 3. If a Demonstration 6 was provided, you will need to consider actuarial equivalence, the early retirement benefits, the normal form of benefit, normal retirement benefits and definition of the qualified joint and survivor benefits.
 4. Read narrative if supplied and note the following:
 - testing basis, testing year,
 - method of determining accrual,
 - imputed permitted disparity,
 - assumptions (Annuity Purchase Rates at 65, etc.),
 - definition of compensation to ensure that they do not need demonstration 9.
 5. Look for any backup data about the employees.
 6. Look for sample calculations including both the most valuable and normal accrual rates.
 7. Look for rate group analysis.
 8. Look for average benefit test analysis, if required.
-

Summary of Schedule Q Demonstrations

**Demo 1 -
Schedule Q #1
answered “yes”**

Requires a determination that a plan that is using the qualified separate line of business (QSLOB) rules of section 414(r) satisfies the gateway test of section 410(b)(5)(B) or satisfies the special rules for employer-wide plans. See Schedule Q Instructions for Demo 1 – Qualified Separate Lines of Business.

**Demo 2 -
Schedule Q #2**

A Demonstration showing satisfaction of IRC 401(a)(26) only applies to Defined Benefit Pension Plans.

**Demo 3 -
Schedule Q #3
answered “yes”**

A request for a determination that each specified benefit, right, or feature meets the nondiscriminatory current availability requirement of Regulations section 1.401(a)(4)-4(b). See Schedule Q Instructions for Demo 3 – Nondiscriminatory Current Availability of Benefits, Rights And Features.

**Demo 4 –
Schedule Q #4
answered “yes”**

Is a request for a determination regarding the plan being restructured, mandatorily disaggregated, or permissively aggregated. See Schedule Q Instructions for Demo 4 – Test for Restructuring, Mandatory Disaggregation or Permissive Aggregation.

**Demo 5 –
Schedule Q #5
answered “yes”**

Is a request for a determination that the plan satisfies the coverage requirements of section 410(b) by satisfying the average benefit test of 1.410(b)-4 and 1.410(b)-5. See Schedule Q Instructions for Demo 5 – Average Benefit Test.

**Demo 6 –
Schedule Q #6
answered “yes”**

Is a request for a determination that the plan satisfies the nondiscrimination in amount or benefits requirements under section 401(a)(4) of the Code using a non-design based safe harbor or a general test. See Schedule Q Instructions for Demo 6 – General Test, Demo 6 – Safe Harbor for Uniform Points Plans, and Demo 6 – Alternative Safe Harbor for Flat Benefit Plans.

Continued on next page

Summary of Schedule Q Demonstrations, Continued

**Demo 7 –
Schedule Q
#7(i) answered
“yes”**

Is a request for a determination regarding any plan provision which provides for pre-participation or imputed service as defined in Regulations section 1.401(a)(4)-11(d)(3)(ii).

**Schedule Q
#7(ii)
answered
“yes”**

Is a request for a determination regarding a plan amendment or, in the case of an initial determination, a plan provision which provides for a period of past service that exceeds the period set forth in the safe harbor in Regulations section 1.401(a)(4)-5(a)(3).

See Schedule Q Instructions for Demonstration 7 – Test for Pre-Participation or Imputed Service.

**Demo 8 –
Schedule Q #8
answered “yes”**

Is a request for a determination regarding a floor offset arrangement intended to satisfy the safe harbor in Regulations section 1.401(a)(4)-8(d). See Schedule Q Instructions for Demonstration 8 – Test for Floor Offset Arrangement

**Demo 9 –
Schedule Q #9
answered “yes”**

Is a request for a determination where the plan bases contributions or benefits on a definition of compensation that does not satisfy the requirements of Regulations sections 1.414(s)-1(c)(2) or (3) OR the plan includes a section 401(k) and/or section 401(m) plan that incorporates an actual deferral percentage or actual contribution percentage test using a definition of compensation that does not satisfy the requirements of Regulations sections 1.414(s)-1(c)(2) or (3). See Schedule Q Instructions for Demo 9 – Nondiscriminatory Compensation.

**Demo 10 –
Schedule Q #10
answered “yes”
and #11
answered “A -
Composition-
of-workforce
method”**

Is a request for a determination for a defined benefit plan with employee contributions not allocated to separate accounts?

Demonstration 10 should demonstrate that the eligibility requirements of Regulations section 1.401(a)(4)-6(b)(2)(ii) are satisfied. See Schedule Q Instructions for Demonstration 10 – Employer-Provided Benefit Method.

Continued on next page

Summary of Schedule Q Demonstrations, Continued

**Demo 10 –
Schedule Q #10
answered “yes”
and #12
answered “C –
Grandfather
rule”**

Requesting a determination for a defined benefit plan with employee contributions not allocated to separate accounts. Demonstration 10 should demonstrate that 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, as required by Regulations section 1.401(a)(4)-6(c)(4)(ii)(D). See Schedule Q Instructions for Demo 10 – Test to Show Employer-Provided Benefit is Nondiscriminatory in Amount.

**Schedule Q not
required except
for Form 5310**

Remember, the Schedule Q is **NOT** required except when the plan is Terminating, otherwise it is discretionary for ongoing plans. – Form 5310 requires the current Demonstrations 5 and/or 6. If submitted, the employer is requesting reliance under IRC 401(a)(4) and /or IRC 410(b)

**Schedule Q and
Instructions**

A Schedule Q and Instructions (Rev. 8-2001) are attached.
