



Guidance
Solvency or hypothetical wind-up liabilities based on
actual life insurance company annuity quotation

Published: May 2019
Modified: June 2019

All rights reserved.
This document or any portion of it may not be
reproduced or used in any manner whatsoever
without CAPSA's permission.

CAPSA is a national inter-jurisdictional association of pension regulators whose mission is to facilitate an efficient and effective pension regulatory system in Canada. It develops practical solutions to further the coordination and harmonization of pension regulation across Canada. This guidance has been produced in the spirit of this objective.

Typically, for most pension plans, the solvency or hypothetical wind-up liabilities associated with benefits expected to be settled by purchase of annuities would be valued using the interest rate assumption (annuity proxy) determined in accordance with the most recently issued Canadian Institute of Actuaries (CIA) guidance relevant to the report date (CIA Guidance). The mortality assumption to be used is provided in the same CIA Guidance combined with a mortality improvement scale with generally no adjustments for sub- or super-standard mortality being made.

According to paragraph 3240.05.1, 3240.17, and 3330.16 of the [Standards of Practice of the CIA](#), the assumptions used for actual and hypothetical wind-up valuations should reflect single premium annuity rates in respect of benefit entitlements that are assumed to be settled by purchase of annuities, unless the establishment of a replicating portfolio is assumed. Therefore, an actual quotation representing the cost of purchasing annuities for a pension plan from an organization authorized to carry on a life insurance business in Canada might reflect a more accurate estimate of the solvency or hypothetical wind-up liabilities of the plan on the valuation date than if an annuity proxy approach was used.

Although not required to do so, a life insurance company may provide a quotation for all or a portion of the pension benefits that are assumed to be settled through the purchase of an annuity. This guidance has been prepared by CAPSA to outline the expectations with respect to situations where an actuary would like to use the quotation to determine the underlying solvency or hypothetical wind-up liabilities. This guidance is applicable to solvency or hypothetical wind-up valuations and may not be appropriate for actual wind-up valuations.

It is expected that the actuary would consider the quotation in determining the pension plan's liabilities, irrespective of whether the premium amount in the quotation is lower or higher than the solvency or hypothetical wind-up liabilities produced by CIA guidance. Further, the approach taken to establish the solvency or hypothetical wind-up liabilities should be applied in a consistent manner.

The date of quotation should coincide with the valuation date. If the quotation date is not the same as the valuation date, the quotation would be considered valid if the quotation date is within six (6) months before or after the valuation date. If this is the case, the solvency or hypothetical wind-up liabilities should be adjusted using the methodology described under "Adjustment to quotation" at the end of this guidance note. Notwithstanding the guidance provided herein, the use of an annuity quotation may not be acceptable if circumstances have changed significantly between the valuation date

and the quotation date such that the quote is not representative of financial or market conditions existing at the valuation date.

The following information is expected to be provided by the life insurance company and the plan actuary:

1. Information to be included in the quotation by the life insurance company¹

- Date of quotation. An explanation of the factors preventing the date of quotation from being the same as the valuation date should be provided if the dates are different.
- Date of first contemplated annuity quote pension payment for those receiving immediate pensions.
- Premium amount split between immediate and deferred pensions.
- Confirmation that the quotation covers all plan provisions specified in the pension plan request to quote and disclosure of any variations, if applicable.
- Confirmation that all administration fees related to the purchase of annuities and including all services requested at the time of the quotation have been included in the premium amount.
- Any conditions that might prevent the life insurance company from acting on the quotation.
- An authorized signature to support the fact that this is indicative of a bona fide annuity quotation that the pension plan administrator could have acted upon.

2. Information to be included in the actuarial report:

- Name of the life insurance company
- Date of quotation. The date of quotation should coincide with the valuation date. If the quotation date is different than the valuation date, the actuary should include a confirmation that circumstances and conditions are not materially different than what they would have been had the quotation been done at the valuation date.
- Solvency or hypothetical wind-up liabilities related to the quotation. The liabilities related to the quotation should be disclosed separately from other solvency or hypothetical wind-up liabilities.

¹ This information is not required to be included in the actuarial report unless included under Section 2 below “*Information to be included in the actuarial report*”. However, the information should be available upon request by the regulator.

- A summary of the demographic information provided to the life insurance company for solvency or hypothetical wind-up liabilities related to the quotation. This information should include separately for immediate and deferred pensions:
 - number of members
 - average pension
 - average age
 - if a bridge benefit is provided
 - number of members receiving bridge benefits
 - average expected bridge pensions
 - duration of payment
 - if identical pension indexing is not provided to all members, or if different levels/types of indexing are provided, information should be provided separately for each pension indexing variant.
- If the quotation date is within six (6) months before or after the valuation date, a description of the calculation of the adjustment to the quotation to calculate solvency or hypothetical wind-up liabilities as described under “*Adjustment to quotation*” at the end of the guidance note.
- Notional solvency or hypothetical wind-up liabilities that would have resulted if the annuity purchase was based on CIA guidance with no adjustments to the mortality rates.
- The underlying adjustment to the unadjusted mortality table to be used according to the CIA guidance as a percentage of the unadjusted mortality rates that would have to be assumed if the annuity proxy rate had been used to reproduce the solvency or hypothetical wind-up liabilities in the quotation.
- The underlying adjustment to the annuity proxy rate if the unadjusted mortality table to be used according to the CIA guidance had been used to reproduce the solvency or hypothetical wind-up liabilities in the quotation.
- The actuary’s or the plan administrator’s certification that all plan provision information provided to the life insurance company for purposes of the quotation is true and correct.

Adjustment to quotation

If the date of quotation is not the valuation date, the solvency or hypothetical wind-up liabilities to be included in the actuarial report that relate to the annuity quotation should equal **A x B** where:

A is equal to:

- the liabilities that relate to the annuity quotation calculated by the actuary as at the valuation date using the annuity proxy rate based on the CIA Guidance in force at that time with no mortality adjustments

Divided by the

- the liabilities that relate to the annuity quotation calculated by the actuary as at the date of the quotation using the annuity proxy rate based on the CIA Guidance in force at that time with no mortality adjustments

And

B is equal to the single premium amount at the date of the quotation resulting from the annuity quote.