Actuarial Standards Board
Conseil des normes actuarielles

Exposure Draft

Revisions to the Practice-Specific Standards for Pension Plans – Assumptions for Hypothetical Wind-Up and Solvency Valuations

Actuarial Standards Board

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Memorandum

To: All Fellows, Affiliates, Associates, and Correspondents of the Canadian Institute of Actuaries and Other Interested Parties

From: A. David Pelletier, Chair
Actuarial Standards Board

Michael Banks, Chair
Designated Group

Date: April 3, 2013

Subject: **Exposure Draft – Revisions to the Practice-Specific Standards for Pension Plans – Assumptions for Hypothetical Wind-Up and Solvency Valuations**

Comment Deadline: **June 3, 2013**

INTRODUCTION

The exposure draft (ED) for Revisions to the Practice-Specific Standards for Pension Plans – Assumptions for Hypothetical Wind-Up and Solvency Valuations was approved for distribution by the Actuarial Standards Board (ASB) on March 27, 2013.

The ED would revise subsections 3240 and 3260 of the practice-specific standards for pension plans with respect to the selection of assumptions for hypothetical wind-up and solvency valuations to better accommodate alternative settlement methods.

BACKGROUND

The ASB created a Designated Group (DG) which is responsible for developing these revisions to the Standards of Practice. The DG includes Michael Banks (Chair), Gavin Benjamin, Serge Charbonneau, Lucie Dutil, Conrad Ferguson, Geoffrey Melbourne, Manuel Monteiro, Marc-Antoine Morin and Catherine Robertson.

A notice of intent (NOI) on this topic was issued on October 15, 2012. A draft educational note, prepared by the Committee on Pension Plan Financial Reporting (PPFRC) of the Canadian Institute of Actuaries (CIA) and related to the same subject matter, was issued on December 14, 2012.

SUMMARY OF COMMENTS ON NOI AND DG RESPONSE

Comments were received from four actuarial consulting firms, three individual actuaries, and the Canadian Association of Pension Supervisory Authorities (CAPSA). The major comments are summarized below in relation to the six changes proposed in the NOI.

1. An actuary may assume that benefits would be settled by purchase of annuities without regard to any group annuity capacity limitations which might apply in practice.

   Comments Received

   One commenter suggested that this approach should be required rather than permissible with a further requirement that where pensions are indexed by reference to the consumer price index (CPI), an assumption would be made that the CPI indexing would be replaced by indexing at a fixed percentage rate. The fixed indexing rate would be at the best estimate inflation rate (BEIR) implicit in the yields on Government of Canada indexed and non-indexed bonds. The commenter suggested that this approach would promote consistency and would result in "reasonably appropriate" hypothetical wind-up liabilities.

   Some other comments supported the proposed change.

   DG Response

   The DG previously considered the possibility of adopting standardized assumptions for all hypothetical wind-up valuations but concluded that it is more appropriate to give consideration to the particular circumstances of different pension plans.

2. An actuary may assume any settlement method permitted by law or any relevant regulatory policy or guideline.

   Comments Received

   One commenter suggested that use of an assumption of an alternative settlement method should also be subject to direction from the actuary's client.

   No other comments were received on this proposal.

   DG Response

   There is nothing in the standards to preclude an actuary seeking confirmation from their client as to the use of an appropriate alternative settlement method assumption.

3. An actuary may make 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. In making such assumptions, the actuary would consider any relevant regulatory policy, guidance, or precedent.

   Comments Received

   One commenter suggested that this change "seems to open a wide door" and is not appropriate without a clear regulatory framework.

   One commenter suggested that this change may be in conflict with existing requirements under the standards that the actuary should comply with the law.

   One commenter indicated that CIA guidance will be required as to the type of assumptions which would be practical and that the CIA should lobby legislators to provide for practical settlement methods in all cases.

One commenter suggested that the standards should provide that the actuary must have reason to believe that any such assumptions would be acceptable to the regulator.

CAPSA commented that:

- “Such assumptions should be made only to the extent that such exercise of regulatory discretion, change in law or plan amendment has occurred or the actuary has valid reason to believe such action is imminent”; and
- Rather than “consider” the actuary should be required to “comply” with any relevant regulatory policy, guidance, or precedent.

DG Response

The DG remains of the opinion that this proposed change is necessary as it is not possible, in some cases, to postulate realistic methods of settlement which are fully consistent with current law and plan terms. In the event of an actual wind-up in these circumstances, exercise of regulatory discretion, a change in law, and/or plan amendments would have to occur to enable completion of the wind-up. In preparing a hypothetical wind-up valuation, it is necessary for the actuary to make assumptions regarding these matters. The selection of this type of assumption would be subject to and is consistent with the requirements of section 1700 of the General Standards.

The DG is of the opinion that it is not appropriate for the Standards of Practice to require compliance with regulatory guidance which is not otherwise legally binding. In practice, actuaries would give considerable weight to relevant regulatory guidance and would welcome changes in law to permit practical settlements in all cases.

4. Establishment of a replicating portfolio may be assumed as a settlement method if permitted by law or any relevant 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.

Comments Received

One commenter does not agree with the replicating portfolio concept on the basis that an adequate replicating portfolio would be comparable to an insurance company’s annuity portfolio and liabilities would be appropriately measured by estimated annuity purchase costs.

One commenter suggested that this change may be in conflict with existing requirements under the standards that the actuary should comply with the law.

One commenter suggested that the notion of “an appropriate level of security” be clarified, perhaps in an educational note.

One commenter suggested that it would not be consistent that “an appropriate level of security” be interpreted to require margins for adverse deviations. The commenter also posited that the application of a replicating portfolio in an actual plan termination would imply additional actuarial valuations that might trigger funding requirements, as necessary, providing additional security of benefits.

CAPSA commented that the standards or an educational note should give guidance as to the appropriate level of security provided by such an arrangement and that such degree of security should be consistent with that provided by the purchase of annuities.

DG Response

The selection of this type of assumption would be subject to and is consistent with the requirements of section 1700 of the General Standards. The DG is of the opinion that a required assessment as to whether such an assumed arrangement would have security equivalent to the purchase of annuities is impractical and such a requirement should not be included in the standards. The CIA may provide educational guidance about the requirement for an appropriate level of security. Regulatory guidance either of a general nature or specific to a particular plan may also be relevant.

5. It would be permitted but not required (as in the current standards) to assume that the settlement date and the wind-up date are coincident.

   Comments Received

   One commenter suggested that this proposal provides too much flexibility and should be restricted to assuming settlement beginning at the calculation date and extending over a period of not more than three to five years from that date.

   One commenter suggested that this proposal is inappropriate as it is not logical to assume that the present value of purchasing annuities over time will be different from the estimated cost of purchasing annuities at the calculation date using market consistent assumptions.

   One commenter suggested that application of this methodology should not be permitted if it would be inconsistent with applicable law.

   CAPSA commented that the intent of this proposal should be clarified.

   DG Response

   This change reflects the reality that actual wind-up settlements routinely occur well after the wind-up date. Also, new, legally permitted settlement methods are evolving for some actual wind-ups and these approaches may involve settlement over time. Any assumptions regarding settlement, including anticipated dates of settlement, would be subject to the requirements of section 1700 of the General Standards.

6. In an external user report, the actuary would provide appropriate descriptions and limitations regarding the basis of settlement assumed.

   Comments Received

   CAPSA commented that this would be an appropriate change and that the revised standard should provide guidance on what descriptions and limitations are appropriate.

   No other comments were received on this proposal.

   DG Response

   The DG is of the view that it is not practical to incorporate detailed requirements in the standards. The CIA might consider whether educational guidance is necessary given the proposed wording of the standards.

After consideration of comments, the changes proposed in the exposure draft are substantially the same as the proposals in the NOI.

COMMENTS ON THE EXPOSURE DRAFT

The ASB is soliciting feedback on this exposure draft from members of the CIA and other stakeholders **by June 3, 2013**. Please send them to Michael Banks at michael.banks@mercer.com, with a copy to Chris Fievoli at chris.fievoli@actuaries.ca. No other forums for the receipt of comments are currently contemplated.

DUE PROCESS

Due process was followed in the development of this exposure draft.

TIMELINE AND EFFECTIVE DATE

The ASB hopes to adopt final standards by September, 2013 with an effective date shortly thereafter. Early adoption would likely be permitted.

ADP, MB

3240 HYPOTHETICAL WIND-UP VALUATION

.01 *A hypothetical wind-up valuation determines the funded status of a pension plan on the assumption that the plan is wound up at the calculation date. The standards for a full wind-up valuation in section 3300 apply to a hypothetical wind-up valuation except for the external user report requirements therein and as superseded by the following recommendations.*

.02 *For a hypothetical wind-up valuation, the actuary should determine benefit entitlements on the assumption that the pension plan has neither a surplus nor a deficit.*

.03 *In determining the benefit entitlements, the actuary should postulate a scenario upon which the hypothetical wind-up valuation is based, taking account of the circumstances of the work.*

.04 *The actuary should take account of contingent benefits that would be payable under the postulated scenario for the hypothetical wind-up.*

.05 *For a hypothetical wind-up valuation, the actuary ~~should~~ may assume that the wind-up date, the calculation date and the settlement date are coincident.*

.05.1 *For a hypothetical wind-up valuation, the actuary 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.*

.06 *For a hypothetical wind-up valuation, the value of assets should be the market value of assets.*

.07 *For a hypothetical wind-up valuation, the actuary should select an explicit assumption for expenses expected to be payable from the pension plan's assets to wind up the pension plan.* [Effective ~~December 30~~Month XX, 2013~~2~~]

Membership data

.08 The precision of the membership data is less critical for a hypothetical wind-up valuation than for an actual wind-up valuation.

.09 Since an actual wind-up is not occurring, pertinent membership data may not be available. The actuary 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

.10 There are often multiple scenarios regarding the circumstances that may result in the wind-up of a pension plan. For a hypothetical wind-up valuation, the actuary may postulate any reasonable, internally consistent, scenario regarding the circumstances resulting in the wind-up of a pension plan, consistent with the circumstances of the work. For the postulated scenario, the actuary would reflect the treatment of any contingent benefits, including:

- Those that are contingent upon the wind-up scenario, 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.

.11 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 plan administrator the discretion to waive early retirement reductions; and
- A provision providing enhanced benefits if funds are sufficient.

Subsequent events

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

Wind-up expenses

.13 Since the actuary would assume that the pension plan has neither a surplus nor a deficit, wind-up expenses related to the resolution of surplus or deficit issues need not be considered.

.14 In developing the assumption for expenses expected to be payable from the pension plan's assets to wind up the pension plan, the actuary 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

.15 A hypothetical wind-up valuation requires the actuary to select assumptions about the methods of settlement.

.16 The actuary may assume any settlement method permitted by law or any relevant regulatory policy or guideline.

.17 The actuary 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.

.18 The actuary 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 actuary would consider any relevant regulatory policy, guidance, or precedent.

.19 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 actuary 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.

3260 REPORTING: EXTERNAL USER REPORT

.01 *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 subsequent events of which the actuary is aware, whether or not the events are taken into account in the work, or, if there are no subsequent events of which the actuary is aware, include a statement to that effect;*
- *State the type of each valuation undertaken under the terms of the appropriate engagement; and*
- *Describe any significant terms of the appropriate engagement that are material to the actuary's advice.*

.02 *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 used to determine the actuarial present value of projected benefits, including the extent of any margin for adverse deviations 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 definitive or virtually definitive amendment of which the actuary is aware, and whether or not such amendment has been included in determining the funded status and the service cost;*

- *Describe any contingent benefits provided under the pension plan and the extent to which such contingent benefits are included or excluded in determining the funded status and the service cost;*
- *Describe any benefits that are not contingent benefits and that have been excluded in determining the funded status and the service cost; and*
- *If there is no provision for adverse deviations, include a statement to that effect.*

.03 *If an external user report includes one or more going concern valuations then the external user report should, for at least one such valuation included in the report, describe and quantify the gains and losses between the prior calculation date and the calculation date.*

.04 *If an external user report includes one or more going concern valuations, other than a valuation for the purpose of determining the maximum funding permitted by law for a "designated plan", as that term is defined in the Income Tax Regulations (Canada), then the external user report should, for at least one such valuation included in the report, report the effect of using a discount rate 1.0% lower than that used for the valuation on:*

- *The actuarial present value, at the calculation date, of projected benefits allocated to periods up to the calculation date; and*
- *The service cost or the rule for calculating the service cost between the calculation date and the next calculation date.*

.05 *For each hypothetical wind-up valuation and solvency valuation undertaken by the actuary, the external user report should:*

- *Describe the methods used to determine the reported liabilities;*
- *Describe the assumptions used to determine the reported liabilities and provide the rationale for each assumption that is material to the actuary'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 scenario; and*
- *Include a description of the extent to which contingent benefits provided under the pension plan are included or excluded in determining the funded status.*

.06 *If an external user report 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 calculation date and the next calculation date, in respect of the defined benefit portion of the plan;*

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

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.*

.06.1 *For each valuation that is not a going concern valuation, a hypothetical wind-up valuation, or a solvency valuation, the external user report should:*

- *Describe the methods used to determine the reported liabilities and/or service cost, as applicable;*
- *Describe the methods used to value the plan's assets, if any;*
- *Describe the assumptions used and provide the rationale for each assumption that is material to the actuary'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 contributions or a range of contributions between the calculation date and the next calculation date;*
- *If contributions 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 contributions required to fund the pension plan adequately in accordance with the law;*
- *Describe one or more possible ways in which benefits may be reduced such that the contributions would be adequate to fund the pension plan in accordance with the law; or*
- *Describe a combination of increases in contributions and reductions in benefits that would result in the funding being adequate to conform to the law.*

.08 *An external user report should provide the following four statements of opinion, all in the same section of the report 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."*

.09 *An external user report should be sufficiently detailed to enable another actuary to assess the reasonableness of the valuation.* [Effective December 30, 2012]

Membership data

.10 Any assumptions and methods used in respect of insufficient or unreliable membership data would be described.

.11 The actuary 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 actuary 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 plan administrator as to the quality of the data.

Types of valuations

.12 The external user report 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 scenario 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 scenario 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

.13 Significant terms of the appropriate engagement may include matters such as:

- 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 margins for adverse deviations, 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 contribution requirements in excess of the requirements of law.

Service cost

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

Reporting gains and losses

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

Discount rate sensitivity

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

Incremental cost

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

Methods

.16 For each valuation included in the external user report for which there was a prior valuation, the description of the actuarial cost method would include a description of any change to the actuarial cost method used in the prior valuation and the rationale for such change.

.17 For each valuation included in the external user report 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 used in the prior valuation and the rationale for such change.

Assumptions

.18 For each valuation included in the external user report for which there was a prior valuation, the description of assumptions would include a description of each change to the assumptions from the assumptions used in the prior valuation.

.18.1 When describing the assumptions for methods of settlement for a hypothetical wind-up or solvency valuation, the actuary 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

.19 In reporting the funded status of the pension plan under the scenario regarding the circumstances resulting in the wind-up that maximizes the wind-up liabilities, the actuary would include benefits that are contingent upon the scenario regarding the circumstances resulting in the wind-up or required by law. However, the actuary may disregard:

- Benefits that are contingent upon a factor other than the scenario 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

.19.1 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

.20 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.

.21 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 report would indicate clearly which statement regarding assumptions applies to each of the valuation's purposes.

.22 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.