# **Final**

Final Standards - Revisions to Part 3000 of the Practice-Specific Standards for Pension Plans - Assumptions for Hypothetical Wind-up and Solvency (subsections 3240 and 3260)

## **Actuarial Standards Board**

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## 3240 HYPOTHETICAL WIND-UP VALUATION

- A hypothetical wind-up valuation determines the <u>funded status</u> of a pension plan on the assumption that the plan is wound up at the <u>calculation date</u>. The standards for a full wind-up valuation in section 3300 apply to a hypothetical wind-up valuation except for the <u>external user report requirements therein and as superseded by the following recommendations.</u>
- For a hypothetical wind-up valuation, the <u>actuary</u> should determine benefit entitlements on the assumption that the pension plan has neither a surplus nor a deficit.
- In determining the benefit entitlements, the <u>actuary</u> should postulate a <u>scenario</u> upon which the hypothetical wind-up valuation is based, taking account of the circumstances of the <u>work</u>.
- The <u>actuary</u> should take account of contingent benefits that would be payable under the postulated scenario for the hypothetical wind-up.
- For a hypothetical wind-up valuation, the <u>actuary</u> may assume that the wind-up date, the <u>calculation date</u> and the settlement date are coincident.
- For a hypothetical wind-up valuation, the <u>actuary</u> may assume that benefits would be settled by the purchase of annuities regardless of any limitation of capacity in the market for group annuity contracts.
- For a hypothetical wind-up valuation, the value of assets should be the market value of assets.
- For a hypothetical wind-up valuation, the <u>actuary</u> should select an explicit assumption for expenses expected to be payable from the pension plan's assets to wind up the pension plan. [Effective September 18, 2013]

#### Membership data

- The precision of the membership data is less critical for a hypothetical wind-up valuation than for an actual wind-up valuation.
- Since an actual wind-up is not occurring, pertinent membership data may not be available. The <u>actuary</u> would make appropriate assumptions regarding such missing membership data. For example, it may be appropriate to retroject current earnings based on aggregate historical pay increases in order to estimate final average earnings.

#### Postulation of scenarios

- There are often multiple <u>scenarios</u> regarding the circumstances that may result in the wind-up of a pension plan. For a hypothetical wind-up valuation, the <u>actuary</u> may postulate any reasonable, internally consistent, <u>scenario</u> regarding the circumstances resulting in the wind-up of a pension plan, consistent with the circumstances of the <u>work</u>. For the postulated <u>scenario</u>, the <u>actuary</u> would reflect the treatment of any contingent benefits, including:
  - Those that are contingent upon the wind-up <u>scenario</u>, such as a plant closure benefit; or
  - Those that are required by law, such as a provision for earlier commencement of deferred pension entitlements in the event of plan wind-up; and
  - Those that are contingent upon a factor other than the wind-up scenario.
- Examples of contingent benefits that are dependent upon factors other than the wind-up scenario or as required by law are:
  - A provision granting the employer or <u>plan administrator</u> the discretion to waive early retirement reductions; and
  - A provision providing enhanced benefits if funds are sufficient.

#### **Subsequent events**

The <u>actuary</u> may reflect <u>subsequent events</u> in the valuation provided that doing so either increases the actuarial present value of the projected benefits at the <u>calculation date</u> or reduces the value of the pension plan's assets at the <u>calculation date</u>.

#### Wind-up expenses

- Since the <u>actuary</u> would assume that the pension plan has neither a surplus nor a deficit, windup expenses related to the resolution of surplus or deficit issues need not be considered.
- In developing the assumption for expenses expected to be payable from the pension plan's assets to wind up the pension plan, the <u>actuary</u> would also make an assumption as to the solvency of the employer. The assumption with respect to the payment of expenses and the assumption with respect to the solvency of the employer would be consistent.

#### **Settlement Methods**

- A hypothetical wind-up valuation requires the <u>actuary</u> to select assumptions about the methods of settlement.
- The <u>actuary</u> may assume a settlement method permitted by law or any relevant regulatory policy or guideline.

- The <u>actuary</u> may assume settlement by means of a replicating investment portfolio if permitted by law or any regulatory policy or guideline, or where it is anticipated that annuities could not be purchased due to group annuity capacity limitations. The assumed replicating portfolio would provide for an appropriate level of security for the pension benefits covered.
- The <u>actuary</u> may incorporate assumptions as to the exercise of regulatory discretion, a change in law, or a plan amendment which would be required to enable a practical settlement of benefits. When making such assumptions, the <u>actuary</u> would consider any relevant regulatory policy, guidance, or precedent.
- For example, for a plan where pensions are indexed with the Consumer Price Index and where it is impractical to purchase annuities indexed with the Consumer Price Index, the <u>actuary</u> may assume that annuities would be purchased with indexing at a fixed percentage rate of comparable value to indexing in accordance with the plan provisions.

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#### 3260 REPORTING: EXTERNAL USER REPORT

An external user report on work pursuant to section 3200 should:

- *Include the calculation date, the report date, and the next calculation date;*
- Describe the sources of membership data, plan provisions, and the pension plan's assets, and the dates at which they were compiled;
- Describe the membership data and any limitations thereof;
- Describe the tests applied to determine the sufficiency and reliability of the membership data and plan asset data for purposes of the work;
- Describe the assets, including their market value and a summary of the assets by major category;
- Describe the pension plan's provisions, including the identification of any pending definitive or virtually definitive amendment;
- Disclose <u>subsequent events</u> of which the <u>actuary</u> is aware, whether or not the events are taken into account in the <u>work</u>, or, if there are no <u>subsequent events</u> of which the actuary is aware, include a statement to that effect;
- State the type of each valuation undertaken under the terms of the <u>appropriate</u> <u>engagement</u>; and
- Describe any significant terms of the appropriate engagement that are material to the actuary's advice.

For each going concern valuation undertaken by the actuary, the external user report should:

- Describe the actuarial cost method;
- *Describe the method used to value the pension plan's assets;*
- Describe the assumptions <u>used</u> to determine the actuarial present value of projected benefits, including the extent of any <u>margin for adverse deviations</u> included with respect to each such assumption, and provide the rationale for each assumption that is material to the actuary's advice;
- Describe the rationale for any assumed additional returns, net of investment management expenses, from an active investment management strategy as compared to a passive investment management strategy, included in the discount rate assumption;
- Report the funded status at the calculation date and the service cost or the rule for calculating the service cost between the calculation date and the next calculation date;
- Disclose any pending but <u>definitive</u> or <u>virtually definitive</u> amendment of which the <u>actuary</u> is aware, and whether or not such amendment has been included in determining the <u>funded status</u> and the <u>service cost</u>;

- Describe any contingent benefits provided under the pension plan and the extent to which such contingent benefits are included or excluded in determining the <u>funded status</u> and the <u>service cost</u>;
- Describe any benefits that are not contingent benefits and that have been excluded in determining the <u>funded status</u> and the <u>service cost</u>; and
- If there is no provision for adverse deviations, include a statement to that effect.
- If an <u>external user report</u> includes one or more <u>going concern valuations</u> then the <u>external user report</u> should, for at least one such valuation included in the <u>report</u>, describe and quantify the gains and losses between the prior <u>calculation date</u> and the <u>calculation date</u>.
- If an <u>external user report</u> includes one or more <u>going concern valuations</u>, other than a valuation for the purpose of determining the maximum <u>funding</u> permitted by law for a "designated plan", as that term is defined in the Income Tax Regulations (Canada), then the <u>external user report</u> should, for at least one such valuation included in the <u>report</u>, report the effect of using a discount rate 1.0% lower than that <u>used</u> for the valuation on:
  - The actuarial present value, at the <u>calculation date</u>, of projected benefits allocated to periods up to the <u>calculation date</u>; and
  - The <u>service cost</u> or the rule for calculating the <u>service cost</u> between the <u>calculation date</u> and the next <u>calculation date</u>.
- For each hypothetical wind-up valuation and solvency valuation undertaken by the <u>actuary</u>, the <u>external user report</u> should:
  - *Describe the methods used to determine the reported liabilities;*
  - Describe the assumptions <u>used</u> to determine the <u>reported</u> liabilities and provide the rationale for each assumption that is material to the <u>actuary</u>'s advice:
  - Describe the basis for inclusion and the amount considered in respect of a letter of credit of which the pension plan is the beneficiary;
  - Report the funded status at the calculation date;
  - *Include a description of the postulated <u>scenario</u>; and*
  - Include a description of the extent to which contingent benefits provided under the pension plan are included or excluded in determining the <u>funded status</u>.
- If an <u>external user report</u> includes one or more hypothetical wind-up valuations or solvency valuations then, for any one such hypothetical wind-up valuation or solvency valuation, the external user report should:
  - Report the incremental cost between the <u>calculation date</u> and the next <u>calculation date</u>, in respect of the defined benefit portion of the plan;

- If the <u>external user report</u> does not include a <u>going concern valuation</u>, <u>report</u> the incremental cost between the <u>calculation date</u> and the next <u>calculation date</u> in respect of the defined <u>contribution</u> portion of the plan;
- Describe the methods <u>used</u> to determine the incremental cost;
- Describe the assumptions <u>used</u> to determine the incremental cost and provide the rationale for each assumption that is material to the <u>actuary</u>'s advice;
- Report the effect on the hypothetical wind-up or solvency liabilities, at the <u>calculation date</u>, of using a discount rate 1.0% lower than that <u>used</u> for the valuation; and
- If the <u>external user report</u> does not include a <u>going concern valuation</u>, describe and quantify the gains and losses between the prior <u>calculation</u> <u>date</u> and the <u>calculation date</u>;

#### unless

- The pension plan is a "designated plan" which has, as members, only persons "connected" with the employer as those terms are defined in the Income Tax Regulations (Canada); or
- The hypothetical wind-up valuation or solvency valuation is based on an extrapolation of results disclosed in a previous external user report.
- For each valuation that is not a <u>going concern valuation</u>, a hypothetical wind-up valuation, or a solvency valuation, the external user report should:
  - Describe the methods <u>used</u> to determine the <u>reported</u> liabilities and/or <u>service cost</u>, as applicable;
  - Describe the methods <u>used</u> to value the plan's assets, if any;
  - Describe the assumptions <u>used</u> and provide the rationale for each assumption that is material to the <u>actuary</u>'s advice; and
  - Include a description of the extent to which contingent benefits provided under the pension plan are included or excluded.
- .07 An external user report that provides advice on funding should:
  - Describe the determination of <u>contributions</u> or a range of <u>contributions</u> between the <u>calculation date</u> and the next <u>calculation date</u>;
  - If <u>contributions</u> are fixed by the terms of the plan or other governing documents, then either:
    - Report that the contributions are adequate to fund the pension plan in accordance with the law; or
    - Report that the contributions are not adequate to fund the pension plan in accordance with the law; and

- Describe the <u>contributions</u> required to <u>fund</u> the pension plan adequately in accordance with the law;
- Describe one or more possible ways in which benefits may be reduced such that the <u>contributions</u> would be adequate to <u>fund</u> the pension plan in accordance with the law; or
- O Describe a combination of increases in <u>contributions</u> and reductions in benefits that would result in the <u>funding</u> being adequate to conform to the law.
- An <u>external user report</u> should provide the following four statements of opinion, all in the same section of the <u>report</u> and in the following order:
  - A statement regarding membership data, which should usually be, "In my opinion, the membership data on which the valuation is based are sufficient and reliable for the purpose of the valuation.";
  - A statement as to assumptions, which should usually be, "In my opinion, the assumptions are appropriate for the purpose(s) of the valuation(s).";
  - A statement as to methods, which should usually be, "In my opinion, the methods employed in the valuation are appropriate for the purpose(s) of the valuation(s)."; and
  - A statement as to conformity, which should be, "This report has been prepared, and my opinions given, in accordance with accepted actuarial practice in Canada."
- An <u>external user report</u> should be sufficiently detailed to enable another <u>actuary</u> to assess the reasonableness of the valuation. [Effective December 30, 2012]

#### Membership data

- Any assumptions and methods <u>used</u> in respect of insufficient or unreliable membership data would be described.
- The <u>actuary</u> may describe limitations on the tests conducted in the review of the data which has been determined to be sufficient and reliable for purposes of the valuation(s). For example, the <u>actuary</u> may describe that the data tests will not capture all possible deficiencies in the data and reliance is also placed on the certification of the <u>plan administrator</u> as to the quality of the data.

## **Types of valuations**

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- The <u>external user report</u> may provide information with respect to multiple valuations, but would, as a minimum:
  - If the pension plan is a registered pension plan and is not a "designated plan", as that term is defined in the Income Tax Regulations (Canada), provide information with respect to:
    - A going concern valuation, if required by law or by the terms of an appropriate engagement;

- A hypothetical wind-up valuation under the <u>scenario</u> regarding the circumstances resulting in the wind-up that, subject to paragraph 3260.19, maximizes the wind-up liabilities, unless the pension plan and the law do not define the benefits payable upon wind-up; and
- Any other hypothetical wind-up or solvency valuation required by law;
- If the pension plan is a "designated plan" as that term is defined in the Income Tax Regulations (Canada), provide information with respect to:
  - A going concern valuation, if required by law or by the terms of an appropriate engagement;
  - A hypothetical wind-up valuation under the <u>scenario</u> regarding the circumstances resulting in the wind-up that, subject to paragraph 3260.19, maximizes the wind-up liabilities, unless the pension plan and the law do not define the benefits payable upon wind-up or the plan has, as members, only persons "connected" with the employer as that term is defined in the Income Tax Regulations (Canada); and
  - Any other hypothetical wind-up or solvency valuation required by law;

and

• If the pension plan is not a registered pension plan, include information with respect to the types of valuations required by the circumstances of the work.

## Significant terms of appropriate engagement

- Significant terms of the appropriate engagement may include matters like:
  - The use of a specified actuarial cost method;
  - The use of a specified asset valuation method;
  - The exclusion of benefits for purposes of a valuation, as permitted by law;
  - The extent of <u>margins for adverse deviations</u>, if any, to be included in selecting assumptions;
  - A policy to fund only the minimum contributions required by law; and
  - Specified methodology for the determination of <u>contribution</u> requirements in excess of the requirements of law.

#### Service cost

For a plan that is a hybrid of a defined <u>contribution</u> pension plan and a defined benefit pension plan, the <u>service cost</u> for a <u>going concern valuation</u> would include the <u>service cost</u> in respect of both the defined contribution portion of the plan and the defined benefit portion of the plan.

### **Reporting gains and losses**

The <u>reported</u> gains and losses for a <u>going concern valuation</u> would include the gain or loss due to a change in the <u>actuarial cost method</u> or a change in the method for valuing the assets and each significant change in assumptions and plan provisions determined at the <u>calculation date</u>. If an amendment to the pension plan prompts the <u>actuary</u> to change the assumptions, the <u>actuary</u> may <u>report</u> the combined effect of the amendment and the resultant change in assumptions.

#### **Discount rate sensitivity**

When following the <u>recommendations</u> to illustrate the effect of a change in discount rate on a valuation, the <u>actuary</u> would maintain all other assumptions and methods as <u>used</u> in the underlying valuation.

#### **Incremental cost**

The incremental cost for a hypothetical wind-up valuation or a solvency valuation represents the present value, at the <u>calculation date</u>, of the expected aggregate change in the hypothetical wind-up liability or solvency liability between the <u>calculation date</u> and the next <u>calculation date</u>, increased for expected benefit payments between the <u>calculation date</u> and the next calculation date.

#### **Methods**

- For each valuation included in the <u>external user report</u> for which there was a prior valuation, the description of the <u>actuarial cost method</u> would include a description of any change to the actuarial cost method used in the prior valuation and the rationale for such change.
- For each valuation included in the <u>external user report</u> for which there was a prior valuation, the description of the method to value the assets would include a description of any differences in change to the asset valuation method <u>used</u> in the prior valuation and the rationale for such change.

### Assumptions

- For each valuation included in the <u>external user report</u> for which there was a prior valuation, the description of assumptions would include a description of each change to the assumptions from the assumptions <u>used</u> in the prior valuation.
- When describing the assumptions for methods of settlement for a hypothetical wind-up or solvency valuation, the <u>actuary</u> would describe any related limitations. For example:
  - If the settlement method assumes that annuities would be purchased but it might not be possible to purchase annuities on actual wind-up of the plan due to capacity limitations; or
  - If the settlement method assumes the exercise of regulatory discretion, a change in law, or a plan amendment for which there is no specific authority.

### Scenario that maximizes wind-up liabilities

- In <u>reporting</u> the <u>funded status</u> of the pension plan under the <u>scenario</u> regarding the circumstances resulting in the wind-up that maximizes the wind-up liabilities, the <u>actuary</u> would include benefits that are contingent upon the <u>scenario</u> regarding the circumstances resulting in the wind-up or required by law. However, the <u>actuary</u> may disregard:
  - Benefits that are contingent upon a factor other than the <u>scenario</u> regarding the circumstances resulting in the wind-up or as required by law; and
  - Possible plan member earnings after the calculation date.

## Other types of valuations

Valuations that are not going concern valuations, hypothetical wind-up valuations, or solvency valuations are usually similar in nature to one of these three types of common valuations. In preparing the external user report for such a valuation, the actuary would consider the relevant reporting requirements for a type of valuation similar to the valuation undertaken and would include additional disclosures as appropriate.

## **Statements of opinion**

- Where different statements of opinion apply in respect of different purposes of the valuation, the above requirements may be modified but would be followed to the extent practicable.
- While a separate statement regarding assumptions would generally be included in respect of each purpose of the valuation, the statements regarding assumptions may be combined where the statements do not differ among some or all of the valuation's purposes. The <u>report</u> would indicate clearly which statement regarding assumptions applies to each of the valuation's purposes.
- While a separate statement regarding methods would generally be included in respect of each purpose of the valuation, the statements regarding methods may be combined where the statements do not differ among some or all of the valuation's purposes. The report would indicate clearly which statement regarding methods applies to each of the valuation's purposes.