October 21, 2013

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
Suite 2700, P.O. Box 2319
Toronto, ON M4P 1E4
Dear Ms. Walli:

Re: Algoma Power Inc.
Application for Deferral and Variance Accounts for Transitional \& Annual Adjustments to its Pension and Other Post-Employment Benefits

Please find accompanying this letter, two copies of an Application to establish deferral and variance accounts to record transitional and ongoing annual adjustments to its pension and other post-employment benefits related assets and liabilities.

Electronic copies of the Application have been submitted via the Board's Regulatory Electronic Submission System.

Yours truly,
Original Signed by
Douglas R. Bradbury P.Eng.
Director Regulatory Affairs

## Enclosures

## ONTARIO ENERGY BOARD

IN THE MATTER OF the Ontario Energy Board Act, 1998, C. S.O. 1998, c. 15 (Sched. B);

AND IN THE MATTER OF an Application by Algoma Power Inc. for an Order or Orders pursuant to Section 78 of the Ontario Energy Board Act, 1998 authorizing the use of additional deferral and variance accounts.

## Application

1. The applicant is Algoma Power Inc. ("API" or the "Applicant"), a wholly-owned subsidiary of FortisOntario Inc. ("FortisOntario"). The Applicant, an Ontario corporation with its head office in Sault Ste. Marie, Ontario carries on the business of owning and operating electricity distribution facilities in the Algoma District of Ontario.
2. API hereby applies to the Ontario Energy Board (the "Board" or the "OEB"), pursuant to section 78 of the Ontario Energy Board Act, 1998 as amended (the "OEB Act") for an Order or Orders authorizing API to establish deferral and variance accounts to record transitional and ongoing annual adjustments to its pension and other post-employment benefits related assets and liabilities. These matters are discussed in the Manager's Summary attached hereto.
3. API's most recent cost of service review was EB-2009-0278 in which the Board approved electricity distribution rates for API's electricity distribution customers effective February 1, 2011. The Board has approved electricity distribution rates effective January 1, 2012 and January 1, 2013 on the basis of third
generation incentive rate-setting.
4. API requests that the Board dispose of this proceeding without a hearing in accordance with subsection $21(4)$ (b) of the OEB Act, which provides:

Despite section 4.1 of the Statutory Powers Procedure Act, the Board may, in addition to its power under that section, dispose of a proceeding without a hearing if,
(a) no person requests a hearing within a reasonable time set by the Board after the Board gives notice of the right to request a hearing; or (b) the Board determines that no person, other than the applicant, appellant or licence holder will be adversely affected in a material way by the outcome of the proceeding and the applicant, appellant or licence holder has consented to disposing of a proceeding without a hearing.

The grounds for this request are:

- No person can be adversely affected by the creation of a deferral and variance account. A deferral account is simply an accounting mechanism to record costs.
- The dispersal of the requested deferral and variance account will be the subject of a future rates proceeding.

5. As signatory to this Application, I, R. Scott Hawkes, Vice President, Corporate Services and General Counsel do certify that the evidence filed in this Application is accurate, consistent and complete to the best of my knowledge.

## All of Which is Respectfully Submitted

APl's contact information for this Application is as follows:

The Applicant:
Mr. Douglas R. Bradbury P. Eng.
Director Regulatory Affairs
Algoma Power Inc.

Mailing Address: 1130 Bertie Street
P. O. Box 1218

Fort Erie, Ontario L2A 5Y2
Telephone:
(905) 994-3634

Fax:
Email Address:
regulatoryaffairs@fortisontario.com

The Applicant's counsel:
Mr. R. Scott Hawkes
Vice President, Corporate Services and General Counsel
Algoma Power Inc.
Mailing Address: 1130 Bertie Street
P. O. Box 1218

Fort Erie, Ontario L2A 5 Y2
Telephone:
(905) 994-3642

Fax:
(905) 994-2211

Email Address: scott.hawkes@fortisontario.com

DATED at Fort Erie, Ontario this $21^{\text {st }}$ day of October, 2013.

## ALGOMA POWER INC.

By its counsel,

R. Scott Hawkes

## Manager's Summary

## Request

API requests the following additional variance and deferral accounts:

- A deferral account for the transitional changes in post-retirement employee benefits liability and costs arising from the changes in accounting standards; and
- A variance account for the changes in pension and other post-employment benefits ("P\&OPEB") expense included in the Board approved 2013 electricity distribution rates and actual costs until the next cost of service review.

These deferral and variance amounts are essentially an amortization of costs, there is no immediate impact on API's cash position, therefore API is not requesting interest improvement related to the amounts recorded.

## DISCUSSION

API adopted, in its opening balance sheet on January 1, 2010, the CICA Handbook Part II, Accounting Standards for Private Enterprises ("ASPE"). Upon adoption, there was no transitional financial impact on the financial statements of API. API is not aware of any other distributor in Ontario, other than Canadian Niagara Power using ASPE.

In May 2013, the Canadian Accounting Standards Board ("AcSB") issued Section 3462, Employee Future Benefits, in Part II of the CICA Handbook. The amendments introduced by Section 3462 changes the financial statements of entities offering postretirement benefits to its employees; API is such an entity. API currently administers two forms of pension and post-employment plans for its employees.

Effective July 1, 2009, employees of the distribution division of Great Lakes Power Limited ("GLPL") were transferred to a separate company, Algoma Power Inc. (formerly Great Lakes Power Distribution Inc.) These employees were members of the Retirement Plan of GLPL prior to July 1, 2009. The Plan was established for the employees transferred to Great Lakes Power Distribution and for future eligible
employees of Great Lakes Power Distribution. On January 27, 2011, the Financial Services Commission of Ontario approved the transfer of assets from the GLPL Plan to the Retirement Fund of Algoma Power Inc. On April 5, 2011, assets were transferred to the Retirement Fund of Algoma Power Inc. with respect to the employees' benefits accrued prior to July 1, 2009 in the GLPL Plan as well as benefits in the GLPL Plan for inactive members formerly employed by the distribution division of GLPL. Full time unionized employees are eligible to participate in the Retirement Fund of Algoma Power Inc. (the "DB Plan"). All full-time, permanent, non-unionized employees are eligible for participation in the API Defined Contribution Plan (the "DC Plan").

API provides certain extended health and dental benefits, OPEB, on behalf of its retired employees. Salaried and hourly employees with a minimum of ten years continuous service, along with their eligible dependents, will have extended health and dental retiree benefits from the date of retirement until their death.

This Application applies only to the DB Plan and Other Post-Employment Benefits.

Section 3462 is effective for fiscal years beginning on or after January 1, 2014 replacing Section 3461. Print copies of Section 3461 and 3462 are provided in Appendix "A".

Under current CICA Handbook standards, Section 3461- Employee Future Benefits, the use of the "corridor approach" is permitted in the calculation of periodic accounting expense. The corridor approach allows the deferral of actuarial and other remeasurement gains and losses to future periods through the amortization of these costs over the remaining service life of current active employees. This has provided a mechanism for smoothing pension and post-retirement expense that would otherwise be volatile. The affect in recent years on changes in interest rates, discount rates and rates of return on the measurement of pension and other post-retirement future liabilities and associated asset values have been significant. These changes have created large gains and losses which historically have been amortized to income over future periods. Section 3462 replaces Section 3461 and will no longer allow the use of the corridor approach. Therefore the volatility of the pension and post-employment expense will impact the current earnings. As a result, in the absence of deferral and variance
accounts, API will have to recognize all re-measurement costs immediately in expense, and will no longer be able to amortize re-measurement gains and losses over future periods.

## Variance Account

To evaluate the probable impact of the implementation Section 3462, API requested that its actuarial services provider, Mercer, provide a 2013 Pension Expense Projection of its DB plan. A copy of the projection provided by Mercer is provided in Appendix " $B$ " of this Application.

Using the information provided by Mercer, API has projected the impact of implementing Section 3462 for the period ending December 31, 2013 for both the DB Plan and The Other Post-Employment Benefits.

Table 1
API Defined Pension Plan - Change in Net Expense Position

## API 2013 Pension Expense Projection under Section 3461

|  | Projected <br> Amounts |
| :--- | ---: |
| Current service costs including plan expenses |  |
| Interest cost | 503 |
| Expected return on plan assets | 1,046 |
| Amortization of transitional obligation | $(1,176)$ |
| Amortization of past service costs | 44 |
| Amortization of net actuarial loss | - |
| Net expense per 3461 | 275 |

API 2013 Pension Expense Projection under Section 3462

|  | Projected <br> Amounts |
| :--- | ---: |
| Current service cost (plan expenses now part of remeasurement) | 503 |
| Finance cost (discount rate times net asset or liability) | 193 |
|  | 696 |
| re-measurements | $(14)$ |
| Net expense per 3462 | 682 |
|  |  |
| Difference in expense 3461 and 3462 | (10) |

Under the provisions of Section 3461, which allows use of the "corridor approach" the net expense is projected to be $\$ 692,000$; applying the provision of Section 3462 the net expense is projected to be $\$ 682,000$. This represents a $\$ 10,000$ reporting change to the financial position of API.

Table 2 provides an overview of the December 31, 2013 projected change in expense related to Other Post-Employment Benefits for API as a result of implementing Section 3462.

Table 2
API Other Post-Employment Benefits - Change in Net Expense Position
API 2013 OPEB Expense Projection under Section 3461

|  | Projected <br> Amounts |
| :---: | :---: |
| Current service costs | 284 |
| Interest cost | 298 |
| Amortization of transitional obligation | 195 |
| Amortization of net actuarial loss | 74 |
| Net expense per 3461 | 851 |
| API 2013 OPEB Expense Projection under Section 3462 |  |
|  | Projected Amounts |
| Current service cost | 284 |
| Finance cost (discount rate times net asset or liability) | 298 |
| re-measurements-2013 actuarial gain | $\begin{gathered} 582 \\ (570) \end{gathered}$ |
| Net expense per 3462 | 12 |
| Difference in expense 3461 and 3462 | (839) |

Because API sponsors a DB Plan and offers other post-employment benefits it is exposed to volatility with respect to its financial and regulatory reporting; a volatility extending from the implementation of Section 3462.

Based on projections provided in Tables $1 \& 2$, the annual change in pension and other post-retirement expense for API is projected to be $\$ 849,000$.

## Deferral Account

Adoption of Section 3462 as of January 1, 2014 requires that unamortized amounts as of December 31, 2013 will be retroactively charged to the retained earnings. The 2013 amounts will be restated to reflect the new Section 3462 as of January 1, 2013. The
expected balances of unamortized amounts as of December 31, 2013, for APl's pension and OPEB, are estimated to be $\$ 8,081,000$.

Table 3 illustrates the expected balance sheet impact and balances of unamortized amounts to be charged to retained earnings upon adoption of the AcSB Section 3462.

Table 3
Balances of Unamortized Amounts

| Project Changes in Balances on Transition to CiCA Section 3462 <br> As at December 31, 2013 |  |  |  |
| :---: | :---: | :---: | :---: |
| (\$'000) | Projected Accruals Pension Benefit Asset | Projected Accrual Other Retirement Benefit Liability |  |
| Per CICA Section 3461 <br> Per CICA Section 3462 <br> Projected Change On Transition | $\begin{gathered} 2,305 \\ (4,095) \\ \hline \end{gathered}$ $(6,400)$ | $\begin{aligned} & (5,311) \\ & \underline{(6,992)} \\ & \hline \end{aligned}$ | $(8,081)$ |

## Materiality

In Chapter 3 of the Filing Requirements For Electricity Distribution Rate Applications, Filing Requirements for 4th Generation Incentive Rate-setting and Annual Incentive Rate-setting Index, the Board has established the materiality threshold for a Z-factor at $0.5 \%$ of the distribution revenue requirement for a distributor with a revenue requirement greater than $\$ 10$ million and less than $\$ 200$ million. APl's revenue requirement, established in its most recent cost of service review is $\$ 20,198,813$. Using the Board's criteria of $0.5 \%$ as a guideline to evaluate the materiality of API's request in this Application the threshold would be set at $\$ 100,994$. Notwithstanding the impact of the
transitional amounts, APl's projection of changes to expenses totaling \$849,000 significantly exceeds this guideline.

## CaUsation

The requirement for the deferral and variance accounts for changes in pension and postemployment expense is solely attributable to the transition to a new accounting standard; specifically the May 2013, AcSB issuance of Section 3462, Employee Future Benefits, in Part II of the CICA Handbook.

## Prudence

APl's most recent cost of service review and the subsequent Board Decision was established using AcSB 3461. The requested deferral and variance accounts will allow API the functionality to continue to report on the basis of its most recent cost of service review.

Use of the requested deferral and variance accounts will decrease the volatility that may be associated with implementation of section 3462 ; such volatility will serve to mask regulatory performance for the duration of the incentive phase of API's regulatory cycle.

## Precedent

The issue of a proposed generic account for impacts on P\&OPEB accounts was specifically dealt with by the Board in the "Addendum to Report of the Board: Implementing International Financial Reporting in an Incentive Rate Mechanism Environment" dated June 13, 2011, EB-2008-0408 (the "Addendum to Report"). On page 15, regarding a generic deferral account for P\&OPEB, the Board did not approve the creation of a generic account for impacts on P\&OPEB accounts. However, the Board did acknowledge that the option remains for a utility to seek an individual account if they can demonstrate the likelihood of a large cost impact upon transition to the new accounting standard.

API submits that the amount of $\$ 8.1$ million is significant compared to a Z-factor threshold of approximately $\$ 101,000$ (i.e. $0.5 \%$ of $\$ 20.2$ million; API's 2011 revenue requirement).

In the matter of, EB-2012-0161, an application by PowerStream Inc. for rates and other charges for electricity distribution effective January 1, 2013, the Board accepted, as part of a Settlement Agreement ${ }^{1}$, the establishment of a single deferral account related to P\&OPEB. The stated intent was that future recovery will be based on amounts being amortized over the average remaining service lives of the employees. The effect is to smooth the adjustments over a long time.

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## Appendix "A"

## Part II

CICA Handbook Sections 3461 \& 3462

## SPECIFIC ITEMS SECTION 3461 employee future benefits

## Additional Resources

## Background

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PURPOSE
. 001 This Section establishes standards for the recognition, measurement, and disclosure of the cost of employee future benefits. It requires an entity to recognize the cost of retirement benefits and certain post-employment
benefits over the periods in which employees render services to the entity in return for the benefits. Other postemployment benefits are recognized when the event that obligates the entity occurs.

## OBJECTIVE AND BASIC PRINCIPLES

. 002 The objective of accounting for the cost of employee future benefits is to recognize a liability and a cost 1 in the reporting period in which an employee has provided the service that gives rise to the benefits. Benefit plans are considered part of an employee's compensation arrangement. Certain benefit plans oblige an entity to provide benefits to an employee in future periods for service provided by the employee in the current period. The cost of providing future benefits under such plans is recognized in the period in which benefits are earned by the employee because the obligation to provide benefits arises as the employee renders the service.
.003 As set out in FINANCIAL STATEMENT CONCEPTS, Section 1000, liabilities have three essential characteristics, as follows:
(a) they embody a duty or responsibility to others that entails settlement by future transfer or use of assets, provision of services or other yielding of economic benefits, at a specified or determinable date, on occurrence of a specified event, or on demand;
(b) the duty or responsibility obligates the entity leaving it little or no discretion to avoid it; and
(c) the transaction or event obligating the entity has already occurred.

An obligation for employee future benefits possesses these characteristics. First, an entity has a responsibility to its employees to provide the benefits at a specified time in the future, i.e., when an employee retires or leaves the entity. Second, although the responsibility is not always contractual, the obligation is constructive or equitable in almost all cases, thereby leaving an entity little or no discretion to avoid it. Finally, an entity is obligated either by the rendering of service by the employee or, in the case of certain post-employment benefits, by an event such as an application for long-term disability benefits or parental leave.
. 004 Employee future benefits may be provided as part of a defined contribution plan or a defined benefit plan (see paragraphs 3461.010-.013). When an entity provides future benefits as part of a defined contribution plan, the entity's only obligation is to make the required contributions (see paragraphs 3461.014-.023). When an entity provides future benefits as part of a defined benefit plan, the entity's obligation is for the provision of the benefits in future periods. Estimating the cost for the current period of these future benefits involves an actuarial valuation and an attribution method (see paragraphs 3461.024-.134). Termination benefits may be offered under the terms of a benefit plan or as a special arrangement for a short period of time only (see paragraphs 3461.135-.142).

## SCOPE

. 005 This Section applies to benefits earned by active employees and expected to be provided to them when they are no longer providing active service, pursuant to the terms of an entity's undertaking to provide such benefits. Employee future benefits include:
(a) pension and other retirement benefits expected to be provided after retirement to employees and their beneficiaries. These benefits include pension income, health care benefits, life insurance, and other miscellaneous benefits provided to employees after retirement.
(b) post-employment benefits expected to be provided after employment but before retirement to employees and their beneficiaries. These benefits include long- and short-term disability income benefits (including workers' compensation), severance benefits, salary continuation, supplemental unemployment benefits, job training and counselling, and continuation of benefits such as health care benefits and life insurance.
(c) compensated absences for which it is expected employees will be paid. These benefits include parental leaves, accumulating sick days that vest or are paid without an illness-related absence, and sabbaticals that provide compensated, unrestricted time off for past service.
(d) termination benefits.
. 006 Active employees are those currently rendering service to the entity. Former employees are those who are retired, whose employment has been terminated or who have left the entity. Inactive employees are those who are not currently rendering service to the entity but whose employment has not been terminated. Active, former and inactive employees are referred to in this Section collectively as "employees".
.007 An entity's arrangement to provide future benefits to employees may take a variety of forms and may be financed in different ways. Future benefits may be provided either directly by an entity or through an intermediary, such as a pension plan or an insurance enterprise. This Section applies to any arrangement that is in substance a benefit plan regardless of its form or the manner or timing of its funding. Absent evidence to the contrary, it is presumed that an entity that has provided benefits in the past and is currently promising those benefits to employees will continue to provide those benefits in the future. This Section applies to future benefits for which an entity pays all or part of the cost. This Section applies to entities with funded and unfunded benefit plans.
.008 This Section does not apply to benefits provided by an entity to employees during their active employment. Examples of these benefits are:
(a) salaries, wages, bonuses, fringe benefits, and similar items that are provided by an entity in the current reporting period, or within twelve months thereafter, in exchange for services rendered by employees in the current reporting period;
(b) occasional sick days and vacation days that do not vest or accumulate beyond twelve months after the current reporting period; and
(c) benefits provided under stock-based compensation arrangements. A stock-based compensation arrangement is a compensation arrangement under which one or more employees receive shares of stock, stock options, or other equity instruments, or an entity has an obligation to employees for amounts based on the value of the entity's shares.

## DEFINITIONS

. 009 The definitions that follow have been adopted for the purpose of this Section. The application of some of this Section requires an understanding of additional technical terms that are defined in paragraphs 3461.024, $3461.101,3461.111,3461.135$ and 3461.145 . The Glossary of defined terms contains all of the definitions in this Section.
(a) Actuarial assumptions are estimates of future events that will affect an entity's costs, and obligation, for employee future benefits. Examples of these estimates are rates of return on plan assets, administration expenses and taxes (other than income taxes), termination rates, disability claim rates, rates of employee turnover, retirement age, mortality, dependency status, per capita claims costs by age and by type of benefit, health care cost trend rates, discount rates to reflect the time value of money, and future salary and benefit levels.
(b) An actuarial valuation is an assessment of the financial status of a benefit plan. It includes the valuation of plan assets, if any, and the accrued benefit obligation.
(c) A benefit plan is any arrangement that is mutually understood by an entity and its employees whereby the entity undertakes to provide its employees with benefits after active service in exchange for their services. Benefits may commence immediately upon termination or suspension of active service or may be deferred until an employee attains a specified age. Generally, a written plan provides the best evidence of the terms of the benefit plan. However, the terms of a benefit plan may also be discernible from a well-defined, although unwritten practice of paying benefits or from oral representations made to employees. For example, an indication that the terms of a benefit plan differ from the written plan may be discerned from an entity's past practice of providing regular increases in certain monetary benefits. An entity could have a present commitment to amend the benefit plan, either in writing or through practice or oral representations. Evidence of an entity's commitment to amend the benefit plan includes
its past practices of amending the plan, identification of strategies to effect future changes, and the assessment of the feasibility and likelihood of making those changes in light of the expected economic and social costs. Anticipated amendments that are subject to negotiations do not constitute terms of a benefit plan until such amendments have been negotiated and agreed to by the entity and its employees.
(d) Benefits that accumulate are those for which the right to the benefit is earned but unused and may be carried forward to one or more periods subsequent to that in which they are earned, even though there may be a limit to the amount that can be carried forward.
(e) A defined benefit plan is a benefit plan that specifies either the benefits to be received by an employee, or the method of determining those benefits, such as a benefit of $\$ 10,000$ of life insurance or a pension benefit equal to one and a half percent of the average of the final five years' salary times the total years of service. Any benefit plan that is not a defined contribution plan is a defined benefit plan.
(f) A defined contribution plan is a benefit plan that specifies how an entity's contributions to the plan are determined rather than the benefits to be received by an employee or the method of determining those benefits. The plan also allocates the entity's contributions to specific individuals. The future benefit for each employee is the accumulated amount of the contributions made by the entity on that employee's behalf together with the accumulated amount of any contributions made by the employee and the investment earnings on the contributions.
(g) Employee future benefits that vest are those for which, after a specific or determinable date, the entitlement ceases to be conditional on an employee remaining in the service of an entity.

## DEFINED CONTRIBUTION PLANS COMPARED TO DEFINED BENEFIT PLANS

. 010 Employee future benefits are provided under either a defined contribution plan or a defined benefit plan. When an entity provides benefits under a defined benefit plan, it is at risk with respect to the amount of the benefit that each employee will receive because the amount is not known with certainty until the benefits have all been paid or cease (actuarial risk). The entity is also at risk with respect to the investment returns on any assets set aside to pay for the cost of the benefits because any shortfall from expected returns must be funded by the entity (investment risk).
.011 When an entity provides benefits under a defined contribution plan, it does not assume the actuarial and investment risks inherent in a defined benefit plan. A defined contribution plan specifies how contributions are determined rather than the amount of benefits an employee is to receive or the method for determining those benefits. The entity contributes a certain amount to the fund in each period in exchange for services rendered by the employee and has no responsibility to make any further contributions. The employees are at risk because the amount of the benefit that will be payable to an individual employee is entirely dependent upon the amount of funds accumulated in the employee's account and the investment earnings on the accumulated funds.
.012 A particular benefit plan is classified as either a defined benefit plan or a defined contribution plan depending on the economic substance of the plan established by its terms and conditions. A benefit plan may contain characteristics of both defined benefit and defined contribution plans but be, in substance, one or the other. For example, a benefit plan may stipulate the basis of contributions on which future benefits are determined and, because of this, appear to be a defined contribution plan. However, the plan may make the entity responsible for specific employee future benefits or a specified level of future benefits. In such a case, the plan is, in substance, a defined benefit plan. Another example is a pension plan in which the benefits provided are the greater of the benefits under a defined benefit plan and the benefits under a defined contribution plan. Such a plan is accounted for as a defined benefit plan.

In some circumstances, a benefit plan may incorporate both a defined contribution component and a defined benefit component. The components are accounted for separately according to their substance. For example, an entity may have changed a defined benefit plan to allow employees a choice of remaining in the defined benefit plan or switching to a defined contribution plan. The defined contribution plan is not set up separately but remains combined with the defined benefit plan for plan funding purposes. In such cases, the defined
benefit component is accounted for as a defined benefit plan and the defined contribution component is accounted for as a defined contribution plan.

## DEFINED CONTRIBUTION PLANS

. 014 In accounting for a defined contribution plan, an entity's obligation for each reporting period is determined by the amounts to be contributed for that period. Consequently, no actuarial valuation is required to measure the liability or the cost. When contributions are due in periods after an employee retires, the liability is measured on a discounted basis and actuarial gains or losses may occur. The liability is measured on an undiscounted basis when the contributions fall due within the period or within twelve months thereafter.
. 015 - For a defined contribution plan, an entity should recognize a cost for a period comprising:
(a) the current service cost for the period;
(b) the interest cost for the period on the estimated present value of any contributions required in future periods related to employee services rendered during the current period or prior periods;
(c) the amortization for the period of past service costs; and
(d) a reduction for the interest income for the period on any unallocated plan surplus. [JAN. 2000 *]

## Current service cost

. 016 - For a defined contribution plan, an entity should recognize as the current service cost of employee future benefits for a period:
(a) the contributions required to be made by the entity in the period in exchange for employee services rendered during the period; and
(b) the estimated present value of any contributions required to be made by the entity in future periods related to employee services rendered during the period. [JAN. 2000]
.017 An entity's current service cost of the future benefits related to an employee's services rendered during a period is the present value of contributions it is required to pay for those services. Any difference between that amount and the net amount paid is recognized as a liability or an asset. When a plan calls for contributions in future periods, such as in periods following retirement or termination of employment, the estimated cost is recognized during the employee's service period.

## Interest cost on contributions

. 018 When an entity has accrued contributions required to be made in future periods as a result of employee services rendered during the current period or prior periods, the entity recognizes interest on those accrued contributions. The interest cost for the period is calculated by applying the discount rate determined in accordance with paragraph 3461.050 as of the beginning of the period (or end of the prior period) to the present value of the accrued contributions throughout that period. An undiscounted basis is inappropriate when a benefit plan requires contributions in a period more than twelve months into the future. A discounted basis most closely reflects the current actual cost of such contributions.

## Past service costs

. 019 - For a defined contribution plan, an entity should amortize past service costs arising from a plan initiation or amendment in a rational and systematic manner over the period during which the entity expects to realize economic benefits from the plan initiation or amendment. [JAN. 2000]
. 020 When a defined contribution plan is initiated or amended, an entity may agree to make contributions in respect of past service. The cost of contributions arising from a plan initiation or amendment is recognized in a rational and systematic manner over the period during which the entity expects to realize economic benefits from the plan initiation or amendment. This period may be the average remaining service period of active employees expected to receive benefits under the plan. However, a shorter period may be appropriate. For example, when an entity negotiates its union contracts, including the benefits package, every three years and usually agrees to changes in employees' benefit entitlements, it may be appropriate for the entity to amortize any resulting past service costs over three years.
. 021 Sometimes contributions for past services are made only for certain employees and are, in effect, made in exchange for services rendered in the current period. For example, some contributions in the current period may be part of remuneration based on current or prior years' profits or other measures of performance. The cost of such contributions is not deferred for amortization in future periods, since the entity has realized the related economic benefits in the current period.

## Interest income on plan surplus

- For a defined contribution plan, an entity should deduct the interest earned on any unallocated plan surplus in determining the cost for a period. [JAN. 2000 *]

When a defined benefit plan is converted to a defined contribution plan, some plan assets may not be allocated to employees' individual accounts, thereby creating a surplus in the defined contribution plan. Interest earned in periods subsequent to the conversion on any such unallocated plan surplus is deducted in determining the cost for the defined contribution plan for the period. Any such plan surplus, which would be recognized as an accrued benefit asset, is subject to the limit on the carrying amount of an accrued benefit asset (see paragraphs 3461.101-.110).

## DEFINED BENEFIT PLANS

## Definitions

The following definitions are associated primarily with paragraphs 3461.025-. 134 :
(a) An accrued benefit asset is the amount of any asset recognized on an entity's balance sheet in respect of employee future benefits before deducting any valuation allowance that may be required. It is the sum of the entity's accumulated cash contributions less the sum of the current and prior years' benefit costs (before any change in valuation allowance).
(b) An accrued benefit liability is the amount of any liability recognized on an entity's balance sheet in respect of employee future benefits. It is the sum of the current and prior years' benefit costs less the entity's accumulated cash contributions.
(c) Accrued benefit methods are a family of actuarial valuation methods in which a distinct unit of future benefit is attributed to each year of credited service and the actuarial present value of that unit of benefit is computed separately for the period during which it is presumed to have accrued. Two accrued benefit methods are:
(i) Accumulated benefit method - Benefits earned to date are based on the plan formula, the employee's history of pay, service and other factors, as of the date of determination.
(ii) Projected benefit method prorated on services - Generally, an equal portion of the total estimated future benefit (i.e., with salary projection or cost escalation, when appropriate) is attributed to each year of service in the attribution period. Some plans define different amounts of benefits for different years of service. For such plans, this method will not necessarily attribute an equal portion of the total estimated future benefit to each year of service in the attribution period (see paragraph 3461.042).
(d) An accrued benefit obligation is the actuarial present value of benefits attributed to employee services rendered to a particular date. As of a particular date prior to an employee's full eligibility date, an entity's accrued benefit obligation in respect of the employee is the portion of the obligation for employee future benefits attributed to that employee's service rendered to that date. On and after the full eligibility date, the accrued benefit obligation and obligation for employee future benefits for an employee are the same.
(e) Actuarial gains and losses are changes in the value of the accrued benefit obligation and the plan assets resulting from:
(i) experience different from that assumed; or
(ii) changes in an actuarial assumption.
(f) Actuarial present value is the discounted value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions.
(g) An attribution period is the period of an employee's service to which an obligation for employee future benefits is assigned.
(h) A credited service period is the employee service period for which benefits are earned pursuant to the terms of a benefit plan. The beginning of a credited service period may be the date of hire or a later date. For example, a plan may provide benefits only for service rendered after a specified age or period of employment.
(i) Fair value is the amount of the consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.
(j) The full eligibility date is the date at which an employee has rendered all of the service necessary to earn the right to receive all of the benefits expected to be received by that employee (including any beneficiaries and dependants expected to receive benefits). Determination of the full eligibility date is affected by plan terms that provide incremental benefits expected to be received by or on behalf of an employee for additional years of service, unless those incremental benefits are insignificant.
(k) A funded benefit plan is a benefit plan in which the reporting entity is setting aside assets to pay the costs of benefits as they become due. The assets are set aside by the reporting entity in a separate legal entity, generally a trust, and the reporting entity cannot use the assets so set aside for its own purposes. When benefits become payable, they are paid out of the trust directly to the employees. Pension plans are generally funded because of legal requirements to set assets aside.
(I) An obligation for employee future benefits is the actuarial present value as of a particular date of benefits expected to be paid under a defined benefit plan. The obligation is measured on the basis of the expected amount and timing of future benefits, taking into consideration the expected future cost of providing the benefits and the extent to which the costs are shared by employees or others.
(m) Plan assets are assets that have been segregated and restricted in a trust or other legal entity separate from a reporting entity to provide for employee future benefits under the following conditions:
(i) The assets of the separate entity are to be used only to settle the related accrued benefit obligation, are not available to the reporting entity's own creditors, and either cannot be returned to the reporting entity or can be returned to the reporting entity only if the remaining assets of the trust are sufficient to meet the plan's obligations.
(ii) To the extent that sufficient assets are in the separate entity, the reporting entity will have no obligation to pay the related employee future benefits directly.

Plan assets include any financial instruments issued by the reporting entity and held by the trust or other legal entity. For the purposes of this Section, plan assets do not include amounts held by the reporting entity and not yet paid into the trust or other legal entity. Plan assets may include certain arrangements with insurance enterprises (see paragraphs 3461.122-.126).
(n) A transitional asset is the unrecognized amount, if any, as of the beginning of the fiscal year to which this Section is first applied, determined as:
(i) the fair value of plan assets less the accrued benefit obligation;
(ii) less any accrued benefit asset or plus any accrued benefit liability.

An entity may have adopted a method of accounting in accordance with this Section prior to its issuance. In that case, a transitional asset is not re-determined.
(o) A transitional obligation is the unrecognized amount, if any, as of the beginning of the fiscal year to which this Section is first applied, determined as:
(i) the accrued benefit obligation less the fair value of plan assets;
(ii) plus any accrued benefit asset or less any accrued benefit liability.

An entity may have adopted a method of accounting in accordance with this Section prior to its issuance. In that case, a transitional obligation is not re-determined.
(p) An unamortized transitional asset or unamortized transitional obligation is the portion of a transitional asset or transitional obligation that has not been recognized in the financial statements.
(q) An unfunded benefit plan is a benefit plan in which an entity pays all of the costs of benefits directly to its employees, their beneficiaries or estates, or to a third-party service provider on behalf of the employees, as the amounts become due.

## Introduction

The objective of accounting for a defined benefit plan is to provide an appropriate allocation of the cost of the plan to the periods in which the related employee services are rendered. Accounting for defined benefit plans involves the use of an actuarial valuation and actuarial assumptions. The accrued benefit obligation is measured on a discounted basis because it may be discharged many years after an employee renders the related service. There is a possibility of actuarial gains and losses as a result of differences between actuarial assumptions and actual experience. The cost recognized for a defined benefit plan for a period is not necessarily the amount of any contribution required for that period for funding purposes. The actuarial assumptions used for funding purposes may differ from those used for accounting purposes because funding is a financing procedure that considers cash requirements and other matters such as pension legislation. When an entity has more than one defined benefit plan, the entity accounts separately for each separately measured plan (see paragraphs 3461.096-.100).

Defined benefit plans may be unfunded, or they may be wholly or partly funded by contributions by an entity and, sometimes, by its employees. Contributions are paid into a fund or a trust that is legally separate from the reporting entity and from which the employee benefits are paid. The adequacy of the fund to make all benefit payments as they fall due depends on the investment performance of the assets in the fund and the extent to which the amount and timing of benefit payments coincide with previous estimates made in funding valuations. The payment of benefits depends not only on the financial position of the fund but also on an entity's ability to make good any shortfall in the fund's assets. Therefore, the entity is, in substance, underwriting the actuarial and investment risks associated with the plan.

Accounting by an entity for a defined benefit plan includes the following steps:
(a) making estimates (actuarial assumptions) about demographic variables (such as employee turnover and mortality) and financial variables (such as future increases in salaries and medical costs) that will affect the cost of employee future benefits (see paragraphs 3461.047-.065);
(b) determining the obligation for employee future benefits, using actuarial techniques to make a reliable estimate of the present value of employees' future benefits;
(c) attributing the cost of benefits to employee service periods in order to determine the accrued benefit obligation and the current service cost (see paragraphs 3461.034-.043);
(d) determining the interest cost on the accrued benefit obligation (see paragraphs 3461.050-. 055 and 3461.075);
(e) determining the fair value of any plan assets (see paragraphs 3461.066-.068);
(f) determining the expected return on plan assets (see paragraphs 3461.076-.078);
(g) when a plan has been initiated or amended, determining the resulting past service costs and the amount of those past service costs to be recognized (see paragraphs 3461.079-.086);
(h) determining the total amount of actuarial gains and losses and the amount of those actuarial gains and losses to be recognized (see paragraphs 3461.087-.093);
(i) when a plan has an accrued benefit asset which is subject to impairment, determining the necessary valuation allowance (see paragraphs 3461.101-.110); and
(j) when a plan has been curtailed or settled, determining the resulting gain or loss (see paragraphs 3461.111-.134).
. 028 In some circumstances, estimates, averages and computational shortcuts may provide a reliable approximation of the detailed computations required by this Section.

## Recognition

- For a defined benefit plan, an entity should recognize a liability and a cost for employee future benefits, other than post-employment benefits and compensated absences that do not vest or accumulate, in the period in which employees render services to the entity in return for the benefits. An entity should recognize a liability and a cost for post-employment benefits and compensated absences that do not vest or accumulate when the event that obligates the entity occurs. [JAN. 2000 *]
.030 A liability for pension benefits and other retirement benefits, as well as certain post-employment benefits and compensated absences, is accrued over the period in which service is rendered. For pension benefits, the right to benefits usually vests and the amount usually increases with the length of service provided by the employee. For other retirement benefits, the amount of benefits is not necessarily increased by the length of service provided by the employee but the right to benefits is earned either by the employee working a specified period of time, attaining a specified age while in service, or both. For certain post-employment benefits and compensated absences, the right to the benefit is earned by the employee rendering service and, based on the length of service provided, the amount of the benefit can increase.
. 031 For post-employment benefits and compensated absences that vest or accumulate, a liability is accrued as employees render the service that gives rise to the benefits. Examples of these types of post-employment benefits and compensated absences are service-related long-term disability benefits, sabbaticals in which the leave is granted to provide unrestricted time off for past service, or vacation days that accumulate and are paid out when the employee retires. However, under some sabbatical arrangements, leave is granted only for an employee to perform research or public service to enhance the reputation of, or otherwise benefit, the entity. In such circumstances, a liability is not accrued in advance for the cost of the employee's services during such
leave. In addition, as a practical matter, an entity is not required to accrue a liability for sick-pay benefits that accumulate but do not vest.

For post-employment benefits and compensated absences that do not vest or accumulate, a liability is recognized when an event that obligates the entity occurs. Examples of these types of benefits and absences are parental leave and non-service-related, short-term and long-term disability benefits.

The terms of a plan may allow an entity to cancel the benefits. It is usually difficult for an entity to cancel benefits and retain its employees without providing some form of compensation. In the absence of evidence to the contrary, accounting for the cost of employee future benefits is based on the premise that an entity that is currently providing future benefits to employees under an existing plan will continue to do so over the remaining service lives of those employees, whether or not a legal obligation exists. Actuarial valuation methods allow the obligation for employee future benefits to be measured with sufficient reliability to justify recognition of the cost of those benefits during employees' working lives and, to the extent the cost is unpaid or unfunded, the related liability.

## Examples

(a) Pension benefits - Employees are eligible to join a pension plan when they are hired. The pension benefit is $\$ 30$ a month for each year of service. The benefits vest after ten years of service. A liability and a cost are recognized as an employee provides service from the date of hire, even though the benefits do not vest until after ten years of service.
(b) Sabbatical - Employees are entitled to take a sabbatical leave of one year with full pay after each six years of service. There is no restriction on employees' activities during their sabbatical leave. A liability and a cost are recognized over the six years following the date of hire or the date of completion of the last sabbatical leave, as the case may be.
(c) Parental leave - Employees are entitled to receive 50 percent of their current salary for up to six months when they take parental leave on the birth or adoption of a child. The entity does not recognize any liability until an employee applies for parental leave, at which point the entity recognizes a liability for the full duration of the leave. In this case, the application for leave is the event that obligates the entity.

## Measurement

## Actuarial valuation method

- For a defined benefit plan, an entity should determine its accrued benefit obligation using:
(a) the projected benefit method prorated on services, when future salary levels or cost escalation affect the amount of the employee future benefits; or
(b) the accumulated benefit method, when future salary levels and cost escalation do not affect the amount of the employee future benefits. [JAN. 2000]
. 035 An accrued benefit method attributes a distinct unit of future benefit to each year of credited service, and the actuarial present value of that unit is computed separately for the period in which it is deemed to have been earned.

For certain benefit plans, such as career-average and final-pay pension plans and retiree health care plans, future salary levels or cost escalation affect the amount of the future benefits. For these plans, the cost of benefits provided in exchange for employee services is determined using the projected benefit method prorated on services. For flat-benefit plans in which benefits vary only with periods of service rendered without any commitment to change the benefit level, the projected benefit method prorated on services is equivalent to the accumulated benefit method.
. 037 The amount of an obligation for employee future benefits is determined from actuarial valuations performed periodically. In the years between valuations, an extrapolation of the actuarial valuation of the obligation is used. Each year, management reviews matters such as changes to the plan, the actuarial assumptions, occurrence of settlements and curtailments, changes to the employee group and the rate of return on plan assets, and determines whether such matters necessitate any adjustments to the extrapolations. When the effect of any change is significant, a new valuation may be necessary.

## Attribution

- For a defined benefit plan, the attribution period should begin on an employee's date of hire unless the plan's benefit formula grants credit for service only from a date after the date of hire. When the plan's benefit formula grants credit for service only from a date after the date of hire, the attribution period should begin at the commencement of the credited service period. However, when the plan's benefit formula grants credit for service only from a date after the date of hire and the credited service period is insignificant relative to the total service period, the obligation for employee future benefits should be attributed from the date of hire. The attribution period should end on the full eligibility date. [JAN. 2000]

An obligation for employee future benefits is attributed to the periods in which an employee renders the service that gives rise to the benefits. For plans in which an employee starts earning benefits when hired, attribution starts from the date of hire. Some plans require an employee to work for a short period of time after the date of hire before earning benefits. When a plan has a credited service period that is significant, and a qualification period that is insignificant, in relation to the employee's total years of service prior to full eligibility, the obligation for employee future benefits is attributed from the start of the credited service period stipulated by the plan. When a plan has a credited service period that is insignificant, and a qualification period that is significant, compared to an employee's total years of service prior to full eligibility, the obligation for employee future benefits is attributed from the date of hire and not from the start of the credited service period stipulated by the plan.
. 040 Some benefit plans provide incremental benefits for additional years of service beyond the end of the credited service period. For example, in certain pension plans that limit credited service periods to a maximum number of years but take subsequent salary increases into account in determining the amount of pension entitlements, significant incremental benefits can be earned beyond the end of the credited service period. In such circumstances, the attribution period may end either at retirement or at the end of the credited service period. For benefit plans, other than pension plans, that provide significant incremental benefits after the credited service period, the attribution period ends at the full eligibility date when additional benefits are no longer earned by rendering further service. For all benefit plans, when incremental benefits are insignificant, the attribution period is not extended for additional years of service.

## Examples

(a) A company has a defined benefit plan specifying that employees join the plan when they are hired. The plan provides a final average earnings pension upon retirement and employees become eligible for supplemental health care benefits when they become eligible for early retirement. The earliest age at which someone can retire and receive benefits under the plan is 55 , the expected retirement age is 63 and the normal retirement age is 65 .

$\qquad$ attribution period for supplemental health care plan attribution period for pension plan

The attribution period for the supplemental health care plan starts at the date of hire and ends when an employee becomes eligible to retire, at age 55. The attribution period for the pension plan also starts at the date of hire but ends at the expected retirement age of 63. The attribution period for the supplemental health plan is shorter because the employee has fulfilled the eligibility provisions of the plan upon becoming eligible for early retirement and is entitled to the benefits upon retirement. No further benefit is conferred on the employee in the years between becoming eligible for early retirement and expected retirement age. The attribution period for the pension plan is longer because the employee continues to earn additional pension benefits in the years between becoming eligible for early retirement and the expected retirement age.
(b) A company has a benefit plan with a formula that provides 100 percent benefit coverage for service for the year in which an employee attains age 60. The plan has a one-year credited service period. Employees are expected to have rendered an average of 20 years of service at the age of 60. Accordingly, the credited service period is insignificant in relation to total years of service prior to full eligibility. In these circumstances, the service cost is recognized from the date of hire to age 60.

(c) A company has a pension plan for its employees providing a pension for each year of membership in the plan equal to one and a half percent multiplied by the average of the highest five consecutive years of pensionable earnings. Employees become eligible to join the plan after two years of service.
Employees do not earn any benefits in the two years of service after the date of hire and before joining the plan. Employees do not earn additional pension benefits after having provided 30 years of service. The earliest age at which an employee may become eligible for retirement is 55 , the expected retirement age is 63 and the normal retirement age is 65 . Employees are expected to have rendered an average of 30 years of service at age 60.


The attribution period may end either at:
-------- completion of 30 years of service (credited service period); or
.......................... expected retirement age.

The attribution period for an employee starts two years after the date of hire and may end either at the attainment of the expected retirement age or at the completion of 30 years of service (the credited service period).
(d) A company has a plan that provides life insurance benefits to employees who render 20 years of service and attain the age of 55 while in service. The benefit amount under the policy is equal to 20 percent of salary in the final year of service. A 55-year-old employee currently earning a salary of \$90,000 has worked for the company for 22 years. The employee is expected to retire at age 60 and is expected to be earning $\$ 120,000$ at that time. The employee is eligible for life insurance coverage under the plan at age 55, when the employee has met the age and service requirements. However, because the employee's salary continues to increase each year, the employee is not eligible for the full expected benefit until retirement at age 60 because an incremental benefit is earned for each additional year of service beyond age 55. That is, the employee earns an additional benefit, from age 55 to retirement at age 60, equal to 20 percent of the increase in salary for service during each of those years.

--------- attribution period
.041 For plans providing post-employment benefits and compensated absences that vest or accumulate, the attribution period generally starts at the date of hire and ends at the expected date of the event giving rise to the obligation for employee future benefits.

## Attribution method

- For a defined benefit pension plan, the obligation for employee future benefits should be attributed to each year of service in the attribution period based on the plan's benefit formula, except when the plan does not state or imply a benefit formula or when an employee's service in later years will lead to a significantly higher level of benefit than in earlier years. In those circumstances, the obligation should be attributed on a straightline basis to each year of service in the attribution period. For a defined benefit plan other than a pension plan, the obligation for employee future benefits should be attributed on a straight-line basis to each year of service in the attribution period unless the plan formula attributes a significantly higher level of benefits to employees' early years of service. In those circumstances, the obligation should be attributed based on the plan's benefit formula. [OCT. 2000]
. 043 Different plans have different formulae for determining benefits:
(a) Some plans have benefit formulae that attribute all, or a significantly higher level, of the total benefits to later years of service, thereby achieving, in substance, a delayed vesting of benefits. The obligation for employee future benefits for these types of plans is attributed on a straight-line basis over each year in the attribution period because the employee has earned benefits in each of the years in the credited service period.
(b) Some plans have terms that make it difficult to attribute benefits to years of service following a plan benefit formula. Plan terms may be ambiguous and quite difficult to apply at dates between the beginning and end of the attribution period. Thus, for a defined benefit plan other than a pension plan, the obligation for employee future benefits is attributed on a straight-line basis over each year in the attribution period unless the plan's benefit formula attributes a significantly higher level of benefits to the employees' early years of service, in which case, attribution is based on the plan's benefit formula.
(c) For plans providing post-employment benefits and compensated absences that vest or accumulate, the attribution method may follow the standards for a defined benefit pension plan or a defined benefit plan other than a pension plan, provided the basis chosen is applied consistently from year to year.


## Measurement date of plan assets and accrued benefit obligation

. 044 - For a defined benefit plan, the plan assets and the accrued benefit obligation should be measured as of the date of the annual financial statements, except that they may be measured as of a date not more than three months prior to that date provided the entity adopts this practice consistently from year to year. [JAN. 2000]

## Measurement of cost for employee future benefits

- For a defined benefit plan, the measurement of cost in both interim and annual financial statements should be based on the assumptions used in measuring the plan assets and the accrued benefit obligation at the preceding year end, unless a more recent measurement of both the plan assets and the accrued benefit obligation is available. When available, more recent information should be used. [JAN. 2000 *]
.046 A remeasurement is usually called for when a significant event such as a plan amendment, settlement or curtailment occurs. The assumptions adopted for a remeasurement are used in determining the cost for employee future benefits from the date of the significant event to the year-end measurement date. The measurement of the cost for the period from the beginning of the year to the date of the significant event is based on the assumptions at the beginning of the year.


## Actuarial assumptions

- For a defined benefit plan, each actuarial assumption should be management's best estimate solely with respect to that individual assumption, determined on the basis that the plan will continue to be in effect in the absence of evidence to the contrary. The set of actuarial assumptions for each plan should be internally consistent. [JAN. 2000]

Actuarial assumptions include:
(a) demographic assumptions about the future characteristics of employees and their beneficiaries who are eligible for benefits, including:
(i) mortality, both during and after employment;
(ii) rates of employee turnover, disability and early retirement;
(iii) the proportion of employees with their beneficiaries eligible for benefits; and
(iv) per capita claims cost by age and by type of benefit;
and
(b) financial assumptions, including:
(i) the discount rate for future cash flows;
(ii) future salary and benefit levels;
(iii) future medical costs, in the case of medical benefits; and
(iv) the rate of return on plan assets.

In making actuarial assumptions, management takes into account the relationships between the factors for which assumptions are required, and keeps the assumptions internally consistent. For example, the level of inflation underlying the assumption about future rates of return on plan assets is the same as the level of inflation underlying the assumption about future salary levels. All assumptions are based on the presumption that the plan will continue in effect in the absence of evidence that it will not continue.

## Discount rate

- For a defined benefit plan, the discount rate used to determine the accrued benefit obligation should be an interest rate determined by reference to:
(a) market interest rates at the measurement date on high-quality debt instruments with cash flows that match the timing and amount of expected benefit payments; or
(b) the interest rate inherent in the amount at which the accrued benefit obligation could be settled. [JAN. 2000]
. 051 The objective of selecting a discount rate is to measure the single amount that, if invested at the measurement date in a portfolio of high-quality debt instruments, would provide the necessary pre-tax cash flows to pay the accrued benefits when due. For example, the current market value of a portfolio of high-quality zero coupon bonds acquired to pay the cost of benefits, when due, equals the amount of the actuarial present value of the benefits because cash inflows equal cash outflows in timing and amount. There is no reinvestment risk in the yields to maturity of the portfolio. However, in other than a zero coupon portfolio, such as a portfolio of longterm debt instruments that pay interest semi-annually or have maturities that do not extend far enough into the future to meet expected benefit payments, the discount rate (the yield to maturity) needs to incorporate reinvestment rates expected to be available in the future. Those reinvestment rates are extrapolated from the existing yield curve at the measurement date.
. 052 When rates on high-quality corporate bonds are available, they are used to determine the discount rate. When the maturities of corporate bonds do not extend far enough into the future to match the cash flows inherent in the accrued benefit obligation, the rates on government bonds are used to determine the discount rate for the expected benefit payments that are farther into the future than the corporate bond maturities.
.053 The discount rate reflects the estimated timing of benefit payments. When some benefits are payable after the maturity of all available corporate or government bonds, the present value of that portion of the benefits is unlikely to vary significantly as a result of the selected discount rate. For that portion of the benefits, an entity may use a discount rate based on the yield of the last maturing corporate or government bond available.
.054 The discount rate is re-evaluated at each measurement date. When long-term interest rates rise or decline, the discount rate changes in a similar manner.

Immediate settlement of an accrued benefit obligation may be possible through, for example, the purchase of an insurance contract, such as an annuity contract, that transfers the significant risks associated with the accrued benefit obligation to a third-party insurer. In such circumstances, the interest rate inherent in the amount at which the accrued benefit obligation could be settled may be used in determining the discount rate.

## Future changes in compensation levels, benefits and cost sharing

.056 - For a defined benefit plan, the accrued benefit obligation should be measured on a basis that takes account of:
(a) future compensation levels;
(b) expected changes in benefits defined in monetary terms;
(c) automatic benefit changes specified by the plan that are expected to occur; and
(d) expected amendments in the cost-sharing provisions of the benefit plan. [JAN. 2000]
. 057 An accrued benefit obligation is measured using assumed future compensation levels when the benefit formula is based on future compensation levels. Therefore, all expected changes in future compensation, whether due to general price level inflation, seniority, promotion, productivity increases or other factors, such as supply and demand in the employment market, are included in the measurement of the accrued benefit obligation. Examples of the types of plans in which the benefit formula is based on future compensation levels are careeraverage, final-pay benefit plans and salary-related life insurance benefit plans. For certain flat-benefit plans, benefits vary only with periods of service rendered. For these plans, future compensation levels do not enter into the determination of the accrued benefit obligation.

A past practice of regular increases in future benefits defined in monetary terms (i.e., a defined dollar amount of benefit or a defined percentage of salary) may indicate that an entity has a present commitment to provide monetary benefits attributable to past service that are greater than the monetary benefits defined by the written plan. When an entity has a substantive commitment to increase benefits, the increased level of benefits forms the basis to measure the accrued benefit obligation. For example, a regular practice of updating the base year of a career-average pension plan or of providing regular increases in the benefit under a flat-benefit plan may indicate that the benefit plan encompasses these increases.
.059 Automatic benefit changes specified by a benefit plan and expected to occur are included in the measurement of the accrued benefit obligation. Examples of automatic benefit changes are:
(a) specified cost-of-living adjustments; and
(b) changes in the cost of benefits in kind, such as health care benefits, that are provided through the direct rendering of services, payment directly to service providers or reimbursement of employees' payments for those services.

A plan amendment is taken into account in the measurement of an accrued benefit obligation once it is agreed to, even when some provisions begin to take effect only in future periods. For example, if a plan amendment grants a different benefit level for employees retiring after a specified future date, the current period measurements of the accrued benefit obligation and the benefit cost take into account the increased or reduced benefit level for employees expected to retire after the specified future date.
. 061 Except in the circumstances discussed in paragraph 3461.062, an entity's cost-sharing policy constitutes part of the substance of the cost-sharing provisions of a benefit plan. An entity's cost-sharing policy is evident when:
(a) the entity has had a practice of:
(i) maintaining a consistent level of cost sharing with its employees; or
(ii) increasing or reducing its share of the cost of covered benefits consistently through changes in employees' contributions towards their benefits, deductibles, co-insurance provisions, out-ofpocket limitations, or some combination thereof;
or
(b) the entity has the ability, and has communicated to affected employees and their beneficiaries its intent, to institute different cost-sharing provisions at a specified time or when certain conditions exist (for example, when health care cost increases exceed a certain level).

An entity's past practice of maintaining a consistent level of cost sharing is not part of the substance of a benefit plan when accompanied by identifiable offsetting changes in other benefits or compensation or when the entity has incurred significant costs, such as work stoppages, to effect that cost-sharing policy. Similarly, an entity's communication of its intent is not part of the substance of a benefit plan when employees are unwilling to accept the change, thereby creating the potential for adverse consequences to the entity's operations, or when some compensation, including other modifications to plan benefits, is required to gain the employees' acceptance.
. 063 In the case of benefit plans providing medical coverage, certain medical claims may be covered by governmental programs under existing law or by other providers of health care benefits. Benefit coverage by governmental programs is assumed to continue as provided by the present law and by other providers pursuant to their present plans. Enacted changes in the law or amendments to the plans of other health care providers that will take effect in future periods and affect the future level of their benefit coverage are taken into account in current period measurements of plan benefits expected to be provided in those future periods. Future changes in laws concerning medical costs covered by governmental programs and future changes in the plans of other providers are not anticipated.

## Medical costs

- For a defined benefit plan, actuarial assumptions about medical costs should reflect expected future changes in the cost of medical services resulting from general price-level inflation, specific changes in the prices of medical services, and changes in medical practices and technology. [JAN. 2000]

Measurement of the cost of future medical benefits requires assumptions about the level and frequency of future claims and the cost of meeting those claims. The level and frequency of claims are particularly sensitive to the age of employees (and their beneficiaries) and may be sensitive to other factors, such as gender and geographical location. An entity estimates future medical costs on the basis of historical data about its own experience, supplemented when necessary by historical data from other entities, insurance enterprises, medical providers or other sources. Historical data from other entities is adjusted to reflect any differences in demographic mix of the population. Historical data, either from the reporting entity or other entities, is also adjusted when there is reliable evidence that historical trends will not continue.

## Plan assets

- For a defined benefit plan, plan assets should be measured at fair value. [JAN. 2000]

The fair value of plan assets is used in the determination of plan surplus or deficit (funded status) and is disclosed in accordance with paragraph 3461.154(e)(i). Either fair value or market-related value is used for the calculation of the expected return on plan assets (see paragraph 3461.076) and the determination of the minimum amount of amortization of net actuarial gains and losses (see paragraph 3461.087).
. 068 The fair value of plan assets is normally market value. When market values are not readily available for certain assets, such as real estate investments, a method that provides an approximation of market value is used. For example, an entity may obtain independent appraisals or review market values of similar assets (see FINANCIAL INSTRUMENTS - RECOGNITION AND MEASUREMENT, Section 3855, for additional guidance concerning the determination of fair value of financial instruments).

## Determination of cost for the period

. 069 The following paragraphs apply to the determination of the cost for a period arising from a defined benefit plan. An entity that has a separately measured plan for post-employment benefits and compensated absences that do not vest or accumulate recognizes past service costs and actuarial gains and losses in income in accordance with the following paragraphs, either on a delayed basis or immediately. The selected method of recognition is applied consistently from year to year. Any transitional obligation or transitional asset resulting from the initial application of this Section is accounted for in accordance with paragraphs 3461.164-.172. Illustrative computations are provided in Illustrative Examples, Example 1.

## Components of cost for the period

- For a defined benefit plan, cost for a period should comprise:
(a) the current service cost, determined in accordance with paragraph 3461.071;
(b) the interest cost on the accrued benefit obligation, determined in accordance with paragraph 3461.075;
(c) the expected return on plan assets, determined in accordance with paragraph 3461.076;
(d) the amortization of past service costs arising from a plan initiation or amendment, determined in accordance with paragraph 3461.079;
(e) the amortization of a net actuarial gain (loss), determined in accordance with paragraph 3461.087;
(f) the amount recognized as a result of a temporary deviation from the plan, determined in accordance with paragraph 3461.094;
(g) the increase or decrease in a valuation allowance against the carrying amount of an accrued benefit asset, determined in accordance with paragraph 3461.102;
(h) the gain or loss on a settlement or curtailment, determined in accordance with paragraphs 3461.113-.114 and 3461.127-.128;
(i) the expense recognized for a termination benefit, determined in accordance with paragraphs 3461.136.138;
(j) the amortization of a transitional asset or transitional obligation, determined in accordance with paragraph 3461.167; and
(k) the amortization of an amount carried forward arising on the initial application of this Section related to the limit on the carrying amount of an accrued benefit asset, determined in accordance with paragraph 3461.167. [JAN. 2000 *]


## Current service cost

. 071 - For a defined benefit plan, an entity should determine its current service cost for a period as the actuarial present value of benefits attributed to employees' services rendered during that period in accordance with paragraphs 3461.038 and 3461.042, reduced to reflect employee contributions. [JAN. 2000]
. 072 Contributions towards the cost of retirement benefits may be received from active employees or from retirees. For example, employees may contribute to a pension plan during their service life and retirees may contribute towards the cost of a drug plan.
. 073 Contributions received during a period from active employees towards the cost of a pension plan reduce the current service cost in the period.
. 074 When contributions are expected to be received from employees in future periods towards the cost of retirement benefits other than pensions, an entity's accrued benefit obligation is measured as the actuarial present value of the benefits expected to be provided, reduced by the actuarial present value of contributions expected to be received from employees in future periods. In determining the amount of those contributions, an entity considers any related plan provisions, such as its past practice of consistently increasing or reducing the contribution rate as described in paragraphs 3461.061-.062. An obligation to return contributions received from employees who do not attain eligibility for future benefits, together with any interest accrued on those contributions, is recognized as a component of an entity's accrued benefit obligation. These factors are reflected also in an entity's current service cost.

## Interest cost on accrued benefit obligation

- For a defined benefit plan, the interest cost on an accrued benefit obligation for a period should be determined by applying the discount rate determined in accordance with paragraph 3461.050 as of the beginning of the period (or end of the prior period) to the accrued benefit obligation for that period. [JAN. 2000 **]


## Expected return on plan assets

.076 . For a funded defined benefit plan, the expected return on plan assets should be based on the expected longterm rate of return on plan assets and the fair value, or a market-related value, of plan assets. [JAN. 2000]
.077 A market-related value is a calculated amount that recognizes changes in the fair value of plan assets in a systematic and rational manner over a period not exceeding five years. Different ways of calculating marketrelated value may be used for different classes of assets. For example, an entity may use a fair value for bonds and a five-year moving average value for equities, but the basis of determining market-related value is applied consistently from year to year for each asset class.
. 078 When plan assets are held in a taxable entity, the expected return on plan assets reflects the income and related tax expense or benefit for the period determined in accordance with INCOME TAXES, Section 3465. In other circumstances, no provision for income and related taxes is included in the expected return on plan assets.

## Past service costs

- For a defined benefit plan, an entity should amortize past service costs arising from a plan initiation or amendment by assigning an equal amount to each remaining service period up to the full eligibility date of each employee active at the date of the plan initiation or amendment who was not yet fully eligible for benefits at that date. However, when all, or almost all, of the employees are no longer active, an entity should amortize past service costs on a straight-line basis over the average remaining life expectancy of the former employees. [JAN. 2000]
. 080 When a defined benefit plan is initiated or amended, an entity may grant benefits calculated by reference to past service. Plan initiations that grant benefits for past service and plan amendments that improve benefits are granted with the expectation that the entity will realize economic benefits in future periods. Therefore, the past service costs resulting from the plan initiation or amendment are not recognized fully in income in the period in which the initiation or amendment takes place. Rather, the past service costs are amortized over the service periods in which the entity expects to realize the economic benefit. This period ends when an employee reaches the full eligibility date under the plan. At the full eligibility date, the entity will have accrued all of the obligation for employee future benefits including any past service costs relating to that obligation. When a plan is initiated that grants benefits solely in exchange for employee service after the date of the plan initiation or a
future date, the credited service period for employees who are active at the date of the plan initiation and expected to receive benefits under the plan begins at the date of the plan initiation or the future date.
.081 To reduce the complexity and detail of required calculations, an entity may use an alternative amortization approach that amortizes past service costs more rapidly. Once chosen, the alternative amortization approach is used consistently from year to year. For example, it is usually acceptable to amortize past service costs on a straight-line basis over the average remaining service period of active employees expected to receive benefits under the plan up to the full eligibility date.
. 082 In some circumstances, the period to the full eligibility date of employees covered by a benefit plan is not the period during which the benefits of past service costs will be realized and a shorter amortization period is appropriate. In those circumstances, the amortization of past service costs is accelerated to reflect a more rapid expiration of the entity's economic benefits. A history of regular plan amendments and other evidence may indicate that the period during which an entity expects to realize economic benefits from an amendment granting increased benefits is shorter than the average remaining service period of active employees to the full eligibility date for benefits covered by the plan. For example, when an entity negotiates its union contracts, including the benefits package, every three years and as a result the entity generally renegotiates its benefits, it may be appropriate to amortize the past service costs over three years. Identification of such situations requires an assessment of the circumstances of each plan.
. 083 In some circumstances, an entity may amend a benefit plan to provide increased benefits calculated by reference to past service and all, or almost all, of those entitled to the increased benefits are no longer active because they have retired, left the entity or had their employment terminated by the entity prior to the plan amendment. The entity amortizes past service costs and other amounts, such as actuarial gains and losses and any transitional obligation or transitional asset, on a straight-line basis over the average remaining life expectancy of the former employees. The average remaining life expectancy of the former employees is an actuarial assumption underlying the computation of an entity's accrued benefit obligation and the related unamortized amounts.
.084 A plan amendment may reduce, rather than increase, an entity's accrued benefit obligation. A reduction in the accrued benefit obligation is applied first to reduce any existing unamortized past service costs and then to reduce any existing unamortized transitional obligation. The excess, if any, is amortized on the same basis as specified in paragraph 3461.079 for past service costs.
. 085 When a defined benefit plan is cancelled and replaced by another defined benefit plan, the cancellation of the first plan is treated as a plan amendment. In such circumstances, any gain or loss is associated with the services to be rendered by employees over the expected period to their full eligibility date under the new plan and, accordingly, is amortized over that period.
. 086 For a separately measured plan providing post-employment benefits or compensated absences that do not vest or accumulate, an entity recognizes past service costs:
(a) immediately in the period in which they arise; or
(b) over a period linked to the type of benefit.

For example, past service costs arising under a plan providing long-term disability benefits to former employees may be amortized over the average expected period during which benefits will be paid. Once chosen, the basis for recognizing past service costs is applied consistently from year to year.

## Actuarial gains and losses

.087 . For a defined benefit plan, an entity should use a systematic method of recognizing actuarial gains and losses in income. An entity should recognize at least the minimum amortization determined in accordance with paragraph 3461.088 in each period, and may recognize actuarial gains and losses in income immediately. The method adopted should be applied consistently to both gains and losses. [JAN. 2000]

- For a defined benefit plan, an entity should recognize amortization of actuarial gains and losses in a period in which, as of the beginning of the period, the unamortized net actuarial gain or loss exceeds 10 percent of the greater of:
(a) the accrued benefit obligation at the beginning of the year; and
(b) the fair value, or market-related value, of plan assets at the beginning of the year.

When amortization is required, the minimum amortization should be that excess divided by the average remaining service period of active employees expected to receive benefits under the plan. However, when all, or almost all, of the employees are no longer active, an entity should base the amortization on the average remaining life expectancy of the former employees. [JAN. 2000]
. 089 Although periodic reviews of benefit plans to determine whether the assumptions remain valid may result in changes in assumptions, short-term experience will often vary from the assumptions without necessarily indicating that those assumptions are incorrect. In the short term, actuarial gains and losses are expected to occur because assumptions about benefit plans relate to a long time frame. The experience of the benefit plan may indicate that the assumptions need to be revised. When assumptions are revised, an adjustment to the accrued benefit obligation may be required. Because actuarial gains and losses may include changes in assumptions as well as experience gains and losses and because gains in one period may be offset by losses in another, or vice versa, delayed recognition of actuarial gains and losses is appropriate.
.090 An actuarial gain or loss on plan assets is the difference between the actual return on plan assets during a period and the expected return on plan assets for that period. When the expected return on plan assets is determined using a market-related value, the actuarial gain or loss on plan assets includes both:
(a) amounts reflected in the market-related value of plan assets (i.e., that portion of the prior periods' actuarial gain or loss on plan assets that has been incorporated in the market-related value); and
(b) amounts not yet reflected in the market-related value of plan assets (i.e., the effects of changes in the fair value of plan assets not yet amortized into the market-related value).

An actuarial gain or loss not yet reflected in the market-related value of plan assets (i.e., item (b) above) is not required to be amortized in accordance with paragraphs 3461.087-.088. That part of the actuarial gain or loss is amortized when it is included in the market-related value of plan assets over future periods.
.091 An actuarial gain or loss on an accrued benefit obligation is the difference between the expected accrued benefit obligation and the actual accrued benefit obligation at the end of the period. The expected accrued benefit obligation includes the effect of the current service cost, benefit payments during the period, and the interest cost on the accrued benefit obligation for the period.
. 092 For a separately measured plan providing post-employment benefits or compensated absences that do not vest or accumulate, an entity recognizes any actuarial gain or loss:
(a) immediately in the period in which it arises; or
(b) over a period linked to the type of benefit.

For example, actuarial gains and losses arising under a plan providing long-term disability benefits to former employees may be amortized over the average expected period during which benefits will be paid. Once chosen, the basis for recognizing actuarial gains and losses is applied consistently from year to year.
. 093 When an entity recognizes actuarial gains and losses immediately for benefit plans other than pension plans, any gain that does not offset a loss previously recognized in accordance with paragraphs 3461.087-.088 is first applied to reduce any unamortized transitional obligation. Similarly, any loss that does not offset a gain previously recognized in accordance with paragraphs 3461.087-.088 is first applied to reduce any unamortized
transitional asset. This treatment ensures that actuarial gains and losses are not recognized in the financial statements before the underlying accrued benefit obligations or plan assets.

Temporary deviation from the benefit plan

An entity may decide to deviate temporarily from the provisions of a benefit plan to increase or decrease the entity's share of the benefit costs incurred in the current period or prior periods. For example:
(a) An entity may forgive a retrospective adjustment of current or prior years' cost sharing relating to benefit costs already incurred on behalf of retirees.
(b) An entity's health care plan may require that contributions from retirees in future years be increased to cover a shortfall in the current year. A shortfall arises when the benefit payments in a given year are greater than the total of the entity's stated share of the benefit payments for the year and the contributions from retirees for that year. The entity may determine that it would be onerous to increase retirees' contributions to meet a shortfall in a particular year, and decide to bear the cost of the shortfall for that year. Decisions by the entity to bear shortfalls in a number of subsequent years may indicate that the benefit plan has been amended, giving rise to amounts to be accounted for in accordance with paragraph 3461.079.

## Entities with two or more plans

- An entity that has two or more defined benefit plans should determine a cost, an accrued benefit obligation, and plan assets by applying this Section to each separately measured plan or aggregation of plans. [JAN. 2000 *]

For purposes of paragraph 3461.096, each funded benefit plan is a separately measured plan. Unfunded benefit plans may be aggregated for measurement purposes only when:
(a) they provide different benefits to the same group of employees and their beneficiaries; or
(b) they provide the same benefits to different groups of employees and their beneficiaries.

An entity may have two or more unfunded benefit plans that provide different benefits to the same group of employees and their beneficiaries. For example, the entity may have separate medical care, dental care and eye care plans that provide benefit coverage to all retirees of the entity. The entity may combine those plans for measurement purposes. Similarly, an entity may have two or more unfunded benefit plans that provide the same benefits to different groups of employees and their beneficiaries. For example, an entity may have substantially the same retirement medical care plans at each of its operating locations. The entity may combine those plans for measurement purposes.
. 099 When an entity has a benefit plan in which the accrued benefit obligation exceeds the fair value of the plan assets, and another benefit plan in which the fair value of the plan assets exceeds the accrued benefit obligation, the amounts in the two plans are generally not netted. Netting in such circumstances is appropriate only when the entity has a clear right to use the assets of one plan to pay for the benefits to be provided by the other plan.

- For an entity that has two or more defined benefit plans, an accrued benefit asset of one defined benefit plan and an accrued benefit liability of another defined benefit plan should be presented separately in the balance sheet except when an entity:
(a) has a right to use the assets of one plan to pay for the benefits to be provided by the other plan; and
(b) intends to exercise that right. [JAN. 2000]


## Limit on the carrying amount of an accrued benefit asset

. 101 The following definitions are associated primarily with paragraphs 3461.102-.110:
(a) An adjusted benefit asset is an accrued benefit asset less the amount, if any, by which the aggregate of any unamortized past service costs, unamortized actuarial losses and unamortized transitional obligation exceeds the aggregate of any unamortized actuarial gains and unamortized transitional asset.
(b) An expected future benefit is a calculated amount representing the benefit an entity expects to realize from a plan surplus. An expected future benefit includes any withdrawable surplus or reduction in future contributions. An entity determines its expected future benefit as the sum of:
(i) the present value of its expected future annual accruals for service for the current number of active employees, less the present value of required employee contributions and minimum contributions the entity is required to make regardless of any surplus; and
(ii) the amount of the plan surplus that can be withdrawn in accordance with the existing plan and any applicable laws and regulations.

- When a defined benefit plan gives rise to an accrued benefit asset, an entity should recognize a valuation allowance for any excess of the adjusted benefit asset over the expected future benefit. The accrued benefit asset should be presented on the entity's balance sheet net of the valuation allowance. A change in the valuation allowance should be recognized in income for the period in which the change occurs. [JAN. 2000]

As a result of following this Section, an entity with a defined benefit plan may have recognized an accrued benefit asset. An accrued benefit asset arises when the entity's accumulated cash contributions exceed the benefit costs recognized since the inception of the plan. The accrued benefit asset comprises the plan surplus for accounting purposes, if any, net of all unamortized balances for past service costs, actuarial gains and losses and transitional asset or transitional obligation. The accrued benefit asset may become impaired when there is a plan surplus that the entity is not entitled to benefit from fully. For example, there may be a regulatory moratorium on pension surplus withdrawals or uncertainties as to an entity's legal right to use a plan surplus.
.104 An accrued benefit asset may be fully realized or may become an accrued benefit liability over time through the amortization of unamortized balances in future periods in accordance with this Section. To determine the extent to which an accrued benefit asset may be impaired, the entity first determines the portion of the accrued benefit asset that will not be amortized to future periods' income. This amount is the adjusted benefit asset. When the expected future benefit exceeds the adjusted benefit asset, the accrued benefit asset is not impaired and, accordingly, no valuation allowance is required.

An entity's expected future annual accruals for service for the current number of active employees are determined on a basis consistent with that used to determine its accrued benefit obligation at the measurement date, including the discount rate determined in accordance with paragraph 3461.050. These expected future annual accruals for service, less required employee contributions and minimum contributions the entity is required to make regardless of any surplus, are then discounted back to the current period to determine the present value. The interest rate used to calculate this present value is the expected rate of return on plan assets used to determine benefit cost in the period (see paragraph 3461.076).
. 106 The objective of paragraph 3461.102 is to limit an entity's accrued benefit asset to the amount that it can realize in the future. Any surplus currently in the plan may be available to reduce an entity's future contributions. The value of the accrued benefit asset is limited, therefore, to the present value of the future cash flow streams described in paragraph 3461.105. The appropriate rate for discounting these future cash flow streams is the rate at which an amount invested today would earn the return required to pay the cash flow streams in the future. This rate, therefore, is the expected return on plan assets.

The present value of expected future annual accruals for service for the current number of active employees is determined on the basis of the current work force. An entity normally assumes that the current number of active employees and the demographic composition of the employee group stay constant. However, when an entity
has existing plans to make significant reductions in its work force, the entity reflects these planned reductions in the number of employees used to compute the expected future benefit amount.

When administration expenses are paid by the plan and included in the normal cost calculation, a best estimate of the future administration expense is included in the expected future annual accruals for service. When administration expenses are paid by the plan and not included in the normal cost calculation, the rate of return on plan assets is adjusted to reflect the deduction of the administration expenses.
. 109 Key factors in determining an entity's expected future benefit from a defined benefit plan with a plan surplus are the ability and intent of the entity to withdraw assets from the plan. The expected future benefit includes amounts to which an entity has a legally enforceable right of withdrawal. It excludes any withdrawable plan surplus an entity is currently required, or intends, to allocate to employees. An entity may not anticipate obtaining a legally enforceable right to withdraw a portion of a plan surplus to which it is not currently entitled, whether on the basis of precedent or otherwise. Accordingly, when withdrawal of plan surplus requires the approval of employees or an appropriate regulatory authority or a court of law, an entity excludes any amount subject to this restriction from its expected future benefit until such approval has been obtained. A change in the allocation of surplus between an entity and its employees is incorporated into the calculation of the expected future benefit only when it has been agreed to and, when required, approved by the appropriate regulatory authorities.
. 110 When an entity is required to continue making contributions in the future even though plan assets currently exceed the accrued benefit obligation, the amount of these contributions reduces the expected future benefit.

## Example

The following example illustrates the application of the limit on the carrying amount of an accrued benefit asset.

The defined terms used in applying this limit are related in the following way:

## Accrued benefit asset

Less: the aggregate of unamortized costs / losses / obligation in excess of the aggregate of unamortized gains / asset

```
Adjusted benefit asset
Expected future benefit
paragraph 3461.101(a)
paragraph 3461.101(b)
```

paragraph 3461.024(a)

## Difference

## Valuation allowance $=$ difference, when difference $>0$

These relationships are illustrated in the following diagrams:
Situation I — Adjusted benefit asset > expected future benefit (as in Year 3 in the numerical example following these diagrams)


Situation II - Adjusted benefit asset < expected future benefit (as in Year 1 in the numerical example following these diagrams)


The following numerical example illustrates the application of the limit to an entity's financial statements over a fouryear period:

|  | Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: | :---: |
| Plan assets | \$200 | \$210 | \$220 | \$230 |
| Accrued benefit obligation | 190 | 150 | 195 | $\underline{205}$ |
| Plan surplus | 10 | 60 | 25 | 25 |
| Less: the aggregate of unamortized costs / losses / obligation less the aggregate of unamortized gains / asset | $\underline{20}$ | (30) | $\underline{5}$ | $\underline{5}$ |
| Accrued benefit asset | \$30 | \$30 | \$30 | \$30 |
|  | === | === | === | = |
| (a) Expected future benefit | \$20 | \$20 | \$20 | \$15 |
|  | === | === | === | === |
| (b) Adjusted benefit asset: |  |  |  |  |
| Accrued benefit asset | \$30 | \$30 | \$30 | \$30 |
| Less: the aggregate of unamortized costs / losses / obligation in | $\underline{20}$ | = | 5 | 5 |

excess of the aggregate of unamortized gains / asset

| $\$ 10$ | $\$ 30$ | $\$ 25$ | $\$ 25$ |
| :--- | :--- | :--- | :--- |
| $===$ | $===$ | $===$ | $===$ |

If $(\mathrm{a})$ is greater than or equal to (b):
No valuation allowance is required
$\checkmark$
If (a) is less than (b):

| Valuation allowance required, equal to the difference between (a) | $\$ 10$ | $\$ 5$ | $\$ 10$ |
| :--- | :--- | :--- | :--- |
| and (b) |  | $===$ | $===$ |
|  |  | $\$ 10$ | $\$(5)$ |

Settlements, insurance contracts and arrangements, and curtailments
Definitions
.111 The following definitions are associated primarily with paragraphs 3461.112-.134:
(a) A curtailment is an event that, under a defined benefit plan, results in:
(i) a significant reduction of the expected years of future service of active employees; or
(ii) the elimination, for a significant number of active employees, of the right to earn defined benefits for some, or all, of their future services.
(b) An insurance contract is a policy in which an insurance enterprise assumes an unconditional legal obligation to provide specified benefits to specific individuals in return for a fixed consideration or premium. An insurance contract is irrevocable and involves the transfer of significant risk from the entity (or the plan) to the insurance enterprise. When the insurance enterprise providing the policy is a captive insurer (an insurance enterprise that does business primarily with the entity and related parties), or when there is any reasonable doubt that the insurance enterprise will meet its obligations under the policy, the policy is not considered an insurance contract. Insurance contracts include annuity contracts.
(c) A settlement is a transaction in which an entity substantially discharges or settles all, or part, of an accrued benefit obligation. A settlement is a transaction that is irrevocable, relieves the entity of primary responsibility for the accrued benefit obligation and eliminates the significant risks associated with the accrued benefit obligation and the assets used to effect the settlement. Examples of transactions that constitute a settlement include:
(i) making lump-sum cash payments to employees in exchange for their rights to receive specified benefits; and
(ii) purchasing non-participating insurance contracts.

## Settlements compared to curtailments

.112 A settlement differs from a curtailment. A settlement eliminates actuarial and investment risks but employees continue to earn benefits by providing future services. Accordingly, a settlement is accounted for by recognizing
the gain or loss resulting from remeasuring the accrued benefit obligation and plan assets at the date of settlement together with the related unamortized actuarial gain or loss. However, unrecognized past service costs are not recognized at the date of settlement since employees will continue to provide services in the future (see paragraphs 3461.113-.121). Following a curtailment, employees are no longer able to earn benefits by providing future service but actuarial and investment risks are not eliminated. Accordingly, a curtailment is accounted for by recognizing as a loss the unamortized past service costs attributable to the employees whose ability to earn benefits has been curtailed, together with the gain or loss from remeasuring the related accrued benefit obligation to the extent this gain or loss does not represent a reversal of unamortized actuarial gains or losses or prior years' service costs (see paragraphs 3461.127-.133). A settlement and a curtailment may occur together (see paragraph 3461.134).

## Settlements

- For a defined benefit plan, an entity should recognize a settlement gain or loss in income for the period in which a settlement occurs. Except as specified in paragraph 3461.114, a settlement gain or loss should comprise:
(a) any gain or loss as a result of remeasuring all of the accrued benefit obligation and all of the plan assets at the date of settlement;
(b) any unamortized actuarial gain or loss at the date of settlement; and
(c) any unamortized transitional asset at the date of settlement.

When a purchase of a participating insurance contract constitutes a settlement, any settlement gain (but not any settlement loss) should be reduced by the amount attributed to the participation right. When an entity settles only a part of an accrued benefit obligation, the settlement gain or loss recognized in income in accordance with this paragraph should be only a pro rata portion of that gain or loss, based on the percentage reduction in the accrued benefit obligation. [OCT. 2000 *]
. 114 - When an entity settles all, or part, of an accrued benefit obligation of a defined benefit plan other than a pension plan, any settlement gain determined in accordance with paragraph 3461.113 should reduce any unamortized transitional obligation at the date of settlement. Any remaining gain, or a settlement loss determined in accordance with paragraph 3461.113, should be recognized in income. [JAN. 2000]
. 115 The deferral of actuarial gains and losses in an ongoing plan is based, in part, on the possibility that gains or losses occurring in one year will offset losses or gains in subsequent years. When all of an accrued benefit obligation has been settled, the possibility of future gains and losses related to that accrued benefit obligation and the assets used to effect the settlement is eliminated. The settlement is viewed as the realization of past gains or losses associated with the accrued benefit obligation that is settled and the assets used to effect the settlement. When only part of an accrued benefit obligation has been settled, the possibility of future gains and losses related to that portion of the accrued benefit obligation and the assets used to effect settlement is eliminated. The partial settlement is viewed as the realization of past gains or losses associated with that portion of the accrued benefit obligation that is settled and the assets used to effect the settlement. For example, an accrued benefit obligation for retirees, but not active employees, may be settled. Thus, a partial settlement of the accrued benefit obligation has occurred.
. 116 In a settlement, any unamortized past service costs continue to be amortized after the settlement. Past service costs are amortized over the average remaining service period to employees' full eligibility dates because the entity expects to receive economic benefits in future periods as the employees continue working and earning future benefits.
.117 Any unamortized transitional obligation or transitional asset may include prior years' service costs and interest costs on the accrued benefit obligation, past service costs and actuarial gains and losses. For purposes of calculating a settlement gain or loss, an unamortized transitional asset at the date of settlement is assumed to be an actuarial gain and is combined with any unamortized actuarial gain or loss. An unamortized transitional obligation at the date of settlement is assumed to be past service costs.
.118 Any unamortized transitional obligation for a defined benefit plan other than a pension plan is likely to include a significant amount of prior years' current service cost and interest cost on the accrued benefit obligation not previously recognized, since such a plan is not usually funded. For an ongoing benefit plan other than a pension plan, any gain arising from a settlement is reduced by any unamortized transitional obligation, with only the excess recognized in income in the period in which the settlement occurs. This treatment ensures that the entity does not accelerate the recognition of any gains arising from remeasuring an accrued benefit obligation before that obligation has been fully recognized. A settlement gain that results from settling a pension obligation is measured without regard to any unamortized transitional obligation.
. 119 For a benefit plan other than a pension plan, when all, or part, of the accrued benefit obligation has been settled, a settlement may accelerate recognition of the transitional obligation under paragraph 3461.167 since settlement payments are included in cumulative benefit payments.
. 120 When the cost of all settlements for a plan in a year is less than, or equal to, the sum of the current service cost and interest cost on the accrued benefit obligation for that plan for the year, gain or loss recognition is permitted but not required for those settlements. These circumstances may arise, for example, when a plan purchases annuities each year for benefits earned by employees retiring in that year. When the gain or loss is not recognized, the settlement transaction is treated as a funding transaction and any gain or loss will be reflected in subsequent actuarial gains or losses of the plan. The accounting policy adopted for recognition of settlement gains and losses in such circumstances is applied consistently from year to year.

The cost of settlement is:
(a) the amount of cash paid to employees, for a direct cash settlement;
(b) the cost of non-participating insurance contracts, for a settlement using such contracts; and
(c) the cost of participating insurance contracts less the amount attributed to participation rights (see paragraphs 3461.125-.126), for a settlement using such contracts.

## Insurance contracts and arrangements

. 122 Employee future benefits may be provided or funded by an entity through insurance contracts. An insurance contract involves the transfer of significant risk from the entity (or the plan) to the insurance enterprise, even though the entity retains credit risk associated with the possibility of a default by the insurance enterprise. Examples of significant risks associated with an accrued benefit obligation are mortality risk and the risk that the inflation rate may change significantly.
. 123 When an entity has settled an accrued benefit obligation through the purchase of an insurance contract, the benefits provided or funded by the insurance contract are excluded from the accrued benefit obligation and the insurance contract is excluded from plan assets, except for any participation right (see paragraph 3461.126).
. 124 Other arrangements with an insurance enterprise do not meet the definition of an insurance contract because the insurance enterprise does not assume an unconditional legal obligation to provide specified benefits to specified individuals. For example, a yearly renewable term contract with an insurance enterprise may provide sufficient cash only to pay for benefits provided in the current year. In such cases, there is no transfer of most of the risk inherent in the accrued benefit obligation and the entity accounts for its obligations to employees under its benefit plans without regard to the insurance arrangement, i.e., the entity applies this Section for defined benefit plans or defined contribution plans.

Participating insurance policies provide that a purchaser (either a plan or an entity) may participate in the experience of an insurance enterprise. The insurance enterprise ordinarily pays dividends to the purchaser, the effect of which is to reduce the cost of the policy. The participation dividend is a partial return of the premium paid by the purchaser and therefore, by the terms of the definition, the participating insurance policy is not an insurance contract. Since, in substance, the participation dividend is a return on investment of the participation right, it is accounted for separately as an investment. However, the component of the participating insurance policy that involves a payment of a fixed consideration or premium may satisfy the definition of an insurance contract. When an entity has transferred significant risk associated with an accrued benefit obligation to an
insurance enterprise through a participating insurance policy, a portion of this policy that represents the payment of the fixed consideration or premium may meet the definition of an insurance contract. In such cases, this portion does constitute a settlement and is accounted for as such (see paragraphs 3461.113-.121). When an entity remains subject to significant risks and rewards associated with the accrued benefit obligation covered or the assets transferred to an insurance enterprise, the purchase of the policy from the insurance enterprise does not constitute a settlement. The entity continues to account for the benefits covered by the policy as described in paragraph 3461.124.
. 126 The purchase price of a participating insurance policy ordinarily is higher than the price of an equivalent policy without a participating right. The difference represents the cost of the participating right, which is recognized separately at the date of purchase as an investment.

## Examples

(a) Calculation of a settlement gain or loss when an unamortized transitional obligation exists:

A company sponsors a funded retirement life insurance plan. On December 31, 20X1, the company settles the accrued benefit obligation of $\$ 70,000$ for its current retirees through the purchase of nonparticipating life insurance contracts. The results of the partial settlement of the accrued benefit obligation are as follows:

| Accrued benefit obligation | $\$(257,000)$ | $\$ 70,000$ | $\$(187,000)$ |
| :--- | ---: | ---: | ---: |
| Plan assets at fair value | $\underline{73,000}$ | $\underline{(70,000)}$ | $\underline{3,000}$ |
| Plan deficit | $(184,000)$ | - | $(184,000)$ |
| Unamortized actuarial net gain | $(44,575)$ | 12,124 | $(32,451)$ |
| Unamortized past service costs | 33,000 | - | 33,000 |
| Unamortized transitional obligation | $\underline{195,000}$ | $\underline{(12,124)}$ | $\underline{182,876}$ |
| Accrued benefit liability | $\$(575)$ | $\$$ | - |
|  | $======$ | $======$ | $\$(575)$ |
|  | $======$ |  |  |

The before settlement amounts of accrued benefit obligation and plan assets incorporate the effects of remeasurement in accordance with paragraph 3461.113(a), and those effects are included in the unamortized actuarial net gain.

The settlement gain is calculated as follows:

Since only a portion of the accrued benefit obligation is settled, the company determines the settlement gain based on the percentage reduction in the accrued benefit obligation, i.e., $\$ 70,000 \div \$ 257,000$, or 27.2\%.

| Unamortized transitional asset | - |
| :--- | ---: |
| Unamortized actuarial net gain | $\underline{44,575}$ |
| Amount subject to pro rata calculation | 44,575 |
| Pro rata portion settled | $\underline{x} 27.2 \%$ |
|  | 12,124 |
| Offset to unamortized transitional obligation | $\underline{(12,124)}$ |
| Settlement gain | $\$$ |

In this case, the settlement gain is entirely offset against the unamortized transitional obligation and, thus, no journal entries are required as a result of the partial settlement.
(b) Calculation of a settlement gain when an unamortized transitional asset exists:

A company sponsors a defined benefit pension plan. On January 2, 20X5, the company settles the accrued benefit obligation of $\$ 200,000$ for its current retirees through the purchase of annuity insurance contracts. The results of the partial settlement of the accrued benefit obligation are as follows:

|  | Before settlement | Settlement | After settlement |
| :---: | :---: | :---: | :---: |
| Accrued benefit obligation | \$(257,000) | \$200,000 | \$ $(57,000)$ |
| Plan assets at fair value | 350,900 | $(200,000)$ | 150,900 |
| Plan surplus | 93,900 | - | 93,900 |
| Unamortized actuarial net gain | $(44,575)$ | 34,679 | $(9,896)$ |
| Unamortized past service cost | 33,000 | - | 33,000 |
| Unamortized transitional asset | $(56,333)$ | 43,827 | $(12,506)$ |
| Accrued benefit asset | \$ 25,992 | \$ 78,506 | \$ 104,498 |
|  | ======= | ======= | ===== |

The before settlement amounts of accrued benefit obligation and plan assets incorporate the effects of remeasurement in accordance with paragraph 3461.113(a), and those effects are included in the unamortized actuarial net gain.

The settlement gain is calculated as follows:

Since only a portion of the accrued benefit obligation is settled, the company determines the settlement gain based on the percentage reduction in the accrued benefit obligation, i.e., $\$ 200,000 \div \$ 257,000$, or 77.8\%.

| Unamortized actuarial net gain | \$44,575 |
| :---: | :---: |
| Pro rata portion settled | +77.8\% |
|  | 34,679 |
| Unamortized transitional asset | 56,333 |
| Pro rata portion settled | x 77.8\% |
|  | 43,827 |
| Settlement gain | \$78,506 |

Journal entry related to the settlement:
$\begin{array}{lcc}\text { Dr. Accrued benefit asset } & 78,506 & \\ \text { Cr. Settlement gain } & 78,506 \\ \text { Curtailments } & \end{array}$
. 127 - For a defined benefit plan, an entity should recognize a curtailment loss in income when it is probable that a curtailment will occur and the net effects are reasonably estimable. An entity should recognize a curtailment gain in income when an event giving rise to a curtailment has occurred. A curtailment gain or loss should comprise:
(a) any unamortized past service costs and any unamortized transitional obligation associated with future years of service no longer expected to be rendered as a result of the curtailment or attributable to future years of service for which benefits have been curtailed; and
(b) the increase or decrease in the accrued benefit obligation resulting directly from the curtailment event, adjusted in accordance with paragraph 3461.128. [OCT. 2000 *]
. 128 - For a defined benefit plan, an increase or decrease in an entity's accrued benefit obligation resulting directly from a curtailment event should be adjusted as follows in determining a curtailment gain or loss:
(a) When there is a decrease in the accrued benefit obligation and an unamortized actuarial loss exists, the decrease in the accrued benefit obligation should be reduced by that loss with any excess included in the curtailment gain.
(b) When there is a decrease in the accrued benefit obligation and an unamortized actuarial gain exists, the entire decrease in the accrued benefit obligation should be included in the curtailment gain.
(c) When there is an increase in the accrued benefit obligation and an unamortized actuarial loss exists, the entire increase in the accrued benefit obligation should be included in the curtailment loss.
(d) When there is an increase in the accrued benefit obligation and an unamortized actuarial gain exists, the increase in the accrued benefit obligation should be reduced by that gain with any excess included in the curtailment loss.

For purposes of determining the increase or decrease in the entity's accrued benefit obligation, any unamortized transitional asset should be treated as an unamortized actuarial gain and should be combined with the unamortized actuarial gain or loss arising subsequent to the date as of which the transitional asset was determined. [JAN. 2000]
.129 A curtailment may result from an event that, under a defined benefit plan, results in a significant reduction of the expected years of future service of active employees. For example, the event may be the termination of employment for those employees who participated in the plan at the date of a prior plan amendment. A curtailment may also result from an event that, under a defined benefit plan, results in an elimination of the right to earn defined benefits for some, or all, of the future services of a significant number of active employees. Included in the calculation of a curtailment gain or loss are part of any unamortized past service costs and part of any unamortized transitional obligation. In these circumstances, the part of any unamortized past service costs and unamortized transitional obligation associated with the curtailment is measured as:
(a) a pro rata portion of the unamortized past service costs, based on the remaining years of expected service prior to full eligibility for those employees active at the date of the plan amendment whose employment has been terminated or whose right to earn defined benefits has been eliminated relative to the remaining years of expected service prior to full eligibility of all employees active at the date of the plan amendment; and
(b) a pro rata portion of the unamortized transitional obligation, based on the remaining years of expected service prior to full eligibility for those employees active at the date of transition whose employment has been terminated or whose right to earn defined benefits has been eliminated relative to the remaining years of expected service prior to full eligibility of all employees active at the date of transition.
. 130 An entity may use the percentage reduction in the accrued benefit obligation in the calculation of the pro rata portion of the curtailment loss to simplify the calculation of the curtailment loss described in paragraphs 3461.127-. 128 or when sufficient data is not available to determine the amortization period at the date as of which the transitional obligation or transitional asset was determined.
.131 A reduction or elimination of future services associated with a curtailment event raises doubt about the continued existence of the future economic benefits of prior plan amendments. Therefore, an entity includes in any curtailment gain or loss an appropriate portion of any unamortized past service costs.

A curtailment can decrease or increase a defined benefit plan's accrued benefit obligation. This decrease or increase may be partly a reversal of previously unamortized actuarial gains and losses and partly a reversal of prior years' service costs and interest costs on the accrued benefit obligation. Therefore, a decrease in the accrued benefit obligation resulting from a curtailment is reduced by any unamortized actuarial loss and the net amount is recognized in income. When a curtailment results in a decrease in the accrued benefit obligation and an unamortized actuarial gain exists, the entire decrease in the accrued benefit obligation is recognized in income as part of the curtailment gain or loss. An increase in the accrued benefit obligation resulting from a curtailment is reduced by any unamortized actuarial gain and the net amount is recognized in income. When the curtailment results in an increase in the accrued benefit obligation and an unamortized actuarial loss exists, the entire increase in the accrued benefit obligation is recognized in income as part of the curtailment loss. Thus, only those amounts that do not represent a reversal of unamortized amounts arising previously are recognized in income.

## Recognition of the effects of a curtailment



The total amount of curtailment gain or loss recognized is the sum of the amount from part (a) and the amount from part (b).
.133 Any unamortized transitional obligation or transitional asset may include prior years' service costs and interest costs on the accrued benefit obligation, past service costs and actuarial gains and losses. For purposes of calculating a curtailment gain or loss, an unamortized transitional asset at the date of curtailment is assumed to be an actuarial gain and is combined with any unamortized actuarial gain or loss. An unamortized transitional obligation at the date of curtailment is assumed to be past service costs and is combined with any unamortized past service costs.

## Examples

(a) Calculation of a curtailment gain when an unamortized actuarial gain and unamortized transitional obligation exist:

A company sponsors an unfunded retirement benefit plan. On October 28, 20X4, the company decides to reduce its operations by terminating the employment of a significant number of employees effective December 31, 20X4. On October 28, 20X4, it is expected that a curtailment gain will result from the termination. The event that gives rise to the curtailment results in a significant reduction in the expected years of future service of active employees. The remaining years of expected service associated with those employees whose employment has been terminated, and who were active employees at the date of transition is 22 percent of the remaining years of service of all employees at the date as of which the transitional obligation was determined. The remaining years of service prior to full eligibility associated with those employees whose employment has been terminated, and who were employees at the date of a prior plan amendment is 18 percent of the remaining years of service of all employees at the date of that plan amendment.

|  | Before curtailment | Curtailment | After curtailment |
| :---: | :---: | :---: | :---: |
| Accrued benefit obligation | \$(257,000) | \$54,000 | \$(203,000) |
| Plan assets at fair value | - | 二 |  |
| Plan deficit | $(257,000)$ | 54,000 | $(203,000)$ |
| Unamortized actuarial net gain | $(44,575)$ | - | $(44,575)$ |
| Unamortized past service costs | 33,000 | $(5,940)$ | 27,060 |
| Unamortized transitional obligation | 195,000 | $(42,900)$ | 152,100 |
| Accrued benefit liability | \$(73,575) | \$ 5,160 | \$(68,415) |

The curtailment gain is calculated as follows:

| Unamortized past service costs: | $18 \% \times \$ 33,000=$ | $\$(5,940)$ |
| :--- | :--- | ---: |
| Unamortized transitional obligation: | $22 \% \times \$ 195,000=$ | $(42,900)$ |
| Pro rata portion of past service costs and <br> unamortized transitional obligation related to the <br> curtailment | $(48,840)$ |  |
| Decrease in accrued benefit obligation | $\underline{54,000}$ |  |
| Curtailment gain | $\$ 5,160$ |  |
|  | $=====$ |  |

Subsequent to the curtailment, the unamortized actuarial gain, unamortized past service costs and unamortized transitional obligation continue to be amortized using the remainder of the amortization period determined at the date each balance arose.

Journal entry related to the curtailment:

Dr. Accrued benefit liability
5,160
Cr. Curtailment gain
(b) Calculation of a curtailment loss related to a disposal of a portion of a business segment when an unamortized actuarial loss and unamortized transitional asset exist:

A company sponsors a defined benefit pension plan. On December 31, 20X4, the company decided to reduce the operations of a business segment significantly, with the result that the employment of a significant number of employees was terminated. The right of these employees to earn further benefits
under the pension plan was eliminated. The portion of the accrued benefit obligation related to these employees was $\$ 110,000$.

|  | Before curtailment | Curtailment | After curtailment |
| :---: | :---: | :---: | :---: |
| Accrued benefit obligation | \$(2,000,000) | \$110,000 | \$(1,890,000) |
| Plan assets at fair value | 2,100,000 | 二 | 2,100,000 |
| Plan surplus | 100,000 | 110,000 | 210,000 |
| Unamortized actuarial net loss | 100,000 | - | 100,000 |
| Unamortized transitional asset | $(200,000)$ | - | $(200,000)$ |
| Accrued benefit asset | \$ | \$110,000 | \$ 110,000 |
|  | ===== | ===== | ===== |

The curtailment gain is calculated as follows:

Decrease in accrued benefit obligation
\$110,000
Unamortized transitional asset of $\$ 200,000$ treated as an unamortized $\qquad$ actuarial gain and combined with the unamortized actuarial net loss of $\$ 100,000$, resulting in an actuarial net gain of $\$ 100,000$ and an adjustment pursuant to paragraph 3461.128(b) of:
\$110,000
= $=$ = $=$ =

Subsequent to the curtailment, the unamortized actuarial loss and unamortized transitional asset continue to be amortized using the remainder of the amortization period determined at the date each balance arose.

Journal entry related to the curtailment:

Dr. Accrued benefit asset
110,000
Cr. Curtailment gain
110,000
Relationship between settlements and curtailments
A settlement and a curtailment may occur separately or together. When benefits expected to be paid in future periods are eliminated for some employees (for example, because a significant portion of the work force is dismissed or a plant is closed), but the plan remains in existence and continues to pay benefits, to invest assets, and to receive contributions, a curtailment has occurred, but not a settlement. When an entity purchases non-participating insurance contracts for the accrued benefit obligation and continues to provide benefits for future service, either in the same plan or in a successor plan, a settlement has occurred but not a curtailment. When a plan termination occurs (that is, the accrued benefit obligation is settled and the plan ceases to exist) and the plan is not replaced by a successor defined benefit plan, both a settlement and a curtailment have occurred (whether or not the employees continue to work for the entity). When both a settlement and a curtailment occur, the entity decides which of these events to account for first and applies the same sequence in the future whenever a settlement and a curtailment occur at the same time.

## TERMINATION BENEFITS

.135 The following definitions are associated primarily with paragraphs 3461.136-.142:
(a) Contractual termination benefits are benefits required to be provided to employees under the existing terms of a benefit plan when a specified event, such as a plant closing, occurs.
(b) Special termination benefits are benefits that are not contractual termination benefits and that are offered to employees for a short period of time, normally not exceeding twelve months, in exchange for employees' voluntary or involuntary termination of employment.

- An entity that offers special termination benefits to employees for voluntary terminations should recognize a liability and an expense when employees accept the offer and the amount of the special termination benefits can be reasonably estimated. [OCT. 2000 *]
.137 - An entity that offers special termination benefits to employees for involuntary terminations should recognize a liability and an expense in the period in which:
(a) management having the appropriate level of authority approves and commits the entity to a plan of termination and establishes the benefits that employees will receive upon their termination of employment;
(b) the benefit arrangement is communicated to employees in sufficient detail to enable them to determine the type and amount of benefits they will receive when their employment is terminated;
(c) the plan of termination specifically identifies the target level of reduction in the number of employees, the job classifications or functions and their locations; and
(d) the period of time to complete the plan of termination indicates that significant changes to the plan of termination are not likely. [OCT. 2000 *]
. 138 An entity that is required by the existing terms of a benefit plan to provide contractual termination benefits to employees should recognize a liability and an expense when it is probable that employees will be entitled to benefits and the amount can be reasonably estimated. [OCT. 2000 *]
. 139 An entity may provide benefits to employees when their employment is terminated. These benefits may be either contractual termination benefits required by the existing terms of a benefit plan when a specified event, such as a plant closing, occurs or special termination benefits offered for a short period of time. A plan of termination for special termination benefits normally does not cover a period exceeding twelve months. Special termination benefits may be provided for involuntary or voluntary termination of service.
. 140 Termination benefits may take various forms including lump-sum payments, periodic future payments, or both. They may be paid directly from an entity's assets, from an existing benefit plan or a new benefit plan, or from a combination thereof. The cost of termination benefits recognized as a liability and an expense includes the amount of any lump-sum payments and the present value of any expected future payments. A situation involving termination benefits may also involve a curtailment to be accounted for in accordance with paragraphs 3461.127-. 128 .
. 141 The liability and expense recognized in respect of employees who accept an offer of special termination benefits:
(a) for a defined benefit pension plan, is the difference between:
(i) the accrued benefit obligation in respect of those employees under existing benefit plans, assuming that those employees would retire or terminate their employment immediately, without taking into account any special termination benefits; and
(ii) the accrued benefit obligation in paragraph 3461.141(a)(i) adjusted to reflect the special termination benefits; and
(b) for a defined benefit plan other than a pension plan, is the difference between:
(i) the accrued benefit obligation in respect of those employees under existing benefit plans, assuming that those employees not yet fully eligible for benefits would terminate their
employment at their full eligibility date and that fully eligible employees would retire immediately, without taking into account any special termination benefits; and
(ii) the accrued benefit obligation in paragraph 3461.141(b)(i) adjusted to reflect the special termination benefits.

The liability and expense for special termination benefits includes only the value of the additional benefits that arises from the offer of special termination benefits. Other changes in the accrued benefit obligation resulting from employees now terminating employment at a date earlier than originally assumed would be recognized either in the determination of actuarial gains or losses (see paragraphs 3461.087-.093) or as a curtailment gain or loss (see paragraphs 3461.127-.133).

An entity may offer special termination benefits to employees who leave voluntarily but terminate the employment of additional employees involuntarily if target reduction levels are not achieved. In those circumstances, the liability for termination benefits is recognized for all targeted terminations when the criteria in paragraph 3461.137 are met. The excess of the cost of voluntary termination benefits over the cost of the involuntary termination benefits is recognized when employees accept the offer and the amount can be reasonably estimated.

## Example

An entity's plan of termination offers $\$ 15,000$ to each employee who leaves voluntarily. The target reduction level is 300 . Employees whose employment is terminated involuntarily will each receive a benefit of $\$ 9,000$. The liability to be recognized when the plan of termination is approved (and the conditions in paragraph 3461.137 are met) is $300 \times \$ 9,000=\$ 2,700,000$. When employees accept the voluntary offer of the $\$ 15,000$ benefit, an additional liability for $\$ 6,000$ per employee is accrued (see paragraph 3461.136).

## discontinued operations and disposal of a portion of a business segment

(paragraph 3461.143 deleted)
. 144 When a settlement or curtailment gain or loss or the cost of special or contractual termination benefits, including post-employment benefits, is directly related to a discontinued operation (see DISPOSAL OF LONGLIVED ASSETS AND DISCONTINUED OPERATIONS, Section 3475), it is:
(a) recognized in accordance with Section 3461; and
(b) presented in accordance with Section 3475.

## MULTIEMPLOYER AND MULTIPLE-EMPLOYER BENEFIT PLANS

The following definitions are associated primarily with paragraphs 3461.146-.149:
(a) A multiemployer plan is a defined benefit plan to which two or more unrelated entities contribute, usually pursuant to one or more collective bargaining agreements. Unrelated entities are entities that do not meet the definition of related parties in RELATED PARTY TRANSACTIONS, Section 3840. Multiemployer plans may be referred to as "joint trust" or "union" plans. Characteristics of a multiemployer plan include the following:
(i) Assets contributed by one participating entity are not segregated in a separate account or restricted to provide benefits only to employees of the entity and, thus, may be used to provide benefits to employees of other participating entities.
(ii) Participating entities usually have a common industry bond or at least have the same labour union.
(iii) A multiemployer plan is usually administered by a board of trustees composed of management and labour representatives.
(b) A multiple-employer plan is a defined benefit plan maintained by more than one entity that is not a multiemployer plan. In contrast to multiemployer plans, a multiple-employer plan maintains separate accounts for each entity so that contributions provide benefits only for employees of the contributing entity. In addition, multiple-employer plans are generally not collectively bargained and are intended to allow participating entities, commonly in the same industry, to pool their plan assets for investment purposes and to reduce the cost of plan administration. Multiple-employer plans may have features that allow participating entities to have different benefit formulae, with the entity's contributions to the plan based on the benefit formula selected by the entity.
. 146 When benefits are provided to employees through a multiemployer plan, the amount for which an individual entity is obligated under the plan may not be quantified. Generally, a contribution rate is established for each period to ensure that the plan assets are adequate to cover the plan's future benefit payments.
. 147 Although a multiemployer plan may have the characteristics of a defined benefit plan, sufficient information to follow the standards on defined benefit plans in paragraphs 3461.024-. 134 is normally not available. In such circumstances, a multiemployer plan is accounted for following the standards on defined contribution plans in paragraphs 3461.014-. 023.
. 148 When benefits are provided to employees through a defined benefit multiple-employer plan, each entity in the plan follows the standards on defined benefit plans in paragraphs 3461.024-. 134 and bases its accounting for plan assets on its proportionate interest in the assets of the multiple-employer plan.
. 149 The definition of a multiemployer plan refers to entities that are unrelated. Entities within a related group, such as a parent company and its subsidiaries, may share a benefit plan that satisfies the definition of a multiemployer benefit plan other than the requirement that the entities be unrelated. The costs of the benefit plan are not always allocated to, or funded separately by, the individual entities within the related group. As a result, individual entities within the related group are not able to identify their share of the underlying assets and liabilities. In such circumstances, a benefit plan is accounted for by the parent company and its subsidiaries in their individual financial statements following the standards on defined contribution plans in paragraphs 3461.014-.023. In its consolidated financial statements, the company accounts for the plan following the standards on defined benefit plans in paragraphs 3461.024-.134. Additional disclosures are required in the non-consolidated financial statements of the parent company and in the financial statements of its subsidiaries to indicate that defined contribution plan accounting has been used (see paragraph 3461.152(h)).

## DISCLOSURE

## General

- The objective of the disclosure requirements is to provide users of financial statements with information about:
(a) the effect of employee future benefits on the entity's financial statements, and
(b) plan obligations and assets for defined benefit plans;
that is useful in understanding the entity's obligation to provide employee future benefits, and the costs, risks and uncertainties associated with those obligations, for purposes of making resource allocation decisions as well as assessing management stewardship. To meet this objective, an entity should provide, at a minimum, the disclosures in paragraphs 3461.151-.163. [JUNE 30, 2004]
.151 An entity provides the disclosures required by paragraphs 3461.153-. 157 and 3461.161 , separately for:
(a) plans that provide pension benefits; and
(b) plans that provide primarily other employee future benefits.
.152 An entity discloses the significant accounting policies it has adopted in applying this Section, including where applicable:
(a) whether future salary levels or cost escalation affect the amount of employee future benefits, and that therefore, the projected benefit method prorated on services has been used to determine the accrued benefit obligation, or whether future salary levels or cost escalation do not affect the amount of employee future benefits, and that therefore, the accumulated benefit method has been used to determine the accrued benefit obligation (see paragraph 3461.034);
(b) whether the expected return on plan assets is based on the fair value of plan assets or on a marketrelated value, and in the latter case, the method used in calculating the market-related value for each class of asset (see paragraphs 3461.076-.077);
(c) the method used to amortize past service costs and the amortization period (see paragraphs 3461.079.083 and paragraph 3461.086);
(d) whether all actuarial gains and losses are amortized or only those in excess of 10 percent of the greater of the accrued benefit obligation and the fair value (or market-related value) of plan assets at the beginning of the year, the method used to amortize actuarial gains and losses, and the amortization period (see paragraphs 3461.087-. 088 and paragraph 3461.092);
(e) when the entity applies this Section prospectively, the method used to amortize a transitional obligation or transitional asset and the amortization period (see paragraph 3461.167);
(f) the sequence in which a settlement and a curtailment are accounted for when a transaction or event gives rise to both (see paragraph 3461.134);
(g) the use of defined contribution plan accounting by an entity that is part of a multiemployer plan for which the entity has insufficient information to apply defined benefit plan accounting (see paragraph 3461.147); and
(h) the use of defined contribution plan accounting by an entity that is part of a multiemployer plan of a related group of companies (see paragraph 3461.149).


## Defined contribution plans

For defined contribution plans, an entity discloses:
(a) the cost recognized for the period; and
(b) a description of the nature and effect of each significant change during the period affecting the comparability of the costs for the current and prior periods, such as a change in the rate of employer contributions, a business combination or a divestiture.

The entity also discloses the total cash amount initially recognized in the period as paid or payable for that period for employee future benefits. This amount includes contributions to funded defined benefit plans and to defined contribution plans; payments directly to employees, their beneficiaries or estates; and payments to a third-party service provider on behalf of the employees. When the entity discloses any component of the total cash amount separately, it provides a reconciliation of this component to that total.

## Defined benefit plans

An entity discloses the following information about the effect of defined benefit plans on its financial statements for the period:
(a) Description of the type(s) of plans a description of the type(s) of pension plans, distinguishing flat-benefit plans from final-pay plans and identifying indexation features; and a description of the type(s) of plans other than pension plans, identifying the benefits included such as health care and life insurance;
(b) Measurement date and dates of actuarial valuations
the date used to measure the plan assets and the accrued benefit obligation (see paragraph 3461.044), the effective date of the most recent actuarial valuation for funding purposes and the effective date of the next required actuarial valuation for funding purposes;
(c) Costs recognized
the total amount of benefit cost recognized for the period (see paragraph 3461.070) and an analysis of the components of that cost, showing separately:
(i) each amount arising from events in the period, including the current service cost, any past service cost arising from a plan initiation or amendment in the period, the interest cost on the accrued benefit obligation, the actual return on plan assets, and actuarial gains and losses arising during the period on an accrued benefit obligation;
(ii) the difference between the actual return on plan assets and the expected return on plan assets;
(iii) other adjustments (such as the deferral of amounts arising from events in the period and the amortization of amounts previously deferred) made to provide an appropriate allocation of costs to the periods in which employee services are rendered, showing separately each component including actuarial gains and losses, past service costs and transitional amounts; and
(iv) the increase or decrease in a valuation allowance against the carrying amount of an accrued benefit asset;
(d) Assets and liabilities
the amount(s) recognized in the balance sheet at the end of the period as an accrued benefit liability or accrued benefit asset, together with the balance sheet classification(s), indicating separately the amount of any valuation allowance determined in accordance with paragraph 3461.102;
(e) Reconciliation
a reconciliation of the accrued benefit obligation to the accrued benefit liability or accrued benefit asset (net of any valuation allowance) at the end of the period (see paragraph 3461.044), showing separately:
(i) the fair value of plan assets at the end of the period;
(ii) the resulting plan surplus or deficit at the end of the period;
(iii) the balance of unamortized amounts at the end of the period, showing separately the amounts of:

- unamortized past service costs;
- unamortized net gain or loss, which comprises unamortized actuarial gains and losses and the asset gains and losses not yet reflected in a market-related value of plan assets; and
- the aggregate of the unamortized transitional obligation or transitional asset and the unamortized amount carried forward arising on the initial application of this Section related to the limit on the carrying amount of an accrued benefit asset;
and
(iv) the amount of any valuation allowance determined in accordance with paragraph 3461.102.

The entity also discloses the total cash amount initially recognized in the period as paid or payable for that period for employee future benefits. This amount includes contributions to funded defined benefit plans and to defined contribution plans; payments directly to employees, their beneficiaries or estates; and payments to a third-party service provider on behalf of the employees for employee future benefits. When the entity discloses any component of the total cash amount separately, it provides a reconciliation of this component to that total.
. 155 An entity discloses the following information about defined benefit plans for which it is the sponsor:
(a) The benefits obligation
a reconciliation of the beginning and ending balances of the accrued benefit obligation for the period, showing separately:
(i) the amount of contributions by employees during the period;
(ii) the amount of benefits paid during the period;
(iii) the current service cost for the period;
(iv) the interest cost for the period on the accrued benefit obligation;
(v) the effect of each significant non-routine event, including an amendment, settlement or curtailment of a plan, an event giving rise to contractual termination benefits, or a business combination or divestiture;
(vi) the actuarial gains and losses arising during the period; and
(vii) the effect of foreign currency exchange rate changes;
(b) Plan assets
the following information about plan assets:
(i) a reconciliation of the beginning and ending balances of the fair value of plan assets for the period, showing separately:

- the amount of contributions by the entity during the period;
- the amount of contributions by employees during the period;
- the amount of benefits paid during the period;
- the effect of each significant non-routine event, including a settlement of a plan, an event giving rise to contractual termination benefits, or a business combination or divestiture;
- the actual return on plan assets during the period; and
- the effect of foreign currency exchange rate changes;
(ii) the percentage of the fair value of total plan assets held at the measurement date (see paragraph 3461.044 ) represented by each major category of plan assets, which include but are not limited to equity securities, debt securities and real estate; and additional asset categories when that information is expected to be useful in understanding the risks and expected long-term rate of return for plan assets; and
(iii) the amounts and types of securities of the entity and related parties included in plan assets, the approximate amount of future annual benefits covered by insurance contracts issued by the entity or related parties, and transactions between the entity and the plan during the period; and
(c) Non-routine events
the nature and effect of each significant non-routine event occurring during the period, including an amendment, curtailment or settlement of a plan, an event giving rise to contractual termination benefits, or a business combination or divestiture.

An entity with a plan providing health care benefits to retirees discloses the effects of a one-percentage-point increase and a one-percentage-point decrease in the assumed health care cost trend rates on the aggregate of the service and interest cost components of the benefit cost for the period, and on the accrued benefit obligation at the end of the period. Comparative information is not required.
An entity that has aggregated disclosures for its single-employer defined benefit pension plans, or for its other defined benefit plans, discloses the accrued benefit obligation at the end of the period as determined by the actuarial valuation, and the fair value of plan assets at the end of the period, separately for the aggregate of plans with accrued benefit obligations in excess of plan assets.

An entity discloses the significant assumptions used in accounting for employee future benefits, including:
(a) the weighted average of the amounts assumed in accounting for the plan for:
(i) the discount rate at the end of the period used to determine the accrued benefit obligation;
(ii) the discount rate at the preceding year end (see paragraph 3461.045) used to determine the benefit cost;
(iii) the expected long-term rate of return on plan assets; and
(iv) the rate of compensation increase (for pay-related plans);
specifying, in a tabular form, the assumptions used to determine the accrued benefit obligation and the assumptions used to determine benefit cost; and
(b) the assumed health care cost trend rate(s) for the next year used to measure the expected cost of benefits covered by the plan (gross eligible charges), and a general description of the direction and pattern of change in the assumed trend rate(s) thereafter, together with the ultimate trend rate(s) and when each such rate is expected to be achieved.

The following disclosures, included in paragraphs 3461.154-. 155 and 3461.157-.158, are not required of entities other than public enterprises, co-operative organizations, deposit-taking institutions and life insurance enterprises:
(a) the components of the benefit cost, otherwise disclosed in accordance with paragraph 3461.154(c);
(b) the separate unamortized amounts, otherwise disclosed in accordance with paragraph 3461.154(e)(iii);
(c) the reconciliation of the beginning and ending balances of the accrued benefit obligation for the period, otherwise disclosed in accordance with paragraph 3461.155(a);
(d) the reconciliation of the beginning and ending balances of the fair value of plan assets for the period, otherwise disclosed in accordance with paragraph 3461.155(b)(i); however, all entities disclose the benefits paid; and
(e) the effects of a one-percentage-point increase and a one-percentage point decrease in the assumed health care cost trend rates, otherwise disclosed in accordance with paragraph 3461.158.

Public enterprises are those enterprises that have issued debt or equity securities that are traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local or regional markets), that are required to file financial statements with a securities commission, or that provide financial statements for the purpose of issuing any class of securities in a public market.

## Multiemployer plans

For multiemployer plans, an entity discloses:
(a) the cost recognized for the period; and
(b) a description of the nature and effect of each significant change during the period affecting comparability, such as a change in the rate of employer contributions, a business combination or a divestiture.

In some circumstances, an entity may be unable to obtain sufficient information about its multiemployer plans to disaggregate amounts it has contributed to provide pension benefits from amounts it has contributed primarily to provide other employee benefits. When such disaggregation is impracticable, an entity discloses total contributions to multiemployer plans.

## Special termination benefits

For special termination benefits, a public enterprise, co-operative organization, deposit-taking institution or life insurance enterprise discloses:
(a) the amount of the expense recognized for the period; and
(b) a description of the nature of the related event or events that resulted in these benefits being provided.

## TRANSITIONAL PROVISIONS

The disclosure paragraphs 3461.150-. 163 of this Section apply to fiscal years ending on or after June 30, 2004. Earlier adoption is encouraged. All other paragraphs of this Section apply to fiscal years beginning on or after January 1, 2000.
. 165 An entity may apply this Section either prospectively or retroactively, and it discloses the method of application it has chosen. This Section is applied on the same basis to all of an entity's benefit plans for which a change in accounting is required.

When a change in accounting is required, an entity determines the accrued benefit obligation, the fair value of plan assets and the transitional obligation or transitional asset in accordance with this Section as of the beginning of the fiscal year to which it is first applied.
. 167 When this Section is applied prospectively to a benefit plan, an entity amortizes a transitional obligation or transitional asset in a rational and systematic manner over an appropriate period of time, which is normally the average remaining service period of active employees expected to receive benefits under the benefit plan. However, when all, or almost all, of the employees are no longer active at the date as of which the plan's transitional obligation or transitional asset is determined, the entity amortizes the transitional obligation or transitional asset on a straight-line basis over the average remaining life expectancy of the former employees. When the limit on the carrying amount of an accrued benefit asset changes as a result of the initial application of this Section on a prospective basis, the amount of the change in the valuation allowance is carried forward and amortized on the same basis as a transitional asset or transitional obligation. For a defined benefit plan other than a pension plan, the amortization of a transitional obligation for each period should be sufficient to ensure that the cumulative benefit cost recognized subsequent to the date as of which the transitional obligation is determined is no less than the cumulative benefit payments subsequent to that date.

An entity may have various unamortized balances arising from the application of methods of accounting for employee future benefits other than the methods specified by this Section. Such balances may include previously unamortized amounts for past service costs, actuarial gains and losses, transitional balances and the difference between the fair value of plan assets and their market-related value. When a change in accounting is required, all of these balances are included in the transitional obligation or transitional asset determined in accordance with this Section, except when the entity chooses to apply the guidance in paragraph 3461.169. The previous amortization schedules no longer apply. All past service costs and actuarial gains or losses arising after the date as of which the transitional obligation or transitional asset is determined are amortized from that date forward in accordance with this Section.

At the date as of which an entity first applies this Section, the entity may apply it in a manner that produces recognized and unrecognized amounts for all of the entity's benefit plans the same as those determined by the application of accounting principles generally accepted in the United States.
.170 When an entity has chosen prospective application of this Section and has a separately measured benefit plan providing post-employment benefits or compensated absences that do not vest or accumulate, the transitional obligation or transitional asset is amortized to income on a basis appropriate for the type of benefit. For example, a long-term disability benefit may be amortized based on the average period over which benefits are expected to be paid.
. 171 When this Section is applied prospectively to a defined benefit plan other than a pension plan that was previously accounted for on a cash basis, any transitional obligation is amortized on a basis that ensures recognition of the accrued benefit obligation in accordance with this Section, in an amount at least equal to the amount that would have been recognized under the previous method of accounting. An accelerated amortization is most likely to occur for such a plan when former employees comprise a significant proportion of all active, inactive and former employees.

For an entity applying this Section on a retroactive basis, restatement of financial statements for prior periods is encouraged but not required.

## GLOSSARY OF DEFINED TERMS

This glossary contains all of the terms defined in this Section (see paragraphs 3461.009, 3461.024, 3461.101, 3461.111, 3461.135 and 3461.145), set out in alphabetical order.

An accrued benefit asset is the amount of any asset recognized on an entity's balance sheet in respect of employee future benefits before deducting any valuation allowance that may be required. It is the sum of the entity's accumulated cash contributions less the sum of the current and prior years' benefit costs (before any change in valuation allowance).

An accrued benefit liability is the amount of any liability recognized on an entity's balance sheet in respect of employee future benefits. It is the sum of the current and prior years' benefit costs less the entity's accumulated cash contributions.

Accrued benefit methods are a family of actuarial valuation methods in which a distinct unit of future benefit is attributed to each year of credited service and the actuarial present value of that unit of benefit is computed separately for the period during which it is presumed to have accrued. Two accrued benefit methods are:
(i) Accumulated benefit method - Benefits earned to date are based on the plan formula, the employee's history of pay, service and other factors, as of the date of determination.
(ii) Projected benefit method prorated on services - Generally, an equal portion of the total estimated future benefit (i.e., with salary projection or cost escalation, when appropriate) is attributed to each year of service in the attribution period. Some plans define different amounts of benefits for different years of service. For such plans, this method will not necessarily attribute an equal portion of the total estimated future benefit to each year of service in the attribution period (see paragraph 3461.042).

An accrued benefit obligation is the actuarial present value of benefits attributed to employee services rendered to a particular date. As of a particular date prior to an employee's full eligibility date, an entity's accrued benefit obligation in respect of the employee is the portion of the obligation for employee future benefits attributed to that employee's service rendered to that date. On and after the full eligibility date, the accrued benefit obligation and obligation for employee future benefits for an employee are the same.

Actuarial assumptions are estimates of future events that will affect an entity's costs, and obligation, for employee future benefits. Examples of these estimates are rates of return on plan assets, administration expenses and taxes (other than income taxes), termination rates, disability claim rates, rates of employee turnover, retirement age, mortality, dependency status, per capita claims costs by age and by type of benefit, health care cost trend rates, discount rates to reflect the time value of money, and future salary and benefit levels.

Actuarial gains and losses are changes in the value of the accrued benefit obligation and the plan assets resulting from:
(i) experience different from that assumed; or
(ii) changes in an actuarial assumption.

Actuarial present value is the discounted value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions.

An actuarial valuation is an assessment of the financial status of a benefit plan. It includes the valuation of plan assets, if any, and the accrued benefit obligation.

An adjusted benefit asset is an accrued benefit asset less the amount, if any, by which the aggregate of any unamortized past service costs, unamortized actuarial losses and unamortized transitional obligation exceeds the aggregate of any unamortized actuarial gains and unamortized transitional asset.

An attribution period is the period of an employee's service to which an obligation for employee future benefits is assigned.

A benefit plan is any arrangement that is mutually understood by an entity and its employees whereby the entity undertakes to provide its employees with benefits after active service in exchange for their services. Benefits may commence immediately upon termination or suspension of active service or may be deferred until an employee attains a specified age. Generally, a written plan provides the best evidence of the terms of the benefit plan. However, the terms of a benefit plan may also be discernible from a well-defined, although unwritten practice of paying benefits or from oral representations made to employees. For example, an indication that the terms of a benefit plan differ from the written plan may be discerned from an entity's past practice of providing regular increases in certain monetary benefits. An entity could have a present commitment to amend the benefit plan, either in writing or through practice or oral representations. Evidence of an entity's commitment to amend the benefit plan includes its past practices of amending the plan, identification of strategies to effect future changes, and the assessment of the feasibility and likelihood of making those changes in light of the expected economic and social costs. Anticipated amendments that are subject to negotiations do not constitute terms of a benefit plan until such amendments have been negotiated and agreed to by the entity and its employees.

Benefits that accumulate are those for which the right to the benefit is earned but unused and may be carried forward to one or more periods subsequent to that in which they are earned, even though there may be a limit to the amount that can be carried forward.

Contractual termination benefits are benefits required to be provided to employees under the existing terms of a benefit plan when a specified event, such as a plant closing, occurs.

A credited service period is the employee service period for which benefits are earned pursuant to the terms of a benefit plan. The beginning of a credited service period may be the date of hire or a later date. For example, a plan may provide benefits only for service rendered after a specified age or period of employment.

A curtailment is an event that, under a defined benefit plan, results in:
(i) a significant reduction of the expected years of future service of active employees; or
(ii) the elimination, for a significant number of active employees, of the right to earn defined benefits for some, or all, of their future services.

A defined benefit plan is a benefit plan that specifies either the benefits to be received by an employee, or the method of determining those benefits, such as a benefit of $\$ 10,000$ of life insurance or a pension benefit equal to one and a half percent of the average of the final five years' salary times the total years of service. Any benefit plan that is not a defined contribution plan is a defined benefit plan.

A defined contribution plan is a benefit plan that specifies how an entity's contributions to the plan are determined rather than the benefits to be received by an employee or the method of determining those benefits. The plan also allocates the entity's contributions to specific individuals. The future benefit for each employee is the accumulated amount of the contributions made by the entity on that employee's behalf together with the accumulated amount of any contributions made by the employee and the investment earnings on the contributions.

An expected future benefit is a calculated amount representing the benefit the entity expects to realize from a plan surplus. An expected future benefit includes any withdrawable surplus or reduction in future contributions. An entity determines its expected future benefit as the sum of:
(i) the present value of its expected future annual accruals for service for the current number of active employees, less the present value of required employee contributions and minimum contributions the entity is required to make regardless of any surplus; and
(ii) the amount of the plan surplus that can be withdrawn in accordance with the existing plan and any applicable laws and regulations.

Fair value is the amount of the consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

The full eligibility date is the date at which an employee has rendered all of the service necessary to earn the right to receive all of the benefits expected to be received by that employee (including any beneficiaries and dependants expected to receive benefits). Determination of the full eligibility date is affected by plan terms that provide incremental benefits expected to be received by or on behalf of an employee for additional years of service, unless those incremental benefits are insignificant.

A funded benefit plan is a benefit plan in which the reporting entity is setting aside assets to pay the costs of benefits as they become due. The assets are set aside by the reporting entity in a separate legal entity, generally a trust, and the reporting entity cannot use the assets so set aside for its own purposes. When benefits become payable, they are paid out of the trust directly to the employees. Pension plans are generally funded because of legal requirements to set assets aside.

An insurance contract is a policy in which an insurance enterprise assumes an unconditional legal obligation to provide specified benefits to specific individuals in return for a fixed consideration or premium. An insurance contract is irrevocable and involves the transfer of significant risk from the entity (or the plan) to the insurance enterprise. When the insurance enterprise providing the policy is a captive insurer (an insurance enterprise that does business primarily with the entity and related parties), or when there is any reasonable doubt that the insurance enterprise will meet its obligations under the policy, the policy is not considered an insurance contract. Insurance contracts include annuity contracts.

A multiemployer plan is a defined benefit plan to which two or more unrelated entities contribute, usually pursuant to one or more collective bargaining agreements. Unrelated entities are entities that do not meet the definition of related parties in RELATED PARTY TRANSACTIONS, Section 3840. Multiemployer plans may be referred to as "joint trust" or "union" plans. Characteristics of a multiemployer plan include the following:
(i) Assets contributed by one participating entity are not segregated in a separate account or restricted to provide benefits only to employees of the entity and, thus, may be used to provide benefits to employees of other participating entities.
(ii) Participating entities usually have a common industry bond or at least have the same labour union.
(iii) A multiemployer plan is usually administered by a board of trustees composed of management and labour representatives.

A multiple-employer plan is a defined benefit plan maintained by more than one entity that is not a multiemployer plan. In contrast to multiemployer plans, a multiple-employer plan maintains separate accounts for each entity so that contributions provide benefits only for employees of the contributing entity. In addition, multipleemployer plans are generally not collectively bargained and are intended to allow participating entities, commonly in the same industry, to pool their plan assets for investment purposes and to reduce the cost of plan administration. Multiple-employer plans may have features that allow participating entities to have different benefit formulae, with the entity's contributions to the plan based on the benefit formula selected by the entity.

An obligation for employee future benefits is the actuarial present value as of a particular date of benefits expected to be paid under a defined benefit plan. The obligation is measured on the basis of the expected amount and timing of future benefits, taking into consideration the expected future cost of providing the benefits and the extent to which the costs are shared by employees or others.

Plan assets are assets that have been segregated and restricted in a trust or other legal entity separate from a reporting entity to provide for employee future benefits under the following conditions:
(i) The assets of the separate entity are to be used only to settle the related accrued benefit obligation, are not available to the reporting entity's own creditors, and either cannot be returned to the reporting entity or can be returned to the reporting entity only if the remaining assets of the trust are sufficient to meet the plan's obligations.
(ii) To the extent that sufficient assets are in the separate entity, the reporting entity will have no obligation to pay the related employee future benefits directly.

Plan assets include any financial instruments issued by the reporting entity and held by the trust or other legal entity. For the purposes of this Section, plan assets do not include amounts held by the reporting entity and not yet paid into the trust or other legal entity. Plan assets may include certain arrangements with insurance enterprises (see paragraphs 3461.122-.126).

A settlement is a transaction in which an entity substantially discharges or settles all, or part, of an accrued benefit obligation. A settlement is a transaction that is irrevocable, relieves the entity of primary responsibility for the accrued benefit obligation and eliminates the significant risks associated with the accrued benefit obligation and the assets used to effect the settlement. Examples of transactions that constitute a settlement include:
(i) making lump-sum cash payments to employees in exchange for their rights to receive specified benefits; and
(ii) purchasing non-participating insurance contracts.

Special termination benefits are benefits that are not contractual termination benefits and that are offered to employees for a short period of time, normally not exceeding twelve months, in exchange for employees' voluntary or involuntary termination of employment.

A transitional asset is the unrecognized amount, if any, as of the beginning of the fiscal year to which this Section is first applied, determined as:
(i) the fair value of plan assets less the accrued benefit obligation;
(ii) less any accrued benefit asset or plus any accrued benefit liability.

An entity may have adopted a method of accounting in accordance with this Section prior to its issuance. In that case, a transitional asset is not re-determined.

The transitional obligation is the unrecognized amount, as of the beginning of the fiscal year in which this Section is first applied, determined as:
(i) the accrued benefit obligation less the fair value of plan assets;
(ii) plus any accrued benefit asset or less any accrued benefit liability.

An entity may have adopted a method of accounting in accordance with this Section prior to its issuance. In that case, a transitional obligation is not re-determined.

An unamortized transitional asset or unamortized transitional obligation is the portion of a transitional asset or transitional obligation that has not been recognized in the financial statements.

An unfunded benefit plan is a benefit plan in which an entity pays all of the costs of benefits directly to its employees, their beneficiaries or estates, or to a third-party service provider on behalf of the employees, as the amounts become due.

Employee future benefits that vest are those for which, after a specific or determinable date, the entitlement ceases to be conditional on an employee remaining in the service of an entity.

## ILLUSTRATIVE EXAMPLES

This material is illustrative only.

These examples indicate how the accounting treatment specified in this Section might be applied in particular situations. Matters of principle relating to particular situations should be decided in the context of this Section.

None of the examples relates to any other example.
Example 1 - Computations
Example 2 - Disclosures
Example 3 - Transition
Example 1 - Computations

These examples illustrate computations of the accrued benefit liability, benefit cost and related amounts for a pension plan and a plan providing other retirement benefits.

SITUATION I
Pension Plan Using Fair Value of Plan Assets for Calculating Expected Return

Situation I assumes that the Company uses fair value for the calculation of the expected return on plan assets. Situation II assumes that the Company uses market-related value for that calculation.

XYZ Company sponsors a defined benefit pension plan. The Company uses the balance sheet date of December 31 as the measurement date. The current service cost and past service costs are determined as of the beginning of the year. All contributions and benefit payments are assumed to occur in the middle of the year. An employee's contributions are refundable upon withdrawal from the plan to the extent benefits have not
become vested. XYZ Company recognizes in pension cost the minimum required annual amortization of actuarial gains and losses. The Company expenses all costs recognized for the period relating to employee future benefits. An unamortized transitional obligation of $\$ 500,000$ is being amortized over 12 years. The following amounts relate to XYZ Company's pension experience as determined by annual valuations.

|  |  |  |
| :---: | :---: | :---: |
| Assumptions |  |  |
| 1 Expected long-term rate of return on plan assets | 7.5\% | 7.5\% |
| 2 Discount rate - Jan. 1 | 6.5\% | 6.0\% |
| 3 Assumed rate of salary escalation | 4.0\% | 4.0\% |
| 4 Average remaining service period of active employees expected to receive benefits under the pension plan (years) | 12 | 12 |
| Annual amounts |  |  |
| 5 Current service cost, net of employee contributions | \$100,000 | \$118,200 |
| 6 Contributions by the Company | 115,000 | 165,000 |
| 7 Contributions by the employees | 35,000 | 40,000 |
| 8 Benefit payments | 30,000 | 39,000 |
| 9 Accrued benefit obligation - Jan. 1 | 2,000,000 | 2,080,000 |
| 10 Accrued benefit obligation - Dec. 31 | 2,080,000 | 2,474,000 |
| 11 Fair value of plan assets - Jan. 1 | 1,500,000 | 1,856,000 |
| 12 Fair value of plan assets - Dec. 31 | 1,856,000 | 1,988,000 |
| 13 Past service costs | - | 125,000 |
| 14 Period over which past service costs are to be amortized - Jan. 1 | - | 12 | (years)

Exhibit I — Actual return on plan assets

|  | 20X1 |  |
| :---: | :---: | :---: |
| 15 Fair value of plan assets - Jan. 1 (Line 11) | \$1,500,000 | \$1,856,000 |
| 16 Contributions (Line $6+$ Line 7) | 150,000 | 205,000 |
| 17 Benefit payments (Line 8) | $(30,000)$ | $(39,000)$ |
| 18 Sub-total | 1,620,000 | 2,022,000 |
| 19 Fair value of plan assets - Dec. 31 (Line 12) | 1,856,000 | 1,988,000 |
| 20 Actual return on plan assets | \$ 236,000 | \$ $(34,000)$ |

Exhibit II — Expected return on plan assets (paragraphs 3461.076-.078)


Exhibit III — Actuarial gain (loss) on plan assets (paragraphs 3461.087-.093)

|  | $\underline{20 X 0}$ | $\underline{\text { 20X1 }}$ |  |
| :--- | :--- | :--- | :--- |
| 26 Actual return on plan assets (Line 20) | $\$ 236,000$ | $\$(34,000)$ |  |
| 27 Expected return on plan assets (Line 25) | $\underline{117,000}$ | $\underline{145,425}$ |  |
| 28 Actuarial gain (loss) on plan assets | $\$ 119,000$ | $\$(179,425)$ |  |
|  | $=======$ | $======$ |  |

Exhibit IV — Interest cost on accrued benefit obligation (paragraph 3461.075)


Exhibit V — Actuarial gain (loss) on accrued benefit obligation (paragraphs 3461.087-.093)

|  | $\underline{20 \times 0}$ | 20X1 |
| :---: | :---: | :---: |
| 35 Accrued benefit obligation - Jan. 1 (Line 9) | \$(2,000,000) | \$(2,080,000) |
| 36 Current service cost, net of employee contributions (Line 5) | $(100,000)$ | $(118,200)$ |
| 37 Past service costs (Line 13) | - | $(125,000)$ |
| 38 Contributions by the employees (Line 7) | $(35,000)$ | $(40,000)$ |
| 39 Interest cost on accrued benefit obligation (Line 34) | $(137,800)$ | $(140,622)$ |
| 40 Benefit payments (Line 8) | 30,000 | 39,000 |
| 41 Expected accrued benefit obligation | $(2,242,800)$ | $(2,464,822)$ |
| 42 Accrued benefit obligation - Dec. 31 (Line 10) | (2,080,000) | (2,474,000) |
| 43 Actuarial gain (loss) on accrued benefit obligation | \$ 162,800 | \$ $(9,178)$ |

Exhibit VI — Required amortization of unamortized net actuarial gain (paragraphs 3461.087-.093)

|  | 20X0 | 20X1 |
| :---: | :---: | :---: |
| 44 Accrued benefit obligation - Jan. 1 (Line 9) | \$2,000,000 | \$2,080,000 |
|  | ====== | ======= |
| 45 Fair value of plan assets - Jan. 1 (Line 11) | \$1,500,000 | \$1,856,000 |
|  | ====== | === |
| $4610 \%$ of the greater of Line 44 and Line 45 | \$ 200,000 | \$ 208,000 |



Exhibit VII — Schedule of unamortized net actuarial gain (paragraphs 3461.087-.093)

|  | 20X1 |  |
| :---: | :---: | :---: |
| 50 Unamortized net actuarial gain - Jan. 1 | \$ | \$281,800 |
| 51 Amortization for current year (Line 49) | - | $(6,150)$ |
| 52 Actuarial gain (loss) on accrued benefit obligation (Line 43) | 162,800 | $(9,178)$ |
| 53 Actuarial gain (loss) on plan assets (Line 28) | 119,000 | $(179,425)$ |
| 54 Unamortized net actuarial gain - Dec. 31 | \$281,800 | \$ 87,047 |

Exhibit VIII — Amortization of past service costs (paragraphs 3461.079-.086)


Exhibit IX — Amortization of transitional obligation (paragraphs 3461.164-.172)

|  | 20×0 | 20X1 |
| :---: | :---: | :---: |
| 58 Unamortized transitional obligation — Jan. 1 (the amount for 20X0 is Line 9 - Line 11 for that year) | \$500,000 | \$458,333 |
| 59 Amortization for current year (\$500,000 $\div 12$ ) | 41,667 | 41,667 |
| 60 Unamortized transitional obligation - Dec. 31 | \$458,333 | \$416,666 |

Exhibit X — Determination of pension cost (paragraphs 3461.069-.095)

|  | 20X1 |  |
| :---: | :---: | :---: |
| 61 Current service cost, net of employee contributions (Line 5) | \$100,000 | \$118,200 |
| 62 Interest cost on accrued benefit obligation (Line 34) | 137,800 | 140,622 |
| 63 Expected return on plan assets (Line 25) | $(117,000)$ | $(145,425)$ |
| 64 Amortization of transitional obligation (Line 59) | 41,667 | 41,667 |
| 65 Amortization of past service costs (Line 56) | - | 10,417 |
| 66 Amortization of net actuarial gain (Line 49) | - | $(6,150)$ |


|  | 20X1 |  |
| :---: | :---: | :---: |
| 68 Accrued benefit liability - Jan. 1 | \$ | \$ $(47,467)$ |
| 69 Pension cost for the year (Line 67) | $(162,467)$ | $(159,331)$ |
| 70 Contributions by the Company (Line 6) | 115,000 | 165,000 |
| 71 Accrued benefit liability - Dec. 31 | \$ $(47,467)$ | \$ $(41,798)$ |

Exhibit XII — Reconciliation of accrued benefit obligation to accrued benefit liability

|  | 20X1 |  |
| :---: | :---: | :---: |
| 72 Accrued benefit obligation - Dec. 31 (Line 10) | \$(2,080,000) | \$(2,474,000) |
| 73 Plan assets at fair value - Dec. 31 (Line 12) | 1,856,000 | 1,988,000 |
| 74 Funded status - plan deficit | $(224,000)$ | $(486,000)$ |
| 75 Unamortized transitional obligation (Line 60) | 458,333 | 416,666 |
| 76 Unamortized past service costs (Line 57) | - | 114,583 |
| 77 Unamortized net actuarial gain (Line 54) | $(281,800)$ | $(87,047)$ |
| 78 Accrued benefit liability - Dec. 31 (Line 71) | \$ $(47,467)$ | \$ $(41,798)$ |

## Journal entries

|  | 20X0 |  | 20X1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Dr. Pension expense | 162,467 |  | 159,331 |  |
| Cr. Accrued benefit liability |  | 162,467 |  | 159,331 |

To record the current year's pension cost (Line 67)

Dr. Accrued benefit liability
115,000
Cr. Cash
165,000
115,000
165,000
To record the payment of funding contributions by the Company (Line 6)
Note:

In practice, actuarial valuations are commonly performed at the beginning of the year using assumptions as of that date. The expense amounts determined from these actuarial valuations are then used for the interim and yearend financial statements for that year. However, the year-end accrued benefit obligation disclosed in the financial statements is required to reflect the year-end discount rate. This result is generally achieved by updating the beginning-of-year valuation using the year-end discount rate while keeping all other assumptions constant. The difference between the two accrued benefit obligation amounts is an actuarial gain or loss on the accrued benefit obligation, which is added to the net unamortized actuarial gain or loss and not amortized until the next year. At the start of the next year, the actuarial valuation is recomputed, this time with the updated discount rate that was used to calculate the accrued benefit obligation for disclosure purposes at the end of the prior year and with all other assumptions updated. This recomputation could result in another actuarial gain or loss which is then also added to the net unamortized actuarial gain or loss amount as of the beginning of the
year. The distinction between these two sources of actuarial gains or losses on the accrued benefit obligation has not been reflected in the above example.

## SITUATION II

Pension Plan Using Market-Related Value of Plan Assets for Calculating Expected Return
Situation II assumes that XYZ Company uses a market-related value for plan assets in determining the expected return on plan assets, which affects the computation of pension cost and accrued benefit liability. The elements of this situation are the same as the elements of Situation I, except as follows (line number references are to Situation I when there is no corresponding line number in this situation; line number references specify Situation II when the amount for a line may differ from the amount for the corresponding line in Situation I):

## Annual amounts

| 11a Market-related value of plan assets - Jan. 1, 20X0 | $\$ 1,500,000$ |
| :--- | ---: |
| 11b Number of years over which changes in the fair value of plan <br> assets are reflected in the market-related value | 5 |

Exhibit II - Expected return on plan assets and market-related value of plan assets (paragraphs 3461.076-.078)


Exhibit III — Actuarial gain (loss) on plan assets (paragraphs 3461.087-.093)

|  | $\underline{\underline{20 \times 0}}$ | 20X1 |
| :---: | :---: | :---: |
| 26 Actual return on plan assets (Line 20) | \$236,000 | \$ $(34,000)$ |
| 27 Expected return on plan assets (Line 25, Situation II) | 117,000 | 136,500 |
| 28 Actuarial gain (loss) on plan assets | \$119,000 | \$(170,500) |
|  | ===== | ==== |
| 28a Annual adjustment on a straight-line basis over the following 5 | \$ 23,800 | \$ $(34,100)$ |

Exhibit VI — Required amortization of unamortized net actuarial gain (paragraphs 3461.087-.093)


Exhibit VII — Schedule of unamortized net actuarial gain (paragraphs 3461.087-.093)

|  | 20X1 |  |
| :---: | :---: | :---: |
| 50 Unamortized net actuarial gain - Jan. 1 | \$ | \$281,800 |
| 51 Amortization for current year (Line 49, Situation II) | - | - |
| 52 Actuarial gain (loss) on accrued benefit obligation (Line 43) | 162,800 | $(9,178)$ |
| 53 Actuarial gain (loss) on plan assets (Line 28, Situation II) | 119,000 | (170,500) |
| 54 Unamortized net actuarial gain - Dec. 31 | \$281,800 | \$102,122 |

## Exhibit X — Determination of pension cost (paragraphs 3461.069-.095)

|  | $\underline{20 \times 0}$ | 20X1 |
| :---: | :---: | :---: |
| 61 Current service cost, net of employee contributions (Line 5) | \$100,000 | \$118,200 |
| 62 Interest cost on accrued benefit obligation (Line 34) | 137,800 | 140,622 |
| 63 Expected return on plan assets (Line 25, Situation II) | $(117,000)$ | $(136,500)$ |
| 64 Amortization of transitional obligation (Line 59) | 41,667 | 41,667 |
| 65 Amortization of past service costs (Line 56) | - | 10,417 |
| 66 Amortization of net actuarial gain (Line 49, Situation II) | - - | - |
| 67 Pension cost | \$162,467 | \$174,406 |
|  | ======= | ====== |

Exhibit XI — Accrued benefit liability (paragraphs 3461.029-.065)

|  | 20X1 |  |
| :---: | :---: | :---: |
| 68 Accrued benefit liability - Jan. 1 | \$ | \$ $(47,467)$ |
| 69 Pension cost for the year (Line 67, Situation II) | $(162,467)$ | $(174,406)$ |
| 70 Contributions by the Company (Line 6) | 115,000 | 165,000 |
| 71 Accrued benefit liability - Dec. 31 | \$ $(47,467)$ | \$ $(56,873)$ |

Exhibit XII — Reconciliation of accrued benefit obligation to accrued benefit liability

|  | 20X1 |  |
| :---: | :---: | :---: |
| 72 Accrued benefit obligation - Dec. 31 (Line 10) | \$(2,080,000) | \$(2,474,000) |
| 73 Plan assets at fair value - Dec. 31 (Line 12) | 1,856,000 | 1,988,000 |
| 74 Funded status - plan deficit | $(224,000)$ | $(486,000)$ |
| 75 Unamortized transitional obligation (Line 60) | 458,333 | 416,666 |
| 76 Unamortized past service costs (Line 57) | - | 114,583 |
| 77 Unamortized net actuarial gain (Line 54, Situation II) | $(281,800)$ | $(102,122)$ |
| 78 Accrued benefit liability - Dec. 31 (Line 71, Situation II) | \$ $(47,467)$ | \$ $(56,873)$ |

## Journal entries

|  | $\underline{20 X 0}$ |  | $\underline{\text { 20X1 }}$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Dr. Pension expense | 162,467 |  | 174,406 |  |
| Cr. Accrued benefit liability |  | 162,467 |  | 174,406 |

To record the current year's pension cost (Line 67)
Dr. Accrued benefit liability
115,000
165,000
Cr. Cash
115,000
165,000
To record the payment of funding contributions by the Company (Line 6)
SITUATION III
Other Retirement Benefits Plan

XYZ Company provides certain retiree health and nominal life insurance benefits to its employees. The plan is unfunded and requires no contributions from employees.

In 20X0, XYZ Company adopted accrual accounting for the benefit plan. Prior to that date, XYZ Company recognized a benefit cost equal to its payments for the actual costs incurred by the retirees. At the beginning of 20X0, XYZ Company's management had an actuarial valuation done for accounting purposes, using the projected benefit method prorated on services.

The results of the valuation were:

Accrued benefit obligation, January 1, 20X0 \$1,000,000

The average remaining service period of employees at the time of adoption of accrual accounting for the benefit plan was 12 years. XYZ Company has decided to amortize this transitional obligation, using a straight-line method, over 12 years.

The following amounts relate to the retiree health and life insurance plan as determined by annual valuations performed in subsequent years. Benefit payments are considered to take place in the middle of each year. Accrual for service is at the beginning of each year. The measurement date selected by XYZ Company is December 31. The Company expenses all costs recognized for the period relating to employee future benefits. This Situation is unrelated to Situations I and II (the line number references do not correspond to the lines in those situations).

20X0

## Assumptions

| 1 Discount rate - Jan. 1 |  | 6.5\% | 6.0\% |
| :---: | :---: | :---: | :---: |
| 2 Average remaining service period of active employees expected to receive benefits under the benefit plan (years) |  | 12 | 12 |
|  | $\underline{20 \times 0}$ | 20X1 |  |
| Annual amounts |  |  |  |
| 3 Current service cost |  | \$65,000 | \$78,000 |
| 4 Benefit payments |  | 15,000 | 17,000 |
| 5 Accrued benefit obligation - Jan. 1 |  | 1,000,000 | 1,200,000 |
| 6 Accrued benefit obligation - Dec. 31 |  | 1,200,000 | 1,242,000 |

Exhibit I — Interest cost on accrued benefit obligation (paragraph 3461.075)


Exhibit II — Actuarial gain (loss) on accrued benefit obligation (paragraphs 3461.087-.093)

|  | 20X1 |  |
| :---: | :---: | :---: |
| 12 Accrued benefit obligation - Jan. 1 (Line 5) | \$(1,000,000) | \$(1,200,000) |
| 13 Current service cost (Line 3) | $(65,000)$ | $(78,000)$ |
| 14 Interest cost on accrued benefit obligation (Line 11) | $(68,737)$ | $(76,170)$ |
| 15 Benefit payments (Line 4) | 15,000 | 17,000 |
| 16 Expected accrued benefit obligation | $(1,118,737)$ | $(1,337,170)$ |
| 17 Accrued benefit obligation - Dec. 31 (Line 6) | (1,200,000) | (1,242,000) |
| 18 Actuarial gain (loss) on accrued benefit obligation | \$ $(81,263)$ | \$ 95,170 |

Exhibit III — Required amortization of unamortized net actuarial loss (paragraphs 3461.087-.093)


Exhibit IV — Schedule of unamortized net actuarial gain (loss) (paragraphs 3461.087-.093)


Exhibit V — Determination of benefit cost (paragraphs 3461.069-.095)


Exhibit VI — Accrued benefit liability (paragraphs 3461.029-.065)

|  | $\underline{20 \times 0}$ | 20X1 |
| :---: | :---: | :---: |
| 32 Accrued benefit liability - Jan. 1 | \$ | \$ 202,070 ) |
| 33 Benefit cost for the year (Line 31) | $(217,070)$ | $(237,503)$ |
| 34 Benefit payments (Line 4) | 15,000 | 17,000 |
| 35 Accrued benefit liability - Dec. 31 | \$(202,070) | \$ $(422,573)$ |
|  | ======= | ======== |

Exhibit VII — Reconciliation of accrued benefit obligation to accrued benefit liability

| 36 Accrued benefit obligation — Dec. 31 (Line 6) | $\$(1,200,000)$ | $\$(1,242,000)$ |
| :--- | ---: | ---: |
| 37 Unamortized transitional obligation | 916,667 | 833,334 |
| 38 Unamortized net actuarial loss (gain) (Line 26) | 81,263 | $(13,907)$ |

## Journal entries

|  | $\underline{20 \times 0}$ |  | 20X1 |  |
| :--- | :---: | :---: | :---: | :---: |
| Dr. Benefit expense | 217,070 |  | 237,503 |  |
| Cr. Accrued benefit liability |  | 217,070 |  | 237,503 |

To record the current year's benefit cost (Line 31)
17,000
Cr. Cash
217,070
237,503

## Dr. Accrued benefit liability

17,000
To record the payment of benefits to, or on behalf of, retirees in the current year (Line 4)

## Example 2 - Disclosures

## SITUATION I

Public Company Disclosure
Company A is a public company with a number of defined benefit and defined contribution plans of different types. The illustration provides disclosures for the fiscal year ended December 31, 20X3, with comparative figures for the prior year. The Company has undertaken several non-routine transactions affecting its benefit plans so that the illustration includes most of the possible disclosures an entity might be required to make. Consequently, the illustration should not be considered typical of the disclosure most entities would make routinely. The Company
has not offered any special termination benefits to employees. All amounts are in thousands of dollars.

## Note 1: Significant accounting policies

(e) Pension and Other Retirement Benefit Plans

- The actuarial determination of the accrued benefit obligations for pensions and other retirement benefits uses the projected benefit method prorated on service (which incorporates management's best estimate of future salary levels, other cost escalation, retirement ages of employees and other actuarial factors).
- For the purpose of calculating the expected return on plan assets, those assets are valued at fair value.
- Actuarial gains (losses) arise from the difference between actual long-term rate of return on plan assets for a period and the expected long-term rate of return on plan assets for that period or from changes in actuarial assumptions used to determine the accrued benefit obligation. The excess of the net accumulated actuarial gain (loss) over 10 percent of the greater of the benefit obligation and the fair value of plan assets is amortized over the average remaining service period of active employees. The average remaining service period of the active employees covered by the pension plan is 15 years (20X3) and 16 years (20X2). The average remaining service period of the active employees covered by the other retirement benefits plan is 16 years (20X3) and 15 years (20X2).
- Past service costs arising from plan amendments are deferred and amortized on a straight-line basis over the average remaining service period of employees active at the date of amendment.
- On January 1, 20X0, the Company adopted the new accounting standard on employee future benefits using the prospective application method. The Company is amortizing the transitional obligation on a straight-line basis over 15 years, which was the average remaining service period of employees expected to receive benefits under the benefit plan as of January 1, 20X0.
- When the restructuring of a benefit plan gives rise to both a curtailment and a settlement of obligations, the curtailment is accounted for prior to the settlement.
- Defined contribution plan accounting is applied to a multiemployer defined benefit plan for which the Company has insufficient information to apply defined benefit plan accounting.


## Note X: Pension and other retirement benefit plans

## Description of benefit plans

The Company has a number of funded and unfunded defined benefit plans, as well as defined contribution plans, that provide pension, other retirement and post-employment benefits to most of its employees. Its defined benefit pension plans are based on years of service and final average salary. Pension benefits will increase annually by 50 percent of the rate of inflation.

Other retirement benefit plans are contributory health care plans with employee contributions adjusted annually, and non-contributory life insurance plans. A plan also provides long- and short-term disability income benefits after employment, but before retirement.

The Company acquired FV Industries in late 20X2 (see Note Y), including its pension and other retirement plans. Subsequent restructuring in 20X2 included termination of employees due to plant closures. This resulted in a curtailment gain (\$180), a settlement gain (\$3) and contractual termination costs (\$59) that together improved earnings by $\$ 124$. Plan amendments, made to be consistent with the FV Industries plans, resulted in past service costs of $\$ 195$.

## Total cash payments

Total cash payments for employee future benefits for 20X3, consisting of cash contributed by the Company to its funded pension plans, cash payments directly to beneficiaries for its unfunded other benefit plans, cash contributed to its defined contribution plans, and cash contributed to its multiemployer defined benefit plan, was \$299 (a) (20X2 - \$269 (a)).

## Explanatory note:

This note explains the derivation of the numbers in the example above; it is not meant to be included in the financial statements.
(a) Total cash payments for employee future benefits is derived as follows:

| Description | 20X3 | 20X2 | Source |
| :---: | :---: | :---: | :---: |
| Employer contributions to funded pension plans | \$ 94 | \$ 75 | Reconciliation of plan assets "Employer contributions" |
| Benefits paid directly to beneficiaries for unfunded other benefit plans | 80 | 70 | Reconciliation of accrued benefit obligation - Other benefit plans, "Benefits paid" |
| Cash contributed to defined contribution plans | 75 | 75 | Total cost recognized for defined contribution plans less amortization of past service costs |
| Cash contributed to the multiemployer defined benefit plan | 50 | 49 | "Defined contribution and other plans" |
| Total cash payments for employee future benefits | $\begin{aligned} & \$ 299 \\ & ==== \end{aligned}$ | $\begin{aligned} & \$ 269 \\ & ==== \end{aligned}$ |  |

## Defined benefit plans

The Company measures its accrued benefit obligations and the fair value of plan assets for accounting purposes as at October 31 of each year. The most recent actuarial valuation of the pension plans for funding purposes was as of January 1, 20X2, and the next required valuation will be as of January 1, 20X5.

## Defined benefit plan obligations




Plan assets consist of: *


Equity securities include the Company's common shares in the amounts of $\$ 165$ ( 8.6 percent of total plan assets) and $\$ 163$ ( 8.5 percent of total plan assets) at December 31, * 20X3 and 20X2 respectively.

* Measured as of the measurement date of October 31 of each year.

Reconciliation of the funded status of the benefit plans to the amounts recorded in the financial statements


The accrued benefit asset (liability), net of valuation allowance, is included in the Company's balance sheet as follows:

|  | Pension benefit plans |  |  |  | Other benefit plans |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{\text { 20X3 }}$ |  | 20X2 |  | 20X3 |  | 20X2 |  |
| Other assets |  | \$ 677 |  | \$ 655 |  | \$ |  |  |
| Accounts payable and accrued charges |  | (25) |  | (30) |  | (18) |  | (26) |
| Other long-term liabilities |  | - 二 |  | 二 |  | (688) |  | (596) |
| Total |  | \$ 652 |  | \$ 625 |  | \$ (706) |  | \$ (622) |
|  |  | ===== |  | ===== |  | ===== |  | ===== |

Plans with accrued benefit obligations in excess of plan assets

Included in the above accrued benefit obligation and fair value of plan assets at year end are the following amounts in respect of plans that are not fully funded:


Elements of defined benefit costs recognized in the year


## Explanatory notes:

These notes explain the derivation of the numbers in the example above; they are not meant to be included in the financial statements.
(a) Expected return on plan assets of $\$(143)$ - the deferral of the actual return on plan assets of $\$(20)=$ \$(123).
(b) Actuarial (gain) loss recognized for year of \$nil - actual actuarial (gain) loss on accrued benefit obligation for year of $\$ 40=\$(40)$.
(c) Amortization of past service costs for year of $\$ 28$ - actual plan amendments for year of $\$$ nil $=\$ 28$.

## Significant assumptions

The significant assumptions used are as follows (weighted average):


Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects for 20X3:

|  | Increase | Decrease |  |
| :--- | :--- | :--- | :--- |
|  | Detal of service and interest cost | $\$ 22$ | $\$(20)$ |
| Accrued benefit obligation | $\$ 173$ | $\$(156)$ |  |

## Defined contribution and other plans

The total cost recognized (a) for the Company's defined contribution plans is as follows:

|  | $\underline{20 X 3}$ | 20X2 |  |
| :--- | :--- | :--- | :--- |
|  | \$70 | $\$ 71$ |  |
| Plans providing pension benefits | $\$ 17$ | $\$ 16$ |  |

One of the Company's divisions participates in a multiemployer defined benefit plan providing both pension and other retirement benefits. This plan, to which contributions totalled $\$ 50$ in 20X3 and $\$ 49$ in 20X2, is accounted for as a defined contribution plan. These amounts are not included in the cost recognized for the defined contribution plan above. The Company's contribution per employee hour increased by 20 percent in 20X2 to fund improved plan benefits.

## Explanatory note:

This note explains the derivation of the numbers in the example above; it is not meant to be included in the financial statements.
(a) The total cost recognized for the Company's defined contribution pension benefit plans includes amortization of past service costs of \$12 (20X2 - \$12).

## SITUATION II

 Non-Public Company DisclosureThis illustration provides disclosures for Company B for 20X3 and 20X2 based on the same facts and circumstances as in Situation I for Company A except that Company B is non-public. Paragraph 3461.159 provides relief from certain disclosure requirements for entities other than public enterprises, co-operative organizations, deposit-taking institutions and life insurance enterprises. Situation II provides a reference to Situation I when the disclosure requirements between these Situations are the same. Situation II provides sample disclosures for requirements that differ from Situation I.

This illustration involves relatively uncommon circumstances for a non-public entity, in order to indicate the disclosures that might be required for such entities under the requirements set out in this Section. In more usual circumstances, the required disclosure would be considerably less.

Company B's significant accounting policy note is the same as Company A's in Situation I.
Note X: Pension and other retirement benefit plans
Company B's description of benefit plans is the same as Company A's in Situation I with the exception of the following additional details, which Company A provides as part of disclosures not required by Company B:

|  | Pension benefit plans |  | Other benefit plans |
| :---: | :---: | :---: | :---: |
|  | Plan assets | Benefit obligation | Benefit obligation |
| Acquisition of FV Industries | \$1,310 | \$ 907 | \$ 600 |
| Sale of operations | (231) | (246) | (89) |
| Settlement gain | (150) | (153) | - |
| Curtailment gain | - | (78) | (102) |
| Contractual termination benefits | (59) | - | - |
| Plan amendments | - | 120 | 75 |

Company B's disclosures of total cash payments, information about measurement and valuation dates, and plan asset mix are the same as Company A's in Situation I.

Reconciliation of the funded status of the benefit plans to the amounts recorded in the financial statements


Company B's disclosures of the balance sheet classification of the accrued benefit asset (liability) and on plans with accrued benefit obligations in excess of plan assets are the same as Company A's in Situation I.

Employee future benefits costs recognized in the year

|  | Pension benefit plans |  |  |  | Other benefit plans |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20X3 |  |  | $\underline{\text { 20X3 }}$ |  |  |
| Defined benefit plans |  | \$72 | \$104 |  | \$164 | \$23 |
| Defined contribution plans (a) |  | \$70 | \$ 71 |  | \$ 17 | \$16 |
| Explanatory note: |  |  |  |  |  |  |

This note explains the derivation of the numbers in the example above; it is not meant to be included in the financial statements.
(a) The employee future benefits costs recognized in the year for defined contribution pension benefit plans includes amortization of past service costs of \$12 (20X2 - \$12).

Company B's disclosure of significant assumptions is the same as Company A's in Situation I.
Benefits paid

Benefits paid by pension benefit plans were $\$ 140(20 X 2-\$ 125)$ and by other benefit plans were $\$ 80$ (20X2 — \$70).

Company B's explanatory paragraph about the multiemployer defined benefit plan is the same as Company A's in Situation I.

## Example 3 - Transition

Company D sponsors a defined benefit pension plan. The Company uses the balance sheet date of December 31 as the measurement date. Until December 31, 1999, the Company had been accounting for its pension plans using a long-term rate of return to measure its accrued benefit obligation and a market-related value to measure its pension plan assets. Effective January 1, 2000, the Company began applying this Section and changed to a market rate to measure its accrued benefit obligation and fair value to measure its pension plan assets. The following amounts relate to the Company's pension experience as determined by annual valuations:

## Assumptions

Jan. 1, 2000
1 Expected long-term rate of return on plan assets

| 2 Discount rate - Jan. 1 | $6.5 \%$ |
| :--- | ---: |
| 3 Average remaining service period of active employees expected to receive benefits | 12 |
| under the pension plan (years) |  |
| Annual amounts | Jan. 1, 2000 |
| 4 Accrued benefit obligation using a long-term rate of return (old method) | $\$ 2,750,000$ |
| 5 Accrued benefit obligation using a market rate (new method) | $3,000,000$ |
| 6 Fair value of plan assets (new method) | $3,600,000$ |
| 7 Market-related value of plan assets (old method) | $2,950,000$ |
| 8 Accrued benefit asset | 150,000 |
| 9 Unamortized net actuarial gain (old method) | 175,000 |
| 10 Unamortized past service costs (old method) | 75,000 |
| 11 Unamortized transitional balance (old method) | 50,000 |

Exhibit I — Transitional asset at January 1, 2000 (paragraphs 3461.164-.172)

| 12 Fair value of plan assets (new method) (Line 6) | $\underline{\text { Jan. 1, 2000 }}$ |
| :--- | ---: |
| 13 Accrued benefit obligation (new method) (Line 5) | $\$ 3,600,000$ |
| 14 Funded status - plan surplus | $\underline{3,000,000}$ |
| 15 Accrued benefit asset (Line 8) | 600,000 |
| 16 Transitional asset | $\underline{150,000}$ |
|  | $\$ 450,000$ |
| $=======$ |  |

Exhibit II — Components of the transitional asset (paragraphs 3461.164-.172)

17 Change in the value of plan assets - Jan. 1, 2000 (Line 6 - Line 7)
Jan. 1, 2000

18 Change in the accrued benefit obligation - Jan. 1 (Line 4 - Line 5)
\$650,000

19 Unamortized net actuarial gain under the old method (Line 9)
$(250,000)$

20 Unamortized past service costs under the old method (Line 10)
175,000

21 Unamortized transitional balance under the old method (Line 11)
22 Transitional asset — Jan. 1 (Line 16) \$450,000

The unamortized balances arising up to December 31, 1999, i.e., the unamortized net actuarial gain, the unamortized past service costs and the unamortized transitional balance, are included in the transitional asset determined in accordance with this Section. The previous amortization schedules cease to apply.

## SITUATION I

## Prospective Method of Application

The Company selects the prospective method of adopting this Section and amortizes the transitional asset computed in Exhibit I on a straight-line basis over the average remaining service period of active employees expected to receive benefits under the pension plan, i.e., 12 years.

## Exhibit III - Amortization of transitional asset and unamortized transitional asset (paragraphs 3461.164-.172)

| 23 Transitional asset — Jan. 1, 2000 (Line 16) | $\$ 450,000$ |
| :--- | ---: |
| 24 Amortization for current year (Line 23 $\div$ Line 3) | $(37,500)$ |
| 25 Unamortized transitional asset — Dec. 31, 2000 | $\$ 412,500$ |
|  | $=======$ |

The accrued benefit asset balance at January 1, 2000 remains at $\$ 150,000$ (Line 8). The amortization on line 24 is included in the determination of net income for the year ended December 31, 2000 and, thus, will affect the balance of the accrued benefit asset at that date.

## SITUATION II <br> Retroactive Method of Application

The Company selects the retroactive method of adopting this Section and adjusts the opening balance of retained earnings on January 1, 2000 for the cumulative effect of the change on prior periods.

Exhibit IV — Unamortized transitional asset (paragraphs 3461.164-.172)

| 26 Transitional asset — Jan. 1, 2000 (Line 16) | $\$ 450,000$ |
| :--- | :--- |
| 27 Retroactive restatement to opening retained earnings on January 1, 2000 | $(450,000)$ |
| 28 Unamortized transitional asset - Dec. 31, 2000 | $\$-$ |

The accrued benefit asset on January 1,2000 is $\$ 600,000$, consisting of $\$ 450,000$ (Line 16) $+\$ 150,000$ (Line 8). Company D may have chosen to recognize the transitional asset retroactively by restating individual prior periods.

## Footnotes

1. Costs recognized for the period include amounts expensed and costs that may have been capitalized as part of an asset such as inventory.

* Editorial change — March 2004.
* Editorial change — March 2004.
* Editorial change - March 2004.
* Editorial change - March 2004.
* Requirements amended — October 1999. Editorial change — March 2004.
** Editorial change - March 2004.
* Editorial change - March 2004.
* Editorial change — December 2002.
* Editorial change - December 2002.
* Editorial change - December 2002.
* Editorial change - December 2002.
* Editorial change — December 2002.

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## SPECIFIC ITEMS

SECTION 3462 employee future benefits

| FOR THOSE WHO CHOOSE NOT TO EARLY ADOPT THIS SECTION, <br> see Section 3461 in Archived Pronouncements. |  |
| :--- | :--- |
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PURPOSE AND SCOPE
.001 This Section establishes standards for the recognition, measurement, and disclosure of the cost of employee future benefits. It requires an entity to recognize the cost of retirement benefits and certain post-employment benefits over the periods in which employees render services to the entity in return for the benefits. Other post-employment benefits are recognized when the event that obligates the entity occurs.
.002 This Section applies to benefits earned by active employees and expected to be provided to them when they are no longer providing active service, pursuant to the terms of an entity's undertaking to provide such benefits. Employee future benefits include:
(a) pension and other retirement benefits expected to be provided after retirement to employees and their beneficiaries, such as pension income, health care benefits, life insurance, and other miscellaneous benefits provided to employees after retirement;
(b) post-employment benefits expected to be provided after employment but before retirement to employees and their beneficiaries, such as long- and short-term disability income benefits (including workers' compensation), severance benefits, salary continuation, supplemental unemployment benefits, job training and counselling, and continuation of benefits such as health care benefits and life insurance;
(c) compensated absences for which it is expected employees will be paid, such as parental leaves, accumulating sick days that vest or are paid without an illness-related absence, and sabbaticals that provide compensated, unrestricted time off for past service; and
(d) termination benefits.
.003 Active employees are those currently rendering service to the entity. Former employees are those who are retired, whose employment has been terminated or who have left the entity. Inactive employees are those who are not currently rendering service to the entity but whose employment has not been terminated. Active, former and inactive employees are referred to in this Section collectively as "employees".
. 004 An entity's arrangement to provide future benefits to employees may take a variety of forms and may be financed in different ways. Future benefits may be provided either directly by an entity or through an intermediary, such as a pension plan or an insurance enterprise. This Section applies to any arrangement that is in substance a benefit plan regardless of its form or the manner or timing of its funding. Absent evidence to the contrary, it is presumed that an entity that has provided benefits in the past and is currently promising those benefits to employees will continue to provide those benefits in the future. This Section applies to future benefits for which an entity pays all or part of the cost. This Section applies to entities with funded benefit plans and/or unfunded benefit plans.
.005 This Section does not apply to benefits provided by an entity to employees during their active employment. Examples of these benefits are:
(a) salaries, wages, bonuses, fringe benefits, and similar items that are provided by an entity in the current reporting period, or within twelve months thereafter, in exchange for services rendered by employees in the current reporting period;
(b) occasional sick days and vacation days that do not vest or accumulate beyond twelve months after the current reporting period; and
(c) benefits provided under stock-based compensation arrangements (see STOCK-BASED COMPENSATION AND OTHER STOCK-BASED PAYMENTS, Section 3870).

## DEFINITIONS

.006 The following terms are used in this Section with the meanings specified:
(a) Accrued benefit methods are a family of actuarial cost methods in which a distinct unit of future benefit is attributed to each year of credited service and the actuarial present value of that unit of benefit is computed separately for the period during which it is presumed to have accrued. Two accrued benefit methods are:
(i) Accumulated benefit method - Benefits earned to date are based on the plan formula, the employee's history of pay, service and other factors, as of the date of determination.
(ii) Projected benefit method prorated on services - Generally, an equal portion of the total estimated future benefit (i.e., with salary projection or cost escalation, when appropriate) is attributed to each year of service in the attribution period. Some plans define different amounts of benefits for different years of service. For such plans, this method will not necessarily attribute an equal portion of the total estimated future benefit to each year of service in the attribution period (see paragraph 3462.042).
(b) Actuarial assumptions are estimates of future events that will affect an entity's costs, and obligation, for employee future benefits. Examples of these estimates are administration expenses and taxes (other than income taxes), termination rates, disability claim rates, rates of employee turnover, retirement age, mortality, dependency status, per capita claims costs by age and by type of benefit, health care cost trend rates, discount rates to reflect the time value of money, and future salary and benefit levels.
(c) An actuarial cost method is a method used to allocate the present value of a defined benefit plan's obligations to time periods in accordance with actuarial practice, usually in the form of a service cost and an accrued liability.
(d) Actuarial gains and losses are changes in the value of the defined benefit obligation resulting from:
(i) experience different from that assumed; or
(ii) changes in an actuarial assumption.
(e) Actuarial present value is the discounted value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions.
(f) An actuarial valuation is an assessment of the financial status of a benefit plan. It includes the valuation of plan assets, if any, and the defined benefit obligation.
(g) An attribution period is the period of an employee's service to which an obligation for employee future benefits is assigned.
(h) A benefit plan is any arrangement that is mutually understood by an entity and its employees whereby the entity undertakes to provide its employees with benefits after active service in exchange for their services. Benefits may commence immediately upon termination or suspension of active service or may be deferred until an employee attains a specified age. Generally, a written plan provides the best evidence of the terms of the benefit plan. However, the terms of a benefit plan may also be discernible from a well-defined, although unwritten practice of paying benefits or from oral representations made to employees. For example, an indication that the terms of a benefit plan differ from the written plan may be discerned from an entity's past practice of providing regular increases in certain monetary benefits. An entity could have a present commitment to amend the benefit plan, either in writing or through practice or oral representations. Evidence of an entity's commitment to amend the benefit plan includes its past practices of amending the plan, identification of strategies to effect future changes, and the assessment of the feasibility and likelihood of making those changes in light of the expected economic and social costs. Anticipated amendments that are subject to negotiations do not constitute terms of a benefit plan until such amendments have been negotiated and agreed to by the entity and its employees.
(i) Benefits that accumulate are those for which the right to the benefit is earned but unused and may be carried forward to one or more periods subsequent to that in which they are earned, even though there may be a limit to the amount that can be carried forward.
(j) Contractual termination benefits are benefits required to be provided to employees under the existing terms of a benefit plan when a specified event, such as a plant closing, occurs.
(k) A credited service period is the employee service period for which benefits are earned pursuant to the terms of a benefit plan. The beginning of a credited service period may be the date of hire or a later date. For example, a plan may provide benefits only for service rendered after a specified age or period of employment.
(I) A curtailment is an event that, under a defined benefit plan, results in:
(i) a significant reduction of the expected years of future service of active employees; or
(ii) the elimination, for a significant number of active employees, of the right to earn defined benefits for some, or all, of their future services.
(m) A defined benefit liability (asset) is the amount of the defined benefit obligation less the fair value of plan assets, if any, adjusted for any valuation allowance in the case of a net asset.
( n ) A defined benefit obligation is the actuarial present value of benefits attributed to employee services rendered to a particular date. As of a particular date prior to an employee's full eligibility date, an entity's defined benefit obligation in respect of the employee is the portion of the obligation for employee future benefits attributed to that employee's service rendered to that date. On and after the full eligibility date, the defined benefit obligation and obligation for employee future benefits for an employee are the same.
(o) A defined benefit plan is a benefit plan that is not a defined contribution plan.
(p) A defined contribution plan is a benefit plan that specifies how an entity's contributions to the plan are determined rather than the benefits to be received by an employee or the method of determining those benefits.
(q) An expected future benefit is a calculated amount representing the benefit the entity expects to realize from a plan surplus. An expected future benefit includes any withdrawable surplus and any reduction in future contributions. An entity determines its expected future benefit as the sum of:
(i) the present value of its expected future annual accruals for service for the current number of active employees, less the present value of required employee contributions and minimum contributions the entity is required to make regardless of any surplus; and
(ii) the amount of the plan surplus that can be withdrawn in accordance with the existing plan and any applicable laws and regulations.
(r) Fair value is the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.
(s) The full eligibility date is the date at which an employee has rendered all of the service necessary to earn the right to receive all of the benefits expected to be received by that employee (including any beneficiaries and dependants expected to receive benefits). Determination of the full eligibility date is affected by plan terms that provide incremental benefits expected to be received by or on behalf of an employee for additional years of service, unless those incremental benefits are insignificant.
(t) A funded benefit plan is a benefit plan in which the reporting entity is setting aside assets to pay the costs of benefits as they become due. The assets are set aside by the reporting entity in a separate legal entity, generally a trust, and the reporting entity cannot use the assets so set aside for its own purposes. When benefits become payable, they are paid out of the trust directly to the employees. Pension plans are generally funded because of legal requirements to set assets aside.
(u) An insurance contract is a policy in which an insurance enterprise assumes an unconditional legal obligation to provide specified benefits to specific individuals in return for a fixed consideration or premium. An insurance contract is irrevocable and involves the transfer of significant risk from the entity (or the plan) to the insurance enterprise. When the insurance enterprise providing the policy is a captive insurer (an insurance enterprise that does business primarily with the entity and related parties), or when there is any reasonable doubt that the insurance enterprise will meet its obligations under the policy, the policy is not considered an insurance contract. Insurance contracts include annuity contracts.
(v) A multiemployer plan is a defined benefit plan to which two or more unrelated entities contribute, usually pursuant to one or more collective bargaining agreements. Unrelated entities are entities that do not meet the definition of related parties in RELATED PARTY TRANSACTIONS, Section 3840. Multiemployer plans may be referred to as "joint trust" or "union" plans. Characteristics of a multiemployer plan include the following:
(i) Assets contributed by one participating entity are not segregated in a separate account or restricted to provide benefits only to employees of the entity and, thus, may be used to provide benefits to employees of other participating entities.
(ii) Participating entities usually have a common industry bond or at least have the same labour union.
(iii) A multiemployer plan is usually administered by a board of trustees composed of management and labour representatives.
(w) A multiple-employer plan is a defined benefit plan maintained by more than one entity that is not a multiemployer plan. In contrast to multiemployer plans, a multiple-employer plan maintains separate accounts for each entity so that contributions provide benefits only for employees of the contributing entity. In addition, multiple-employer plans are generally not collectively bargained and are intended to allow participating entities, commonly in the same industry, to pool their plan assets for investment purposes and to reduce the cost of plan administration. Multiple-employer plans may have features that allow participating entities to have different benefit formulae, with the entity's contributions to the plan based on the benefit formula selected by the entity.
(x) An obligation for employee future benefits is the actuarial present value as of a particular date of benefits expected to be paid under a defined benefit plan. The obligation is measured on the basis of the expected amount and timing of future benefits, taking into consideration the expected future cost of providing the benefits and the extent to which the costs are shared by employees or others.
(y) Plan assets are assets that have been segregated and restricted in a trust or other legal entity separate from a reporting entity to provide for employee future benefits under the following conditions:
(i) The assets of the separate entity are to be used only to settle the related defined benefit obligation, are not available to the reporting entity's own creditors, and either cannot be returned to the reporting entity or can be returned to the reporting entity only if the remaining assets of the trust are sufficient to meet the plan's obligations.
(ii) To the extent that sufficient assets are in the separate entity, the reporting entity will have no obligation to pay the related employee future benefits directly.

Plan assets include any financial instruments issued by the reporting entity and held by the trust or other legal entity. For the purposes of this Section, plan assets do not include amounts held by the reporting entity and not yet paid into the trust or other legal entity. Plan assets may include certain arrangements with insurance enterprises (see paragraphs 3462.096-.100).
(z) Remeasurements and other items comprise the aggregate of:
(i) the difference between the actual return on plan assets and the return calculated using the discount rate used to determine the defined benefit obligation;
(ii) actuarial gains and losses;
(iii) the effect of any valuation allowance in the case of a net defined benefit asset, determined in accordance with paragraph 3462.086;
(iv) past service costs; and
(v) gains and losses arising from settlements and curtailments.
(aa) A settlement is a transaction in which an entity substantially discharges or settles all, or part, of a defined benefit obligation. A settlement is a transaction that is irrevocable, relieves the entity of primary responsibility for the defined benefit obligation and eliminates the significant risks associated with the defined benefit obligation and the assets used to effect the settlement. Examples of transactions that constitute a settlement include:
(i) making lump-sum cash payments to employees in exchange for their rights to receive specified benefits; and
(ii) purchasing non-participating insurance contracts.
(bb) Special termination benefits are benefits that are not contractual termination benefits and that are offered to employees for a short period of time, normally not exceeding twelve months, in exchange for employees' voluntary or involuntary termination of employment.
(cc) An unfunded benefit plan is a benefit plan in which an entity pays all of the costs of benefits directly to its employees, their beneficiaries or estates, or to a third-party service provider on behalf of the employees, as the amounts become due.
(dd) Employee future benefits that vest are those for which, after a specific or determinable date, the entitlement ceases to be conditional on an employee remaining in the service of an entity.
(ee) A valuation allowance is the amount by which a defined benefit plan surplus exceeds the expected future benefit that the entity expects to realize from that surplus.

## BASIC PRINCIPLES

.007 The objective of accounting for the cost of employee future benefits is to recognize a liability and a cost in the reporting period in which an employee has provided the service that gives rise to the benefits. Costs recognized may be expensed or be capitalized as part of an asset such as inventory or property, plant and equipment. Benefit plans are considered part of an employee's compensation arrangement. Certain benefit plans oblige an entity to provide benefits to an employee in future periods for service provided by the employee in the current period. The cost of providing future benefits under such plans is recognized in the period in which benefits are earned by the employee because the obligation to provide benefits arises as the employee renders the service.
.008 As set out in FINANCIAL STATEMENT CONCEPTS, Section 1000, liabilities have three essential characteristics:
(a) they embody a duty or responsibility to others that entails settlement by future transfer or use of assets, provision of services or other yielding of economic benefits, at a specified or determinable date, on occurrence of a specified event, or on demand;
(b) the duty or responsibility obligates the entity leaving it little or no discretion to avoid it; and
(c) the transaction or event obligating the entity has already occurred.

An obligation for employee future benefits possesses these characteristics. First, an entity has a responsibility to its employees to provide the benefits at a specified time in the future (i.e., when an employee retires or leaves the entity). Second, although the responsibility is not always contractual, the obligation is constructive or equitable in almost all cases, thereby leaving an entity little or no discretion to avoid it. Finally, an entity is obligated either by the rendering of service by the employee or, in the case of certain post-employment benefits, by an event such as an application for long-term disability benefits or parental leave.

## Defined contribution plans and defined benefit plans

. 009 Employee future benefits are provided under either a defined contribution plan or a defined benefit plan. When an entity provides benefits under a defined benefit plan, it is at risk with respect to the amount of the benefit that each employee will receive because the amount is not known with certainty until the benefits have all been paid or cease (actuarial risk). The entity is also at risk with respect to the investment returns on any assets set aside to pay for the cost of the benefits because any shortfall from expected returns must be funded by the entity (investment risk).
.010 When an entity provides benefits under a defined contribution plan, it does not assume the actuarial and investment risks inherent in a defined benefit plan. A defined contribution plan specifies how contributions are determined rather than the amount of benefits an employee is to receive or the method for determining those benefits. The entity contributes a certain amount to the fund in each period in exchange for services rendered by the employee and has no responsibility to make any further contributions. The employees are at risk because the amount of the benefit that will be payable to an individual employee is entirely dependent upon the amount of funds accumulated in the employee's account and the investment earnings on the accumulated funds.
.011 A particular benefit plan is classified as either a defined benefit plan or a defined contribution plan depending on the economic substance of the plan established by its terms and conditions. A benefit plan may contain characteristics of both defined benefit and defined contribution plans but is, in substance, one or the other. For example, a benefit plan may stipulate the basis of contributions on which future benefits are determined and, because of this, appear to be a defined contribution plan. However, the plan may make the entity responsible for specific employee future benefits or a specified level of future benefits. In such a case, the plan is, in substance, a defined benefit plan. Another example is a pension plan in which the benefits provided are the greater of the benefits under a defined benefit plan and the benefits under a defined contribution plan. Such a plan is accounted for as a defined benefit plan.
.012 In some circumstances, a benefit plan may incorporate both a defined contribution component and a defined benefit component. The components are accounted for separately according to their substance. For example, an entity may have changed a defined benefit plan to allow employees a choice of remaining in the defined benefit plan or switching to a defined contribution plan. The defined contribution plan is not set up separately but remains combined with the defined benefit plan for plan funding purposes. In such cases, the defined benefit component is accounted for as a defined benefit plan and the defined contribution component is accounted for as a defined contribution plan.

## DEFINED CONTRIBUTION PLANS

. 013 In accounting for a defined contribution plan, an entity's obligation for each reporting period is determined by the amounts to be contributed for that period. Consequently, no actuarial valuation is required to measure the liability or the cost. When contributions are due in periods after an employee retires, the liability is measured on a discounted basis and actuarial gains or losses may occur. The liability is measured on an undiscounted basis when the contributions fall due within the period or within twelve months thereafter.
.014 - For a defined contribution plan, an entity shall recognize a cost for a period comprising:
(a) the current service cost for the period;
(b) the past service costs for the period;
(c) the interest cost for the period on the estimated present value of any contributions required in future periods related to employee services rendered during the current period or prior periods; and
(d) a reduction for the interest income for the period on any unallocated plan surplus.

The costs for the period are recognized either as an expense or as an amount capitalized as part of an asset such as inventory or property, plant and equipment.

## Current service cost

.015 - For a defined contribution plan, an entity shall recognize as the current service cost of employee future benefits for a period:
(a) the contributions required to be made by the entity in the period in exchange for employee services rendered during the period; and
(b) the estimated present value of any contributions required to be made by the entity in future periods related to employee services rendered during the period.
.016 An entity's current service cost of the future benefits related to an employee's services rendered during a period is the present value of contributions it is required to pay for those services. Any difference between that amount and the net amount paid is recognized as a liability or an asset. When a plan calls for contributions in future periods, such as in periods following retirement or termination of employment, the estimated cost is recognized during the employee's service period.

## Past service costs

.017 When a defined contribution plan is initiated or amended, an entity may agree to make contributions in respect of past service. The cost of these contributions is recognized in the period in which the plan is initiated or in the period in which a plan amendment is agreed to.

## Interest cost on contributions

018 When an entity has accrued contributions required to be made in future periods as a result of employee services rendered during the current period or prior periods, the entity recognizes interest on those accrued contributions. The interest cost for the period is calculated by applying the discount rate determined in accordance with paragraph 3462.047 as of the beginning of the period (or end of the prior period) to the present value of the accrued contributions throughout that period. An undiscounted basis is inappropriate when a benefit plan requires contributions in a period more than twelve months into the future. A discounted basis most closely reflects the current actual cost of such contributions.

## Interest income on plan surplus

.019 - For a defined contribution plan, an entity shall deduct the interest earned on any unallocated plan surplus in determining the cost for a period.
. 020 When a defined benefit plan is converted to a defined contribution plan, some plan assets may not be allocated to employees' individual accounts, thereby creating a surplus in the defined contribution plan. Interest earned in periods subsequent to the conversion on any such unallocated plan surplus is deducted in determining the cost for the defined contribution plan for the period. Any such plan surplus, which would be recognized as an asset, is subject to the limit on the carrying amount of that asset (see paragraphs 3462.067-.075).

## DEFINED BENEFIT PLANS

## General

.021 The objective of accounting for a defined benefit plan is to provide an appropriate allocation of the cost of the plan to the periods in which the related employee services are rendered. Accounting for defined benefit plans involves the use of an actuarial valuation and actuarial assumptions. The defined benefit obligation is measured on a discounted basis because it may be discharged many years after an employee renders the related service. There is a possibility of actuarial gains and losses as a result of differences between actuarial assumptions and actual experience. The cost recognized for a defined benefit plan for a period is not necessarily the amount of any contribution required for that period for funding purposes.
.022 Defined benefit plans may be unfunded, or they may be wholly or partly funded by contributions by an entity and, sometimes, by its employees. Contributions are paid into a fund or a trust that is legally separate from the reporting entity and from which the employee benefits are paid. The adequacy of the fund to make all benefit payments as they fall due depends on the investment performance of the assets in the fund and the extent to which the amount and timing of benefit payments coincide with previous estimates made in funding valuations. The payment of benefits depends not only on the financial position of the fund but also on an entity's ability to make good any shortfall in the fund's assets. Therefore, the entity is, in substance, underwriting the actuarial and investment risks associated with the plan.

## Recognition

- For a defined benefit plan, an entity shall recognize:
(a) the defined benefit liability (asset) in the balance sheet at the end of the period; and
(b) the costs of the plan for the period (see paragraphs 3462.076-.090), either as an expense or as an amount capitalized as part of an asset such as inventory or property, plant and equipment.
.024 - An entity shall recognize the defined benefit obligation and the cost for employee future benefits in the period in which employees render services to the entity in return for the benefits, except for post-employment benefits and compensated absences that do not vest or accumulate. For such benefits, an entity shall recognize the defined benefit obligation and the cost for employee future benefits when the event that obligates the entity occurs.

A liability for pension benefits and other retirement benefits, as well as certain post-employment benefits and compensated absences, is accrued over the period in which service is rendered. For pension benefits, the
right to benefits usually vests and the amount usually increases with the length of service provided by the employee. For other retirement benefits, the amount of benefits is not necessarily increased by the length of service provided by the employee but the right to benefits is earned either by the employee working a specified period of time, attaining a specified age while in service, or both. For certain post-employment benefits and compensated absences, the right to the benefit is earned by the employee rendering service and, based on the length of service provided, the amount of the benefit can increase.
. 026 For post-employment benefits and compensated absences that vest or accumulate, a liability is accrued as employees render the service that gives rise to the benefits. Examples of these types of post-employment benefits and compensated absences are service-related long-term disability benefits, sabbaticals in which the leave is granted to provide unrestricted time off for past service, or vacation days that accumulate and are paid out when the employee retires. However, under some sabbatical arrangements, leave is granted only for an employee to perform research or public service to enhance the reputation of, or otherwise benefit, the entity. In such circumstances, a liability is not accrued in advance for the cost of the employee's services during such leave. In addition, as a practical matter, an entity is not required to accrue a liability for sick-pay benefits that accumulate but do not vest.
.027 For post-employment benefits and compensated absences that do not vest or accumulate, a liability is recognized when an event that obligates the entity occurs. Examples of these types of benefits and absences are parental leave and non-service-related, short- and long-term disability benefits.

The terms of a plan may allow an entity to cancel the benefits. It is usually difficult for an entity to cancel benefits and retain its employees without providing some form of compensation. In the absence of evidence to the contrary, accounting for the cost of employee future benefits is based on the premise that an entity that is currently providing future benefits to employees under an existing plan will continue to do so over the remaining service lives of those employees, whether or not a legal obligation exists. Actuarial valuation methods allow the obligation for employee future benefits to be measured with sufficient reliability to justify recognition of the cost of those benefits during employees' working lives and, to the extent the cost is unpaid or unfunded, the related liability.

## Examples

(a) Pension benefits - Employees are eligible to join a pension plan when they are hired. The pension benefit is $\$ 30$ a month for each year of service. The benefits vest after 10 years of service. A liability and a cost are recognized as an employee provides service from the date of hire, even though the benefits do not vest until after 10 years of service.
(b) Sabbatical - Employees are entitled to take a sabbatical leave of one year with full pay after each six years of service. There is no restriction on employees' activities during their sabbatical leave. A liability and a cost are recognized over the six years following the date of hire or the date of completion of the last sabbatical leave, as the case may be.
(c) Parental leave - Employees are entitled to receive 50 percent of their current salary for up to six months when they take parental leave on the birth or adoption of a child. The entity does not recognize any liability until an employee applies for parental leave, at which point the entity recognizes a liability for the full duration of the leave. In this case, the application for leave is the event that obligates the entity.

## Measurement of a defined benefit obligation

. 029 - An entity shall measure the defined benefit obligation for each of its defined benefit plans as of the balance sheet date using either:
(a) the most recently completed actuarial valuation prepared for funding purposes (but not one prepared using a solvency, wind-up, or similar valuation basis) for plans for which such a valuation has been prepared; or
(b) a separate actuarial valuation prepared for accounting purposes as described in paragraphs 3462.035. 061.

For defined benefit plans for which a funding valuation as described in (a) has been prepared, the entity shall make an accounting policy choice to measure its defined benefit plan obligation using that funding valuation or a separate actuarial valuation prepared for accounting purposes. The entity applies that same choice to all of those plans. In making this choice, the entity need not meet the criterion in ACCOUNTING CHANGES, paragraph 1506.06(b). For plans for which no such funding valuation has been prepared, the entity shall measure the defined benefit obligation using an actuarial valuation prepared for accounting purposes in accordance with (b).
.030 An actuarial valuation prepared for funding purposes has a different objective than an actuarial valuation prepared for accounting purposes, and may use different actuarial assumptions resulting in different obligation and cost numbers. Funding valuations are prepared in accordance with pension legislation and regulations, generally to determine required cash contributions to the plan. Accounting valuations are prepared in accordance with generally accepted accounting principles using management's best estimates and the discount rate required by paragraph 3462.047.
.031 An entity may prepare an actuarial valuation for an unfunded plan on a basis consistent with that described in paragraph 3462.029(a) (i.e., a funding valuation). In accordance with paragraph 3462.029, the entity applies the same accounting choice to that unfunded plan as to its funded plans.
.032 An entity may change its accounting policy on measurement of the defined benefit obligation. For example, it may change between an actuarial valuation for funding purposes and an actuarial valuation for accounting purposes, or it may change the actuarial cost method. When an entity makes such a change in accounting policy, it shall apply that change retrospectively in accordance with ACCOUNTING CHANGES, Section 1506, except as noted in paragraph 3462.033.

033 An entity that includes employee benefit costs in the carrying amount of assets, such as inventories or property, plant and equipment, need not restate the carrying amount of those assets when making a change in accounting policy in accordance with paragraph 3462.032.

## Actuarial valuation for accounting purposes

.034 - An entity that uses a separate actuarial valuation prepared for accounting purposes to determine the defined benefit obligation in accordance with paragraph 3462.029 (b) shall follow the guidance in paragraphs 3462.035-061.
.035 - An entity shall determine its defined benefit obligation using:
(a) the projected benefit method prorated on services, when future salary levels or cost escalation affect the amount of the employee future benefits; or
(b) the accumulated benefit method, when future salary levels and cost escalation do not affect the amount of the employee future benefits.

036 An accrued benefit method attributes a distinct unit of future benefit to each year of credited service, and the actuarial present value of that unit is computed separately for the period in which it is deemed to have been earned.
. 037 For certain benefit plans, such as career-average and final-pay pension plans and retiree health care plans, future salary levels or cost escalation affect the amount of the future benefits. For these plans, the cost of benefits provided in exchange for employee services is determined using the projected benefit method prorated on services. For flat-benefit plans in which benefits vary only with periods of service rendered without any commitment to change the benefit level, the projected benefit method prorated on services is equivalent to the accumulated benefit method.

038 - The attribution period shall begin on an employee's date of hire unless the plan's benefit formula grants credit for service only from a date after the date of hire. When the plan's benefit formula grants credit for service only from a date after the date of hire, the attribution period shall begin at the commencement of the credited service period. However, when the plan's benefit formula grants credit for service only from a date after the date of hire and the credited service period is insignificant relative to the total service period, the obligation for employee future benefits shall be attributed from the date of hire. The attribution period shall end on the full eligibility date.
.039 An obligation for employee future benefits is attributed to the periods in which an employee renders the service that gives rise to the benefits. For plans in which an employee starts earning benefits when hired, attribution starts from the date of hire. Some plans require an employee to work for a short period of time after the date of hire before earning benefits. When a plan has a credited service period that is significant, and a qualification period that is insignificant, in relation to the employee's total years of service prior to full eligibility, the obligation for employee future benefits is attributed from the start of the credited service period stipulated by the plan. When a plan has a credited service period that is insignificant, and a qualification period that is significant, compared to an employee's total years of service prior to full eligibility, the obligation for employee future benefits is attributed from the date of hire and not from the start of the credited service period stipulated by the plan.
. 040 Some benefit plans provide incremental benefits for additional years of service beyond the end of the credited service period. For example, in certain pension plans that limit credited service periods to a maximum number of years but take subsequent salary increases into account in determining the amount of pension entitlements, significant incremental benefits can be earned beyond the end of the credited service period. In such circumstances, the attribution period may end either at retirement or at the end of the credited service period. For benefit plans, other than pension plans, that provide significant incremental benefits after the credited service period, the attribution period ends at the full eligibility date when additional benefits are no longer earned by rendering further service. For all benefit plans, when incremental benefits are insignificant, the attribution period is not extended for additional years of service.

## Examples

(a) A company has a defined benefit plan specifying that employees join the plan when they are hired. The plan provides a final average earnings pension upon retirement and employees become eligible for supplemental health care benefits when they become eligible for early retirement. The earliest age at which someone can retire and receive benefits under the plan is 55 , the expected retirement age is 63 and the normal retirement age is 65 .


The attribution period for the supplemental health care plan starts at the date of hire and ends when an employee becomes eligible to retire, at age 55 . The attribution period for the pension plan
also starts at the date of hire but ends at the expected retirement age of 63. The attribution period for the supplemental health plan is shorter because the employee has fulfilled the eligibility provisions of the plan upon becoming eligible for early retirement and is entitled to the benefits upon retirement. No further benefit is conferred on the employee in the years between becoming eligible for early retirement and expected retirement age. The attribution period for the pension plan is longer because the employee continues to earn additional pension benefits in the years between becoming eligible for early retirement and the expected retirement age.
(b) A company has a benefit plan with a formula that provides 100 percent benefit coverage for service for the year in which an employee attains age 60. The plan has a one-year credited service period. Employees are expected to have rendered an average of 20 years of service at the age of 60. Accordingly, the credited service period is insignificant in relation to total years of service prior to full eligibility. In these circumstances, the service cost is recognized from the date of hire to age 60.

(c) A company has a pension plan for its employees providing a pension for each year of membership in the plan equal to one and a half percent multiplied by the average of the highest five consecutive years of pensionable earnings. Employees become eligible to join the plan after two years of service. Employees do not earn any benefits in the two years of service after the date of hire and before joining the plan. Employees do not earn additional pension benefits after having provided 30 years of service. The earliest age at which an employee may become eligible for retirement is 55, the expected retirement age is 63 and the normal retirement age is 65 . Employees are expected to have rendered an average of 30 years of service at age 60.


The attribution period may end either at：
ーーーーーーーー completion of 30 years of service（credited period）；or
－－－－－－－－－－－－－－－－．．．expected retirement age．

The attribution period for an employee starts two years after the date of hire and may end either at the attainment of the expected retirement age or at the completion of 30 years of service（the credited service period）．
（d）A company has a plan that provides life insurance benefits to employees who render 20 years of service and attain the age of 55 while in service．The benefit amount under the policy is equal to 20 percent of salary in the final year of service．A 55－year－old employee currently earning a salary of $\$ 90,000$ has worked for the company for 22 years．The employee is expected to retire at age 60 and is expected to be earning $\$ 120,000$ at that time．The employee is eligible for life insurance coverage under the plan at age 55，when the employee has met the age and service requirements．However， because the employee＇s salary continues to increase each year，the employee is not eligible for the full expected benefit until retirement at age 60 because an incremental benefit is earned for each additional year of service beyond age 55 ．That is，the employee earns an additional benefit，from age 55 to retirement at age 60，equal to 20 percent of the increase in salary for service during each of those years．

－ーーーーーーー－attribution period
041 For plans providing post－employment benefits and compensated absences that vest or accumulate，the attribution period generally starts at the date of hire and ends at the expected date of the event giving rise to the obligation for employee future benefits．
.042 - For a defined benefit pension plan, the obligation for employee future benefits shall be attributed to each year of service in the attribution period based on the plan's benefit formula, except when the plan does not state or imply a benefit formula or when an employee's service in later years will lead to a significantly higher level of benefit than in earlier years. In those circumstances, the obligation shall be attributed on a straightline basis to each year of service in the attribution period. For a defined benefit plan other than a pension plan, the obligation for employee future benefits shall be attributed on a straight-line basis to each year of service in the attribution period unless the plan formula attributes a significantly higher level of benefits to employees' early years of service. In those circumstances, the obligation shall be attributed based on the plan's benefit formula.
.043 Different plans have different formulae for determining benefits:
(a) Some plans have benefit formulae that attribute all, or a significantly higher level, of the total benefits to later years of service, thereby achieving, in substance, a delayed vesting of benefits. The obligation for employee future benefits for these types of plans is attributed on a straight-line basis over each year in the attribution period because the employee has earned benefits in each of the years in the credited service period.
(b) Some plans have terms that make it difficult to attribute benefits to years of service following a plan benefit formula. Plan terms may be ambiguous and quite difficult to apply at dates between the beginning and end of the attribution period. Thus, for a defined benefit plan other than a pension plan, the obligation for employee future benefits is attributed on a straight-line basis over each year in the attribution period unless the plan's benefit formula attributes a significantly higher level of benefits to the employees' early years of service, in which case, attribution is based on the plan's benefit formula.
(c) For plans providing post-employment benefits and compensated absences that vest or accumulate, the attribution method may follow the standards for a defined benefit pension plan or a defined benefit plan other than a pension plan, provided the basis chosen is applied consistently from period to period.

Actuarial assumptions
.044 . Each actuarial assumption shall be management's best estimate solely with respect to that individual assumption, determined on the basis that the plan will continue to be in effect in the absence of evidence to the contrary. The set of actuarial assumptions for each plan shall be internally consistent.
.045 Actuarial assumptions include:
(a) demographic assumptions about the future characteristics of employees and their beneficiaries who are eligible for benefits, including:
(i) mortality, both during and after employment;
(ii) rates of employee turnover, disability and early retirement;
(iii) the proportion of employees with their beneficiaries eligible for benefits; and
(iv) per capita claims cost by age and by type of benefit;
and
(b) financial assumptions, including:
(i) the discount rate for future cash flows;
(ii) future salary and benefit levels; and
(iii) future medical costs, in the case of medical benefits.
.046 In making actuarial assumptions, management takes into account the relationships between the factors for which assumptions are required, and keeps the assumptions internally consistent. For example, assumptions that include a general inflation factor use consistent estimates of that factor. All assumptions are based on the presumption that the plan will continue in effect in the absence of evidence that it will not continue. The actuarial assumptions used for funding purposes may differ from those used for a separate actuarial valuation prepared for accounting purposes (see paragraph 3462.030).

Discount rate
. 047 - The discount rate used to determine the defined benefit obligation shall be an interest rate determined at the date of the actuarial valuation by reference to:
(a) market interest rates on high-quality debt instruments with cash flows that match the timing and amount of expected benefit payments; or
(b) the interest rate inherent in the amount at which the defined benefit obligation could be settled.
.048 The objective of selecting a discount rate is to measure the single amount that, if invested in a portfolio of high-quality debt instruments, would provide the necessary pre-tax cash flows to pay the accrued benefits when due. For example, the current market value of a portfolio of high-quality zero coupon bonds acquired to pay the cost of benefits, when due, equals the amount of the actuarial present value of the benefits because cash inflows equal cash outflows in timing and amount. There is no reinvestment risk in the yields to maturity of the portfolio. However, in other than a zero coupon portfolio, such as a portfolio of long-term debt instruments that pay interest semi-annually or have maturities that do not extend far enough into the future to meet expected benefit payments, the discount rate (the yield to maturity) needs to incorporate reinvestment rates expected to be available in the future. Those reinvestment rates are extrapolated from the existing yield curve.
. 049 When rates on high-quality corporate bonds are available, they are used to determine the discount rate. When the maturities of corporate bonds do not extend far enough into the future to match the cash flows inherent in the defined benefit obligation, the rates on government bonds are used to determine the discount rate for the expected benefit payments that are farther into the future than the corporate bond maturities.
.050 The discount rate reflects the estimated timing of benefit payments. When some benefits are payable after the maturity of all available corporate or government bonds, the present value of that portion of the benefits is unlikely to vary significantly as a result of the selected discount rate. For that portion of the benefits, an entity may use a discount rate based on the yield of the last maturing corporate or government bond available.
.051 Immediate settlement of a defined benefit obligation may be possible through, for example, the purchase of an insurance contract, such as an annuity contract, that transfers the significant risks associated with the defined benefit obligation to a third-party insurer. In such circumstances, the interest rate inherent in the amount at which the defined benefit obligation could be settled may be used in determining the discount rate.

Future changes in compensation levels, benefits and cost sharing
.052 - The defined benefit obligation shall be measured on a basis that takes account of:
(a) future compensation levels;
(b) expected changes in benefits defined in monetary terms;
(c) automatic benefit changes specified by the plan that are expected to occur; and
(d) expected amendments in the cost-sharing provisions of the benefit plan.
.053 A defined benefit obligation is measured using assumed future compensation levels when the benefit formula is based on future compensation levels. Therefore, all expected changes in future compensation, whether due to general price level inflation, seniority, promotion, productivity increases or other factors, such as supply and demand in the employment market, are included in the measurement of the defined benefit obligation. Examples of the types of plans in which the benefit formula is based on future compensation levels are career-average, final-pay benefit plans and salary-related life insurance benefit plans. For certain flat-benefit plans, benefits vary only with periods of service rendered. For these plans, future compensation levels do not enter into the determination of the defined benefit obligation.
. 054 A past practice of regular increases in future benefits defined in monetary terms (i.e., a defined dollar amount of benefit or a defined percentage of salary) may indicate that an entity has a present commitment to provide monetary benefits attributable to past service that are greater than the monetary benefits defined by the written plan. When an entity has a substantive commitment to increase benefits, the increased level of benefits forms the basis to measure the defined benefit obligation. For example, a regular practice of updating the base year of a career-average pension plan or of providing regular increases in the benefit under a flat-benefit plan may indicate that the benefit plan encompasses these increases.
.055 Automatic benefit changes specified by a benefit plan and expected to occur are included in the measurement of the defined benefit obligation. Examples of automatic benefit changes are:
(a) specified cost-of-living adjustments; and
(b) changes in the cost of benefits in kind, such as health care benefits, that are provided through the direct rendering of services, payment directly to service providers or reimbursement of employees' payments for those services.
.056 A plan amendment is taken into account in the measurement of a defined benefit obligation once it is agreed to, even when some provisions begin to take effect only in future periods. For example, if a plan amendment grants a different benefit level for employees retiring after a specified future date, the current period measurements of the defined benefit obligation and the benefit cost take into account the increased or reduced benefit level for employees expected to retire after the specified future date.

Except in the circumstances discussed in paragraph 3462.058, an entity's cost-sharing policy constitutes part of the substance of the cost-sharing provisions of a benefit plan. An entity's cost-sharing policy is evident when:
(a) the entity has had a practice of:
(i) maintaining a consistent level of cost sharing with its employees; or
(ii) increasing or reducing its share of the cost of covered benefits consistently through changes in employees' contributions towards their benefits, deductibles, co-insurance provisions, out-ofpocket limitations, or some combination thereof;
or
(b) the entity has the ability, and has communicated to affected employees and their beneficiaries its intent, to institute different cost-sharing provisions at a specified time or when certain conditions exist (for example, when health care cost increases exceed a certain level).
. 058 An entity's past practice of maintaining a consistent level of cost sharing is not part of the substance of a benefit plan when accompanied by identifiable offsetting changes in other benefits or compensation or when the entity has incurred significant costs, such as work stoppages, to effect that cost-sharing policy. Similarly, an entity's communication of its intent is not part of the substance of a benefit plan when employees are unwilling to accept the change, thereby creating the potential for adverse consequences to the entity's operations, or when some compensation, including other modifications to plan benefits, is required to gain the employees' acceptance.

059 In the case of benefit plans providing medical coverage, certain medical claims may be covered by governmental programs under existing law or by other providers of health care benefits. Benefit coverage by governmental programs is assumed to continue as provided by the present law and by other providers pursuant to their present plans. Enacted changes in the law or amendments to the plans of other health care providers that will take effect in future periods and affect the future level of their benefit coverage are taken into account in current period measurements of plan benefits expected to be provided in those future periods. Future changes in laws concerning medical costs covered by governmental programs and future changes in the plans of other providers are not anticipated.

Medical costs
.060 - Actuarial assumptions about medical costs shall reflect expected future changes in the cost of medical services resulting from general price-level inflation, specific changes in the prices of medical services, and changes in medical practices and technology.
. 061 Measurement of the cost of future medical benefits requires assumptions about the level and frequency of future claims and the cost of meeting those claims. The level and frequency of claims are particularly sensitive to the age of employees (and their beneficiaries) and may be sensitive to other factors such as gender and geographical location. An entity estimates future medical costs on the basis of historical data about its own experience, supplemented when necessary by historical data from other entities, insurance enterprises, medical providers or other sources. Historical data from other entities is adjusted to reflect any differences in demographic mix of the population. Historical data, either from the reporting entity or other entities, is also adjusted when there is reliable evidence that historical trends will not continue.

## Remeasurement of a defined benefit obligation

062 - The actuarial valuation of the defined benefit obligation shall be determined in accordance with paragraph 3462.029 at least every three years but may occur more frequently (for example, when a significant event takes place). In the years between valuations, the entity uses a roll-forward technique to estimate the defined benefit obligation. In doing so, the entity exercises judgment and takes into account factors such as:
(a) the amount from the last actuarial determination of the defined benefit obligation;
(b) the increase in the obligation due to the passage of time;
(c) the increase in the obligation due to the rendering of service in the current year; and
(d) any benefit payments.

A similar process occurs when an actuarial valuation is performed during the year and rolled forward to the end of the year.
.063 A new actuarial valuation of the defined benefit obligation is performed in the year in which a significant event takes place. This valuation may be as of the date of the significant event, the end of the year in which the significant event occurs, or any date in between. Examples of events that may be significant and require a remeasurement of the defined benefit obligation include a settlement, a curtailment or a plan amendment such as a grant of benefits calculated by reference to past service. A significant change in the interest rate used in determining the discount rate to measure the defined benefit obligation does not trigger a requirement for a new actuarial valuation.
.064 Paragraph 3462.062 describes the application of a roll-forward technique to estimate the defined benefit obligation. In applying this technique, an entity takes into consideration the following guidance:
(a) Since the defined benefit obligation is the discounted value of expected benefit payments, these payments will be discounted by one year less in the year following an actuarial valuation than in the year of the valuation. The increase in the obligation due to the passage of time is calculated by multiplying the obligation at the end of the previous year by the discount rate used in the valuation.
(b) The defined benefit obligation under a defined benefit plan also changes each year due to the additional year of employees' service. The current service cost is estimated by multiplying the current service cost for the prior year by $(1+\mathrm{d})$ when d is the discount rate, expressed as a percentage.

## Plan assets

.065 - Plan assets shall be measured at fair value as of the balance sheet date.
.066 The fair value of plan assets is normally market value. When market values are not readily available for certain assets, such as real estate investments, a method that provides an approximation of market value is used. For example, an entity may obtain independent appraisals or review market values of similar assets during the year, and update that valuation for known changes in conditions between the valuation date and the balance sheet date.

## Limit on the carrying amount of a defined benefit asset

. 067 - When the fair value of plan assets exceeds the defined benefit obligation, that plan surplus shall be recognized as a defined benefit asset on the balance sheet only to the extent it is expected to be realized by the entity. The entity shall recognize a valuation allowance for any excess of the plan surplus over the expected future benefit. A change in the valuation allowance shall be recognized in income for the period in which the change occurs.
.068 To determine the extent to which a defined benefit asset may be impaired, an entity determines the expected future benefit that it expects to realize from the plan surplus.
. 069 An expected future benefit consists of any withdrawable surplus and reduction in future contributions and is determined as the sum of:
(a) the present value of its expected future annual accruals for service for the current number of active employees, less the present value of required employee contributions and minimum contributions the entity is required to make regardless of any surplus; and
(b) the amount of the plan surplus that can be withdrawn in accordance with the existing plan and any applicable laws and regulations.

070 An entity's expected future annual accruals for service for the current number of active employees are determined on a basis consistent with that used to determine its defined benefit obligation, including the discount rate used to measure that obligation. These expected future annual accruals for service, less required employee contributions and minimum contributions the entity is required to make regardless of any surplus, are then discounted back to the current period to determine the present value. The interest rate used to calculate this present value is that same discount rate.
.071 The objective of paragraph 3462.067 is to limit an entity's defined benefit asset as of the balance sheet date to the amount that it can realize in the future (i.e., the expected future benefit). Any surplus currently in the plan may be available to reduce an entity's future contributions. Therefore, the value of the defined benefit asset is limited to the present value of the future cash flow streams described in paragraph 3462.069(a) together with the amount in paragraph 3462.069(b).

The present value of expected future annual accruals for service for the current number of active employees is determined on the basis of the current work force. An entity normally assumes that the current number of active employees and the demographic composition of the employee group stay constant. However, when an entity has existing plans to make significant reductions in its work force, the entity reflects these planned reductions in the number of employees used to compute the expected future benefit amount.
.073 When administration expenses are paid by the plan and included in the calculation of the current service cost, a best estimate of the future administration expense is included in the expected future annual accruals for service. When administration expenses are paid by the plan and not included in the calculation of the
current service cost, the discount rate referred to in paragraph 3462.070 is adjusted to reflect the deduction of the administration expenses.
. 074 Key factors in determining an entity's expected future benefit from a defined benefit plan with a plan surplus are the ability and intent of the entity to withdraw assets from the plan. The expected future benefit includes amounts to which an entity has a legally enforceable right of withdrawal. It excludes any withdrawable plan surplus an entity is currently required, or intends, to allocate to employees. An entity may not anticipate obtaining a legally enforceable right to withdraw a portion of a plan surplus to which it is not currently entitled, whether on the basis of precedent or otherwise. Accordingly, when withdrawal of plan surplus requires the approval of employees or an appropriate regulatory authority or a court of law, an entity excludes any amount subject to this restriction from its expected future benefit until such approval has been obtained. A change in the allocation of surplus between an entity and its employees is incorporated into the calculation of the expected future benefit only when it has been agreed to and, when required, approved by the appropriate regulatory authorities.
. 075 When an entity is required to continue making contributions in the future even though plan assets currently exceed the defined benefit obligation, the amount of these contributions reduces the expected future benefit.

## Determination of the cost for the period

.076 The total cost of a defined benefit plan for a period comprises:
(a) changes in the defined benefit obligation other than those resulting from benefit payments to plan members;
(b) the amount of any plan assets transferred and any payments made directly by the entity in connection with a settlement;
(c) the actual return on plan assets, determined in accordance with paragraph 3462.077; and
(d) the change in a valuation allowance, determined in accordance with paragraph 3462.067.

The total cost of a defined benefit plan is reduced by any employee contributions, determined in accordance with paragraphs 3462.081-.083.
.077 The actual return on plan assets for a period is determined as follows:
(a) the difference between:
(i) fair value of plan assets at the beginning of the period, reduced by any reduction in plan assets for benefit payments or settlements, and increased by any contributions to the plan; and
(ii) the fair value of plan assets at the end of the period, less
(b) any costs of managing plan assets paid for by the plan sponsor.
. 078 The actual return on plan assets consists of interest, dividends and other income derived from plan assets, together with realized and unrealized gains or losses on plan assets, adjusted for any costs of managing plan assets. Such costs may be paid by the plan sponsor (see paragraph 3462.077(b)) or by the plan itself, in which case, those costs have reduced plan assets at the end of the period (see paragraph 3462.077(a)(ii)). However, other administration costs, such as audit and actuarial fees, are not deducted from the actual return on plan assets.

## Components of the cost for the period

. 079 The components of the total cost of a defined benefit plan for the period are as follows:
(a) current service cost;
(b) finance cost; and
(c) remeasurements and other items.

## Current service cost

. 080 Current service cost for the period is the actuarial present value of benefits attributed to employees' services rendered during that period, reduced to reflect employee contributions.
. 081 Contributions towards the cost of retirement benefits may be received from active employees or from retirees. For example, employees may contribute to a pension plan during their service life and retirees may contribute towards the cost of a drug plan.
. 082 Contributions received during a period from active employees towards the cost of a pension plan reduce the current service cost in the period.
. 083 When contributions are expected to be received from employees in future periods towards the cost of retirement benefits other than pensions, an entity's defined benefit obligation is measured as the actuarial present value of the benefits expected to be provided, reduced by the actuarial present value of contributions expected to be received from employees in future periods. In determining the amount of those contributions, an entity considers any related plan provisions, such as its past practice of consistently increasing or reducing the contribution rate as described in paragraphs 3462.057-.058. An obligation to return contributions received from employees who do not attain eligibility for future benefits, together with any interest accrued on those contributions, is recognized as a component of an entity's defined benefit obligation. These factors are reflected also in an entity's current service cost.

## Finance cost

. 084 Finance cost for the period is the net interest on the defined benefit liability. Finance cost for a defined benefit asset is a credit. Finance cost is generally determined by multiplying the defined benefit liability (asset) at the start of the period by the discount rate used in determining the defined benefit obligation at the start of the period.

## Remeasurements and other items

. 085 Remeasurements and other items for the period comprise the aggregate of:
(a) the difference between the actual return on plan assets and the return calculated using the discount rate referred to in paragraph 3462.084;
(b) actuarial gains and losses;
(c) the effect of any valuation allowance in the case of a net defined benefit asset;
(d) past service costs; and
(e) gains and losses arising from settlements and curtailments.
. 086 The effect of a valuation allowance included in remeasurements and other items has two elements:
(a) the change in the valuation allowance for the period; and
(b) the effect of the valuation allowance on finance cost.

The effect of a valuation allowance on finance cost arises because a valuation allowance reduces the defined benefit asset and, thus, affects the finance cost calculated in accordance with paragraph 3462.084. However, the existence of a valuation allowance does not affect the actual return on plan assets. Consequently, when a valuation allowance exists, remeasurements and other items include an amount to offset the above effect on finance cost. That credit amount is calculated by multiplying the valuation allowance at the start of the period by the discount rate used in calculating finance cost.
.087 Past service costs are changes in the defined benefit obligation for employee service in prior periods that arise from the introduction or withdrawal of, or amendment to, a defined benefit plan in the current period.
.088 The gain or loss from a settlement, determined as of the date of the settlement, is the difference between:
(a) the amount of the defined benefit obligation being settled; and
(b) the settlement price, including the fair value of any plan assets transferred and any payments made directly by the entity in connection with the settlement.
.089 The gain or loss from a curtailment, determined as of the date of the curtailment, is the change in the defined benefit obligation resulting from the curtailment.
. 090 The amount of remeasurements and other items may be calculated by deducting current service cost and finance cost from total defined benefit cost (see paragraph 3462.076); or alternatively, by determining each of the components of remeasurements and other items separately as described in paragraphs 3462.085089.

## Entities with two or more plans

. 091 - An entity that has two or more defined benefit plans shall determine a cost, a defined benefit obligation, and plan assets by applying paragraphs 3462.023-. 090 to each separately measured plan or aggregation of plans.
.092 For purposes of paragraph 3462.091, each funded benefit plan is a separately measured plan. Unfunded benefit plans may be aggregated for measurement purposes only when they provide:
(a) different benefits to the same group of employees and their beneficiaries; or
(b) the same benefits to different groups of employees and their beneficiaries.
.093 An entity may have two or more unfunded benefit plans that provide different benefits to the same group of employees and their beneficiaries. For example, the entity may have separate medical care, dental care and eye care plans that provide benefit coverage to all retirees of the entity. The entity may combine those plans for measurement purposes. Similarly, an entity may have two or more unfunded benefit plans that provide the same benefits to different groups of employees and their beneficiaries. For example, an entity may have substantially the same retirement medical care plans at each of its operating locations. The entity may combine those plans for measurement purposes.

094 When an entity has a benefit plan in which the defined benefit obligation exceeds the fair value of the plan assets, and another benefit plan in which the fair value of the plan assets exceeds the defined benefit obligation, the amounts in the two plans are generally not netted. Netting in such circumstances is appropriate only when the entity has a clear right to use the assets of one plan to pay for the benefits to be provided by the other plan.
. 095 - An entity that has two or more defined benefit plans shall present separately in the balance sheet a defined benefit asset of one defined benefit plan and a defined benefit liability of another defined benefit plan, except when the entity:
(a) has a right to use the assets of one plan to pay for the benefits to be provided by the other plan; and
(b) intends to exercise that right.

## Insurance contracts and arrangements

.096 Employee future benefits may be provided or funded by an entity through insurance contracts. An insurance contract involves the transfer of significant risk from the entity (or the plan) to the insurance enterprise, even though the entity retains credit risk associated with the possibility of a default by the insurance enterprise. Examples of significant risks associated with a defined benefit obligation are mortality risk and the risk that the inflation rate may change significantly.
. 097 When an entity has settled a defined benefit obligation through the purchase of an insurance contract, the benefits provided or funded by the insurance contract are excluded from the defined benefit obligation and the insurance contract is excluded from plan assets, except for any participation right (see paragraph 3462.100).
.098 Other arrangements with an insurance enterprise do not meet the definition of an insurance contract because the insurance enterprise does not assume an unconditional legal obligation to provide specified benefits to specified individuals. For example, a yearly renewable term contract with an insurance enterprise may provide sufficient cash only to pay for benefits provided in the current period. In such cases, there is no transfer of most of the risk inherent in the defined benefit obligation and the entity accounts for its obligations to employees under its benefit plans without regard to the insurance arrangement.

099 Participating insurance policies provide that a purchaser (either a plan or an entity) may participate in the experience of an insurance enterprise. The insurance enterprise ordinarily pays dividends to the purchaser, the effect of which is to reduce the cost of the policy. The participation dividend is a partial return of the premium paid by the purchaser and therefore, by the terms of the definition, the participating insurance policy is not an insurance contract. Since, in substance, the participation dividend is a return on investment of the participation right, it is accounted for separately as an investment. However, the component of the participating insurance policy that involves a payment of a fixed consideration or premium may satisfy the definition of an insurance contract. When an entity has transferred significant risk associated with a defined benefit obligation to an insurance enterprise through a participating insurance policy, a portion of this policy that represents the payment of the fixed consideration or premium may meet the definition of an insurance contract. In such cases, this portion does constitute a settlement and is accounted for as such (see paragraph 3462.063 ). When an entity remains subject to significant risks and rewards associated with the defined benefit obligation covered or the assets transferred to an insurance enterprise, the purchase of the policy from the insurance enterprise does not constitute a settlement. The entity continues to account for the benefits covered by the policy as described in paragraph 3462.098.
. 100 The purchase price of a participating insurance policy ordinarily is higher than the price of an equivalent policy without a participating right. The difference represents the cost of the participating right, which is recognized separately at the date of purchase as an investment.

## TERMINATION BENEFITS

. 101 - An entity that offers special termination benefits to employees for voluntary terminations shall recognize a liability and an expense when employees accept the offer and the amount of the special termination benefits can be reasonably estimated.
. 102 - An entity that offers special termination benefits to employees for involuntary terminations shall recognize a liability and an expense in the period in which:
(a) management having the appropriate level of authority approves and commits the entity to a plan of termination and establishes the benefits that employees will receive upon their termination of employment;
(b) the benefit arrangement is communicated to employees in sufficient detail to enable them to determine the type and amount of benefits they will receive when their employment is terminated;
(c) the plan of termination specifically identifies the target level of reduction in the number of employees, the job classifications or functions and their locations; and
(d) the period of time to complete the plan of termination indicates that significant changes to the plan of termination are not likely.

- An entity that is required by the existing terms of a benefit plan to provide contractual termination benefits to employees shall recognize a liability and an expense when it is probable that employees will be entitled to benefits and the amount can be reasonably estimated.
.104 An entity may provide benefits to employees when their employment is terminated. These benefits may be either contractual termination benefits required by the existing terms of a benefit plan when a specified event, such as a plant closing, occurs or special termination benefits offered for a short period of time. A plan of termination for special termination benefits normally does not cover a period exceeding twelve months. Special termination benefits may be provided for involuntary or voluntary termination of service.
.105 Termination benefits may take various forms including lump-sum payments, periodic future payments, or both. They may be paid directly from an entity's assets, from an existing benefit plan or a new benefit plan, or from a combination thereof. The cost of termination benefits recognized as a liability and an expense includes the amount of any lump-sum payments and the present value of any expected future payments. A situation involving termination benefits may also involve a curtailment and is accounted for as such (see paragraph 3462.063).
. 106 The liability and expense recognized in respect of employees who accept an offer of special termination benefits:
(a) for a defined benefit pension plan, is the difference between:
(i) the defined benefit obligation in respect of those employees under existing benefit plans, assuming that those employees would retire or terminate their employment immediately, without taking into account any special termination benefits; and
(ii) the defined benefit obligation in paragraph 3462.106(a)(i) adjusted to reflect the special termination benefits; and
(b) for a defined benefit plan other than a pension plan, is the difference between:
(i) the defined benefit obligation in respect of those employees under existing benefit plans, assuming that those employees not yet fully eligible for benefits would terminate their employment at their full eligibility date and that fully eligible employees would retire immediately, without taking into account any special termination benefits; and
(ii) the defined benefit obligation in paragraph 3462.106(b)(i) adjusted to reflect the special termination benefits.

The liability and expense for special termination benefits includes only the value of the additional benefits that arises from the offer of special termination benefits. Other changes in the defined benefit obligation resulting from employees now terminating employment at a date earlier than originally assumed are recognized either in the determination of actuarial gains or losses, or as a curtailment gain or loss (see paragraph 3462.063), and are included in remeasurements and other items (see paragraph 3462.085).

An entity may offer special termination benefits to employees who leave voluntarily but terminate the employment of additional employees involuntarily if target reduction levels are not achieved. In those circumstances, the liability for termination benefits is recognized for all targeted terminations when the criteria in paragraph 3462.102 are met. The excess of the cost of voluntary termination benefits over the cost of the involuntary termination benefits is recognized when employees accept the offer and the amount can be reasonably estimated.

## Example

An entity's plan of termination offers $\$ 15,000$ to each employee who leaves voluntarily. The target reduction level is 300 . Employees whose employment is terminated involuntarily will each receive a benefit of $\$ 9,000$. The liability to be recognized when the plan of termination is approved (and the conditions in paragraph 3462.102 are met) is $300 \times \$ 9,000=\$ 2,700,000$. When employees accept the voluntary offer of the $\$ 15,000$ benefit, an additional liability for $\$ 6,000$ per employee is accrued (see paragraph 3462.101).

## DISCONTINUED OPERATIONS

. 108 When a settlement or curtailment gain or loss or the cost of special or contractual termination benefits, including post-employment benefits, is directly related to a discontinued operation (see DISPOSAL OF LONG-LIVED ASSETS AND DISCONTINUED OPERATIONS, Section 3475), it is:
(a) recognized and measured in accordance with this Section; and
(b) presented in accordance with Section 3475.

## MULTIEMPLOYER AND MULTIPLE-EMPLOYER BENEFIT PLANS

. 109 When benefits are provided to employees through a multiemployer plan, the amount for which an individual entity is obligated under the plan may not be quantified. Generally, a contribution rate is established for each period to ensure that the plan assets are adequate to cover the plan's future benefit payments.
. 110 Although a multiemployer plan may have the characteristics of a defined benefit plan, sufficient information to follow the standards on defined benefit plans in this Section is normally not available. In such circumstances, a multiemployer plan is accounted for following the standards on defined contribution plans in paragraphs 3462.013-020.

111 When benefits are provided to employees through a defined benefit multiple-employer plan, each entity in the plan follows the standards on defined benefit plans in this Section and bases its accounting for plan assets on its proportionate interest in the assets of the multiple-employer plan.
.112 The definition of a multiemployer plan refers to entities that are unrelated. Entities within a related group, such as a parent company and its subsidiaries, may share a benefit plan that satisfies the definition of a multiemployer benefit plan other than the requirement that the entities be unrelated. The costs of the benefit plan are not always allocated to, or funded separately by, the individual entities within the related group. As a result, individual entities within the related group are not able to identify their share of the underlying assets and liabilities. In such circumstances, a benefit plan is accounted for by the parent company and its subsidiaries in their individual financial statements following the standards on defined contribution plans in paragraphs 3462.013-.020. In its consolidated financial statements, the company accounts for the plan following the standards on defined benefit plans in this Section. Additional disclosures are required in the non-consolidated financial statements of the parent company and in the financial statements of its subsidiaries to indicate that defined contribution plan accounting has been used (see paragraph 3462.114(b)).

## DISCLOSURE

## General

. 113 - An entity shall provide the disclosures required by paragraphs 3462.114-.118 separately for plans that provide:
(a) pension benefits; and
(b) primarily other employee future benefits.

## Multiemployer plans

- An entity shall disclose the following information about multiemployer plans:
(a) a general description of the plan, including whether the plan is a pension plan or a plan other than a pension plan such as a retiree health care plan, and whether the plan is a defined benefit plan or a defined contribution plan; and
(b) when the plan is a multiemployer defined benefit plan but sufficient information is not available to use defined benefit plan accounting, and defined contribution plan accounting is used:
(i) the fact that the plan is a defined benefit plan;
(ii) the reason why it is being accounted for as a defined contribution plan;
(iii) any available information about the plan's surplus or deficit, and
(iv) the nature and effect of significant changes in the contractual elements of the plan.


## Defined benefit plans

. 115 - An entity shall disclose the following information about defined benefit plans:
(a) a general description of each type of plan, including whether the plan is a pension plan or a plan other than a pension plan such as a retiree health care plan;
(b) the fair value of plan assets at the end of the period;
(c) the defined benefit obligation at the end of the period;
(d) the plan surplus or deficit at the end of the period (the difference between amount (c) and amount (b));
(e) any difference between the plan surplus or deficit at the end of the period and the amount recognized in the balance sheet as a result of a valuation allowance;
(f) if not separately presented on the face of the income statement, the amount of remeasurements and other items for the period (see paragraphs 3462.085-.090);
(g) the effective date of the most recently completed actuarial valuation used in determining the defined benefit obligation; and
(h) the nature and effect of significant changes in the contractual elements of the plans during the period.
. 116 DISCLOSURE OF ACCOUNTING POLICIES, Section 1505, requires disclosure of significant accounting policies. For defined benefit plans, this requirement includes whether the defined benefit obligation is measured using a funding valuation or an accounting valuation (see paragraph 3462.029).
. 117 ACCOUNTING CHANGES, Section 1506, requires disclosure of changes in accounting policies. For defined benefit plans, this requirement includes any change in whether a defined benefit obligation is determined using a funding valuation or an accounting valuation, or in the actuarial cost method used.

## Termination benefits

- An entity shall disclose the nature and, if not separately presented on the face of the income statement, the effect of any termination benefits provided in the period.


## EFFECTIVE DATE AND TRANSITION

119 An entity applies this Section for annual financial statements relating to fiscal years beginning on or after January 1, 2014. Earlier application is permitted, but only for all of an entity's benefit plans.
. 120 An entity applies this Section retrospectively, in accordance with ACCOUNTING CHANGES, Section 1506, except as specified in paragraphs 3462.121-.124.
. 121 When an entity includes employee benefit costs in the carrying amount of assets, such as inventories or property, plant and equipment, it need not restate the carrying amount of those assets at the date of application of this Section.
. 122 When an entity previously used a measurement date prior to the balance sheet date for plan assets and the defined benefit obligation rather than measuring them as of the balance sheet date, it applies the following transitional approach:
(a) Use the measurement of plan assets and defined benefit obligations that the entity applied for yearend reporting for the year immediately preceding the year to which the Section is first applied, which may have been determined using a measurement date of up to three months prior to the balance sheet date. The entity does not remeasure plan assets and defined benefit obligations as of the beginning of the year in which this Section is first applied.
(b) Restate those measurements retrospectively to reflect any changes in accounting policies in accordance with ACCOUNTING CHANGES, Section 1506, other than the change in the measurement date. For example, an entity might previously have deferred and amortized actuarial gains and losses, and past service costs, for its defined benefit plans, or an entity may have decided to change from using an accounting valuation to a funding valuation to measure its defined benefit obligation.
(c) Determine the defined benefit obligation as of the balance sheet date for the year in which this Section is first applied, either by an actuarial valuation as of that date or by a roll-forward of an earlier actuarial valuation prepared within the last three years in accordance with paragraph 3462.062. Determine the fair value of plan assets as of the balance sheet date for the year in which this Section is first applied in accordance with paragraphs 3462.065-.066.
(d) Using the amounts determined in (c), calculate defined benefit cost for the period between the measurement date for the year immediately preceding the year in which this Section is first applied and the balance sheet date for the year in which this Section is first applied, exclusive of any gain or loss arising from a plan amendment or initiation, settlement or curtailment.
(e) Allocate the defined benefit cost determined in (d) proportionately such that twelve months of costs are allocated to the current year, and adjust opening retained earnings for the earliest prior year presented by any remainder. For example, a calendar-year entity may have previously used a September 30, 2013 measurement date for the year ended December 31, 2013 and have no plan amendment or initiation, settlement or curtailment during the 15 -month period between October 1, 2013 and December 31, 2014. The entity would allocate twelve-fifteenths of the defined benefit cost to the current period defined benefit cost for 2014 and the remainder as an adjustment to opening retained earnings at January 1, 2013.
(f) Any gain or loss arising from a plan amendment or initiation, settlement or curtailment between the measurement date that is used for the immediately preceding year and the beginning of the year in which this Section is first applied is recognized as a component of defined benefit cost in the period in which the event occurs and not as an adjustment of retained earnings.

The transitional approach for the measurement date provisions is illustrated in the following diagram using the dates from the example in paragraph 3462.122(e):


Any gain or loss arising from a plan amendment or initiation, settlement or curtailment that occurs after September 30, 2013 is recognized in the income statement in the period in which the event occurs.
. 124 Paragraph 3462.115(f) requires disclosure of the amount of remeasurements and other items for the period, if not separately presented on the face of the income statement. An entity applying paragraph 3462.122 determines the amount of remeasurements and other items for the year in which this Section is first applied as follows:
(a) For the defined benefit cost calculated in paragraph 3462.122(d), determine the amount of remeasurements and other items (see paragraphs 3462.085-.090) included in that defined benefit cost.
(b) Allocate the remeasurements and other items proportionately as described in paragraph 3462.122(e) to determine the portion applicable to the year in which this Section is first applied.

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## Appendix "B"

## Mercer Report

## MERCER

## FortisOntario Inc.

## 2012 Year-End Disclosures and 2013, 2014 Pension Expense Estimates under Canadian Accounting Standards

Change in benefit obligation
Benefit obligation - end of prior period
Current service cost (employer)
Interest cost
Employee contributions
Plan amendments
Benefits paid
Net transfer in (out)
Acquisitions (divestitures)
Increase (decrease) in obligation due to curtailment
Obligation being settled
Special termination benefits
Actuarial loss (gain)
Foreign exchange rate changes
Benefit obligation - end

| Algoma RPP | Algoma SERP |
| :---: | :---: |
| 20,370,447 | 401,155 |
| 414,031 | - |
| 1,072,961 | 19,970 |
| 152,935 | - |
| - | - ${ }^{-}$ |
| $(821,148)$ | $(51,234)$ |
| - | - |
| - | - |
| - | - |
| - | - |
| - | - |
| 2,361,549 | 12,916 |
| - | - |
| 23,550,775 | 382,807 |
| 18,135,080 | - |
| 1,492,362 | - |
| 597,428 | 51,234 |
| 152,935 | - |
| $(821,148)$ | $(51,234)$ |
| - | - |
| - | - |
| - | - |
| - | - |
| - | - |
| - | - |
| 19,556,657 | - |
| 23,550,775 | 382,807 |
| 19,556,657 | - |
| $(3,994,118)$ | $(382,807)$ |
| - | - |
| - | 221,130 |
| - | - |
| 6,155,254 | 35,895 |
| 2,161,136 | $(125,782)$ |

Change in plan assets
Market value of plan assets - end of prior period
Actual return on plan assets
Employer contributions
Employee contributions
Benefits paid
Surplus paid out to employer
Settlement payments
Net transfer in (out)
Acquisitions (divestitures)
Actual plan expenses
Foreign exchange rate changes
Market value of plan assets - end

## Reconciliation of funded status

Benefit obligation - end
Market value of plan assets - end
Funded status - surplus (deficit)
Employer contributions after measurement date
Unamortized transitional obligation
Unamortized past service costs
Unamortized net actuarial loss (gain)
Accrued benefit asset (liability), net of valuation allowance

## MERCER

## FortisOntario Inc.

2012 Year-End Disclosures and 2013, 2014 Pension Expense Estimates under Canadian Accounting Standards

2012 Components of expense
Current service cost
Interest cost
Expected return on plan assets
Amortization of transitional obliation
Amortization of past service costs
Amortization of net actuarial loss (gain)
Curtailment loss (gain)
Settlement loss (gain)
Amortization of transitional increase (decrease) in VA
Increase (decrease) in valuation allowance
Special Termination Benefits
Net expense (income)

## Assumptions

At beginning of period
Discount rate
Rate of compensation increase
Expected rate of return on plan assets
EARSL
At end of period
Discount rate
Rate of compensation increase EARSL

| Algoma RPP | Algoma SERP |
| ---: | ---: |
| 414,031 | - |
| $1,072,961$ | 19,970 |
| $(1,130,060)$ | - |
| 2,029 | 44,100 |
| - | - |
| 149,539 | - |
| - | - |
| - | - |
| - | - |
| - | - |
| - | 64,070 |
| 508,500 |  |


| $5.30 \%$ | $5.30 \%$ |
| :---: | :---: |
| $4.00 \%$ | $4.00 \%$ |
| $6.25 \%$ | $6.25 \%$ |
| 15.20 | 9.80 |
|  |  |
| $4.40 \%$ | $4.40 \%$ |
| $4.00 \%$ | $4.00 \%$ |
| 13.80 | 9.80 |

## MERCER

## FortisOntario Inc.

## 2012 Year-End Disclosures and 2013, 2014 Pension Expense Estimates under Canadian Accounting Standards

Estimated 2013 Components of expense under CICA3461
Current service cost
Interest cost
Expected return on plan assets
Amortization of transitional obliation
Amortization of past service costs
Amortization of net actuarial loss (gain)
Curtailment loss (gain)
Settlement loss (gain)
Amortization of transitional increase (decrease) in VA
Increase (decrease) in valuation allowance
Special Termination Benefits
Net expense (income)

Estimated 2013 components of expense under CICA 3462
Current service cost
Finance cost
Remeasurements
Net expense (income)

Difference in 2013 expense under CICA 3461 vs CICA 3462
CICA 3461
CICA 3462
Difference

## Charge to retained earnings

Unrecognized losses at Dec. 31, 2012
Difference in 2013 expense 3461 vs 3462
Total charge (credit) to retained earnings

Balanc sheet reconciliation
Balance sheet asset (liability) at Jan 1, 2013
2013 employer contribution
2013 expense under CICA 3461
(Charge) Credit to retained earnings
Balance sheet asset (liability) at Dec 31, 2013

Estimated 2014 components of expense under CICA 3462
Current service cos
Finance cost
Remeasurements
Net expense (income)

Algoma RPP Algoma SERP

| 503,148 | - |
| ---: | ---: |
| $1,029,990$ | 15,784 |
| $(1,175,901)$ | - |
| - | 44,100 |
| - | - |
| 275,375 | - |
| - | - |
| - | - |
| - | - |
| - | - |
| - | 59,884 |
| 632,612 |  |


| 503,148 | 0 |
| :---: | ---: |
| 175,741 | 16,844 |
| $(15,002)$ | 862 |
| 663,887 | 17,706 |


| 632,612 | 59,884 |
| ---: | :---: |
| 663,887 | 17,706 |
| 31,275 | $(42,178)$ |


| $6,155,254$ | 257,025 |
| ---: | :---: |
| 31,275 | $(42,178)$ |
| $6,186,529$ | 214,847 |


| $2,161,136$ | $(125,782)$ |
| ---: | :---: |
| 914,989 | 48,164 |
| $(632,612)$ | $(59,884)$ |
| $(6,186,529)$ | $(214,847)$ |
| $(3,743,016)$ | $(352,349)$ |


| 557,734 | 0 |
| ---: | ---: |
| 155,335 | 14,622 |
| $(402,891)$ | $(932)$ |
| 310,178 | 13,690 |


[^0]:    ${ }^{1}$ EB-2012-0161, Decision and Order dated December 21, 2012, Appendix " $C$ ", Settlement Agreement, Issue \#5 page 22 of 32

