### ONTARIO SUPERIOR COURT OF JUSTICE

BETWEEN:

### DAVID KIDD, ALEXANDER HARVEY, JEAN PAUL MARENTETTE, GARRY C. YIP, LOUIE NUSPL, SUSAN HENDERSON and LIN YEOMANS

**Plaintiffs** 

- and -

### THE CANADA LIFE ASSURANCE COMPANY, A.P. SYMONS, D. ALLEN LONEY and JAMES R. GRANT

**Defendants** 

Proceeding under the Class Proceedings Act, 1992

### MOTION RECORD OF THE PLAINTIFFS [VOLUME II OF II]

(Motion to Vary Judgment, returnable March 18, 2013)

March 11, 2013

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Court File No.05-CV-287556CP

### ONTARIO SUPERIOR COURT OF JUSTICE

**BETWEEN:** 

DAVID KIDD, ALEXANDER HARVEY,
JEAN PAUL MARENTETTE, GARRY C. YIP, LOUIE NUSPL, SUSAN HENDERSON
and LIN YEOMANS

**Plaintiffs** 

-- and --

### THE CANADA LIFE ASSURANCE COMPANY, A.P. SYMONS, D. ALLEN LONEY and JAMES R. GRANT

Defendants

Proceeding under the Class Proceedings Act, 1992

#### AFFIDAVIT OF MARCUS ROBERTSON

- I, MARCUS ROBERTSON, of the Village of Bath, in the Province of Ontario, make oath and say:
- 1. I am a fellow of the Canadian Institute of Actuaries, a former partner in the firm of Robertson, Eadie & Associates and was retained by the Plaintiffs in the within proceeding to provide actuarial advice to the Plaintiffs and Class Counsel. As such, I have personal knowledge of the matters to which I herein depose. Where my knowledge is based on information and belief, I have stated the source of my knowledge and verily believe the information to be true.
- 2. This affidavit is sworn further to my affidavit of September 20, 2012, sworn in support of a motion by the Plaintiffs to prevent certain unilateral action by Canada Life and a request for a mediator to be appointed in order to assist the parties in resolving their differences. I repeat and rely on the contents of that affidavit, which is attached to this affidavit at Exhibit "A."
- 3. I swear this affidavit in support of the Plaintiffs' motion to vary the Judgment in accordance with the terms of the Amended Surplus Sharing Agreement ("ASSA").

- 4. I have acted as the actuarial advisor to Class Counsel and the Plaintiffs throughout the history of this litigation and particularly in the context of the negotiation of the original Surplus Sharing Agreement ("SSA"). I have further assisted the Plaintiffs and Class Counsel with the issues arising as a result of the substantial reduction in the Integration Partial Windup Surplus ("IPWU Surplus") as first reported by the external advisors to Canada Life in February of 2012.
- 5. In particular, I have assisted in the investigation and review by the Plaintiffs of the change in circumstances. In that respect, I recommended that the Plaintiffs and Class Counsel request and review certain documentation from Canada Life and its external actuarial advisors, including the following:
  - a. Report on the Actuarial Valuation for Funding Purposes as at December 31,2008, a true copy of which is attached to this affidavit at Exhibit "B";
  - b. Report on the Estimated Financial Position of the Portion of the Plan Affected by the 2005 Partial Plan Wind Up, dated March 21, 2012, a true copy of which is attached to this affidavit at Exhibit "C";
  - c. Letter from Mercer to Canada Life dated October 9, 2012, a true copy of which is attached to this affidavit at Exhibit "D";
  - d. Report on the Actuarial Valuation for Funding Purposes as at December 31,2011, a true copy of which is attached to this affidavit at Exhibit "E" and
  - e. Report on the Transfer of the Liabilities of the Remaining Portion of the 2005

    Partial Windup to the Ongoing Portion of the Plan, dated October 11, 2012, a

    copy of which is attached hereto at Exhibit "F".
- 6. Although I did not attempt to reproduce the figures and actuarial work undertaken and reported by Mercer, I did review Mercer's work for reasonableness. I applied my professional actuarial assessment and judgment to all of the other prevailing market conditions which are applicable to the decline in the value of the IPWU surplus.

- 7. In my affidavit of September 20, 2012, I gave a thorough description of the reasons for the decline in the IPWU surplus. I repeat and rely on those explanations for the purposes of this affidavit.
- 8. The salient aspects of my review are as follows:
  - a. The most significant reason for the decline in the estimated value of the IPWU Surplus relates to a dramatic increase in the cost of settling the basic pension benefits of the members of the IPWU.
  - b. The effect of the elections made by individual plan members has been to reduce the estimated amount of the IPWU surplus. In particular, more members than were expected elected pension purchases, and annuity purchase prices have been greater than the commuted values which were and are available for transfer.
  - c. There is no particular adverse investment performance at the source of the reduction in the IPWU surplus. In this case, I understand the asset values in respect of the IPWU surplus have not declined and have in fact increased during the relevant time.
  - d. I have observed that the actuaries retained by Canada Life have followed the appropriate Guidance provided to actuaries by the Canadian Institute of Actuaries in respect of the reports prepared for Plan. I can also observe that the appropriate Guidance appears to have been applied in a reasonable and consistent manner.
  - e. Using results presented in three reports prepared by the Plan's actuary (the Report on the Actuarial Valuation for Funding Purposes at December 31, 2008, the Report on the Estimated Financial Position of the Portion of the Plan affected by the 2005 Partial Plan Wind-up as at December 31, 2011 and the Report on the Transfer of the Liabilities of the Remaining Portion of the 2005 Partial Plan

Wind-up to the Ongoing Portion of the Plan), I have prepared brief summaries showing the financial positions of the portion of the Plan attributable to the IPWU Group at various points in time and sources of change in the estimated actuarial surplus over time. The summaries on the following two pages reflect financial positions at January 1, 2006, December 31, 2008, December 31, 2011 and August 31, 2012, as well as sources and amounts of change between these dates.

and the property and the property are to be a second of the property of the pr	January 1, 2005	December 31, 2008	December 31, 2011
Assets			
Market Value of Assets	\$287,025,000	\$300,320,000	\$306,543,000
Increased asset allocation to PWU Group	O	0	5,886,000
In-Transit Benefit Payments	0		(5,888,090)
Crown DC Balances	630,000	579,000	390,000
Termination Expense Provision	0	(12,000,000)	(13,000,000)
Total Assets	\$287,655,000	\$288,899,000	\$293,931,000
Liabilities			
Present Value of Benefits for:			rinnere statut seus spanja jastel i si jastel i signi spanja statut en
Active and Disabled Members	\$22,615,000	\$8.805.000	8
Pensioners and Survivors	68,003,000	87,230,000	115.194.000
Deferred and Inactive Pensioners	93,051,000	120,510,090	169,957,000
Grown DC Members	000'069	279,000	350,000
Total Liabilíties	\$184,299,000	\$217,124,000	\$285,541,600
Funding Excess	\$103,356,000	\$71,775,000	000'065'8\$
Reconciliation of Changes			the same of the sa
Funding Excess (previous valuation)		\$103,356,000	\$71.775.000
Interest on Funding Excess	The state of the s	15,814,000	9,522,000
Employer Contributions paid from Excess		(570,000)	(32,000)
Expected Funding Excess (current valuation)	and the state of t	\$118,600,000	\$81,265,000
Economic Experience:			
Investment Experience		(23,268,000)	8,483,000
Post-retirement Indexation Gains		836,000	9
Demographic Experience:			
Retirement Experience		2,181,000	0
Mortality Experience		23,000	0
Net demographic Experience		2,234,000	1,562,000
Assumption Changes		The state of the s	
Change in Assumed Cost of Annuities		5,733,900	(64,679,000)
Change in Settlement Elections due to ageing		0	(2,621,000)
Effect of Actual Settlement Elections		0	(20,200,000)
Change in Assumption re: Members' Elections		(25,431,000)	0
Increase in Expense Provision		(7,000,000)	(1,000,000)
Increased asset allocation to PWU Group		0	5.886.000
Other Gains and Losses		000'99	(306,000)
Funding Excess (current valuativon)		\$71.775.000	CG 300 000

	December 31, 2011	August 31, 2012
Assets		terreseasion of the first state of the state
Market Value of Assets	\$318,205,000	\$312,707,000
Increased asset allocation to PWU Group	6,557,000	6.866.000
Crown DC Balances	390,000	316,000
Pending expense Reimbursements	(11,800,000)	(14,700,000)
Termination Expense Provision	(13,000,000)	(12,700,000)
Total Assets	\$300,352,000	\$292,489,000
Liabilities		
Present Value of Benefits for:	Additional and the control of the co	
Pensioners and Survivors	\$124,698,000	\$124,121,000
Deferred and Inactive Pensioners	157,742,000	162,206,000
Pnensing Payouts	6,230,000	123,000
Crown DC Members	330,000	316,000
Total Liabilities	\$289,060,000	\$286,766,000
Funding Excess	\$11.300 000	SAGE COLL YOU
	2006	UND(62) (CC
Reconciliation of Changes		Albertaki in seripi sena adap anja nja majaminji firaljinji kapendrovovovovovovovovoje.
Funding Excess (previous valuation)		\$11,292,000
Interest on Liabilities	The state of the s	(\$5,333,000)
Net Return on Assets and Pending Asset Transfer		5,424,000
Change in Estimated Cost of Purchasing Annuities		(5,144,000)
Effect of Actual Settlement Elections		1,321,000
Interest on Pending Expense Reimbursements		(2,177,000)
Decrease in Provision for Future Termination Expenses	The second secon	300,000
Other Gains and Losses		40,000
Funding Excess (current valuatioon)		ČC 755

- 9. What the foregoing tables demonstrate is that the primary reason for the drop in the estimated IPWU Surplus is the dramatic increase in the liabilities associated with the anticipated settlement of benefits through annuity purchases for members who make that election (an increase of approximately \$64.7 million from December 31, 2008 to December 31, 2011).
- 10. As I noted in my Affidavit of September 20, 2012, the principle reason for the increase in these liabilities is the decline in yields on Government of Canada real-return, long-term bonds. For example, at December 31, 2008, this yield was reported at 2.10%, whereas at December 31, 2011, the yield was reported at 0.45%. At August 31, 2012, the yield on real-return, long-term bonds was 0.40%
- 11. The figures in the charts above reflect the decline in interest rates and the corresponding increase in the Plan liabilities. I am satisfied that the Plan actuary has fairly reflected the change in the IPWU Surplus over the period 2006 to 2012.
- The information provided in various reports prepared by Mercer and summarized above relates to lump sum payments determined in accordance with Provincial regulation and estimated prices of annuities expected to be purchased from insurance companies licensed to conduct annuity business in Canada. In Spring 2012, Mercer surveyed insurance companies regarding the anticipated settlement of benefits through annuity purchases and none of the insurance companies approached was prepared to sell the required annuities. In other words, there is no market in Canada for the Canada Life pensions. As a result, Mercer, on behalf of Canada Life, prepared and filed the Report on the Transfer of the Liabilities of the Remaining Portion of the 2005 Partial Plan Wind-up to the Ongoing Portion of the Plan. The IPWU surplus therefore will be based, in part, on estimated rather than actual annuity prices.
- 13. The most recent actuarial information available discloses the following estimates of surpluses (net of termination expenses) related to each of the Partial Plan Wind Ups available for distribution (summarized at page 5 of the October 9, 2012 letter from Mercer to Canada Life, Exhibit "D"):

Total	\$12.8 million
Pelican	\$2.9 million
Adason	\$6.2 million <sup>1</sup>
Indago	\$1.1 million
IPWU	\$2.6 million

#### THE AMENDED SSA

- 14. I have advised the Plaintiffs and Class Counsel throughout the negotiations which resulted in the ASSA. Further, I attended the mediation before Justice Strathy in order to provide support to the Plaintiffs and Class Counsel in the negotiation in those terms. Finally, I was consulted by the Plaintiffs and Class Counsel as the terms of the ASSA were finalized and committed to writing.
- 15. The dramatic reduction in the estimated value of the IPWU surplus is directly related to the decline in yields on Government of Canada real-return, long-term bonds; and this decline is a direct result of economic forces beyond the control of the parties. In the circumstances, giving some Class Members the possibility of a future surplus distribution under the ASSA ameliorates this economic misfortune. Overall, the ASSA presents a better deal than if the SSA were implemented without any amendment.
- 16. I believe the terms of the ASSA represent a fair and reasonable set of terms for Class Members under the prevailing circumstances.
- 17. I swear this affidavit in support of a motion to vary the Judgment in accordance with the ASSA and for no other or improper purpose.

<sup>&</sup>lt;sup>1</sup> Canada Life subsequently notified the Plaintiffs that figure was revised to \$6.1 million.

SWORN BEFORE ME at the	)	
Town of Picton, in the	)	
Province of Ontario	)	
this 8 <sup>th</sup> day of March, 2013.	)	
ANR D.	)	Marcus Robitson
Commissione for Taking Affidavits		Marcus Robertson

Barrister, Solicitor, Notary Public
MATHERS LAW SPETENTIAL
6 TALBOT STREET
SUITE NO. 4
PICTON, ON KOK 2TO

This is Exhibit "A" referred to in the affidavit of Marcus Robertson sworn before me, this 8<sup>th</sup>

A Commissioner for taking affidavits, etc.

SHELAGH MARGARET MATHERS Barrister, Solicitor, Notary Public

WATHERS LAW OFFICE 6 TALBOT STREET SUITE NO. 4 PICTON, ON KOK 2TO

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Court File No. 05-CV-287556CP

### ONTARIO SUPERIOR COURT OF JUSTICE

BETWEEN:

## DAVID KIDD, ALEXANDER HARVEY, JEAN PAUL MARENTETTE, GARRY C. YIP, LOUIE NUSPL, SUSAN HENDERSON and LIN YEOMANS

Plaintiff

- and -

### THE CANADA LIFE ASSURANCE COMPANY, A.P. SYMONS, D. ALLEN LONEY and JAMES R. GRANT

Defendant

### AFFIDAVIT OF MARCUS ROBERTSON (sworn September 20, 2012)

I, MARCUS ROBERTSON, of the Village of Bath, in the Province of Ontario, MAKE OATH AND SAY:

- 1. I am a fellow of the Canadian Institute of Actuaries, a former partner in the firm of Robertson, Eadie and Associates, and was retained by the Plaintiffs in the within proceeding to provide actuarial advice to the Plaintiffs and Class Counsel. As such, I have personal knowledge of the matters to which I depose hereinafter. Where my knowledge is based upon information and belief, I have stated the source of my knowledge, and verily believe the same to be true.
- 2. I have been asked by Class Counsel to swear this Affidavit in support of the motion by the Representative Plaintiffs of the Integration Partial Wind Up Sub-Class for a declaration that a proposed transfer of members of the Integration Partial Wind Up Sub-Class who elected an immediate or deferred annuity to the ongoing portion of the Canada Life Canadian Employees' Pension Plan (the "Plan") by Canada Life constitutes a violation of the Surplus Sharing Agreement between the parties (the "SSA").

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- 3. As I acted as the actuarial advisor to Class Counsel and the Plaintiffs in the context of the negotiation of the SSA, I am familiar with its terms. Class counsel as asked me to describe the annuity purchase process contemplated by the SSA, provide an overview of the reasons for the decline in the Integration Partial Wind Up surplus in this case, and to discuss whether or not the \$1,000 minimum guaranteed payment to members of the Integration Partial Wind Up Sub-Class and eligible members of the Non-Partial Wind-up Sub-Class under the SSA remains capable of implementation, from an actuarial perspective, given the reduction of distributable surplus to approximately \$3.1 million.
- 4. In preparing my affidavit, I have relied upon the following documents prepared by Canada Life's actuaries ("Mercer"), and provided to me by Class Counsel:
  - (a) Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008; and,
  - (b) Letter from Benedict O. Ukonga (Mercer) to Amy Metzger (Canada Life) dated September 12, 2012, regarding the estimate at August 31, 2012 of the financial position on a solvency basis of the portions of the Canada Life Registered Plan affected by the 2005 partial wind-up and the potential Indago, Adason and Pelican partial wind-ups.

#### The Partial Wind Ups Generally and the Proposed Annuity Purchase

- 5. In very general terms, pension surplus represents the excess value of the assets held in a pension fund over the value of the pension plan's liabilities, both calculated in a manner prescribed by regulation. The estimated amount of surplus (if any) in a pension plan at any given time is actuarially determined and depends upon a number of factors. One of the most important factors in determining whether or not a pension plan is in surplus is prevailing interest rates.
- 6. In the context of a partial plan wind-up, the value of a plan's surplus is determined in the context of settling pension plan members' basic pension entitlements. Under the *Pension Benefits Act* (the "PBA"), if a pension plan member has not yet

retired or is not eligible for early retirement, the plan member is required to be provided with the right to elect one of three options for the settlement of his or her basic pension benefits: 1) the transfer of the commuted value of his or her basic pension benefit to a prescribed locked-in retirement vehicle; 2) the purchase of a deferred annuity from an insurance company; or, 3) the transfer of the commuted value of his or her basic pension benefit to another registered pension plan, provided the administrator of the proposed receiving plan consents to the transfer.

- 7. For retired pension plan members in receipt of a pension, basic pension benefits in pay have historically been settled through the purchase of an immediate annuity from an insurance company.
- 8. The pension surplus in respect of a partial wind-up is the amount of assets left once the foregoing basic pension benefits have been settled.
- 9. At the time the Integration Partial Wind Up was declared by Canada Life, a pension plan administrator who declared a partial wind-up was required to transfer the member's basic pension entitlements from the pension plan in accordance with the options described in paragraph 6 and 7 above. These basic requirements were described by the Financial Services Commission of Ontario ("FSCO"), in Policy W100-231, a copy of which is attached hereto as Exhibit "A."
- 10. In accordance with this policy and general regulatory requirements, the terms of the SSA were drafted in accordance with the requirement to provide Plan members affected by the Integration Partial Wind Up with their portability options.
- 11. More recently, FSCO changed its policy with respect to the settlement of basic benefits for pension plan members affected by a partial plan wind-up, as a result of a decision of the Financial Services Tribunal. In this policy, Policy W100-232, dated September 30, 2010, FSCO indicated that:

[a]s a result of the December 2, 2009 Financial Services Tribunal decision respecting an Imperial Oil Limited pension plan, FSCO will no longer require administrators to purchase annuities for members affected by a partial wind up who are entitled to an immediate or a deferred pension. Instead, the administrator may transfer the assets relating to these pension benefits to the on-going portion of the pension plan.

- 12. A copy of Policy W100-232 is attached hereto as Exhibit "B."
- 13. It is notable that Policy W100-232 pre-dates the execution of the SSA, which was made effective as of September 1, 2011. While the parties could theoretically have negotiated a provision in the SSA that members of the Integration Partial Wind Up would have their benefits transferred to the ongoing portion of the Plan, they did not do so. Instead, the application provision of the SSA, section 7(e), provided the following:

The Parties agree that PWU Group Members shall be given their portability rights under section 73(2) of the Pension Benefits Act (Ontario) or under a similar provision in the pension standards legislation applicable to them. Canada Life will arrange for an annuity to be purchased for any PWU Group Member who elects to receive (or is deemed to have elected) a deferred or immediate pension, and the pension provided via such annuity, including indexation (if any), shall be determined in accordance with the terms of the Plan. Any annuities purchased for pensioners or other Plan or New Plan members or former members in conjunction with the Partial Wind Ups shall be insured annuities, and, subject to such reasonable administrative limits as may be imposed by Canada Life, annuities shall only be purchased for an amount that on the date of purchase is within the Assuris limits. The Parties agree that any annuities will be purchased following a competitive bidding process, which may include as potential annuity providers Canada Life and/or any of its affiliates.

- 14. Based upon the information that was provided to Class Counsel, I understand that Canada Life was unable to obtain any quotes from insurance companies in respect of the required annuity purchase.
- 15. From the standpoint of individuals who elected or are deemed to have elected the purchase of a deferred or immediate annuity, there would likely be little impact on the member in terms of the actual value of the pension received during retirement, whether the pension was paid from the ongoing Plan, or by an insurance company through an

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annuity contract. The main differences relate to the nature of the risk and benefit security associated with a particular form of basic benefit settlement, as:

- (a) A pension paid from the ongoing Plan relies upon the, *inter alia*, the value of the assets in the underlying Plan fund, and the solvency of the Plan sponsor, to guarantee the benefit; whereas,
- (b) A pension paid through an annuity contract is secured through the contract with the insurance company providing the annuity, and is, depending upon the amount of the monthly pension being paid through the annuity, guaranteed by an insurance industry organization called Assuris.

### Reasons for the Decline in the Integration Partial Wind Up Surplus

- 16. The most significant reason for the decline in the Integration Partial Wind Up Surplus relates to a dramatic increase in the cost of settling the basic pension benefits of the members of the Integration Partial Wind Up.
- 17. With any pension plan wind up (full or partial), the estimated surplus at the effective date of the wind-up and the actual surplus existing at the completion of the wind up can differ, for several reasons, including 1) data changes (membership data must be confirmed as part of the wind up process), 2) member elections (as noted above, some members have the option of accepting lump sum settlements of their entitlements or having their entitlement purchased from an insurance company, 3) investment returns that are different from the returns assumed at the effective date of the wind up, and 4) differences between the estimated and actual costs of purchasing annuities.
- 18. In this case, the partial wind up was declared by Canada Life effective June 30, 2005 and basic pension benefits of employees affected by this partial wind-up have not yet been settled.
- 19. In various correspondences and reports prepared by the Plan's actuary since the effective date of the partial wind-up, the actuary has identified changes in the estimated

surplus and the sources of those changes. I have not attempted to aggregate the figures presented by the Plan's actuary, but instead provide general comments regarding the changes in estimated surplus over time.

- 20. The changes in estimated surplus that were due to changes in membership data were not material.
- 21. The effect of individual member elections has been to reduce the estimated amount of surplus. More members than were expected elected pension purchases and annuity purchase prices have been greater than commuted values available for transfer.
- 22. Regarding investment performance, it is my understanding that Canada Life took steps to partially "immunize" the assets associated with the Integration Partial Wind Up, by moving a significant portion of the assets from equity investments to fixed income investments.
- 23. In this case, the asset values in respect of the Integration Partial Wind Up have not declined, and in fact, the value of the underlying assets has somewhat increased.
- 24. There have been, however, significant increases since December 31, 2008 in liabilities related to affected members who elected purchased pensions, and these increases are largely related to the discount rates used by the Plan's actuary. In the following paragraph, I discuss guidance provide to actuaries by the Canadian Institute of Actuaries ("CIA"). For purposes of this document, I limited my comments to guidance related to valuing fully indexed pensions. Similar comments would apply to the valuation of non-indexed pensions, although the discount rates were necessarily different.
- 25. The CIA has, for several years, provided guidance regarding actuarial bases (discount rates and mortality assumptions) to be used when estimating the cost of purchasing annuities for actuarial valuation purposes. In my experience, actuaries generally follow the CIA's guidance, unless they can support the use of a different basis. For reports on this Plan, the actuary has followed CIA's guidance consistently.

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- 26. For ongoing pension plans, actuaries typically use the guidance when performing solvency and hypothetical wind-up valuations. For pension plans that are being wound up, whether in whole or in part, actuaries use the guidance to estimate the cost of purchasing annuities from insurance companies for members for whom pensions will be purchased in order to complete the full or partial wind-up. The actual cost of the pensions being purchased is determined by the insurance companies that sell annuities.
- 27. Of the two assumptions covered by the CIA's guidance, the discount rate assumption has the greatest impact. I have not estimated the effect of changes in the discount rates on the estimated purchase prices of pensions and, consequently, the estimated surplus on the partial wind-up of the Plan, but note that these effects have been described in various correspondences and reports prepared by Mercer over the past several years. While I didn't confirm that Mercer's estimates were accurate, they seemed reasonable, given the discount rates that the actuary was using.
- 28. For actuarial valuations with effective dates between January 1, 2005 and December 31, 2007, the CIA offered no guidance to actuaries with respect to pensions that are indexed in relation to changes in the Consumer Price Index ("CPI"), indicating that it (the CIA) did not have sufficient information to provide "any direct guidance on the appropriate basis to be used to value such annuities."
- 29. For actuarial valuations with effective dates on or after January 1, 2008, the CIA has consistently recommended, for plans the size of the Plan, that actuaries use the yield on Government of Canada real-return long-term bonds for pensions that are fully indexed to changes in the CPI. Although indexed pensions under this Plan are not necessarily fully indexed to changes in the CPI, the Plan's actuary has made that assumption and I agree with his assumption.
- 30. The following table illustrates the yields on Government of Canada real-return long-term bonds (CANSIM series V39057) at various dates since December 31, 2007.

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Date	Yield on GoC
	Real-Return Long-Term Bonds
December 31, 2007	1.91%
December 31, 2008	2.10%
December 31, 2009	1.53%
December 31, 2010	1.11%
December 31, 2011	0.45%
June 30, 2012	0.44%
August 31, 2012	0.40%
September 18, 2012	0.39%

31. These rates are measured and reported on a daily basis. In 2012, the yields have ranged from 0.30% (June 1<sup>st</sup> and June 4<sup>th</sup>) and 0.62% (March 19<sup>th</sup>).

### Minimum Guaranteed Benefits Under the SSA

- 32. Under the terms of the SSA, the Integration Partial Wind Up surplus is to be divided as follows:
  - (a) 57.22% to members of the Integration Partial Wind Up group;
  - (b) 12.44% to eligible inactive members of the Non-Partial Wind Up group; and,
  - (c) 30.34% to Canada Life.
- 33. Utilizing the most recent estimate provided by Mercer of the Integration Partial Wind Up surplus, the allocation of surplus as between these three groups is approximately as follows:
  - (a) Integration Partial Wind Up Group: \$1.77 million;
  - (b) Eligible inactive Non Partial Wind Up Group: \$0.39 million; and,
  - (c) Canada Life: \$0.94 million.

- 34. The SSA provides certain minimum guaranteed surplus payments to certain members of the Class. These are set out at sections 7(g) and 8(d) of the SSA, which provide as follows:
  - 7(g) The minimum surplus allocation to each Eligible PWU Group Member shall be \$1,000.
  - The Inactive Eligible Non-PWU Group Surplus 8(d) Allocation shall be allocated under the Plan among Inactive Eligible Non-PWU Group Members (or their surviving spouse, beneficiary, or estate described in paragraph 8(f) below, if applicable) pro rata to the wind up liabilities of such Inactive Eligible Non-PWU Group Members as of June 30, 2005 (or the date immediately preceding death or cash out, for those individuals whose liabilities under the Plan were reduced or paid out due to death or cash out between April 12, 2005 and June 30, 2005), subject to a minimum allocation of \$1,000 having regard to applicable regulatory requirements.
- 35. Based upon the most recent report filed with FSCO by Canada Life, as at December 31, 2008, it was reported that there were 2,146 individuals of the Integration Partial Wind Up Group, and 1,560 individuals in the eligible inactive Non Partial Wind Up Group.
- 36. Given the available surplus, as estimated at August 31, 2012 by Mercer, the surplus available for distribution would be insufficient to meet the minimum payments guaranteed by sections 7(g) and 8(d) of the SSA, as:
  - (a) \$1.77 million, distributed pro rata amongst the members of the Integration Partial Wind Up Group, only nets individual surplus allocations of approximately \$825.00 per group member; and,
  - (b) \$0.39 million, distributed pro rata amongst the members of the eligible inactive Non Partial Wind Up Group, only nets individual surplus allocations of approximately \$250.00 per group member.

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37. I make this Affidavit in good faith and for no other or improper purpose.

SWORN BEFORE ME at the Town of Picton, in the Province of Ontario, on September 2012.

Commissioner for Taking Affidavits

Marcus Robertson

Kenneth Gregory Meniove Barrister, Solicitor & Notary Public Province of Ontario This is Exhibit "A" referred to in the affidavit of Marcus Robertson sworn before me, this 20<sup>th</sup> day of September, 2012

A Commissioner for taking affidavits, etc.

Kenneth Gregory Menlove Barrister, Solicitor & Notary Public Province of Ontario Financial Services Commission of Ontario Commission des services financiers de l'Ontario



SECTION:

Wind Up

INDEX NO.:

W100-231

TITLE:

Distribution of Benefits on Partial Wind Up

- PBA s. 72(1) and 73(2) - Regulation 909 s. 28(2)

APPROVED BY:

Superintendent of Financial Services

PUBLISHED:

FSCO website (March 2007)

**EFFECTIVE DATE:** 

March 30, 2007 [No longer applicable - replaced by W100-232 - September 2010]

REPLACES:

W100-230

This policy replaces W100-230 ("Individual Statement at Wind Up") as of the effective date of this policy.

Note: Where this policy conflicts with the Financial Services Commission of Ontario Act, 1997, S.O. 1997, c. 28 (FSCO Act), Pension Benefits Act, R.S.O. 1990, c. P.8 (PBA) or Regulation 909, R.R.O. 1990 (Regulation), the FSCO Act, PBA or Regulation govern.

This policy addresses the distribution of the benefits provided under the terms of the pension plan on partial wind up. In this policy, the term "benefits" does not include any benefits arising from the distribution of surplus on partial wind up. On full wind up of a pension plan, all assets of the pension plan must be distributed. Similarly, on partial wind up, the administrator must distribute all assets in the wound up portion of the pension plan.

The distribution of surplus on partial wind up is addressed in policies S900-901 ("Allocation of Surplus to Members, Former Members and Other Persons on Wind Up") and S900-910 ("Distribution of Surplus to Employer on Partial Wind Up").

#### **Options for Receipt of Benefits**

On the partial wind up of a pension plan, several options are provided under the PBA for the distribution of benefits to members, former members and other persons who are entitled to receive benefits from the pension plan as a result of partial wind up.

Active members included in the partial wind up may elect to:

- Transfer the commuted value of the pension benefit, as provided in section 73(2) of the PBA;
- Receive the lump sum cash payment under any of sections 39(4), 50, 63(2), 63(3) and 63(4) of the PBA, subject to the terms of the pension plan; or
- Receive an immediate or deferred pension.

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Former members and other persons who are included in the partial wind up and are not in receipt of pension payments on the partial wind up date continue to be entitled to a deferred pension commencing at the normal retirement date, or such earlier date as provided under the terms of the pension plan, PBA and Regulation. In addition, section 73(2) of the PBA provides that such persons are entitled to the transfer rights under section 42(1) and that section 42(3) does not apply to limit these transfer rights.

Generally, all persons included in the partial wind up who are in receipt of a pension will continue to receive their pension on the same basis as before the partial wind up. The pension amount may be adjusted at the completion of the partial wind up process, such as where the terms of a multi-employer pension plan permit the reduction of benefits, or where an employer declares bankruptcy and the partial windup has not been fully funded.

If a member who is entitled to make an election does not do so within the prescribed time, or such longer period as the administrator may allow, the member shall be deemed to have elected a deferred or immediate pension.

All immediate and deferred pensions in the wound up portion of the pension plan must be provided through the purchase of life annuities from an insurance company licensed in Canada to provide such annuities.

### **Provision of Individual Statements**

The administrator of the pension plan must prepare individual statements, as required by section 72(1) of the PBA. The statements must set out the entitlements and the options available to each member, former member and other person who is entitled to receive benefits or a refund from the pension plan as a result of the partial wind up.

The statements required under section 72(1) of the PBA must contain the information specified in section 28(2) of the Regulation. In respect of former members and other persons who are currently in receipt of or will be receiving a pension, the statement should include full information on the insurance company from which the annuity has been or will be purchased, as well as the name of a contact person there. Where this contact information is not available at the time that the statement is issued, the statement should indicate when and how the information will be provided.

The statements required under section 72(1) of the PBA must be given to the persons who are entitled to receive payment from the pension plan as a result of the partial wind up within 60 days after the administrator receives notice that the Superintendent of Financial Services (Superintendent) has approved the wind up report. Where the Superintendent has approved payment of benefits under section 70(3) of the PBA, the statements must be given to the persons affected by the approval within 60 days after the administrator receives notice of the section 70(3) approval.

#### Distribution of Benefits

Once the Superintendent has approved the wind up report, the distribution of benefits by transfer, cash payment or annuity purchase, as elected by all persons entitled to benefit payments under the wound up portion of the pension plan, should proceed as quickly as possible.

Where the wound up portion of the pension plan is in a deficit position that requires additional funding under section 75 of the PBA, sections 29(7) and 29(8) of the Regulation may place limits on the distribution of benefits from the pension plan. See also policy W100-440 ("Restrictions on Payments in Deficit Situations").

Where the wound up portion of the pension plan is in a surplus position, provision of benefits must be completed before or concurrently with the distribution of surplus from the wound up portion of the pension plan.

The split, either notional or actual, between the wound up and on-going portions of the pension plan must be maintained until all assets of the wound up portion are distributed. When that asset distribution is completed, only the on-going portion of the pension plan will remain.

This is Exhibit "B" referred to in the affidavit of Marcus Robertson sworn before me, this 20<sup>th</sup> day of September, 2012

A Commissioner for taking affidavits, etc.

Kenneth Gregory Menlove Barrister, Solicitor & Notary Public Province of Ontario Financial Services Commission of Ontario Commission des services financiers de l'Ontario



SECTION:

Wind Up

INDEX NO.:

W100-232

TITLE:

Distribution of Benefits on Partial Wind Up

- PBA ss. 72(1) and 73(2) - Regulation 909 s. 28(2)

APPROVED BY:

Superintendent of Financial Services

PUBLISHED:

FSCO website (September 2010)

EFFECTIVE DATE:

September 30, 2010

REPLACES:

W100-231

This policy replaces W100-231 ("Distribution of Benefits on Partial Wind Up") as of the effective date of this policy.

Note: Where this policy conflicts with the Financial Services Commission of Ontario Act, 1997, S.O. 1997, c. 28 (FSCO Act), Pension Benefits Act, R.S.O. 1990, c. P.8 (PBA) or Regulation 909, R.R.O. 1990 (Regulation), the FSCO Act, PBA or Regulation govern.

Note: The electronic version of this policy, including direct access to all linked references, is available on FSCO's website at <a href="https://www.fsco.gov.on.ca">www.fsco.gov.on.ca</a>. All pension policies can be accessed from the Pensions section of the website through the Pension Policies link.

This policy addresses the distribution of the benefits provided under the terms of the pension plan on partial wind up. In this policy, the term "benefits" does not include any benefits arising from the distribution of surplus on partial wind up. On full wind up of a pension plan, all assets of the pension plan must be distributed. Similarly, on partial wind up, the administrator must distribute all assets related to the wound up portion of the pension plan.

The distribution of surplus on partial wind up is addressed in policies <u>S900-901</u> (Allocation of Surplus to Members, Former Members and Other Persons on Wind Up) and <u>S900-910</u> (Distribution of Surplus to Employer on Partial Wind <u>Up</u>).

#### Options for Receipt of Benefits

On the partial wind up of a pension plan, several options are provided under the PBA for the distribution of benefits to members, former members and other persons who are entitled to receive benefits from the pension plan as a result of partial wind up.

Index No.: W100-232 / Page 2 of 3

Active members included in the partial wind up may elect to:

- Transfer the commuted value of the pension benefit, as provided in section 73(2) of the PBA. The transfer rights under section 42(1) entitle a member or former member with a deferred pension under the pension plan to transfer the commuted value of the deferred pension:
  - to a pension fund related to another pension plan, if the administrator of the other pension plan agrees to accept it;
  - b) into a prescribed retirement savings arrangement; or
  - c) for the purchase of a life annuity for the member or former member, through a life insurance company licensed in Canada; or
- Receive an immediate or deferred pension.

In addition, active members who are eligible will receive lump sum cash payments:

- Provided for under sections 39(4), 63(3) and 63(4) of the PBA; or
- Provided for under sections 50 and 63(2) of the PBA, if the terms of the pension plan provides for it.

Former members and other persons who are included in the partial wind up and are not in receipt of pension payments on the partial wind up date continue to be entitled to a deferred pension commencing at the normal retirement date, or such earlier date as provided under the terms of the pension plan, PBA and Regulation. In addition, section 73(2) of the PBA provides that persons entitled to a deferred pension but not in receipt of a pension are entitled to the transfer rights under section 42(1) and that section 42(3) does not apply to limit these transfer rights.

Members already in receipt of a pension and included in the partial wind up will continue to receive their pension from the plan if the administrator decides not to purchase annuities in respect of their benefits. If the administrator decides to purchase annuities for these individuals, their pension will be paid from the applicable insurance company.

If a member who is entitled to make an election does not do so within the prescribed time, or such longer period as the administrator may allow, the member shall be deemed to have elected a deferred or, if eligible, an immediate pension.

As a result of the December 2, 2009 Financial Services Tribunal decision respecting an Imperial Oil Limited pension plan, FSCO will no longer require administrators to purchase annuities for members affected by a partial wind up who are entitled to an immediate or a deferred pension. Instead, the administrator may transfer the assets relating to these pension benefits to the on-going portion of the pension plan. For more information regarding this, see policy W100-233 – (Distribution of Benefits on Partial Wind Up Where Immediate or Deferred Pensions are Not Purchased).

### **Provision of Individual Statements**

The administrator of the pension plan must prepare individual statements, as required by section 72(1) of the PBA. The statements must set out the information specified in section 28(2) of the Regulation including the options available to each member, former member and other person who is entitled to receive benefits or a refund from the pension plan as a result of the partial wind up.

In respect of former members and other persons for whom the administrator has purchased or intends to purchase an annuity from an insurance company licensed in Canada, the statement should also include information (name and address) of the insurance company from which the annuity has been or will be purchased, as well as the name and contact information of a contact person there. Where this contact information is not available at the time that the statement is issued, the statement should indicate when and how the information will be provided.

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Where the plan administrator chooses **not** to purchase annuities for the immediate and deferred pensions relating to the partial wind up, additional information and communication as described in policy W100-233 must be provided to members affected by the partial wind up.

The statements required under section 72(1) of the PBA must be given to the persons who are entitled to receive payment from the pension plan as a result of the partial wind up within 60 days after the administrator receives notice that the Superintendent of Financial Services (Superintendent) has approved the wind up report. Where the Superintendent has approved payment of benefits under section 70(3) of the PBA, the statements must be given to the persons affected by the approval within 60 days after the administrator receives notice of the section 70(3) approval.

#### Distribution of Benefits

The timing of distribution of benefits relating to a partial wind up depends on whether the partial wind up is in a surplus or a deficit position.

Where the partial wind up is fully funded and the Superintendent has approved the partial wind up report, the plan administrator must make payment in accordance with the elections or deemed elections within 60 days after the later of the day in which the administrator receives the applicable person's election or deemed election; and the day on which the administrator receives notice that the Superintendent has approved the report. The provision of benefits must be completed before or concurrently with the distribution of any surplus remaining in the wound up portion of the pension plan.

Where the wound up portion of the pension plan is in a deficit position that requires additional funding under section 75 of the PBA, sections 29(7) and 29(8) of the Regulation may place limits on the distribution of benefits from the pension plan. For example, section 29(8) provides that a life annuity purchase cannot occur until the required funding under section 75 of the PBA has been made. Similarly, the transfer of the assets and liabilities in respect of the immediate and deferred pensions to the on-going portion of the pension plan can only take place once the requirements of section 75 have been met.

Where the plan administrator has chosen **not** to purchase life annuities for the immediate and deferred pensions of the wound up portion of the pension plan, the transfer of the assets and liabilities in respect of these pensions to the on-going portion of the pension plan shall proceed once all section 75 funding requirements have been met. See also policies <u>W100-102</u> (Filing Requirements and Procedure on Full or Partial Wind Up of a Pension Plan) and <u>W100-440</u> (Restrictions on Payments in Deficit Situations).

The split, either notional or actual, between the wound up and on-going portions of the pension plan must be maintained until all assets of the wound up portion are distributed.

This is Exhibit "B" referred to in the affidavit of Marcus Robertson sworn before me, this 8<sup>th</sup> of March, 2013

A Commissioner for taking affidavits, etc.

SHELAGH MARGARET MATHERS Barrister, Solicitor, Notary Public

MATHERS LAW OFFICE 6 TALBOT STREET SUITE NO. 4 PICTON, ON KOK 2TO September 2009

### The Canada Life Canadian Employees Pension Plan

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

### **MERCER**

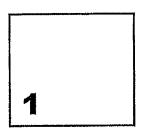


Financial Services Commission of Ontario Registration Number: 0354563 Canada Revenue Agency Registration Number: 0354563

Consulting, Outsourcing, Investments.

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Note: The Plan was partially wound up effective June 30, 2005. The results summarized below as at January 1, 2006 and December 31, 2008 represent the combined retained and partial wind-up portions of the Plan. Details about the breakdown of assets, liabilities, and current service costs between these two groups, as well as a description of how liabilities and current service costs were calculated, are outlined in the body of the report.

### **Summary of Results**

Going-concern Financial Position	31.12.2008	1.1.2006
Market value of assets	\$722,323,000	\$795,710,000
Actuarial liability	\$501,294,000	\$500,034,000
Funding excess (Unfunded liability)	\$221,029,000	\$295,676,000
Solvency Financial Position	31.12.2008	1.1.2006
Solvency assets	\$720,323,000	\$793,710,000
Solvency liability	\$554,696,000	\$509,440,000
Solvency excess (deficiency)	\$165,627,000	\$284,270,000
Transfer ratio	1.32	1.57
Wind-up Financial Position	31.12.2008	
Market value of assets (net of termination expenses)	\$717,323,000	
Total wind-up liability	\$554,696,000	_
Wind-up excess (deficiency)	\$162,627,000	

### The Canada Life Canadian Employees Pension Plan

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

Funding Requirements (annualized)	2009	2006
Total current service cost	\$8,715,000	\$10,640,000
Estimated members' required contributions	\$1,475,000	\$1,765,000
Estimated employer's current service cost	\$7,240,000	\$8,875,000
Estimated members' pensionable earnings	\$69,766,000	\$76,411,000
Employer's current service cost as a percentage of members' pensionable earnings	10.4%	11.6%
Minimum special payments	\$0	\$0
Estimated minimum employer contribution for year	\$0	\$0
Estimated maximum employer contribution for year	\$0	\$0

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### Introduction

# Report on the Actuarial Valuation as at December 31, 2008

#### To The Canada Life Assurance Company

At the request of the Canada Life Assurance Company, (the "Company"), we have conducted an actuarial valuation of The Canada Life Canadian Employees Pension Plan (the "Plan") as at December 31, 2008. We are pleased to present the results of the valuation.

The purpose of this valuation is to determine:

- the funded status of the Plan as at December 31, 2008 on going-concern, solvency and wind-up bases, and
- the minimum and maximum funding requirements from 2009.

The information contained in this report was prepared for the internal use of the Company and for filing with the Financial Services Commission of Ontario and with the Canada Revenue Agency, in connection with our actuarial valuation of the plan. This report is not intended or suitable for any other purpose.

This report will be filed with the Superintendent of Financial Services for the Financial Services Commission of Ontario (the "Superintendent") and with the Canada Revenue Agency.

The next actuarial valuation of the plan will be required as at a date not later than December 31, 2011 or as at the date of an earlier amendment to the plan, in accordance with the minimum requirements of the *Ontario Pension Benefits Act*.

There is a funding excess of \$228,029,000 and no special payments are required for solvency purposes as at December 31, 2008, on the basis of the assumptions and methods described in this report. Thus, the employer need not contribute to the plan until after the entire funding excess has been applied towards the employer's current service cost.

Once the entire funding excess has been so applied, monthly employer contributions must resume. We recommend that such employer contributions be determined as 10.4% of members' pensionable earnings.

Since the funding excess for the retained group exceeds the maximum allowed under Section 147.2 of the *Income Tax Act*, no contribution to the plan by Canada Life is permitted before the funding excess has been reduced to less than \$28,331,200, or else the plan's registered status may be revoked.

### June 30, 2005 Partial Wind-Up

A partial wind-up was declared by Canada Life as a result of the workforce integration measures taken after the acquisition of the Company by The Great-West Life Assurance Company ("Great-West Life") on July 10, 2003. All members of the plan whose employment with Canada Life terminated in conjunction with the integration, other than those members of the plan who were employed in the province of Québec, have been included in the partial wind-up. This includes members whose employment was terminated during the integration period by Canada Life, as well as those who resigned or retired voluntarily. It also includes those members who were informed during the integration period that their employment would be terminated as a result of the integration and whose employment was, or will be, subsequently terminated after June 30, 2005. The integration period started effective July 10, 2003, the date Canada Life was acquired by Great-West Life, and ended on June 30, 2005 (the "Partial Wind-Up Date").

On September 4, 2003, the Superintendent approved Canada Life's request to commence monthly pension payments from the pension fund to those members and former members of the plan who are eligible for, and who elect to receive, an immediate pension. In the absence of the Superintendent's consent, the option for members to transfer funds from the pension fund, will not be provided until after the partial wind-up report is approved.

A report on the partial wind-up of the plan as at June 30, 2005 was filed with the Superintendent in March, 2006.

This report shows the assets and liabilities separately for those Plan members who were affected by the June 30, 2005 partial wind-up (the "partial wind-up" group) and those members who were not affected by the June 30, 2005 partial wind-up (the "retained" group).

Actuarial Assumptions and Methodology

For the retained group, we have used the same going-concern valuation assumptions and methods as were used for the valuation as at January 1, 2006, except for the following changes:

Assumption	31.12.2008 Valuation	1.1.2006 Valuation
Investment Return	5.8%	5.25%
Inflation	1.3%	2.5%
Productivity Improvement	1.0%	0.5%
Increase in YMPE and maximum pension	2.3%	3.0%
Starting YMPE	\$46,300 (2009)	\$42,100 (2006)
Termination Scale	Revised, see Appendix B	See Appendix B
Merit Scale	Revised, see Appendix B	See Appendix B
Mortality	UP 94 Generational	UP 94 projected to 2015

We have made the above changes to the going concern actuarial assumptions to reflect anticipated future experience and the general long term economic outlook and market conditions in effect at December 31, 2008. Expected future investment returns under the plan were developed based on the plan's target asset mix in the statement of investment policies and objectives. These changes have resulted in a decrease in the actuarial liabilities at December 31, 2008 of \$59,965,000 and a decrease in the 2009 employer current service cost, expressed as a percentage of members' pensionable earnings, of 3.7%.

In addition, for the partial wind-up group, we have updated the assumptions used to estimate the cost of settling benefits through annuity purchases to reflect the market conditions in effect at December 31, 2008 and refined the assumption on member election between lump sum transfers or the purchase of a deferred or immediate annuity. These changes have resulted in an increase of \$19,693,000 in the actuarial liability at December 31, 2008.

The solvency and wind-up assumptions have been updated to reflect market conditions at the valuation date.

The assumptions used for purposes of this valuation are described in Appendix B. All assumptions made for the purposes of the valuation were reasonable at the time the valuation was prepared.

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

A new Canadian Institute of Actuaries Standard of Practice for determining pension commuted values ("CIA Standard") became effective on April 1, 2009. The new CIA Standard changed the assumptions to be used to value the solvency and wind-up liabilities for benefits assumed to be settled through a lump sum transfer. As permitted by the regulations to the Ontario Pension Benefits Act, the financial impact of the new CIA Standard has been reflected in this actuarial valuation.

This report has been prepared on the assumption that all of the assets in the pension fund are available to meet all of the claims on the pension plan. We are not in a position to assess the impact that the Ontario Court of Appeal's decision in *Aegon Canada Inc.* and *Transamerica Life Canada versus ING Canada Inc.* or similar decisions in other jurisdictions might have on the validity of this assumption.

After checking with representatives of Canada Life Assurance Company, to the best of our knowledge there have been no events subsequent to the valuation date which, in our opinion, would have a material impact on the results of the valuation.

On July 29, 2004, the Supreme Court of Canada dismissed the appeal in Monsanto Canada Inc. versus Superintendent of Financial Services ("Monsanto"), thereby upholding the requirement to distribute surplus on partial plan wind-ups under *The Pension Benefits Act (Ontario)*. The decision has retroactive application. With the exception of the June 30, 2005 partial wind-up, we are unaware of any partial plan wind-up having been declared in respect of the plan where *Monsanto* may apply. In preparing this actuarial valuation, we have assumed that all plan assets are available to cover the plan liabilities presented in this report. The subsequent declaration of a partial wind-up of the plan where *Monsanto* may apply in respect of a past event, or disclosure of an existing past partial wind-up, could cause an additional claim on plan assets, the consequences of which would be addressed in a subsequent report. We note the discretionary nature of the power of the regulatory authorities to declare partial wind-ups and the lack of clarity with respect to the retroactive scope of that power. We are making no representation as to whether the regulatory authorities might declare a partial wind-up in respect of other events in the plan's history.

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

#### The Canada Life Canadian Employees Pension Plan

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada. It has also been prepared in accordance with the funding and solvency standards set by the *Ontario Pension Benefits Act*.

Respectfully submitted,

Hrvoje Lakota

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

Vineet Kochhar

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

September 24, 2009

Date

September 24, 2009

Date

### The Canada Life Canadian Employees Pension Plan

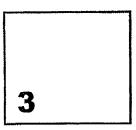
Registration number with the Financial Services Commission of Ontario and with the Canada Revenue Agency: 0354563

This valuation report may not be relied upon for any purpose other than those explicitly noted above or by any party other than The Canada Life Assurance Company, the Financial Services Commission of Ontario or the Canada Revenue Agency. Mercer is not responsible for the consequences of any other use. A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future.

Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the amount of plan expenses, and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

To prepare this report, actuarial assumptions, as described in Appendix B, are used to select a single scenario from the range of possibilities. The results of that single scenario are included in this report. However, the future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different. Actuarial assumptions may also be changed from one valuation to the next because of changes in regulatory requirements, plan experience, changes in expectations about the future and other factors.

Because actual plan experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit-related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a valuation report or reports.



### **Financial Position of the Plan**

### Valuation Results - Going-concern Basis

When conducting a valuation on a going-concern basis, we determine the relationship between the respective values of assets and accumulated benefits, assuming the plan will be maintained indefinitely.

#### Financial Position

The results of the valuation as at December 31, 2008, in comparison with those of the previous valuation as at January 1, 2006, are summarized as follows:

Going-concern Basis (Retained Group)

	31.12.2008	1.1.2006
Assets		
Market value of assets	\$432,565,000	\$506,970,000
Crown DC balances	\$859,000	\$1,085,000
Total assets	\$433,424,000	\$508,055,000
Actuarial liability		
Present value of accrued benefits for:		
<ul> <li>active and disabled members</li> </ul>	\$105,602,000	\$101,434,000
<ul><li>pensioners and survivors</li></ul>	\$145,851,000	\$176,017,000
<ul> <li>deferred and inactive pensioners</li> </ul>	\$31,283,000	\$37,199,000
■ pending payouts <sup>1</sup>	\$575,000	\$0
<ul> <li>Crown DC members</li> </ul>	\$859,000	\$1,085,000
Total liability	\$284,170,000	\$315,735,000
Funding excess	\$149,254,000	\$192,320,000

<sup>&</sup>lt;sup>1</sup> In the January 1, 2006 valuation, pending payments of \$697,000 were deducted from Plan assets. In the December 31, 2008 valuation, they are being shown in the liability section.

Going-concern Basis (Partial Wind-Up Group)

	31.12.2008	1.1.2006
Assets		
Market value of assets <sup>2</sup>	\$288,320,000	\$287,025,000
Crown DC balances	\$579,000	\$630,000
Total assets	\$288,899,000	\$287,655,000
Actuarial liability		
Present value of accrued benefits for:		
<ul> <li>active and disabled members</li> </ul>	\$8,805,000	\$22,615,000
<ul> <li>pensioners and survivors</li> </ul>	\$87,230,000	\$68,003,000
<ul> <li>deferred and inactive pensioners</li> </ul>	\$120,510,000	\$93,051,000
■ Crown DC members	\$579,000	\$630,000
Total llability	\$217,124,000	\$184,299,000
Funding excess	\$71,775,000	\$103,356,000

### Going-concern Basis (Total)

	31.12.2008	1.1.2006
Assets		
Market value of assets <sup>2</sup>	\$720,885,000	\$793,995,000
Crown DC balances	\$1,438,000	\$1,715,000
Total assets	\$722,323,000	\$795,710,000
Actuarial liability		
Present value of accrued benefits for:		
<ul> <li>active and disabled members</li> </ul>	\$114,407,000	\$124,049,000
<ul> <li>pensioners and survivors</li> </ul>	\$233,081,000	\$244,020,000
<ul> <li>deferred and inactive pensioners</li> </ul>	\$151,793,000	\$130,250,000
<ul> <li>pending payouts<sup>1</sup></li> </ul>	\$575,000	\$0
<ul> <li>Crown DC members</li> </ul>	\$1,438,000	\$1,715,000
Total liability	\$501,294,000	\$500,034,000
Funding excess	\$221,029,000	\$295,676,000

<sup>&</sup>lt;sup>2</sup> Net of a \$12 million provision for wind-up expenses.

#### Reconciliation of Financial Position

A reconciliation of the financial position of the retained group (i.e. a funding excess of \$149,254,000 as at December 31, 2008 compared to a funding excess of \$192,320,000 as at January 1, 2006) and the financial position of the partial wind-up portion of the plan (i.e. a funding excess of \$71,775,000 as at December 31, 2008 compared to a funding excess of \$103,356,000 as at January 1, 2006) is summarized as follows:

#### Reconciliation of Financial Position

	Retained	Partial Wind-Up	
	Group	Group	
Funding excess as at 01.01.2006	\$192,320,000	\$103,356,000	
Interest on funding excess to 31.12.2008	\$31,908,000	\$15,814,000	
Employer's contributions drawn from previous funding excess	(\$29,908,000)	(\$570,000)	
Expected funding excess at 31.12.2008	\$194,320,000	\$118,600,000	
Economic experience:			
■ investment experience	(\$107,161,000)	(\$23,268,000)	
<ul> <li>salary increases lower than expected</li> </ul>	\$911,000	\$0	
<ul> <li>post-retirement indexation lower than expected</li> </ul>	\$1,826,000	\$836,000	
Demographic experience:			
■ termination experience	(\$1,860,000)	\$0	
- retirement experience	(\$75,000)	\$2,181,000	
<ul> <li>mortality experience</li> </ul>	\$1,352,000	\$53,000	
Assumption changes:			
<ul> <li>changes in actuarial assumptions for retained group</li> </ul>	\$59,965,000	n/a	
<ul> <li>change in assumed cost of purchasing annuities for partial wind-up group</li> </ul>	n/a	\$5,738,000	
<ul> <li>change in best estimate assumption of members' election between lump sum payment of benefits versus annuity purchase</li> </ul>	n/a	(\$25,431,000)	
<ul> <li>Increase in expense provision</li> </ul>	n/a	(\$7,000,000)	
Net impact of other elements of gains and losses	\$(24,000)	\$66,000	
Funding excess as at 31.12.2008	\$149,254,000	\$71,775,000	

### Valuation Results - Solvency Basis

When conducting a solvency valuation, we determine the relationship between the respective values of the plan's assets and its liabilities on a solvency basis, determined in

accordance with the *Ontario Pension Benefits Act*. The values of the plan's assets and liabilities on a solvency basis are related to the corresponding values calculated as though the plan were wound up and settled on the valuation date.

We have included the value of all benefits that may be contingent upon the circumstances of the postulated plan wind-up.

### Financial Position on a Solvency Basis

The plan's solvency position as at December 31, 2008, in comparison with that of the previous valuation as at January 1, 2006, is determined as follows:

**Solvency Position (Retained Group)** 

	31.12.2008	1.1.2006
Market value of assets	\$432,565,000	\$506,970,000
Crown DC balances	\$859,000	\$1,085,000
Termination expense provision	(\$2,000,000)	(\$2,000,000)
Solvency assets	\$431,424,000	\$506,055,000
Actuarial liability		
Present value of accrued benefits for:		
<ul> <li>active and disabled members</li> </ul>	\$118,481,000	\$90,024,000
<ul> <li>pensioners and survivors</li> </ul>	\$177,271,000	\$190,202,000
<ul> <li>deferred and inactive pensioners</li> </ul>	\$40,386,000	\$43,830,000
<ul> <li>pending payouts<sup>1</sup></li> </ul>	\$575,000	\$0
<ul> <li>Crown DC members</li> </ul>	\$859,000	\$1,085,000
Solvency liabilities	\$337,572,000	\$325,141,000
Solvency excess (deficiency)	\$93,852,000	\$180,914,000
Transfer ratio	1.28	1.56

#### **Solvency Position (Partial Wind-Up Group)**

	31.12.2008	1.1.2006
Market value of assets	\$300,320,000	\$292,025,000
Crown DC balances	\$579,000	\$630,000
Termination expense provision	(\$12,000,000)	(\$5,000,000)
Solvency assets	\$288,899,000	\$287,655,000
Actuarial liability		
Present value of accrued benefits for:		
<ul> <li>active and disabled members</li> </ul>	\$8,805,000	\$22,615,000
<ul><li>pensioners and survivors</li></ul>	\$87,230,000	\$68,003,000
<ul> <li>deferred and inactive pensioners</li> </ul>	\$120,510,000	\$93,051,000
■ Crown DC members	\$579,000	\$630,000
Solvency liabilities .	\$217,124,000	\$184,299,000
Solvency excess (deficiency)	\$71,775,000	\$103,356,000
Transfer ratio	1.39	1.59

#### **Solvency Position (Total)**

	31.12.2008	1.1.2006
Market value of assets	\$732,885,000	\$798,995,000
Crown DC balances	\$1,438,000	\$1,715,000
Termination expense provision	(\$14,000,000)	(\$7,000,000)
Solvency assets	\$720,323,000	\$793,710,000
Actuarial liability		
Present value of accrued benefits for:		
<ul> <li>active and disabled members</li> </ul>	\$127,286,000	\$112,639,000
<ul> <li>pensioners and survivors</li> </ul>	\$264,501,000	\$258,205,000
<ul> <li>deferred and inactive pensioners</li> </ul>	\$160,896,000	\$136,881,000
<ul> <li>pending payouts<sup>1</sup></li> </ul>	\$575,000	\$0
■ Crown DC members	\$1,438,000	\$1,715,000
Solvency liabilities	\$554,696,000	\$509,440,000
Solvency excess (deficiency)	\$165,627,000	\$284,270,000
Transfer ratio	1.32	1.57

### Financial Position on a Wind-up Basis

The plan's hypothetical wind-up position as of December 31, 2008, assuming circumstances producing the maximum wind-up liabilities on the valuation date, is determined as follows:

Wind-up	Position	(Retained	Group	)
---------	----------	-----------	-------	---

\$432,565,000 \$859,000 (\$5,000,000) \$428,424,000
(\$5,000,000)
\$428,424,000
ψ
\$118,481,000
\$177,271,000
\$40,386,000
\$575,000
\$859,000
\$337,572,000
\$90,852,000

### Wind-up Position (Partial Wind-Up Group)

31.12.2008
\$300,320,000
\$579,000
(\$12,000,000)
\$288,899,000
\$8,805,000
\$87,230,000
\$120,510,000
\$579,000
\$217,124,000
\$71,775,000

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

#### Wind-up Position (Total)

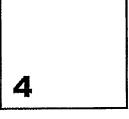
	31.12.2008
Market value of assets	\$732,885,000
Crown DC balances	\$1,438,000
Termination expense provision	(\$17,000,000)
Wind-up assets	\$717,323,000
Present value of accrued benefits for:	
<ul> <li>active and disabled</li> </ul>	\$127,286,000
<ul> <li>pensioners and survivors</li> </ul>	\$264,501,000
<ul> <li>deferred pensioners</li> </ul>	\$160,896,000
<ul><li>pending payouts</li></ul>	\$575,000
<ul> <li>Crown DC members</li> </ul>	\$1,438,000
Total wind-up liability	\$554,696,000
Wind-up excess (deficiency)	\$162,627,000

### Impact of Plan Wind-up

In our opinion, the value of the plan's assets would be greater than its actuarial liabilities if the plan were to be wound up on the valuation date.

### Pension Benefit Guarantee Fund (PBGF) Assessment

For purposes of the Pension Benefits Guarantee Fund, the 2008 assessment payable pursuant to Paragraph 37(4) of the Regulations under the *Ontario Pension Benefits Act* is to be determined as \$1 per Ontario member. The Pension Benefits Guarantee Fund Assessment Base for the plan is \$0.



### **Funding Requirements**

### **Current Service Cost**

The estimated value of the benefits that will accrue on behalf of the active members during 2009, in comparison with the corresponding value determined in the previous valuation as at January 1, 2006, is summarized below:

**Employer's Current Service Cost** 

	2009	2006
Total current service cost	\$8,715,000	\$10,640,000
Estimated members' required contributions	\$1,475,000	\$1,765,000
Estimated employer's current service cost	\$7,240,000	\$8,875,000
Estimated members' pensionable earnings	\$69,766,000	\$76,411,000
Employer's current service cost expressed as a percentage of members' pensionable earnings	10.4%	11.6%

An analysis of the changes in the employer's current service cost follows:

#### Changes in Employer's Current Service Cost

Employer's current service cost as at 1.1.2006	11.6%
Demographic changes	2.5%
Plan amendments	0.0%
Changes in assumptions	(3.7%)
Employer's current service cost as at 31.12.2008	10.4%

### **Special Payments**

Since the plan is in a surplus position on both a going-concern and solvency basis based on the results of this valuation, no special payments are required.

### **Employer Contributions**

There is a funding excess of \$149,254,000 in respect of the retained group and \$71,775,000 in respect of the partial wind-up group and no special payments are required for solvency purposes as at December 31, 2008 on the basis of the assumptions and methods described in this report. Thus the employer need not contribute to the plan until after the entire funding excess has been applied towards the employer's current service cost.

Once the entire funding excess has been so applied, monthly employer contributions to the plan in regards to the retained group must resume. We recommend that such employer contributions be determined as 10.4% of members' pensionable earnings. The amount of the employer's current service cost should be monitored in order to ensure that monthly employer contributions resume in a timely manner.

In accordance with Section 147.2 of the *Income Tax Act*, the Plan may not retain its registered status if the employer makes a contribution while the funding excess in respect of the retained group (\$149,254,000 as at December 31, 2008) exceeds the lesser of:

- 20% of the going-concern actuarial liability of the retained members<sup>3</sup> (\$56,662,400);
   and
- the greater of:
  - -10% of the going-concern actuarial liability<sup>3</sup> (\$28,331,200); and
  - two years of total current service cost (\$17,430,000).

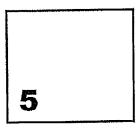
Since the funding excess exceeds the maximum allowed under Section 147.2 of the *Income Tax Act*, no contribution to the Plan by Canada Life is permitted before funding excess has been reduced to less than \$28,331,200, or else the plan's registered status may be revoked.

### Maximum Eligible Contributions

Given the funding excess as at December 31, 2008, we have estimated the maximum eligible annual contribution for 2009, 2010, and 2011 to be \$0.

<sup>&</sup>lt;sup>3</sup> Excluding liability in respect of DC members.

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008



### **Actuarial Opinion**

With respect to the Actuarial Valuation as at December 31, 2008 of the The Canada Life Canadian Employees Pension Plan FSCO Registration 0354563

Canada Revenue Agency 0354563

Based on the results of this valuation, we hereby certify that, as at December 31, 2008:

- The employer's current service cost for 2009 and subsequent years, up to the next actuarial valuation should be calculated as 10.4% of members' pensionable earnings.
- The employer's current service cost for 2009 is estimated to be \$7,240,000 based on an estimated payroll of \$69,766,000.
- There is a funding excess of \$149,254,000 in respect of the retained group and \$71,775,000 in respect of the partial wind-up group and no special payments are required for solvency purposes as at December 31, 2008 on the basis of the assumptions and methods described in this report. Thus the employer need not contribute to the plan until after the entire funding excess has been applied towards the employer's current service cost. Once the entire funding excess has been so applied, monthly employer contributions must resume.
- The plan has a solvency excess of \$93,852,000 in respect of the retained group and \$71,775,000 in respect of the partial wind-up group as at December 31, 2008. No special payments are required for solvency purposes.
- The solvency liabilities used to determine the solvency status of the plan do not exclude any benefit provided under the plan.

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

- The Pension Benefits Guarantee Fund annual assessment under Section 37 of the Regulations to the *Ontario Pension Benefits Act* is \$1 per Ontario Plan Beneficiary. The estimated PBGF assessment base for 2009 is \$0.
- The transfer ratio of the plan is greater than 1.0.
- The Prior Year Credit Balance on December 31, 2008 is \$0.
- In our opinion,
  - the data on which the valuation is based are sufficient and reliable for the purposes of the valuation,
  - the assumptions are, in aggregate, appropriate for the purposes of determining the funded status of the plan as at December 31, 2008 on going-concern and solvency bases, and determining the minimum funding requirements, and
  - the methods employed in the valuation are appropriate for the purposes of determining the funded status of the plan as at December 31, 2008 on goingconcern and solvency bases, and determining the minimum funding requirements.
- This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada.
- All assumptions made for the purposes of the valuation were independently reasonable at the time the valuation was prepared.

Hrvoje Lakota

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

Vineet Kochhar

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

September 24, 2009

Date

September 24, 2009

Date

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

The Canada Life Canadian Employees Pension Plan

Appendix A

### **Plan Assets**

#### Sources of Plan Asset Data

The pension fund is held in trust by The Canada Life Assurance Company and is invested by Capital Guardian, Jarislowsky Fraser, and Laketon in accordance with the Plan's investment policy.

We have relied upon the Plan's audited financial statements prepared by Deloitte & Touche, for the period from January 1, 2006 to December 31, 2008.

We have also relied on information provided by The Canada Life Assurance Company regarding the defined contribution account balances for those members of the plan who accrued defined contribution benefits during 1999 as well as the split of pension plan cash flows (e.g. employee contributions, monthly benefit payments, lump sum benefit payments, and expenses), from January 1, 2006 to December 31, 2008 between the partial wind-up and retained groups.

#### Reconciliation of Plan Assets

The pension fund transactions for the period from January 1, 2006 to December 31, 2008 are summarized as follows:

Reconciliation of Plan Assets - DB only (Market Value)

* *			
2006	2007	2008	
\$799,692,000	\$859,679,000	\$841,854,000	
\$1,825,000	\$1,697,000	\$1,605,000	
\$0	\$0	\$0	
\$82,830,000	\$5,661,000	(\$84,178,000)	
\$84,655,000	\$7,358,000	(\$82,573,000)	
\$18,248,000	\$18,310,000	\$18,400,000	
\$3,080,000	\$3,114,000	\$3,776,000	
\$3,218,000	\$3,248,000	\$3,456,000	
	\$302,000	\$474,000	
\$122,000	\$209,000	\$290,000	
\$24,668,000	\$25,183,000	\$26,396,000	
\$859,679,000	\$841,854,000	\$732,885,000	
	\$799,692,000 \$1,825,000 \$0 \$82,830,000 \$84,655,000 \$18,248,000 \$3,080,000 \$3,218,000 \$122,000 \$24,668,000	\$799,692,000 \$859,679,000  \$1,825,000 \$1,697,000  \$0 \$0  \$82,830,000 \$5,661,000  \$84,655,000 \$7,358,000  \$18,248,000 \$18,310,000  \$3,080,000 \$3,114,000  \$3,218,000 \$3,248,000  \$302,000  \$122,000 \$209,000  \$24,668,000 \$25,183,000	

For the purposes of the June 30, 2005 partial wind-up report, the allocation of Plan assets between the members affected by the partial wind-up and those not affected by the partial wind-up was done based on the "standard method" under Policy W100-102. For a number of reasons that were discussed in more detail in the partial wind-up report, and which include the fact that this Plan covers members with service in a number of jurisdictions outside of Ontario, the final methodology to be used to apportion Plan assets in the partial wind-up will be confirmed in a subsequent report filed with the Superintendent dealing with the treatment of any estimated partial wind-up surplus. In addition, the surplus amount could change due to a number of other factors, including refinements in membership data used in the calculations, and the cost of purchasing annulties.

For the purposes of this report, we have continued to base our calculations on the initial asset allocation outlined in the June 30, 2005 partial wind-up report filed in March, 2006. We note, however, that if the methodology used to apportion plan assets at June 30, 2005 changes, the amounts shown in this and prior report, will change as well.

As discussed above, and as outlined in our June 30, 2005 partial wind-up report, the estimated assets allocated to the partial wind-up group as at that date were \$273,124,000.

This amount included \$589,000 of defined contribution account balances for members affected by the partial wind-up.

As at January 1, 2006, this amount had grown to \$292,655,000 (including \$630,000 of defined contribution account balances). The reconciliation of the defined benefit assets allocated to the partial wind-up group for the period June 30, 2005 to January 1, 2006 is shown in the January 1, 2006 actuarial valuation report.

The pension fund transactions for the retained and the partial wind-up groups from January 1, 2006 to December 31, 2008 are summarized as follows:

### Reconciliation of Plan Assets 2006 - DB only (Market Value)

Meconclication of Flan Assets 2000		DD Only (market	
	Retained	Partial Wind-Up	Total
January 1, 2006	\$507,667,000	\$292,025,000	\$799,692,000
PLUS			
Members' contributions	\$1,771,000	\$54,000	\$1,825,000
Company's contributions	\$0	\$0	\$0
Investment income & Net capital gains (losses)	\$52,393,000	\$30,437,000	\$82,830,000
	\$54,164,000	\$30,491,000	\$84,655,000
LESS			
Pensions pald	\$14,793,000	\$3,455,000	\$18,248,000
Terminations	\$3,080,000	\$0	\$3,080,000
Expenses	\$1,940,000	\$1,278,000	\$3,218,000
Withholding Taxes	\$74,000	\$48,000	\$122,000
-	\$19,887,000	\$4,781,000	\$24,668,000
December 31, 2006	\$541,944,000	\$317,735,000	\$859,679,000

### Reconciliation of Plan Assets 2007 - DB only (Market Value)

	Retained	Partial Wind-Up	Total
January 1, 2007	\$541,944,000	\$317,735,000	\$859,679,000
PLUS			
Members' contributions	\$1,647,000	\$50,000	\$1,697,000
Company's contributions	\$0	\$0	\$0
Investment income & Net capital gains (losses)	\$3,544,000	\$2,117,000	\$5,661,000
	\$5,191,000	\$2,167,000	\$7,358,000
LESS			
Pensions paid	\$14,434,000	\$3,876,000	\$18,310,000
Terminations	\$2,879,000	\$235,000	\$3,114,000
Expenses	\$2,129,000	\$1,119,000	\$3,248,000
Transaction Fees	\$190,000	\$112,000	\$302,000
Withholding Taxes	\$132,000	\$77,000	\$209,000
	\$19,764,000	\$5,419,000	\$25,183,000
December 31, 2007	\$527,371,000	\$314,483,000	\$841,854,000

### Reconciliation of Plan Assets 2008 - DB only (Market Value)

	Retained	Partial Wind-Up	Total
January 1, 2008	\$527,371,000	\$314,483,000	\$841,854,000
PLUS			
Members' contributions	\$1,582,000	\$23,000	\$1,605,000
Company's contributions	\$0	\$0	\$0
Investment income & Net capital gains (losses)	(\$75,488,000)	(\$8,690,000)	(\$84,178,000)
	(\$73,906,000)	(\$8,667,000)	(\$82,573,000)
LESS			
Pensions paid	\$14,316,000	\$4,084,000	\$18,400,000
Terminations	\$3,776,000	<b>\$0</b>	\$3,776,000
Expenses	\$2,329,000	\$1,127,000	\$3,456,000
Transaction Fees	\$297,000	\$177,000	\$474,000
Withholding Taxes	\$182,000	\$108,000	\$290,000
	\$20,900,000	\$5,496,000	\$26,396,000
December 31, 2008	\$432,565,000	\$300,320,000	\$732,885,000

In addition to the assets shown above, there are \$859,000 in defined contribution account balances for the retained group and \$579,000 for the partial wind-up group who accrued benefits under the defined contribution provision of the plan during 1999. The resulting market value for the retained group is \$433,424,000, and for the partial wind-up group is \$300,899,000.

We have tested the pensions paid, the lump-sum refunds and the contributions for consistency with the membership data for the plan members who have received benefits or made contributions. The results of these tests were satisfactory.

#### **Investment Policy**

The plan administrator adopted a statement of investment policy and objectives effective March, 2008. This policy is intended to provide guidelines for the manager(s) as to the level of risk which is commensurate with the plan's investment objectives. A significant component of this investment policy is the asset mix.

At the same time, the assets allocated to the partial wind-up group were segmented from the assets of the ongoing portion of the Plan, and are being invested in accordance with the investment guidelines established for this portion of the Plan.

The constraints on the asset mix, and the actual asset mix as at December 31, 2008, are provided for information purposes:

Distribution of the Market Value of the Fund by Asset Class - Retained Group

	<b>Investment Policy</b>		_ Actual Asset Mix	
	Minimum	Target	Maximum	as at 31.12.2008
Fixed Income				
<ul> <li>Cash and Short Term</li> </ul>	0%	3%	10%	3%
<ul> <li>Canadlan Bonds</li> </ul>	20%	30%	40%	4004
<ul> <li>Real Return Bonds</li> </ul>	0%	10%	20%	46%
■ Total	35%	43%	 50%	49%
Equity				
<ul> <li>Canadian Equities</li> </ul>	15%	27%	35%	24%
<ul> <li>Foreign Equities</li> </ul>	15%	30%	35%	27%
<ul> <li>Total</li> </ul>	50%	57%	65%	51%
	-	100%	-	100%

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

#### Distribution of the Market Value of the Fund by Asset Class - Partial Wind-Up Group

	Investment Policy	Actual Asset Mix
	Target	as at 31.12.2008
Fixed Income		
<ul> <li>Cash and Short Term Bonds</li> </ul>	60%	66%
<ul> <li>Canadian Bonds (incl. Real Return Bonds)</li> </ul>	28%	25%
1	88%	91%
Equity		
<ul> <li>Canadian Equities</li> </ul>	12%	9%
<ul> <li>Foreign Equities</li> </ul>	0%	0%
■ Total	12%	9%
	100%	100%

#### Performance of Fund Assets

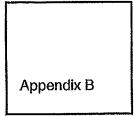
The performance of fund assets, net of expenses, from January 1, 2006 to December 31, 2008 as per our calculations (which assume that the next cash flow occurred in the middle of each period, are shown below:

Rate of Return - Market Value of Plan Assets

	Gross	Net
2006	10.51%	10.06%
2007	0.67%	0.22%
2008 (Jan to Mar)	-1.64%	-1.68%
2008 (Apr to Dec)	Ongoing: -13.29%	Ongoing: -13.67%
	PWU: -1.23%	PWU: -1.67%

The average net return on the market value, net of expenses (including transaction fees and withholding taxes) for the ongoing group, since the last valuation at January 1, 2006 was -0.55% per year. This rate is less than the assumed investment return for the ongoing group of 5.25% by 5.80% per year.

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008



### **Actuarial Methods and Assumptions**

Actuarial Valuation Methods - Going-concern Basis

#### Valuation of Assets

For this valuation, we have continued to use the market value of Plan assets which was \$722,323,000 as at December 31, 2008. This amount includes \$1,438,000 of defined contribution balances and, to ensure that the results for the partial wind-up group are consistent on going-concern and solvency basis, a \$12,000,000 provision for remaining expenses associated with the partial wind-up of the Plan.

#### Valuation of Actuarial Liabilities

Over time, the real cost to the employer of a pension plan is the excess of benefits and expenses over member contributions and investment earnings. The actuarial cost method allocates this cost to annual time periods.

For purposes of the going-concern valuation, for the retained group, we have continued to use the *projected unit credit actuarial cost method*. Under this method, for Staff members and Field Management members' benefits that are based on final average earnings, we determine the actuarial present value of benefits accrued in respect of service prior to the valuation date, including ancillary benefits, based on projected final average earnings. For the portion of Field Management members' pension benefits that are based on accumulated contributions and/or account balances, we determine the present value of benefits that the member would receive based on current account balances and commissions projected with interest or inflation, as the case may be, to the date of member's termination, death, or retirement. For the partial wind-up members who are still actively accruing service as at December 31, 2008, employment was assumed to have terminated on December 31, 2008, and benefits are based on final average earning as at the valuation date. This is referred to as the *actuarial liability*.

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The funding excess or funding shortfall, as the case may be, is the difference between the actuarial value of assets and the actuarial liability. An unfunded liability will be amortized over no more than 15 years through special payments as required under the *Ontario Pension Benefits Act*. A funding excess may, from an actuarial standpoint, be applied immediately to reduce required employer current service contributions unless precluded by the terms of the plan or by legislation.

This actuarial funding method produces a reasonable matching of contributions with accruing benefits. Because benefits are recognized as they accrue, the actuarial funding method aims at keeping the plan fully funded at all times. This promotes benefit security, once any unfunded liabilities and solvency deficiencies have been funded.

The going-concern actuarial liability for all partial wind-up members are set equal to their wind-up liabilities.

#### Current Service Cost

The *current service cost* is the actuarial present value of projected benefits to be paid under the plan with respect to service during the year following the valuation date.

Current service cost has been calculated for the retained group. As we have assumed all partial wind-up members who are still actively employed terminated on the valuation date, current service costs were not calculated for these members. To the extent that some partial wind-up members continue accruing service following the valuation date, the cost of such benefit accruals will be covered from the surplus assets allocated to the partial wind-up group.

The employer's current service cost is the total current service cost reduced by the members' required contributions.

The employer's current service cost has been expressed as a percentage of the members' pensionable earnings to provide an automatic adjustment in the event of fluctuations in membership and/or pensionable earnings.

Under the projected unit credit actuarial cost method, the current service cost for an individual member will increase each year as the member approaches retirement. However, the current service cost of the entire group, expressed as a percentage of the members' pensionable earnings, can be expected to remain stable as long as the average age of the group remains constant.

### Employer's Contribution

Accordingly, the employer's contributions for this purpose are determined as follows:

#### **Employer's Contributions**

With a funding excess	With an unfunded liability
Current service cost	Current service cost
MINUS	PLUS
Any funding excess applied to cover the employer's current service cost	Payments to amortize any unfunded liability

### Actuarial Assumptions - Going-concern Basis

The actuarial value of benefits is based on economic and demographic assumptions. At each valuation we determine whether, in our opinion, the actuarial assumptions are still appropriate for the purposes of the valuation, and we revise them, if necessary.

In this valuation, we have used the same assumptions as in the previous valuation except as noted. Emerging experience will result in gains or losses that will be revealed and considered in future actuarial valuations. For this valuation, we have used the following assumptions.

### **Economic Assumptions**

#### Investment Return

We have assumed that the investment return on the market value of the fund will average 5.8% per year over the long term. We have based this assumption on an expected long-term return on the pension fund less an allowance for investment and administrative expenses and less a margin for adverse deviations, as described below.

We have assumed a gross rate of return of 7.0% consistent with market conditions applicable on the valuation date, based on estimated returns for each major asset class and the target asset mix specified in the plan's investment policy. Additional returns of 0.3% are assumed to be achievable due to active management (net of investment expenses).

We have allowed for investment and administrative expenses of 0.5% per year.

We have included a margin for adverse deviations, from all sources, of 1.0% per year.

The previous valuation assumed a rate of 5.25%.

### Expenses

The assumed Investment Return reflects an implicit provision for investment and administrative expenses of 0.5%.

#### Inflation

We assumed inflation will be 1.3% per year. This assumption is based on the break-even inflation rate between nominal and real Government of Canada bond yields at December 31, 2008.

In the previous valuation, we had assumed that inflation will be 2.5% per year.

#### Increases in the YMPE

Since the benefits provided by the plan depend on the final average Year's Maximum Pensionable Earnings (YMPE) under the Canada/Québec Pension Plan, it is necessary to make an assumption about increases in the YMPE for this valuation. We have assumed that the YMPE will increase at 2.3% per year. This assumed rate of increase consists of the assumed rate of inflation of 1.3% per year plus an allowance of 1.0% per year for the effect of real economic growth and productivity gains in the Canadian economy, which is consistent with historical real economic growth. The increase was applied from the 2009 level of the YMPE of \$46,300.

In the previous valuation, we had assumed that the YMPE would increase at 3.0% per year from the 2006 YMPE of \$42,100.

#### Increases in the Maximum Pension Permitted under the Income Tax Act

The *Income Tax Act* stipulates that the maximum pension that can be provided under a registered pension plan will be increased to specified amounts up to 2009, and automatically, starting in 2010, in accordance with general increases in the average wage.

For this valuation, we have assumed that the maximum pension payable under the plan will increase as specified in the *Income Tax Act* in 2009, and will increase starting in 2010 at the same rate as the YMPE, 2.3% per year.

In the previous valuation, we had assumed that the maximum pension payable under the plan will increase as specified in the *Income Tax Act* in 2007, 2008 and 2009, and will increase starting in 2010 at, 3.0% per year.

### Increases in Pensionable Earnings

The benefits ultimately paid will depend on each member's final average earnings. To calculate the pension benefits payable upon retirement, death or termination of employment, we have taken annualized 2008 earnings and assumed that such pensionable earnings will increase in accordance with a salary scale that consists of separate components for inflation, productivity, and an age-based merit and promotion component.

The assumed inflation rate and productivity improvements used in this valuation are 1.3% per year and 1.0% per year respectively (for a general wage inflation of 2.3% per year). In the prior valuation, the assumed assumption for general wage inflation was 3.0% per year.

The current merit and promotional increase component is based on an experience study conducted in 2008 (and updated in 2009) by the Company considering increases over the years from 2004 to 2009. Based on the results of the experience study and our discussions with the Company, these rates are our (and the Company's) current best estimates of future merit and promotional increases following the valuation date. Sample rates for the current and prior valuations are shown in the following table:

Sample Merit and Promotional Increases

	31.12.2008	1.1.2006	
Age	Percentage	Percentage	
20	8.0000%	3.791%	
25	6.2000%	3.054%	
30	4.2101%	2.406%	
35	3.0000%	1.877%	
40	2.0000%	1.411%	
45	1.3000%	1.072%	
50	1.0000%	0.951%	
55	0.5309%	0.481%	
60	0.0000%	0.000%	

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### Indexation of Pensions in Payment

For members hired before January 1, 2001, pensions in payment are increased each year according to a formula related to increases in the Consumer Price Index (CPI). For members hired after January 1, 2001, pensions in payment are increased on an ad hoc basis at the discretion of the Company. Note that some Field Management Members hired before January 1, 2001 elected to receive some or all of their pension in a non-indexed form when they retired.

For this valuation, we have assumed that the CPI will increase at the rate of 1.3%. We have also assumed that the pensioner increases will not be affected by the fund rate of return. Consequently, pensions payable to those members hired before January 1, 2001 are assumed to increase annually at the rate of 1.3%. Pensions payable to members hired after January 1, 2001 are assumed not to be indexed.

In the previous valuation pensions payable to members hired before January 1, 2001 were assumed to increase annually at a rate of 2.5% per year.

#### Interest Credited on Employee-required Contributions

For this valuation, we have assumed that the interest rate to be credited on employee-required contributions will be 5.8% per year, over the long term. This rate is consistent with the assumptions underlying the investment return assumption.

### Demographic Assumptions

### Retirement Age

Because early retirement pensions are reduced in accordance with a formula, the retirement age of plan members has an impact on the cost of the plan.

Retirement rates are typically developed taking into account the past experience of the plan. However, the recent retirement experience of the plan has been affected by the recent integration of Canada Life with Great-West Life and is not considered appropriate for predicting the future rates of retirement. As such, the current retirement assumptions are based on a retirement experience study based on pre-integration retirement experience. After discussions with the Company, the rates used in this valuation represent our (and the Company's) current best estimate of future retirement experience under the Plan.

The assumed retirement rates used in the current and prior valuation are summarized in the following tables:

**Retirement Rates** 

Age	Percentage
55	15.0%
56	7.5%
57	7.5%
58	7.5%
59	7.5%
60	25.0%
61	25.0%
62	25.0%
63	25.0%
64	25.0%
65	100.0%

### Termination of Employment

We have made an allowance for projected benefits payable on the termination of employment before retirement for reasons other than death.

The termination assumptions used in this valuation are based on a study of the terminations experience at Canada Life and its affiliated companies over the past couple of years. After discussions with the Company, the rates used in this valuation represent our current (and the Company's) best estimate of future termination experience under the Plan. Sample rates are shown in the following table:

**Termination Rates** 

	31.12.2008	1.1.2006
Age	Percentage	Percentage
20	15.0%	10.0%
25	15.0%	10.0%
30	10.0%	10.0%
35	8.5%	10.0%
40	5.0%	10.0%
45	4.0%	7.5%
50	4.0%	5.0%
55	0.0%	2.5%

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### Mortality

The actuarial value of the pension depends on the lifetime of the member. We have assumed mortality rates, both before and after retirement, in accordance with the 1994 Uninsured Pension Mortality Table with projection scale AA applied to reflect continuing future improvements in mortality. According to this table, the life expectancy at age 65, as of the valuation date, is 19.4 years for males and 22.0 years for females.

The 1994 Uninsured Pension Mortality Table reflects the mortality experience as of 1994 for a large sample of North American pension plans. Applying projection scale AA provides an allowance for improvements in mortality after 1994. This table is commonly used for valuations of Canadian pension plans

While there is strong evidence of continuing improvement in mortality, forecasts of the rate of future improvement are very uncertain. We have used the projection scale AA to reflect future improvements in mortality.

In the previous valuation, we had assumed mortality rates in accordance with the 1994 Uninsured Pensioner Mortality Table projected to 2015 using the projection scale AA.

#### Disability

No allowance has been made for disability retirement on the basis that the impact of including such an assumption would not have a material impact on the valuation results. We have assumed that those currently disabled would remain disabled until retirement and would continue to accrued benefits until retirement in accordance with the plan terms

### Family Composition

Benefits in case of death, before and after retirement, depend on the Plan member's marital status.

For this valuation, we continued to assume that 80% of Staff Members and 100% of Field Management Members will have an eligible spouse on the earlier of death or retirement, and that the male partner will be three years older than the female partner.

## Actuarial Valuation Methods and Assumptions – Solvency and Impact of Plan Wind-up

We have used the market value of the plan's assets in our valuation of the plan for solvency purposes.

To determine the solvency actuarial liability, we have valued those benefits that would have been paid had the plan been wound up on the valuation date, including benefits that would be immediately payable if the employer's business were discontinued on December 31, 2008, with all members fully vested in their accrued benefits. No benefits payable on plan wind-up were excluded from our calculations.

We have considered that members under the earliest retirement age specified in the Plan would be entitled to a deferred pension payable from their normal retirement date or such earlier age for which plan eligibility requirements have been satisfied at December 31, 2008. Members over the earliest retirement age specified in the Plan are considered to be entitled to an immediate pension, reduced in accordance with the plan rules. We have also considered that Ontario and Nova Scotia members whose age plus years of service equal at least 55 at December 31, 2008 would be entitled to a deferred pension payable from the age that would produce the greatest value if employment were to have continued for the purpose of determining eligibility for early retirement benefits. For each individual plan member, accumulated contributions with interest plus 50% of the present value of the pension accumulated are established as a minimum actuarial liability.

As outlined in our March 2006 partial wind-up report, benefits for the members affected by the partial wind-up are going to be settled pursuant to affected member elections that will be made in accordance with Subsection 73(2) of the PBA or such similar rules in other provinces.

For the purposes of this valuation, we have changed the assumption of the benefit settlement election option for active, disabled, and deferred vested members in both the retained and partial wind-up groups. The new election assumption reflects our current best estimate assumption on member elections. The assumed elections are as follows:

Age Range	Percentage electing lump sum transfers	Percentage electing annuity purchases	
55+	30%	70%	
50 - 55	50%	50%	
Under 50	70%	30%	

In the previous valuation, we assumed active, disabled and partial wind-up members not eligible to retire would elect to have their benefits settled through lump sum transfers. Active, disabled, partial wind-up members eligible to retire with an immediate pension, deferred vested retained members, and retired members were assumed to elect to have their benefits settled through the purchase of annuities.

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The calculation of the estimated lump sum transfer amounts on December 31, 2008 for members assumed to elect a lump sum transfer is based on the assumptions described in Section 3800 – *Pension Commuted Values* of the Canadian Institute of Actuaries' Standards of Practice applicable for December 31, 2008.

For greater certainty in calculating estimated lump sum amounts:

- For partial wind-up members who terminated employment prior to February 1, 2005, the calculations were done based on the recommendations of the Canadian Institute of Actuaries applicable on the member's date of termination of employment.
- For other partial wind-up members, the calculations were done based on the Canadian Institute of Actuaries' Standard of Practice effective February 1, 2005, for Determining Pension Commuted Values applicable on the earlier of December 31, 2008 and the date of the member's termination of employment, if applicable.
- For active, disabled and deferred vested members not included in the partial wind-up, the calculations were done based on the Canadian Institute of Actuaries' Standard of Practice for Determining Pension Commuted Values effective April 1, 2009 applicable for December 31, 2008.

For partial wind-up members who have been notified that their employment will be terminated as part of the integration but who are still accruing service at December 31, 2008, liabilities and benefits shown in this report are calculated based on final average earnings and credited service as at December 31, 2008. The ultimate benefit these members receive will depend on their service and final average earnings as at their eventual date of termination from the plan as well as the assumptions prescribed for calculation of commuted values at that time.

For members who were assumed to have their benefits settled through the purchase of an annuity, the value of the benefits for such members is based on an estimate of the cost of settlement of these benefits through the purchase of annuities.

However, there is limited data available to provide credible guidance on the cost of a purchase of indexed annuities in Canada. In accordance with the *Canadian Institute of Actuaries Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2008 and December 30, 2009*, we have assumed that an appropriate proxy for estimating the cost of such purchase is using the following assumptions:

Interest rate: Based on the yields on Government of Canada real return bonds; and

Mortality table: UP94@2015

Assumptions are as follows:

**Actuarial Assumptions** 

Benefits assumed to be settle	d through lump sum transfer	
Nominal interest rate	Retained members: 4.20% per year for the first 10 years following December 31, 2008, 5.70% per year thereafter	
	Partial wind-up members: in accordance with CIA recommendations at member's date of termination	
Inflation	Retained members: 1.34% per year for the first 10 years following December 31, 2008, 1.95% per year thereafter	
	Partial wind-up members: in accordance with CIA recommendations at member's date of termination	
Mortality rate	Retained members: UP94 Projected to 2020 using Scale AA (unisex)	
	Partial wind-up members: in accordance with CIA recommendations at member's date of termination (i.e. GAM83 (50% male) for terminations occurring before February 1, 2005, and UP94 Projected to 2015 using Scale AA (50% male) for terminations occurring after January 31, 2005)	
Post retirement indexing	In determining the amount of post retirement indexing included in the calculation of commuted values we have reflected the indexing formula specified in the plan which limits the amount of post retirement increases to the lesser of inflation and the average fund rate of return less 4%.	
Benefits assumed to be settle	ed through annuity purchase (retained and partial wind-up groups)	
Nominal interest rate	Immediate Retirement: indexed: 3.4% Non-indexed: 4.85%	
Nominal interest rate	Deferred Retirement: Indexed: 4.45% per year during the deferral period and 3.00% after commencement Non-indexed: 4.45%	
Mortality rate	UP94 Projected to 2015 using Scale AA (sex distinct)	
Inflation	1.30% per year	
Post retirement indexing	We have assumed that the life insurance company would price the annuities as if they were fully indexed for inflation	
Final average earnings:	Based on actual pensionable earnings over the averaging period	

Family composition:	80% of currently single and 100% of currently married Members will have a spouse on the earlier of death or retirement. Where available, we have used the actual difference between the age of the member and the spouse Otherwise, we have assumed that the male partner will be three years older than the female partner.	
Termination Expense		
<ul> <li>Solvency</li> </ul>	Retained Members:	\$2,000,000
	Partial wind-up Members:	\$12,000,000 (remaining)
<ul> <li>Impact of wind-up</li> </ul>	Retained Members:	\$5,000,000
	Partial wind-up Members:	\$12,000,000 (remaining)

In a solvency valuation, the accrued benefits are based on the member's final average earnings on the valuation date; therefore, no salary projection is used. Also the employment of each member is assumed to have terminated on the valuation date, therefore, no assumption is required for future rates of termination of employment.

To determine the solvency position of the retained portion of the plan, the provision for expenses payable from the plan's assets is in respect of actuarial, administration and legal expenses that would be incurred in terminating the plan. For the purpose of determining the financial position of the retained portion of the plan upon wind-up, the provision for termination expenses also includes transaction fees related to the liquidation of the plan's assets and any reduction in the value of the plan's equity assets resulting from their liquidation.

Because the settlement of all benefits on wind-up is assumed to occur on the valuation date and is assumed to be uncontested, the provision for termination expenses for the retained portion of the plan does not include custodial, investment management, auditing, consulting and legal expenses that would be incurred between the wind-up date and the settlement date or due to the terms of a wind-up being contested. Expenses associated with the distribution of any surplus assets that might arise on an actual wind-up are also not included in the estimated termination expense provisions.

The provision for termination expense for the partially-wound up portion of the plan was based on an estimate of the administrative, communications, actuarial, legal and other fees related to the partial wind-up that was provided to us by the Company.

In determining the provision for termination expenses payable from the plan's assets, we have assumed that the plan sponsor would be solvent on the wind-up date. We have also assumed, without analysis, that the plan's terms as well as applicable legislation and court decisions would permit the relevant expenses to be paid from the plan.

Actual fees incurred on an actual plan wind-up may differ materially from the estimates disclosed in this report.

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In accordance with *Ontario Pension Benefits Act*, we have not included a provision for adverse deviation in the solvency and wind-up valuations.

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Appendix C

# **Membership Data**

Analysis of Membership Data

The actuarial valuation is based on membership data as at December 31, 2008, provided by Canada Life.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), pensionable earnings, credited service, contributions accumulated with interest and pensions to retirees and other members entitled to a deferred pension. Contributions, lump sum payments and pensions to retirees were compared with corresponding amounts reported in financial statements. The results of these tests were satisfactory.

Plan membership data are summarized below. For comparison, we have also summarized corresponding data from the previous valuation.

#### **Membership Data - Retained Members**

	31.12.2008	1.1.2006
Active Members		
Number	1,223	1,607
Total pensionable earnings for previous year	\$73,251,446	\$80,597,244
Average years of pensionable service	10.1 years	6.9 years
Average age	44.8	41.2
Accumulated contributions with interest	\$25,248,195	\$21,706,726
Deferred Pensioners		
Number	730	717
Total annual pension	\$3,739,382	\$3,612,699
Average annual pension	\$5,122	\$5,039
Average age	48.0	46.6
Pensioners and Survivors		
Number	830	847
Total annual lifetime pension	\$14,458,671	\$14,567,641
Average annual lifetime pension	\$17,420	\$17,199
Average age	75.4	75.1

# Membership Data – Members Affected by the Partial Wind-Up

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	31.12.2008	1.1.2006
Active Members		
Number	20	79
Total pensionable earnings for previous year	\$1,682,463	\$6,107,825
Average years of pensionable service	19.2 years	17.4 years
Average age	54.4	51.3
Accumulated contributions with Interest	\$1,949,063	\$5,359,032
Deferred Pensioners		
Number	1,899	1,905
Total annual pension	<b>\$12,605,17</b> 5	\$12,756,420
Average annual pension	\$6,638	\$6,696
Average age	43.4	40.5
Pensioners and Survivors		
Number	227	162
Total annual lifetime pension	\$4,458,475	\$3,174,995
Average annual lifetime pension	\$19,641	\$19,599
Average age	62.0	60.4

The membership movement for all categories of membership since the previous actuarial valuation is as follows:

#### **Reconciliation of Membership**

	Actives	Deferred Vested	Pensioners and Beneficiaries	Partial Wind-Up	Total
Total at 1.1.2006	1,607	717	847	2,146 <sup>4</sup>	5,317
New entrants	8				8
Terminations:					
not vested					0
<ul> <li>transfers/refunds</li> </ul>	(149)	(114)			(263)
<ul><li>deferred pensions</li></ul>	(165)	165			0
<ul><li>pending payments</li></ul>	(35)				(35)
Deaths	(2)	(1)	(91)		(94)
Deaths with survivor					0
Retirements	(41)	(31)	72		0
Data adjustments and updates		(6)	2		(4)
Total at 31.12.2008	1,223	730	830	2,146 <sup>5</sup>	4,929

<sup>&</sup>lt;sup>4</sup> Includes 79 members who are still accruing benefits at December 31, 2005, 1,905 deferred vested members and 162 pensioners

<sup>&</sup>lt;sup>5</sup> Includes 20 members who are still accruing benefits at December 31, 2008, 1,899 deferred vested members and 227 Pensioners

The distribution of the active members not affected by the partial wind-up by age and pensionable service as at December 31, 2008, is summarized as follows:

Distribution of Retained Active Members
By Age Group and Pensionable Service as at 31.12.2008

			Year	s of Pensi	onable Se	rvice		
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
Under 20						•		0
20 - 24								0
25 - 29	22	16						38
30 - 34	26	137	4					167
35 - 39	12	174	20	3				209
40 - 44	6	153	28	30	2			219
45 - 49	1	139	31	31	24	1		2 <b>27</b>
50 - 54	3	97	28	17	11	15		171
5 <b>5 -</b> 59	1	62	16	19	11	5	7	121
60 - 64	3	34	9	10	3	2	6	67
<b>65</b> +	1	2				1		4
Total	75	814	136	110	51	24	13	1,223

The distribution of the active members affected by the partial wind-up by age and pensionable service as at December 31, 2008, is summarized as follows:

Distribution of Active Members Affected by the Partial Wind-Up by By Age Group and Pensionable Service as at 31.12.2008

			Year	s of Pensi	onable Se	rvice		
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
Under 20								
20 - 24								0
25 - 29								0
3 <b>0 -</b> 34								0
35 - 39								0
40 - 44								0
45 - 49								0
50 - 54		4	2	3	4	7		20
55 - 59								0
60 - 64								0
65 +								0
Total	0	4	2	3	4	7	0	20

This group is made up of those members affected by the partial wind-up who were allowed to bridge their severance until attainment of age 55. Once these members attain age 55 their service accruals in the plan will stop.

The distribution of the inactive members not affected by the partial wind-up by age as at December 31, 2008, is summarized as follows:

Distribution of Retained Inactive Members By Age Group as at 31.12.2008

	Deferred I	Pensioners	Pensioners and Surviv	
Age	Number	Average Pension	Number	Average Pension
< 40	158	\$3,484	1	*
40 - 44	134	\$4,069	1	*
45 - 49	136	\$4,770		
50 - 54	151	<b>\$5,846</b>	3	\$6,464
55 - 59	77	\$6,922	29	\$13,297
60 - 64	40	\$7,536	94	\$17,318
65 - 69	16	\$10,983	135	\$16,814
70 - 74	12	\$4,485	150	\$19,032
75 - 79	5	\$3,947	128	\$19,543
80 - 84	1	*	135	\$18,062
85 - 89			105	\$15,001
90 - 94			40	\$16,462
95 - 99			9	\$14,159
100 +				
Total	730	\$5,122	830	\$17,420

<sup>\*</sup> For confidentiality reasons, average pensions are not shown for age groups with less than 2 members.

The distribution of the inactive members affected by the partial wind-up by age as at December 31, 2008, is summarized as follows:

Distribution of Inactive Members Affected by the Partial Wind-Up By Age Group as at 31.12.2008

	Deferred Pensioners		Pensioners a	and Survivors
Age	Number	Average Pension	Number	Average Pension
< 40	696	\$2,929		
40-44	438	\$6,629	1	*
45 - 49	358	\$9,257		
50 - 54	268	\$10,538	1	*
55 - 59	118	\$11,850	70	\$20,857
60 - 64	20	\$6,273	101	\$20,116
65 - 69	1	*	50	\$17,075
70 - 74			4	\$25,153
75 - 79				
80 - 84				
85 - 89				
90 - 94				
95 - 99				
100 +				
Total	1899	\$6,638	227	\$19,641

<sup>\*</sup> For confidentiality reasons, average pensions are not shown for age groups with less than 2 members.

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## **Summary of Plan Provisions**

#### Introduction

The Canada Life Assurance Company Trusteed Canadian Staff Pension Fund (1965) was established on December 31, 1964. The Canada Life Assurance Company Trusteed Canadian Staff Pension Fund (1958) and The Canada Life Assurance Company Trusteed Canadian Agents Fund were merged into this plan effective January 1, 1997 and the combined plan was renamed the Canada Life Canadian Employees Pension Plan.

This valuation is based on the plan provisions in effect on December 31, 2008. The following is a summary of the plan's main provisions in effect on December 31, 2008. It is not intended as a complete description of the plan.

#### Crown Life Insurance Company

In January 1, 1999, the Canada Life Canadian Employees Pension Plan was amended for those members who became employees of Canada Life as a result of Canada Life's acquisition of the Crown Life Insurance Company of Canada. This amendment provided pension benefits based on the terms of the Pension Plan for Crown Life Insurance Company of Canada Employees ("Crown Canada Plan") for the period of service from January 1, 1999 to December 31, 1999. For service on and after January 1, 2000, these employees earn pension benefits based on the same terms as other members of the Canada Life Canadian Employees Pension Plan; however, prior service in the Crown Canada Plan is counted for the purpose of determining eligibility for benefits.

Since these provisions only affected one year of service, they are not described in detail in this report. A detailed summary is available in the plan documents and in our funding valuation report on the Crown Canada Plan.

The Canada Life Canadian Employees Pension Plan

#### Eligibility for Membership

Each person hired by the Company as a Staff employee on a full-time or a permanent parttime basis is eligible, but not required, to join the plan upon date of hire. Each such person is required to join the plan upon the later of attaining age 25 and the completion of two years of continuous service.

Each person who is hired by the Company as a Field Management employee is required to join the plan upon date of hire.

An employee who is employed by the Company on a temporary basis is eligible, but not required, to join the plan following two years of continuous service provided that, in the two consecutive years, the employee has:

- earned at least 35% of the YMPE; or
- worked at least 700 hours for the Employer.

The YMPE, or Year's Maximum Pensionable Earnings, refers to the maximum annual amount of earnings upon which an employee and an employer contribute to the Canada/Québec Pension Plan (C/QPP).

#### Contributions

Each member is required to contribute 2.5% of the member's pensionable earnings up to an annual maximum contribution of \$2,500. Employees who have accrued 35 years of credited service are not required to make any additional contribution into the plan.

#### **Retirement Dates**

#### **Normal Retirement Date**

The normal retirement date for Staff members is the last day of the month in which the member attains age 65. The normal retirement date for Field Management members is the last day of the month in which the member attains age 60.

#### **Early Retirement Date**

If a Staff member has been in the plan for at least two years, the member may choose to retire as early as age 55. If a Field Management member has been in the plan for at least two years, the member may choose to retire as early as age 50.

If a member is both a Staff member and a Field Management member (i.e. the member has both Staff service and Field Management service), the member can elect to commence the Staff portion of his or her pension as early as age 50.

#### **Postponed Retirement**

An active member may postpone retirement beyond the normal retirement date; however, in accordance with the plan provisions, all members must commence their pension prior to the end of the year in which they attain age 69.

#### Retirement Benefits

#### **Normal Retirement Benefit (Staff Members)**

The retirement income benefit payable at the normal retirement date in respect of Staff pensionable service is equal to the sum of:

- 1.6% of the member's highest 3-year average earnings up to final average YMPE; and
- 2.0% of the member's highest 3-year average earnings in excess of final average YMPE

multiplied by the member's Staff pensionable service, capped at 35 years.

The highest 3-year average earnings are defined as the greater of:

- the annual average of the member's pensionable earnings in the final 36-month period up to the member's termination of employment, retirement, or death; and,
- the annual average of the member's pensionable earnings in any three consecutive calendar years in the last fifteen calendar years.

As of January 1, 2004, the definition of pensionable earnings under the plan was amended to exclude bonuses paid in respect of periods of service after December 31, 2003. At the same time, the plan was amended to guarantee that the member's highest 3-year average earnings at the time of termination of employment, retirement, or death would not be lower than they were at December 31, 2004.

The Final Average YMPE is defined as the average of the YMPE in the year in which the Staff member or Field Management member terminates employment with Canada Life, retires, or dies and the YMPE in each of the two immediately preceding calendar years.

# Normal Retirement Benefit (Field Management Members)

The retirement benefits payable at the normal retirement in respect of Field Management pensionable service is equal to the sum of the following four components:

Post-1988 Field Management Benefit	For each year of Field Management pensionable service on or after January 1, 1988 (up to a maximum of 35 years of service), the member will receive a pension equal to the sum of:
	<ul> <li>1.5% of the member's highest 5-year average earnings up to the final average YMPE; and,</li> </ul>
	<ul> <li>2.0% of the member's highest 5-year average earnings in excess of the final average YMPE.</li> </ul>
Annuity Purchase Benefit	The Annuity Purchase Benefit provides an annual pension payable to the Field Management member, with the amount of the pension based on the employee contributions and (notional) company grants that are accumulated with interest until the member's retirement, death, or termination and are converted to a pension based on a factor specified in the plan text. The Annuity Purchase Benefit is equal to the sum of the member's:
	<ul> <li>earnings-related required contributions and company grants (made prior to December 31, 1987), with interest, multiplied by the applicable factor from Table A; and</li> </ul>
	<ul> <li>commission-related required contributions and notional company grants, with interest, multiplied by the applicable factor from Table B.</li> </ul>
Commission Earnings Benefit	The Commission Earnings Benefit provides an annual pension payable to the Field Management member, with the amount of the pension calculated based on the member's indexed commission earnings multiplied by the applicable factor from Table C.
Designated Appointee Benefit	The Designated Appointee Benefit provides an annual pension payable to the Field Management member, with the amount of the annual pension equal to 0.5% of the member's final 10-year earnings multiplied by the Field Management member's designated appointee pensionable service.

Tables A, B, and C referred to in the above plan description are shown on the following page.

Retirement Age	Table A	Table B	Table C
50	0.0602	0.0598	0.0048
51	0.0614	0.0610	0.0052
52	0.0626	0.0623	0.0056
53	0.0638	0.0637	0.0060
54	0.0656	0.0651	0.0064
55	0.0674	0.0666	0.0069
56	0.0686	0.0681	0.0074
57	0.0704	0.0697	0.0080
58	0.0722	0.0712	0.0087
59	0.0740	0.0729	0.0094
60	0.0758	0.0747	0.0100
61	0.0770	0.0765	0.0107
62	0.0782	0.0783	0.0114
63	0.0800	0.0802	0.0121
64	0.0818	0.0821	0.0129
65	0.0835	0.0841	0.0139
66	0.0859	0.0862	0.0147
67	0.0877	0.0882	0.0154
68	0.0895	0.0903	0.0163
69	0.0919	0.0924	0.0173

#### **Early Retirement Pension (Staff Members)**

If a member with Staff pensionable service retires early, the member will be entitled to a pension in respect of his or her Staff pensionable service that is calculated the same way as for a normal retirement. The pension payable however, will be reduced as follows:

#### **Early Retirement Reduction for Staff Members**

If member has:	Early retirement reduction:
Age 60 with more than 30 years of pensionable service	No reduction for early retirement
Age 60 with less than 30 years of pensionable service	The member's normal retirement date pension will be reduced by 0.4% multiplied by the lesser of:
	<ul> <li>The number of months by which the pension commencement date precedes the member's normal retirement date; and</li> </ul>
	<ul> <li>The number of months by which the member's pensionable service is less than 30 years.</li> </ul>
Under age 60 with more than 30 years of pensionable service	The member's normal retirement date pension will be reduced by 0.4% for each month by which the pension commencement date precedes the member's attainment of age 60.
Under age 60 and less than 30 years of pensionable service	The member's normal retirement date pension will be reduced by 0.4% multiplied by:
	<ul> <li>the number of months by which the pension commencement date precedes the member's normal retirement date; minus</li> </ul>
	<ul> <li>the number of months by which the member's pensionable service exceeds 25 years.</li> </ul>

If, however, the member attained age 50 and completed at least 20 years of pensionable service as of January 1, 1997, reduction of the member's pension in respect of his or her Staff pensionable service shall not exceed 0.4% multiplied by the lesser of the number of months by which the pension commencement date precedes the member's normal retirement date; and the number of months by which the pension commencement date precedes the date at which the member would have attained age 60 and completed at least 30 years of pensionable service.

If a member is both a Staff member and a Field Management member (i.e. the member has both Staff service and Field Management service), the member can elect to commence the Staff portion of his pension as early as age 50; however the amount of the Staff pension will be reduced so that the amount of pension is actuarial equivalent of the pension otherwise payable at age 55.

#### **Early Retirement Pension (Field Management Members)**

If a member with Field Management pensionable service retires early, the member will be entitled to a pension in respect of his or her Field Management pensionable service that is calculated the same way as for a normal retirement. The pension payable however, will be reduced as follows:

#### **Early Retirement Reduction for Field Management Members**

Post-1988 Field Management Benefit	The normal retirement date pension will be reduced by 0.4% for each month by which the member's pension commencement date precedes the member's normal retirement date.
Annuity Purchase Benefit	The annual pension is calculated by multiplying the member's accumulated contributions and grants by a factor from Table A or Table B, as appropriate.
Commission Earnings Benefit	The annual pension is calculated by multiplying the member's indexed commission earnings by a factor from Table C.
Designated Appointee Benefit	The normal retirement date pension will be reduced by 0.6% for each month by which the member's pension commencement date precedes the member's normal retirement date.

#### **Postponed Retirement Pension**

A member who continues to be an active employee of Canada Life may elect to postpone retirement. In that case, the member would continue to accrue service (up to his or her 69<sup>th</sup> birthday).

For Staff members, the pension shall not be less than the actuarial equivalent of the pension accrued by the member as of his normal retirement date, increased by the amount by which the pension would have been indexed.

For Field Management members, the pension will be determined as follows:

#### Postponed Pension Benefits for Field Management Members

Post-1988 Field Management Benefit	The pension shall not be less than the actuarial equivalent of the pension accrued by the member as of his normal refirement date, increased by the amount by which the pension would have been indexed.
Annuity Purchase Benefit	The Annuity Purchase Benefit provides an annual pension payable to the Field Management member, with the amount of the pension based on the employee contributions and (notional) company grants that are accumulated with interest until the member's retirement, death, or termination and are converted to a pension based on a factor specified in the plan text. The accumulated contributions and grants are multiplied by the factor from Table A or Table B, as applicable.
Commission Earnings Benefit	The Commission Earnings Benefit is based on the member's indexed commission earnings multiplied by the applicable factor from Table C.
Designated Appointee Benefit	The Designated Appointee Benefit will be equal to the amount accrued by the member as of his normal retirement date.

#### **Maximum Pension**

The total annual pension payable from the plan upon retirement, death or termination of employment cannot exceed the lesser of:

- 2% of the average of the best three consecutive years of total compensation paid to the member by the Company, multiplied by total credited service; and
- the maximum dollar limit for the year of termination, retirement or death prescribed in the Income Tax Act, Canada, multiplied by the member's total credited service.

#### Survivor Benefits

#### **Death Before Retirement**

If a member with Staff pensionable service dies before the pension commencement date, the member's spouse will receive an immediate pension equal to 60% of the pension accrued by the member at his death, with a guarantee of at least 120 monthly payments. Alternatively, the spouse may elect a deferred pension or a lump sum settlement equal to the value of the immediate pension. If the member has no spouse, the member's beneficiary will receive a lump sum equal to the present value of 120 monthly payments of 60% of the normal retirement date pension accrued by the member up to his death. In either situation, the death benefit payable to the member's beneficiary will be at least equal to the commuted value of the member's benefits.

If a member with Field Management pensionable service dies before his pension commencement date, death benefits shall be equal to the sum of the following:

#### Pre-Retirement Death Benefits for Field Management Members

An immediate pension equal to 60% of the Post-1988 Field Management pension benefits accrued by the member up to his death, with a guarantee of at least 120 monthly payments. Alternatively, the spouse may elect a deferred pension or a lump sum settlement equal to the value of the immediate pension.
If the member has no spouse, the member's beneficiary will receive a lump sum settlement equal to the commuted value of 60% of the pension accrued by the member at his death, as would have been payable to the member at the member's normal retirement date, with a guarantee of at least 120 monthly payments.
The member's spouse, or beneficiary if there is no spouse, will receive a benefit equal to value of the member's earnings related company grants with interest, earnings related required contributions with interest, commission related notional company grants with interest; and, commission related required contributions with interest.
A lump sum equal to the value of the Commission Earnings Benefit that the member would have been entitled to at his normal retirement date. If the member has a spouse, the spouse may elect an immediate unreduced annuity or a deferred annuity of equal value.
A lump sum equal to the value of the Designated Appointee Benefit that the member would have been entitled to at his normal retirement date. If the member has a spouse, the spouse may elect an immediate unreduced annuity or a deferred annuity of equal value.

Report on the Actuarial Valuation for Funding Purposes as at December 31, 2008

#### **Death After Retirement**

The normal form of payment for the Staff member's benefit and for the Field Management member's benefit for pensionable service on and after January 1, 1988 is as follows:

- For a member with a spouse the normal form of payment is a joint and survivor 60% pension, with 60 monthly payments of 60% of the member's pension guaranteed.
- For a member without a spouse, the normal form of payment is a lifetime pension, with
   120 monthly payments of 60% of the member's pension guaranteed.

The normal form of payment for the Field Management member's Designated Appointee, Commission Earnings, and Annuity Purchase Benefits is a lifetime pension, with 120 monthly payments of 100% of the member's pension guaranteed.

For all benefits the member may elect to receive an optional form of pension on an actuarial equivalent basis.

#### **Termination Benefits**

If a member's employment terminates for reasons other than death or retirement, the benefits payable from the plan will depend on the member's length of plan membership, as follows:

#### Benefits in the Event of Termination of Employment

if member has:	The plan will pay:
Less than two years of membership	A refund of the member's contributions with Interest.
At least two years of membership	A deferred lifetime pension based on the member's earnings, contributions and credited service up to the date of termination.

Deferred pensions are payable commencing at the applicable normal retirement date; however, a member may elect to commence receipt of pension early subject to early retirement reduction factors described in the above sections Early Retirement Pension (Staff Members) and Early Retirement Pension (Field Management Members).

If a member is entitled to a deferred pension, the member may also transfer the commuted value of that pension into another retirement vehicle in accordance with the applicable federal and provincial legislation.

#### Pension Indexing

The annual pensions payable to members who were hired by Canada Life prior to January 1, 2001, and their respective spouses and beneficiaries shall be increased each January 1 following the member's retirement date (except as noted below). The amount of the pension increase will be equal to (a) minus (b) where:

- (a) is the member's annual pension at his or her pension commencement date multiplied by the lesser of:
  - (i) the cumulative return based on the excess of the Current Year Rate for Indexing over 4% for each year measured from the member's pension commencement date to January 1 of the plan year; and,
  - (ii) the cumulative Consumer Price Index Rate measured from the member's pension commencement date to January 1 of the plan year; and,
- (b) is the member's annual pension as at December 31 of the previous plan year.

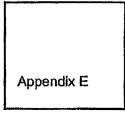
In no event shall the adjustment on any January 1 decrease the member's pension below the amount of the annual pension payable on December 31 of the immediately preceding year.

The first increase for pension benefits payable in respect of Field Management pensionable service will not take place until January 1 following the member's attainment of age 60.

Effective January 1, 2003, the Current Year Rate for Indexing means the average of the fund rates of return over the first 15 of the preceding 16 plan years. Between January 1, 2001 and January 1, 2003, the Current Year Rate for Indexing meant the average of the fund rates of return over the first 5 of the preceding 6 plan years. Prior to January 1, 2001, the Current Year Rate for Indexing meant the rate earned by the Company on its life insurance and annulty funds during the preceding calendar year, excluding the affect of the Company's investment in its subsidiaries.

Note that some Field Management members hired before January 1, 2001 elected to receive some or all of their pension in a non-indexed form when they retired. These benefits are not indexed for inflation.

Pension benefits for members hired after December 31, 2000 may be increased, from time to time, at the discretion of the Company in accordance with such method as the Company may in its discretion adopt effective any January 1.



## **Employer Certification**

With respect to the report on the actuarial valuation of the *The Canada Life Canadian Employees Pension Plan*, as at December 31, 2008, I hereby certify that, to the best of my knowledge and belief:

- a copy of the official plan documents and of all amendments made up to December 31, 2008, were provided to the actuary,
- the membership data provided to the actuary included a complete and accurate description of every person who is entitled to benefits under the terms of the plan for service up to December 31, 2008, and
- all events subsequent to December 31, 2008 that may have an impact on the results of the valuation have been communicated to the actuary.

Date Signed Signed

FLWUDD C HAAS

# **MERCER**



Mercer (Canada) Limited 161 Bay Street P.O. Box 501 Toronto, Ontario M5J 2S5 416 868 2000

Consulting. Outsourcing. Investments.

This is Exhibit "C" referred to in the affidavit of Marcus Robertson sworn before me, this 8th day of March, 2013

A Commissioner for taking affidavits, etc.

SHELAGH MARGARET MATHERS Barrister, Solicitor, Notary Public

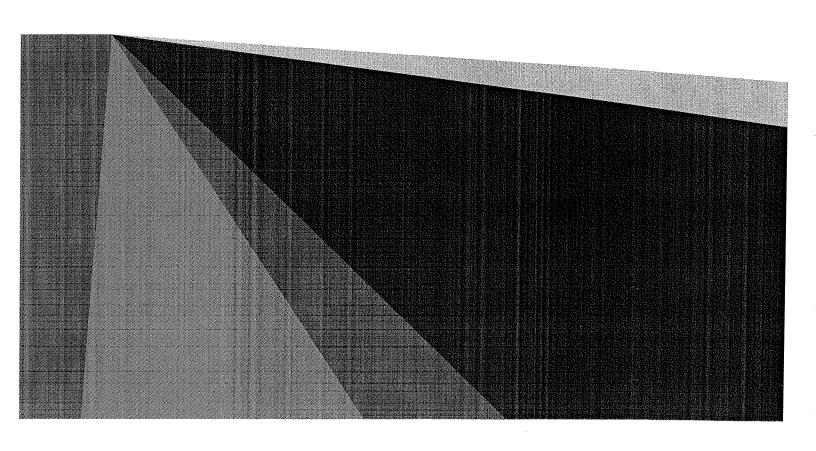
MATHERS LAW OFFICE 6 TALBOT STREET SUITE NO. 4 PICTON, ON KOK 2TO



# THE CANADA LIFE CANADIAN EMPLOYEES PENSION PLAN

# REPORT ON THE ESTIMATED FINANCIAL POSITION OF THE PORTION OF THE PLAN AFFECTED BY THE 2005 PARTIAL PLAN WIND-UP

THE CANADA LIFE ASSURANCE COMPANY 21 MARCH 2012



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#### Introduction

At the request of the Canada Life Assurance Company ("Canada Life" or the "Company"), we have estimated the financial position of the portion of the Canada Life Canadian Employees Pension Plan (the "Plan") affected by the June 30, 2005 partial wind-up of the plan (the "partial wind-up group) as at December 31, 2011.

#### June 30, 2005 Partial Wind-Up

A partial wind-up was declared by Canada Life as a result of the workforce integration measures taken after the acquisition of the Company by The Great-West Life Assurance Company ("Great-West Life") on July 10, 2003. All members of the Plan whose employment with Canada Life terminated in conjunction with the integration, other than those members of the plan who were employed in the province of Québec, have been included in the partial wind-up. This includes members whose employment was terminated during the integration period by Canada Life, as well as those who resigned or retired voluntarily. It also includes those members who were informed during the integration period that their employment would be terminated as a result of the integration and whose employment was terminated after June 30, 2005. The integration period started effective July 10, 2003, the date Canada Life was acquired by Great-West Life, and ended on June 30, 2005 (the "Partial Wind-Up Date").

On September 4, 2003, the Superintendent approved Canada Life's request to commence monthly pension payments from the pension fund to those members and former members of the Plan who are eligible for, and who elect to receive, an immediate pension.

A report on the partial wind-up of the Plan as at June 30, 2005 was filed with the Superintendent in March, 2006.

On April 14, 2011, the Superintendent approved the distribution of basic benefits for the partial wind-up group as set out in the June 30, 2005 partial wind-up report. All members of the partial wind-up group were given the option of either electing a lump sum transfer of their benefit entitlements from the pension fund, or to have a deferred or immediate annuity purchased on their behalf.



#### **Terms of Engagement**

In accordance with our terms of engagement with the Company, our estimate of the financial position of the portion of the Plan in respect of the partial wind-up group is based on the following material terms:

- The estimates should only be in respect of the portion of the Plan affected by the June 30, 2005 partial wind-up i.e. no part of this report is in respect of the retained portion of the Plan. In addition, this report does not consider the effects on the estimated financial position of the portion of the Plan affected by the 2005 partial wind-up if a partial wind-up is declared in respect of a past event(s) from the Plan's history;
- The valuation has been prepared in accordance with applicable pension legislation and actuarial standards of practice in Canada; and
- The purpose of these estimates and the results contained in this report are as a result of a request from Canada Life's legal counsel for the sole purpose of providing legal advice.

#### Calculation Methodology, Assumptions and Data

Our calculations reflect the provisions of the Plan as at December 31, 2011. A summary of the main plan provisions can be found in our December 31, 2008 actuarial valuation report.

Our calculations reflect the asset information in respect of the partial wind-up group provided to us by Canada Life. Details of the assets are provided in Appendix A.

Our calculations are based on membership data as at December 31, 2010. We have reflected the payment of commuted values for members who elected lump sum transfers in settlement of their basic benefits (for member elections received up to January 20, 2012). A summary of the membership data is provided in Appendix C.

The assumptions used to determine lump sum transfers are based on the Canadian Institute of Actuaries' ("CIA") Recommendations or Standards of Practice (as the case may be based on members' dates of termination of employment) for determining lump sum transfers from registered pension plans in Canada. The assumptions used to estimate the cost of purchasing immediate or deferred annuities are based on guidance issued by the CIA on estimating the cost of purchasing annuities. Appendix B provides a summary of the assumptions used.

The estimates shown in this report have been prepared under two scenarios regarding the settlement elections for members whose elections had not been received as at January 20, 2012:

• Scenario 1: Assumes members whose settlement elections have not been received, would make their settlement elections in accordance with the benefit settlement election assumptions from the December 31, 2008 actuarial valuation of the Plan.

Scenario 2: Assumes members whose settlement elections have not been received, would
elect or be deemed to elect to have their benefits settled through the purchase of immediate or
deferred annuities.

This report has been prepared on the assumption that all of the assets of the pension fund that have been allocated to the partial wind-up group are available to meet all of the claims in respect of the partial wind-up group.

On July 29, 2004, the Supreme Court of Canada dismissed the appeal in Monsanto Canada Inc. versus Superintendent of Financial Services ("Monsanto"), thereby upholding the requirements to distribute surplus on partial plan wind-up under The Pension Benefits Act (Ontario). The decision has retroactive application and applies on the termination of Ontario employees if they are included in a partial plan wind-up, regardless of the province in which the pension plan is registered.

With the exception of the June 30, 2005 partial wind-up of the Plan, we are not aware of any other partial plan wind-up having been declared in respect of the Plan where the Monsanto decision may apply. In preparing these estimates, we have therefore assumed that the portion of the Plan's assets allocated to the partial wind-up group are available to cover that group's estimated liabilities presented in this report. The subsequent declaration of a partial wind-up of the Plan where *Monsanto* may apply in respect of a past event, or disclosure of an existing past partial wind-up, could cause an additional claim on Plan assets (and consequent re-allocation of the assets allocated to the partial wind-up group), the consequences of which would be addressed in a subsequent report. We note the discretionary nature of the power of the regulatory authorities to declare partial wind-ups and the lack of clarity with respect to the retroactive scope of that power. We are making no representation as to whether the regulatory authorities might declare a partial wind-up in respect of other events in the Plan's history.

#### **Subsequent Events**

After checking with representatives of the Company, to the best of our knowledge there have been no events subsequent to December 31, 2011, which, in our opinion, would have a material impact on the estimates provided in this report.

The results in this report reflect the estimated financial position of the portion of the Plan in respect of the partial wind-up group as at December 31, 2011. Other than the reflection of the payment of commuted values made up to February 10, 2012, this report does not take into account any experience after December 31, 2011.



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## Valuation Results - Scenario 1

Under Scenario 1, assuming members whose settlement elections have not been received make their elections in accordance with the benefit settlement election assumptions from the December 31, 2008 actuarial valuation, the estimated financial position of the partial wind-up group as at December 31, 2011, compared with that of the previous valuation, is as follows:

	12.31.2011	12.31.2008
Assets		
Market value of assets	\$306,543,000	\$300,320,000
Increased asset allocation to PWU group	\$5,886,000	\$0
In-transit benefit payments <sup>1</sup>	(\$5,888,000)	\$0
Crown DC balances	\$390,000	\$579,000
Termination expense provision	(\$13,000,000)	(\$12,000,000)
Wind-up assets	\$293,931,000	\$288,899,000
Present value of accrued benefits for:  active members	Φ0	
• active members	<b>#</b> 0	
active members	\$0	\$8,805,000
<ul> <li>pensioners and survivors</li> </ul>	\$0 \$115,194,000	\$8,805,000 \$87,230,000
pensioners and survivors	\$115,194,000	\$87,230,000
<ul><li>pensioners and survivors</li><li>deferred pensioners</li><li>Crown DC members</li></ul>	\$115,194,000 \$152,369,000	\$87,230,000 \$120,510,000
<ul><li>pensioners and survivors</li><li>deferred pensioners</li></ul>	\$115,194,000 \$152,369,000 \$390,000	\$87,230,000 \$120,510,000 \$579,000

<sup>&</sup>lt;sup>1</sup> Commuted value payments to partial wind-up members made after January 1, 2012 and up to February 10, 2012

#### **Reconciliation of the Financial Position**

A reconciliation of the financial position at the last valuation (i.e. a wind-up excess of \$71,775,000) to the estimated financial position at December 31, 2011 under Scenario 1 (i.e. a wind-up excess of \$25,978,000) is as follows:

100000000000000000000000000000000000000	Partial Win	d-Up Group
Wind-up excess (shortfall) as at previous valuation		\$71,775,000
Interest on funding excess (funding shortfall) at 4.24% per year		\$9,522,000
Employer's special payments, with interest		\$0
Employer's contributions drawn from previous funding excess, with interest		(\$32,000)
Expected funding excess (funding shortfall)		\$81,265,000
Net experience gains (losses)		
Investment return	\$8,483,000	
Net demographic experience	\$1,562,000	
Total experience gains (losses)	\$10,045,000	\$10,045,000
Changes in assumption of member settlement election between annuities and lump sum transfers due to aging		(\$2,621,000)
Impact of actual settlement elections		(\$10,200,000)
Impact of changes in the estimated cost of purchasing annuities		(\$57,579,000)
Increase in provision for termination expenses		(\$1,000,000)
Increase in allocation of Plan assets to 2005 PWU group as a result of data changes		\$5,886,000
Net impact of other elements of gains and losses		\$182,000
Estimated wind-up excess (shortfall) at December 31, 2011		\$25,978,000

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### Valuation Results - Scenario 2

Under Scenario 2, assuming members whose settlement elections have not been received elect, or are deemed to elect to have their benefits settled through the purchase of immediate or deferred annuities, the estimated financial position of the partial wind-up group at December 31, 2011, compared with that of the previous valuation, is as follows:

	12.31.2011	12.31.2008
Assets		
Market value of assets	\$306,543,000	\$300,320,000
Increased asset allocation to PWU group	\$5,886,000	\$0
In-transit benefit payments <sup>1</sup>	(\$5,888,000)	\$0
Crown DC balances	\$390,000	\$579,000
Termination expense provision	(\$13,000,000)	(\$12,000,000)
Wind-up assets	\$293,931,000	\$288,899,000
Present value of accrued benefits for:		
active members	\$0	\$8,805,000
<ul> <li>pensioners and survivors</li> </ul>	\$115,194,000	\$87,230,000
deferred pensioners	\$169,957,000	\$120,510,000
Crown DC members	\$390,000	\$579,000
Total wind-up liability	\$285,541,000	\$217,124,000
Wind-up excess (shortfall)	\$8,390,000	\$71,775,000
Transfer ratio	1.07	1.39

#### **Reconciliation of the Financial Position**

A reconciliation of the financial position at the last valuation (i.e. a wind-up excess of \$71,775,000) to the estimated financial position at December 31, 2011 (i.e. a wind-up excess of \$8,391,000) is as follows:

	Partial Win	d-Up Group
Wind-up excess (shortfall) as at previous valuation		\$71,775,000
Interest on funding excess (funding shortfall) at 4.24% per year		\$9,522,000
Employer's special payments, with interest		\$0
Employer's contributions drawn from previous funding excess, with interest		(\$32,000)
Expected funding excess (funding shortfall)	_	\$81,265,000
Net experience gains (losses)		
Investment return	\$8,483,000	
Net demographic experience	\$1,562,000	
Total experience gains (losses)	\$10,045,000	\$10,045,000
Changes in assumption of member settlement election between annuities and lump sum transfers due to aging		(\$2,621,000)
Impact of actual settlement elections		(\$20,200,000)
Impact of changes in the estimated cost of purchasing annuities		(\$64,679,000)
Increase in provision for termination expenses		(\$1,000,000)
Increase in allocation of Plan assets to 2005 PWU group as a result of data changes		\$5,886,000
Net impact of other elements of gains and losses		(\$306,000)
Estimated wind-up excess (shortfall) at December 31, 2011		\$8,390,000

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# **Actuarial Opinion**

In our opinion, for the purposes of determining the estimated financial position of the portion of the Plan affected by the 2005 partial wind-up,

- the membership data on which the calculations are based are sufficient and reliable,
- · the assumptions are appropriate, and
- the methods employed are appropriate.

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada.

Benedict O. Ukonga

Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

March 21, 2012

Date

Douglas Johnson

Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

March 21, 2012

Date

MARSH & MCLENNAN COMPANIES

# Appendix A

# Plan Assets

The pension fund is held in trust by the trustees. In preparing this report, we have relied upon fund statements prepared by The Canada Life Assurance Company.

We have also relied on information provided by the Canada Life Assurance Company regarding the defined contribution account balances for those partial wind-up members who accrued defined contribution benefits during 1999 as well as information on pension plan cash flows (e.g. employee contributions, monthly benefit payments, lump sum benefit payments, and expenses), from January 1, 2009 to December 31, 2011 in respect of members of the partial wind-up group.

A reconciliation of the assets allocated to the partial wind-up group from the date of the last valuation to December 31, 2011 is as follows:

DB Assets only	2009	2010	2011
January 1	\$300,320,000	\$315,255,000	\$326,795,000
PLUS			
Members' contributions	\$9,000	\$1,000	\$0
Company's contributions	\$0	\$0	\$0
Net investment income & net capital gains (losses)	\$20,794,000	\$18,110,000	\$13,308,000
	\$20,803,000	\$18,111,000	\$13,308,000
LESS			
Pensions paid	\$4,634,000	\$4,986,000	\$5,417,000
Lump sum payments	\$0	\$0	\$25,614,000
Expenses	\$1,234,000	\$1,585,000	\$2,528,000
	\$5,868,000	\$6,571,000	\$33,559,000
December 31	\$315,255,000	\$326,795,000	\$306,544,000
Gross rate of return	7.0%	5.8%	4.3%
Rate of return net of expenses	6.6%	5.3%	3.5%

Please note that for the purposes of the June 30, 2005 partial wind-up report, the allocation of Plan assets between the members affected by the partial wind-up and those not affected by the partial wind-up was done based on the "standard method" under FSCO Policy W100-102 (please see the partial wind-up report for additional information on the asset allocation). We noted in that report that the final allocation of Plan assets could change due to a number of factors including (but not limited to) refinements in membership data.

As a result of the data cleanup exercise undertaken by Canada Life in 2010, the data changes that arose during the preparation of the benefit statements for the partial wind-up group in 2011, and miscellaneous other data changes and updates since June 2005, the initial allocation of the Plan's assets between the partial wind-up group and the retained portion of the Plan at June 30, 2005 has changed. This change results in the assets of the Plan that would have being allocated to the partial wind-up group been higher by approximately \$4,992,000 as at June 30, 2005. This amount, adjusted with the gross rate of return on the total fund between July 2005 and March 2008, and with the gross rate of return on the non-segmented assets between April 2008 and December 2011 would have grown to approximately \$5,886,000.

As a result, the market value of assets in respect of the partial wind-up group at December 31, 2011 and before pending commuted value payments is \$312,429,000

# Appendix B

# **Actuarial Methods and Assumptions**

#### **Valuation of Assets**

For this valuation, the market value of the assets allocated to the partial wind-up group is used.

#### Valuation of Liabilities

No benefits payable on plan wind-up were excluded from our calculations.

We have considered that members under the earliest retirement age specified in the Plan would be entitled to a deferred pension payable from their normal retirement date or such earlier age for which plan eligibility requirements have been satisfied at their employment termination date. Members over the earliest retirement age specified in the Plan are considered to be entitled to an immediate pension, reduced in accordance with the plan rules. We have also considered that Ontario and Nova Scotia members whose age plus years of service equal at least 55 at their employment termination date would be entitled to a deferred pension payable from the age that would produce the greatest value if employment were to have continued for the purpose of determining eligibility for early retirement benefits. For each individual plan member, accumulated contributions with interest plus 50% of the present value of the pension accumulated are established as a minimum actuarial liability.

Partial wind-up members' benefits are going to be settled in accordance with members' actual or deemed elections pursuant to subsection 73(2) of the PBA (or such similar rules in other provinces).

The value of benefits that will be settled through a lump sum transfer is based on the assumptions prescribed for the calculation of commuted values payable from registered pension plans at the date of termination of employment.

#### For greater certainty:

- For partial wind-up members who terminated employment prior to February 1, 2005, the
  calculations were done based on the September 1993 recommendations of the Canadian
  Institute of Actuaries applicable on the member's date of termination of employment.
- For partial wind-up members who terminated employment after February 1, 2005 but prior to April 1, 2009, the calculations were done based on the Canadian Institute of Actuaries' Standard of Practice effective February 1, 2005, for Determining Pension Commuted Values applicable on their dates of termination of employment.
- For partial wind-up members who terminated employment after April 1, 2009, the calculations were done based on the Canadian Institute of Actuaries' Standard of Practice effective April 1, 2009, for Determining Pension Commuted Values applicable on their dates of termination.



Benefits provided as an immediate or deferred pension are assumed to be settled through the purchase of annuities based on an estimate of the cost of settlement of these benefits through the purchase of annuities.

We have estimated the cost of purchasing these annuities based on the preliminary guidance issued by the Canadian Institute of Actuaries' Committee on Pension Plan Financial Reporting ("PPFRC") on the estimated costs of purchasing annuities for valuations on and after December 31, 2011. Based on this preliminary guidance, we have assumed that an appropriate proxy for estimating the cost of purchasing indexed pensions is using the yields on the long term Government of Canada Real Return Bonds.

We note however that there is very limited data available to provide credible guidance on the cost or availability of a purchase of indexed annuities in Canada. The actual cost of purchasing these annuities may be substantially different from the estimates shown in this report.

We have not included a provision for adverse deviation in these calculations.

The assumptions are as follows:

	December 31, 2011	December 31, 2008	
Form of benefit settlement elected	ed by member:		
Lump sum	Scenario 1:	For active, disabled and deferred	
	<ul> <li>Actual elections for those whose elections had been received</li> </ul>	<ul><li>vested partial wind-up members:</li><li>70% of under age 50,</li></ul>	
	<ul> <li>Assumed settlement elections as in December 31, 2008 valuation for those whose elections had not been</li> </ul>	<ul><li>50% of from age 50 to 55, and</li><li>30% of over age 55</li></ul>	
	received	elect to receive their benefit	
	Scenario 2:	- entitlement in a lump sum	
	<ul> <li>Actual settlement elections for those whose election had been received</li> </ul>		
	0% for members whose elections had not been received		
Annuity purchase	Scenario 1:	All remaining members are assumed	
	<ul> <li>Actual elections for those whose elections had been received</li> </ul>	to elect to receive their benefit entitlement in the form of a deferred or immediate pension. These benefits	
	<ul> <li>Assumed settlement elections as in December 31, 2008 valuation for those whose elections had not been received</li> </ul>	are assumed to be settled through the purchase of deferred or immediate pension	
	Scenario 2:	-	
	<ul> <li>Actual settlement elections for those whose election had been received</li> </ul>		
	100% for members whose elections had not been received		
Benefits assumed to be settled the	nrough lump sum transfer		
Nominal interest rate	In accordance with CIA recommendations/Standards of Practice applicable at member's date of termination of employment	In accordance with CIA recommendations/Standards of Practice applicable at member's date of termination of employment	
Inflation	In accordance with CIA recommendations/Standards of Practice at member's date of termination of employment	In accordance with CIA recommendations/Standards of Practice at member's date of termination of employment	
Post retirement indexing	In determining the amount of post retirement indexing included in the calculation of commuted values we have reflected the indexing formula specified in the plan which limits the amount of post retirement increases to the lesser of inflation and the average fund rate of return less 4%.		
Mortality	In accordance with CIA recommendations date of termination of employment	s/Standards of Practice at member's	

	December 31, 2011	December 31, 2008	
Benefits assumed to be settled the	nrough annuity purchase		
Nominal interest rate	Immediate retirement	Immediate retirement	
	Indexed: 2.46% per year	Indexed: 3.40% per year	
	Non-indexed: 3.31% per year	Non-indexed: 4.85% per year	
	Deferred retirement	Deferred retirement	
	Indexed: 3.31% during the deferral period, 2.46% after commencement	Indexed: 4.45% during the deferral period, 3.00% after commencement	
	Non-indexed: 3.31% per year	Non-indexed: 4.45% per year	
Mortality rate	UP 94 with generational mortality improvements (sex distinct)	UP 1994 projected to 2015 (sex distinct)	
Inflation	2.00% per year	1.30% per year	
	We have assumed that the life insurance company would price the annuities as if they were fully indexed for inflation.	We have assumed that the life insurance company would price the annuities as if they were fully indexed for inflation.	
Provision for wind-up expenses <sup>2</sup> :	\$13 million	\$12 million	
Final average earnings	Based on actual pensionable earnings over the averaging period	Based on actual pensionable earnings over the averaging period	
Family composition	80% of currently single and 100% of currently married Members will have a spouse on the earlier of death or retirement. Where available, we have used the actual difference between the age of the member and the spouse. Otherwise, we have assumed that the male partner will be three years older than the female partner.		

<sup>&</sup>lt;sup>2</sup> Provided to us by Canada Life

# Appendix C

### Membership Statistics

The estimated financial position is based on the membership data of the partial wind-up group as at December 31, 2010.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), accrued pensions, credited service, contributions accumulated with interest and pensions to members whose pensions had commenced. Contributions, lump sum payments and pensions to retirees were compared with corresponding amounts reported in financial statements. The results of these tests were satisfactory.

Plan membership data is summarized below. The membership information shown at December 31, 2010 is in respect of partial wind-up members who have <u>not</u> elected to have their benefit entitlements settled through a lump sum transfer as at January 20, 2012. As of January 20, 2012, 695³ partial wind-up members had elected to have their benefits settled through lump sum transfers. The membership summary at December 31, 2008 is in respect of all partial wind-up members.

	31.12.2010	31.12.2008
Active Members		
Number	0	20
Total pensionable earnings for previous year	n/a	\$1,682,463
Average years of pensionable service	n/a	19.2 years
Average age	n/a	54.4
Accumulated contributions with interest	n/a	\$1,949,063
Deferred Pensioners		
Number	1,210	1,899
Total annual pension	\$9,158,676	\$12,605,175
Average annual pension	\$7,569	\$6,638
Average age	43.3	43.4
Pensioners and Survivors		
Number	220	227
Total annual lifetime pension	\$4,855,101	\$4,458,475
Average annual lifetime pension	\$22,069	\$19,641
Average age	64.6	62.0
Other Members <sup>4</sup>		
Number	21	n/a <sup>5</sup>
Total annual pension	n/a	n/a
Average annual pension	n/a	n/a
Average age	50.5	n/a

<sup>&</sup>lt;sup>3</sup> 653 formerly deferred vested and 42 formerly in receipt of pensions

<sup>&</sup>lt;sup>4</sup> Members entitled to DC only benefits and members whose benefits had previously been settled

<sup>&</sup>lt;sup>5</sup> This group was included in "Deferred Pensioners" at 31.12.2008.

#### Distribution of Inactive Members Affected by the Partial Wind-Up By Age Group as at 31.12.2010

Deferred Pensioners		Pensioners	s and Survivors	
Age	Number	Average Annual Pension	Number	Average Annual Pension
< 40	299	2,484		
40-44	256	4,853		
45 - 49	287	9,141	1	*
50 - 54	202	11,525	1	*
55 - 59	130	15,143	42	18,721
60 - 64	34	7,333	91	24,763
65 - 69	2	*	70	22,300
70 - 74			15	14,894
75 - 79				
80 - 84				
85 - 89				
90 - 94				
95 - 99				
100 +				
Total	1210	7,569	220	22,069

<sup>\*</sup> For confidentiality reasons, average pensions are not shown for age groups with 2 or fewer members.

March 21, 2012

# Appendix D

## **Employer Certification**

With respect to the estimates of the financial position of the portion of the Canada Life Canadian Employees Pension Plan affected by the 2005 partial wind-up, as at December 31, 2011, I hereby certify that, to the best of my knowledge and belief:

- · the calculations reflect the terms of the Company's engagement with the actuary
- a copy of the official plan documents and of all amendments made up to December 31, 2011, were provided to the actuary and is reflected appropriately in the summary of plan provisions contained in the filed December 31, 2008 valuation report,
- the asset information summarised in Appendix A is reflective of the Plan's assets allocated to the 2005 partial wind-up group,
- the membership data provided to the actuary included a complete and accurate description of every person within the partial wind-up group who is entitled to benefits under the terms of the Plan, and

• all events subsequent to December 31, 2011 that may have an impact on the results shown in this report have been communicated to the actuary.

Date

W. B. ROBINSON

Name



Mercer (Canada) Limited 161 Bay Street, P.O. Box 501 Toronto, Ontario M5J 2S5 +1 416 868 2000

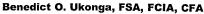


This is **Exhibit "D"** referred to in the affidavit of **Marcus Robertson** sworn before me, this 8<sup>th</sup> day of March, 2013

A Commissioner for taking affidavits, etc.

SHELAGH MARGARET MATHERS Barrister, Solicitor, Notary Public

MATKERS LAW OFFICE 6 TALBOT STREET SUITE NO. 4 PICTON, ON KOK 2TO



Principal



**100** MERCER

161 Bay Street P.O. Box 501 Toronto, Ontario M5J 2S5 416 868 7385 Fax 416 868 7555 ben.ukonga@mercer.com www.mercer.ca

October 9, 2012

Ms Amy Metzger Counsel - Litigation The Canada Life Assurance Company 255 Dufferin Avenue London, Ontario N6A 4K1

## Privileged & Confidential Prepared for the Advice of Counsel

**Subject:** Revised estimate of the financial position on a solvency basis of the portions of the Canada Life Registered Plan affected by the 2005 partial wind-up and the potential Indago, Adason and Pelican partial wind-ups

#### Dear Amy:

As requested, this letter provides an estimate of the financial position of the portion of the Canada Life Canadian Employees Pension Plan (the "Canada Life RPP" or the "Plan") affected by the June 30, 2005 partial plan wind-up (the "2005 PWU group") and the portions of the Plan affected by the potential Indago, Adason and Pelican partial wind-ups on a solvency basis as at August 31, 2012.

The revision of the estimates shown in this letter is as a result of an update to the pending expense reimbursement as at June 30, 2012 from \$14.0 million to \$14.5 million.

Similar to our previous updates, we have estimated the financial position of the 2005 PWU group under two scenarios:

- Scenario 1: assuming that terminations of Indago, Adason Property Management and Pelican Foods employees who were members of the Plan (the "Historical Potential PWU groups") do not trigger separate partial wind-ups of the Plan; and
- Scenario 2: assuming that separate partial wind-ups of the Plan are triggered by the terminations of Indago, Adason Property Management and Pelican Foods employees who were members of the Plan.

The estimated financial positions of the Historical Potential PWU groups are only shown under scenario 2.



Page 2 October 9, 2012 Ms Amy Metzger The Canada Life Assurance Company

#### Please note the following:

- The liabilities of the 2005 PWU group and the historical potential wind-up groups have been calculated based on market conditions at August 31, 2012. The assumptions used are summarized in Appendix A. They also reflect our current understanding of the provisions of the Canada Life Registered Plan.
- Under Scenario 2, the liabilities of the Indago, Adason and Pelican Foods employees include the estimated liabilities for additional benefits that would arise if partial wind-ups of the Plan were declared in respect of each of these groups.
- For the 2005 PWU group, the cumulative pending expense payments have been updated from June 30, 2012 to August 31, 2012 by increasing the amount at June 30, 2012 with the expenses for this group for July and August 2012 (provided by Canada Life). For the historical potential partial wind-up groups, we have left the cumulative pending expense payments unchanged from the amounts at June 30, 2012. We do not expect these amounts to have materially changed as at August 31, 2012 from their respective amounts at June 30, 2012.

As mentioned in our earlier estimates, these cumulative pending expense payments are being held as "payables" against the assets allocated to the respective groups<sup>1</sup>. Appendix B provides further information on these cumulative pending expense payments:

The cumulative pending expense payments are as follows:

Group	Cumulative pending expense payments
June 2005 partial wind-up group	\$14.7 million
Indago	\$0.0 million
Pelican	\$0.1 million
Adason Property Management	\$0.4 million

<sup>&</sup>lt;sup>1</sup> Plan assets were segmented before pending expense payments were deducted, therefore, cumulative pending expense payments are being held as payables against the respective groups' allocated assets.



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#### Estimated Financial Position as at August 31, 2012

Under Scenario 1, assuming partial wind-ups are not declared as a result of the terminations of Indago, Adason Property Management and Pelican Foods employees who were members of the Plan, the estimated financial position of the 2005 PWU group at August 31, 2012 is as follows. For comparison purposes, we show the estimated financial position at June 30, 2012 (and based on the new CIA annuity purchase guidance, which became effective June 30, 2012).

Estimated financial position for 2005 PWU group (\$ million)	August 31, 2012	June 30, 2012	
Assets	\$312.7	\$311.6	
Pending asset transfer	\$6.9	\$6.7	
Liabilities	(\$286.5)	(\$285.8)	
Pending expense payments	(\$14.7)	(\$14.0)	
Surplus	\$18.4	\$18.5	
Provision for future termination expenses	(\$12.7)	(\$12.7)	
Surplus net of termination expenses	\$5.7	\$5.8	

The provision for future termination expenses for the 2005 PWU group, of \$12.7 million, is an estimate of the future administrative, communications, actuarial, legal and other fees related to the partial wind-up that was provided by Canada Life.



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A reconciliation of the change in the estimated financial position from June 30, 2012 to August 31, 2012 is as follows:

(millions)	
Estimated surplus at June 30, 2012	\$5.8
Investment return on assets allocated to the partial wind-up group	\$2.2
Interest on liabilities at 2.7%	(\$1.3)
Impact of election of commuted values	\$1.3
Change in estimated costs of purchasing annuities	(\$1.8)
Increase in pending expense payments	(\$0.2)
Revision to cumulative pending expense payments	(\$0.5)
All other factors	\$0.2
Estimated surplus at August 31, 2012	\$5.7

## Impact of potential partial wind-up declarations in respect of Indago, Adason and Pelican

Under Scenario 2, assuming that terminations of employees of Indago, Adason Property Management and Pelican Foods are declared to be separate partial wind-ups of the Plan, the estimated financial position of the different groups within the Plan (excluding Crown DC account balances) as at August 31, 2012 are as follows:



Page 5 October 9, 2012 Ms Amy Metzger The Canada Life Assurance Company

Estimated financial position at August 31, 2012 (\$ million)	2005 PWU group	Indago	Adason	Pelican
Assets	\$316.5 <sup>2</sup>	\$1.5	\$12.2	\$4.3
Liabilities	(\$286.5)	(\$0.2)	(\$5.2)	(\$1.1)
Pending expense payments	(\$14.7)	\$0.0	(\$0.4)	(\$0.1)
Surplus	\$15.3	\$1.3	\$6.6	\$3.1
Termination expenses	(\$12.7)	(\$0.2)	(\$0.4)	(\$0.2)
Surplus net of termination expenses	\$2.6	\$1.1	\$6.2	\$2.9

A reconciliation of the estimated financial position from June 30, 2012 for Indago, Adason and Pelican to the estimated financial position at August 31, 2012 shown in this letter is presented below:

(\$ millions)	Indago	Adason	Pelican Foods
Estimated surplus at June 30, 2012	\$1.1	\$6.1	\$2.9
Investment return on allocated assets	\$0.0	\$0.2	\$0.1
Interest on liabilities	\$0.0	(\$0.0)	\$0.0
Increase in provision for future termination expenses Changes in estimated costs of purchasing	(\$0.0)	(\$0.0)	(\$0.0)
annuities	\$0.0	\$0.0	\$0.0
All other factors	(\$0.0)	(\$0.1)	(\$0.1)
Estimated surplus at August 31, 2012	\$1.1	\$6.2	\$2.9

<sup>&</sup>lt;sup>2</sup> Reflects pending asset transfer as a result of data changes made



Page 6
October 9, 2012
Ms Amy Metzger
The Canada Life Assurance Company

#### Membership data, assumptions, and methodology

For the purpose of preparing the above estimates:

- We have used membership data as at August 31, 2012 for the 2005 PWU and as at December 31, 2011 for the Indago, Adason and Pelican potential partial wind-up groups.
- For the 2005 PWU group, we have reflected members' actual elections for the settlement of their basic benefits.
  - For members who elected a lump sum transfer, we have reflected the payment of their commuted values. We have reflected lump sum payments that the Company has indicated will be made up to September 14, 2012;
  - For members who elected an immediate or deferred pension, we have reflected the estimated cost of settling their benefits through the purchase of deferred or immediate annuities;
  - For members whose settlement elections have not been received, we have assumed these members would elect, or be deemed to elect, an immediate or deferred pension.
     We have estimated the cost of settling their benefits through the purchase of deferred or immediate annuities.

In addition, under scenario 2, we have assumed all Indago, Adason, and Pelican Foods employees with remaining benefit entitlements<sup>3</sup> would elect, or be deemed to elect, to have their benefits settled through the purchase of immediate or deferred annuities.

- The calculations were prepared based on our current understanding of the provisions of the Canada Life Registered Plan;
- We have used the economic assumptions (specifically interest rate and inflation) consistent with the economic conditions at August 31, 2012;

The assumptions used in our calculations are summarized in Appendix A;

<sup>&</sup>lt;sup>3</sup> This excludes members who have already received a lump sum transfer (at their initial termination dates) but are entitled to additional benefits as a result of a partial wind-up being declared



Page 7 October 9, 2012 Ms Amy Metzger The Canada Life Assurance Company

- We have relied on the August 31, 2012 market value of assets provided to us by Canada
- The estimated financial positions are expressed on a solvency basis;
- The estimated cost of purchasing annuities is based on the Canadian Institute of Actuaries' Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2011 and December 30, 2012 effective June 30. 2012;

We note that in Canada, there is very limited data available in the market regarding the pricing of annuities indexed to inflation. The market for these annuities is also virtually nonexistent. As a result, it is possible, maybe even likely, that the actual cost of purchasing these annuities will exceed (potentially materially) the estimates shown in this letter.

If you have any questions regarding the above, we would be glad to discuss them with you in more detail at your convenience. As always, you can reach me at (416) 868 7385.

Sincerely,

Benedict O. Ukonga, FSA, FCIA, CFA

Principal

Copy:

Wally Robinson: Great-West Life | London Life | Canada Life

Doug Johnson, Joseph Tang, James Dalton: Mercer



## **Appendix A: Key Assumptions**

	August 31, 2012		June 30, 2012
Benefits assumed to be settled	through annuity purc	nase	
Nominal interest rate	Immediate retireme	<u>ent</u>	Immediate retirement
	Indexed: 2.36% pe	r year	Indexed: 2.35% per year
	Non-indexed: 3.049	% per year	Non-indexed: 3.05% per year
	Deferred retiremen	<u>t</u>	Deferred retirement
	Indexed: 3.04% du period, 2.36% after		Indexed: 3.05% during the deferral period, 2.35% after commencement
	Non-indexed: 3.049	% per year	Non-indexed: 3.05% per year
Mortality rate	UP 94 with generational mortality improvements (sex distinct)		UP 94 with generational mortality improvements (sex distinct)
Inflation	1.95% per year		1.90% per year
Post retirement indexing	We have assumed that the life insurance company would price the annuities as if they were fully indexed for inflation.		We have assumed that the life insurance company would price the annuities as if they were fully indexed for inflation.
Provision for future wind-up	June 2005 PWU	\$12.7 million	\$13 million for the June 30, 2005 partial
expenses:	Indago	\$0.0 million	wind-up (based on information provided by Canada Life). To be determined for
	Adason	\$0.4 million	the other potential partial wind-ups
	Pelican	\$0.1 million	groups.
Member settlement elections	All remaining members of the 2005 PWU group, and remaining Indago, Adason and Pelican members are assumed 100% immediate or deferred annuities		All remaining partial-windup members assumed 100% immediate or deferred annuities
Basis	Solvency		Solvency



#### **Appendix B**

Reconciliation of the assets allocated to the 2005 PWU group (under scenario 1 and <u>before</u> pending expenses)

#### Reconciliation from June 30, 2012 to August 31, 2012

	2005 PWU group
June 30, 2012	\$311,648,000
PLUS	
Members' contributions	\$0
Company's contributions	\$0
Investment income	\$2,182,000
	\$2,182,000
LESS	
Pension and lump sums paid	\$1,123,000
	\$1,123,000
August 31, 2012	\$312,707,000

#### Pending Expense Reimbursements<sup>4</sup>

(millions)	2005 PWU group	Indago	Adason	Pelican
June 30, 2012	\$14.5	\$0.0	\$0.4	\$0.1
Estimated plan Expenses – July and August 2012	\$0.2	\$0.0	\$0.0	\$0.0
August 31, 2012	\$14.7	\$0.0	\$0.4	\$0.1

-

<sup>&</sup>lt;sup>4</sup> Cumulative pending expenses as provided by Canada Life

This is Exhibit "E" referred to in the affidavit of Marcus Robertson sworn before me, this 8<sup>th</sup>

Asy of March, 2013

A Commissioner for taking affidavits, etc.

SHELAGH MARGARET MATHERS Barrister, Solicitor, Notary Public

MATHERS LAW OFFICE 6 TALBOT STREET SUITE NO. 4 PICTON, ON KOK 2TO



# THE CANADA LIFE CANADIAN EMPLOYEES PENSION PLAN

## REPORT ON THE ACTUARIAL VALUATION FOR FUNDING PURPOSES AS AT DECEMBER 31, 2011

SEPTEMBER 2012

Financial Services Commission of Ontario Registration Number: 0354563 Canada Revenue Agency Registration Number: 0354563



#### Note to reader regarding actuarial valuations:

This valuation report may not be relied upon for any purpose other than those explicitly noted in the Introduction, nor may it be relied upon by any party other than the parties noted in the Introduction. Mercer is not responsible for the consequences of any other use. A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future. If maintained indefinitely, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the amount of plan expenses, and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

To prepare the results in this report, actuarial assumptions are used to model a single scenario from a range of possibilities for each valuation basis. The results based on that single scenario are included in this report. However, the future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material. Different assumptions or scenarios within the range of possibilities may also be reasonable, and results based on those assumptions would be different. Furthermore, actuarial assumptions may be changed from one valuation to the next because of changes in regulatory and professional requirements, developments in case law, plan experience, changes in expectations about the future and other factors.

The valuation results shown in this report also illustrate the sensitivity to one of the key actuarial assumptions, the discount rate. We note that the results presented herein rely on many assumptions, all of which are subject to uncertainty, with a broad range of possible outcomes and the results are sensitive to all the assumptions used in the valuation.

Should the plan be wound up, the going concern funded status and solvency financial position, if different from the wind-up financial position, become irrelevant. The hypothetical wind-up financial position estimates the financial position of the plan assuming it is wound-up on the valuation date. Emerging experience will affect the wind-up financial position of the plan assuming it is wound-up in the future. In fact, even if the plan were wound-up on the valuation date, the financial position would continue to fluctuate until the benefits are fully settled.

Because actual plan experience will differ from the assumptions used in this valuation, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit-related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a valuation report or reports.

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## Summary of Results

	31.12.11	31.12.08
Going Concern Financial Status		
Market value of assets	\$798,169,000	\$722,323,000
Golng concern funding target	(\$651,151,000)	(\$501,294,000)
Funding excess (shortfall)	\$147,018,000	\$221,029,000
Hypothetical Wind-up Financial Position		
Wind-up assets	\$796,169,000	\$717,323,000
Wind-up liability	(\$740,076,000)	(\$554,696,000)
Wind-up excess (shortfall)	\$56,093,000	\$162,627,000
Funding Requirements in the Year Following the Valuation <sup>1</sup>		
Total current service cost	\$10,435,000	\$8,715,000
Estimated member's required contributions	(\$1,329,000)	(\$1,475,000)
Estimated employer's current service cost	\$9,106,000	\$7,240,000
Employer's current service cost as a percentage of members' pensionable earnings	14.6%	10.4%
Minimum special payments	\$0	\$0
Estimated minimum employer contribution	\$0	\$0
Estimated maximum eligible employer contribution	\$0	\$0
Next required valuation date	12.31.2014	12.31.2011

<sup>&</sup>lt;sup>1</sup> Provided for reference purposes only. Contributions must be remitted to the Plan in accordance with the Minimum Funding Requirements and Maximum Eligible Contributions sections of this report.

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#### Introduction

#### To The Canada Life Assurance Company

At the request of the Canada Life Assurance Company ("Canada Life" or the "Company"), we have conducted an actuarial valuation of The Canada Life Canadian Employees Pension Plan (the "Plan") as at the valuation date, December 31, 2011. We are pleased to present the results of the valuation.

#### Purpose

The purpose of this valuation is to determine:

- The funded status of the plan as at December 31, 2011 on going concern, hypothetical windup and solvency bases;
- The minimum required funding contributions from 2012, in accordance with the Ontario Pension Benefits Act;
- The maximum permissible funding contributions from 2012, in accordance with the *Income Tax Act*.

The information contained in this report was prepared for the internal use of Company and for filing with the Financial Services Commission of Ontario and with the Canada Revenue Agency, in connection with our actuarial valuation of the Plan. This report will be filed with the Superintendent of the Financial Services Commission of Ontario (the "Superintendent") and with the Canada Revenue Agency. This report is not intended or suitable for any other purpose.

In accordance with pension benefits legislation, the next actuarial valuation of the Plan will be required as at a date not later than December 31, 2014, or as at the date of an earlier amendment to the Plan.

#### June 30, 2005 Partial Wind-Up

A partial wind-up was declared by Canada Life as a result of the workforce integration measures taken after the acquisition of the Company by The Great-West Life Assurance Company ("Great-West Life") on July 10, 2003. All members of the Plan whose employment with Canada Life terminated in conjunction with the integration, other than those members of the plan who were employed in the province of Québec, have been included in the partial wind-up. This includes members whose employment was terminated during the integration period by Canada Life, as well as those who resigned or retired voluntarily. It also includes those members who were informed during the integration period that their employment would be terminated as a result of the integration and whose employment was terminated after June 30, 2005. The integration period started effective July 10, 2003, the date Canada Life was acquired by Great-West Life, and ended on June 30, 2005 (the "Partial Wind-Up Date").

On September 4, 2003, the Superintendent approved Canada Life's request to commence monthly pension payments from the pension fund to those members and former members of the partial wind-up who are eligible for, and who elect to receive, an immediate pension. In the absence of the Superintendent's consent, the option for members to transfer funds from the pension fund, will not be provided until after the partial wind-up report is approved.

A report on the partial wind-up of the Plan as at June 30, 2005 was filed with the Superintendent in March, 2006.

This report shows the assets and liabilities separately for those Plan members who were affected by the June 30, 2005 partial wind-up (the "partial wind-up group") and those members who were not affected by the June 30, 2005 partial wind-up (the "retained group").

On April 14, 2011, the Superintendent approved the distribution of basic benefits for the partial wind-up group as set out in the June 30, 2005 partial wind-up report.

On and around June 30, 2011, benefit statements were distributed to all members of the partial wind-up group. Members were given the option of electing to have their benefit entitlements settled either through a lump sum transfer from the pension fund, or to have a deferred or immediate annuity purchased on their behalf. Lump sum transfers were made to members who elected the lump sum transfer option. All remaining members either elected, or were deemed to elect, to have their benefits settled through purchase of immediate or deferred annuities.

#### **Terms of Engagement**

In accordance with our terms of engagement with the Company, our actuarial valuation of the Plan is based on the following material terms:

- It has been prepared in accordance with applicable pension legislation and actuarial standards of practice in Canada.
- As instructed by the Company, we have reflected a margin for adverse deviations in our going concern valuation by reducing the going concern discount rate by 0.15% per year.
- We have reflected the Company's decisions for determining the solvency funding requirements, summarized as follows:
  - The same plan wind-up scenario was hypothesized for both hypothetical wind-up and solvency valuations.
  - Although permissible, no benefits were excluded from the solvency liabilities.
  - The solvency financial position was determined on a market value basis.
  - No funding relief measures have been applied.

See the Valuation Results - Solvency section of the report for more information.

#### Events Since the Last Valuation at December 31, 2008 Pension Plan

There have been no special events since the last valuation date.

This valuation reflects the provisions of the Plan as at December 31, 2011. The Plan has been amended and restated since the date of the previous valuation. The amendments and restatement were to bring the Plan in compliance with applicable provincial and employment standards legislation with effective dates on and before October 1, 2011, and for harmonization,

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to the extent possible, with other registered plans sponsored by Canada Life and its affiliated companies. These amendments had no material impact on the results of the valuation. The Plan provisions are summarised in Appendix F.

#### **Assumptions**

We have used the same going concern valuation assumptions and methods as were used for the previous valuation, except for the following:

Assumption	Current valuation	Previous valuation
Discount rate:	5.35%	5.80%
Discount rate used for valuing lump-sum transfers:	2.60% for the first 10 years after date of exit, and 4.10% thereafter	N/A
Inflation:	2.00%	1.30%
Productivity improvement:	0.75%	1.00%
Inflation used for valuing lump- sum transfers	1.31% for the first 10 years after date of exit, and 2.44% thereafter	N/A
ITA limit / YMPE increases;	2.75%	2.30%
Pensionable earnings increases:	Revised Merit and promotional increases with 2.75% general wage inflation.	Merit and promotional increases with 2.30% general wage inflation.
Starting YMPE:	\$50,100 (2012)	\$46,300 (2009)
Mortality:	85% of UP94 generational	UP94 fully generational
Termination rates:	Revised age related table	Age related table
Retirement rates:	Revised age related table	Age related table
Mortality rates used for valuing lump-sum transfers:	UP94 generational mortality table	N/A

The hypothetical wind-up and solvency assumptions for the retained group, as well as the assumptions used to estimate the cost of purchasing annuities for the partial wind-up group, have been updated to reflect market conditions at the valuation date.

A summary of the going concern, and hypothetical wind-up and solvency methods and assumptions are provided in Appendices C and D, respectively.

#### Regulatory Environment and Actuarial Standards

There have been a number of changes to the Ontario Pension Benefits Act (the "Act") and regulations which impact the funding of the Plan.

Effective July 1, 2012, the *Pension Benefits Act (Ontario)* and the Regulations to the Act were amended to require plans to provide immediate vesting to all Ontario plan members and to provide grow-in benefits to certain Ontario members whose employment is terminated at the initiation of their employer. The plan will be amended to reflect these requirements. The cost of these legislated minimum benefit improvements is not reflected in the valuation. In accordance

with section 3(1.0.1) of the amended Regulations, the cost will be reflected in the next full valuation of the plan.

A new Canadian actuarial Standard of Practice for determining pension commuted values ("CIA CV Standard") became effective on April 1, 2009, with additional changes to the CV Standard becoming effective February 1, 2011. The new CIA CV Standard changed the assumptions to be used to value the solvency and wind-up liabilities for benefits assumed to be settled through a lump sum transfer. The financial impact of the new CIA CV standard has been reflected in this actuarial valuation.

A new Canadian actuarial Standard of Practice – Practice Specific Standards of Practice for Pension Plans became effective December 31, 2010 (the "CIA Pension Standards"). The requirements of the CIA Pension Standards have been reflected in this report.

#### **Subsequent Events**

After checking with representatives of the Company, to the best of our knowledge there have been no events subsequent to the valuation date which, in our opinion, would have a material impact on the results of the valuation. Our valuation reflects the financial position of the Plan as of the valuation date and does not take into account any experience after the valuation date.

#### Impact of Case Law

This report has been prepared on the assumption that all of the assets in the pension fund are available to meet all of the claims on the Plan. We are not in a position to assess the impact that the Ontario Court of Appeal's decision in *Aegon Canada Inc.* and *Transamerica Life Canada versus ING Canada Inc.* or similar decisions in other jurisdictions might have on the validity of this assumption.

On July 29, 2004, the Supreme Court of Canada dismissed the appeal in Monsanto Canada Inc. versus Superintendent of Financial Services ("Monsanto"), thereby upholding the requirements to distribute surplus on partial plan wind-up under The Pension Benefits Act (Ontarlo). The decision has retroactive application and applies on the termination of Ontarlo employees if they are included in a partial plan wind-up, regardless of the province in which the pension plan is registered.

Although this decision dealt with Ontario legislation, it is possible that it could have application to other provinces since the underlying language in the *Pension Benefits Act (Ontario)*, is similar to language in a number of other provinces, either currently or in the past.

For Federally regulated employees, on March 5, 2009, the Supreme Court of Canada denied leave to appeal in Cousins v. Attorney General of Canada and Marine Atlantic Inc. ("Marine Atlantic") confirming that the *Pension Benefits Standards Act* does not require surplus distribution on a partial plan termination.

With the exception of the June 30, 2005 partial wind-up of the Plan, we are not aware of any other partial plan wind-up having been declared in respect of the Plan where the Monsanto decision may apply. In preparing this actuarial valuation, we have therefore assumed that the Plan's assets are available to cover the Plan's liabilities presented in this report. The subsequent declaration of a partial wind-up of the Plan where *Monsanto* may apply in respect of

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a past event, or disclosure of an existing past partial wind-up, could cause an additional claim on the Plan's assets, the consequences of which would be addressed in a subsequent report. We note the discretionary nature of the power of the regulatory authorities to declare partial wind-ups (for events that occurred prior to July 1, 2012) and the lack of clarity with respect to the retroactive scope of that power. We are making no representation as to whether the regulatory authorities might declare a partial wind-up in respect of other events in the Plan's history.

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## Valuation Results – Going Concern Financial Status

A going concern valuation compares the relationship between the value of Plan assets and the present value of expected future benefit cash flows in respect of accrued service, assuming the Plan will be maintained indefinitely.

The results of the current valuation, compared with those from the previous valuation, are summarized as follows:

**Retained Group** 31.12.11 31.12.08 Assets Market value of assets \$496,847,000<sup>2</sup> \$432,565,000 Crown DC balances \$970,000 \$859,000 Total \$497,817,000 \$433,424,000 Going concern funding target active and disabled members \$160,827,000 \$105,602,000 \$169,391,000 \$145,851,000 pensioners and survivors deferred pensioners \$30,494,000 \$31,283,000 pending payouts \$409,000 \$575,000 Crown DC balances \$970,000 \$859,000 \$284,170,000 Total \$362,091,000 Funding excess (shortfall) \$135,726,000 \$149,254,000

<sup>&</sup>lt;sup>2</sup> Reflects pending asset transfer of \$6,557,000 from the retained group's allocated assets to the partial wind-up group's allocated assets as a result of a revision of the initial asset allocation at June 30, 2005 due to a data clean up exercise and other membership changes.

<b>Partial</b>	Wind-	Up (	<b>Group</b>

31.12.11	31.12.08
	<u> </u>
\$299,962,000 <sup>4</sup>	\$288,320,000
\$390,000	\$579,000
\$300,352,000	\$288,899,000
<b>\$0</b>	\$8,805,000
\$124,698,000	\$87,230,000
\$157,742,000	\$120,510,000
\$6,230,000	\$0
\$390,000	\$579,000
\$289,060,000	\$217,124,000
\$11,292,000	\$71,775,000
	\$299,962,000 <sup>4</sup> \$390,000 \$300,352,000 \$0 \$124,698,000 \$157,742,000 \$6,230,000 \$390,000 \$289,060,000

#### Total

	31.12.11	31.12.08
Assets		711224
Market value of assets <sup>3</sup>	\$796,809,000	\$720,885,000
Crown DC balances	\$1,360,000	\$1,438,000
Total	\$798,169,000	\$722,323,000
Going concern funding target		
active and disabled members	\$160,827,000	\$114,407,000
<ul> <li>pensioners and survivors</li> </ul>	\$294,089,000	\$233,081,000
deferred pensioners	\$188,236,000	\$151,793,000
<ul> <li>pending payouts</li> </ul>	\$6,639,000	\$575,000
Crown DC balances	\$1,360,000	\$1,438,000
Total	\$651,151,000	\$501,294,000
Funding excess (shortfall)	\$147,018,000	\$221,029,000

<sup>&</sup>lt;sup>3</sup> Net of provision for plan termination expenses for the partial wind-up group of \$13 million at December 31, 2011 and \$12 million at December 31, 2008

<sup>&</sup>lt;sup>4</sup> Reflects pending asset transfer of \$6,557,000 from the retained group's allocated assets to the partial wind-up group's allocated assets as a result of a revision of the initial asset allocation at June 30, 2005 due to a data clean up exercise and other membership changes.

The going concern funding target for the retained group includes a provision for adverse deviations.

#### **Reconciliation of Financial Status**

	Retaine	d Group
Funding excess (shortfall) as at previous valuation		\$149,254,000
Interest on funding excess (funding shortfall) at 5.80% per year		\$27,506,000
Employer's special payments, with interest		\$0
Employer's contributions drawn from previous funding excess with interest		(\$28,838,000)
Expected funding excess (funding shortfall)	•	\$147,922,000
Net experience gains (losses)		
Investment return	\$43,847,000	
Salary/YMPE growth different than expected	\$6,375,000	
<ul> <li>Post retirement indexation different than expected</li> </ul>	\$1,616,000	
Mortality	(\$2,094,000)	
Retirement	\$57,000	
Termination	(\$2,018,000)	
Total experience gains (losses)	\$47,783,000	\$47,783,000
Impact of changes in actuarial assumptions:		
Inflation and inflation related items	(\$26,579,000)	
CV basis for lump sum terminations	(\$2,703,000)	
Discount rate	(\$22,565,000)	
Productivity Increases	\$2,024,000	
• Mortality	(\$17,434,000)	
Termination	\$1,573,000	
Retirement	\$1,139,000	
Merit and Promotion increases	\$4,240,000	
Total assumption changes impact	(\$60,305,000)	(\$60,305,000)
Pending assets transfer to partial wind-up group		(\$6,557,000)
Data adjustments and updates, including clean-up of deferred vested member records		\$8,203,000
Net impact of other elements of gains and losses		(\$1,320,000)
Funding excess (shortfall) as at current valuation		\$135,726,000

	Partial Wit	ıd-Up Group
Funding excess (shortfall) as at previous valuation	2 Al SHAI WEEK	\$71,775,000
Interest on funding excess (funding shortfall) at 4.24% per year		\$9,522,000
Employer's special payments, with interest		\$0
Employer contribution drawn from excess		(\$32,000)
Expected funding excess (funding shortfall)		\$81,265,000
Net experience gains (losses)		
Investment return	\$8,699,000	
Post retirement indexation different than expected	\$780,000	
Mortality	(\$601,000)	
Retirement	\$566,000	
Total experience gains (losses)	\$9,444,000	\$9,444,000
Impact of changes in the estimated cost of purchasing annuities		(\$62,381,000)
Changes in assumption of member election between annuities and lump sum transfers due to aging		(\$4,904,000)
Impact of actual elections:		
Members who elected commuted values	\$7,684,000	
<ul> <li>Members who elected, or were deemed to elect, an annuity purchase</li> </ul>	(\$24,555,000)	
Total actual elections impact	(\$16,871,000)	(\$16,871,000)
Pending transfer from retained group's allocated assets		\$6,557,000
Increase in wind-up expense provision		(\$1,000,000)
Data corrections		(\$464,000)
Net impact of other elements of gains and losses		(\$354,000)
Funding excess (shortfall) as at current valuation		\$11,292,000

#### **Current Service Cost**

The current service cost is an estimate of the present value of the additional expected future benefit cash flows in respect of pensionable service that will accrue after the valuation date, assuming the Plan will be maintained indefinitely.

The current service cost during the year following the valuation date compared with the corresponding value determined in the previous valuation, is as follows:

	2012	2009
Total current service cost	\$10,435,000	\$8,715,000
Estimated members' required contributions	(\$1,329,000)	(\$1,475,000)
Estimated employer's current service cost	\$9,106,000	\$7,240,000
Employer's current service cost expressed as a percentage of members' pensionable earnings	14.6%	10.4%

The key factors that have caused a change in the employer's current service cost since the previous valuation are summarized in the following table:

Employer's current service cost as at previous valuation	10.4%
Demographic changes	1.2%
Changes in assumptions	3.0%
Employer's current service cost as at current valuation	14.6%

#### **Discount Rate Sensitivity**

The following table summarises the effect on the going concern funding target shown in this report of using a discount rate which is 1.00% lower than that used in the valuation:

Scenario	Valuation Basis	Reduce Discount Rate by 1%
Going concern funding target – Retained <sup>5</sup>	\$360,712,000	\$418,553,000
Current service cost		
Total current service cost	\$10,435,000	\$12,651,000
<ul> <li>Estimated members' required contributions</li> </ul>	(\$1,329,000)	(\$1,329,000)
Estimated employer's current service cost	\$9,106,000	\$11,322,000

<sup>&</sup>lt;sup>5</sup> Excludes DC balances and pending payouts

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# Valuation Results – Hypothetical Wind-up Financial Position

When conducting a hypothetical wind-up valuation, we determine the relationship between the respective values of the Plan's assets and its liabilities assuming the Plan is wound up and settled on the valuation date, assuming benefits are settled in accordance with the Act and under circumstances producing the maximum wind-up liabilities on the valuation date. However, to the extent permitted by law, the actuary may disregard:

- Benefits that would not be payable under the hypothesized scenario
- Plan member earnings after the valuation date.

The hypothetical wind-up financial position as of the valuation date, compared with that at the previous valuation, is as follows:

**Retained Group** 

31,12,11 31.12.08 Assets Market value of assets \$496,847,000<sup>6</sup> \$432,565,000 Crown DC balances \$970,000 \$859,000 Termination expense provision (\$2,000,000) (\$5,000,000)Wind-up assets \$495,817,000 \$428,424,000 Present value of accrued benefits for: active members \$199,017,000 \$118,481,000 pensioners and survivors \$208,181,000 \$177,271,000 deferred pensioners \$42,439,000 \$40,386,000 pending payouts \$409,000 \$575,000 Crown DC balances \$970,000 \$859,000

\$451,016,000

\$44,801,000

Total wind-up liability

Wind-up excess (shortfall)

\$337,572,000

\$90,852,000

<sup>&</sup>lt;sup>6</sup> Reflects pending asset transfer of \$6,557,000 from the retained group's allocated assets to the partial wind-up group's allocated assets as a result of a revision of the initial asset allocation at June 30, 2005 due to a data clean up exercise and other membership changes.

Partial Wind-Up Group				
	31.12.11	31.12.08		
Assets				
Market value of assets	\$312,962,000 <sup>7</sup>	\$300,320,000		
Crown DC balances	\$390,000	\$579,000		
Termination expense provision	(\$13,000,000)	(\$12,000,000)		
Wind-up assets	\$300,352,000	\$288,899,000		
Present value of accrued benefits for:				
active members	\$0	\$8,805,000		
pensioners and survivors	\$124,698,000	\$87,230,000		
deferred pensioners	\$157,742,000	\$120,510,000		
pending payouts	\$6,230,000	\$0		
Crown DC balances	\$390,000	\$579,000		
Total wind-up liability	\$289,060,000	\$217,124,000		
Wind-up excess (shortfall)	\$11,292,000	\$71,775,000		
	Total			
	31.12.11	31.12.08		
Assets				
Market value of assets	\$809,809,000	\$732,885,000		
Crown DC balances	\$1,360,000	\$1,438,000		
Termination expense provision	(\$15,000,000)	(\$17,000,000)		
Wind-up assets	\$796,169,000	\$717,323,000		
Present value of accrued benefits for:				
active members	\$199,017,000	\$127,286,000		
pensioners and survivors	\$332,879,000	\$264,501,000		
deferred pensioners	\$200,181,000	\$160,896,000		
pending payouts	\$6,639,000	\$575,000		
Crown DC balances	\$1,360,000	\$1,438,000		
Total wind-up liability	\$740,076,000	\$554,696,000		

\$56,093,000

Wind-up excess (shortfall)

\$162,627,000

<sup>&</sup>lt;sup>7</sup> Reflects pending asset transfer of \$6,557,000 from the retained group's allocated assets to the partial wind-up group's allocated assets as a result of a revision of the initial asset allocation at June 30, 2005 due to a data clean up exercise and other membership changes.

#### Wind-up Incremental Cost to December 31, 2014

The wind-up incremental cost is an estimate of the present value of the projected change in the hypothetical wind-up liabilities from the valuation date until the next scheduled valuation date, adjusted for the benefit payments expected to be made in that period.

The hypothetical wind-up incremental cost in respect of the Retained Group determined in this valuation is as follows:

	31,12,11
Number of years covered by report	3 years
Total hypothetical wind-up liabilities at the valuation date (A) <sup>8</sup>	\$449,637,000
Present value of projected hypothetical wind-up liability at the next required valuation plus benefit payments until the next required valuation (B) <sup>8</sup>	\$505,442,000
Hypothetical wind-up incremental cost (B – A)	\$55,805,000

The incremental cost is <u>not</u> an appropriate measure of the contributions that would be required to maintain the financial position of the Plan on a hypothetical wind-up basis unchanged from the valuation date and the next required valuation date, if actual experience is exactly in accordance with the going concern valuation assumptions. This is because it does not reflect the fact that the expected return on plan assets (based on the going concern assumptions) is greater than the discount rate used to determine the hypothetical wind-up liabilities.

#### **Discount Rate Sensitivity**

The following table summarises the effect on the hypothetical wind-up liabilities shown in this report of using a discount rate which is 1.00% lower than that used in the valuation:

Scenario	Valuation Basis	Reduce Discount Rate by 1%
Total hypothetical wind-up liability – Retained <sup>8</sup>	\$449,637,000	\$528,723,000
Total hypothetical wind-up liability – Partial Wind-Up <sup>8</sup>	\$282,440,000	\$343,167,000

<sup>&</sup>lt;sup>8</sup> Excludes pending payouts and crown DC balances

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# Valuation Results - Solvency

#### Overview

The Act also requires the financial position of the Plan to be determined on a solvency basis. The financial position on a solvency basis is determined in a similar manner to the Hypothetical Wind-up Basis, except for the following:

Exceptions	Reflected in valuation based on the terms of engagement
The circumstance under which the Plan is assumed to be wound-up could differ for the solvency and hypothetical wind-up valuations.	The same circumstances were assumed for the solvency valuation as were assumed for the hypothetical wind-up.
Certain benefits can be excluded from the solvency financial position. These include:	No benefits were excluded from the solvency liabilities shown in this valuation.
(a) any escalated adjustment (e.g. indexing),	
(b) certain plant closure benefits,	
(c) certain permanent layoff benefits,	
(d) special allowances other than funded special allowances,	
(e) consent benefits other than funded consent benefits,	
(f) prospective benefit increases,	
(g) potential early retirement window benefit values, and	
(h) pension benefits and ancillary benefits payable under a qualifying annuity contract.	
The financial position on the solvency basis needs to be adjusted for any Prior Year Credit Balance.	Not applicable.
The solvency financial position can be determined by smoothing assets and the solvency discount rate over a period of up to 5 years.	Smoothing was not used.
The benefit rate increases coming into effect after the valuation date can be reflected in the solvency valuation.	Not applicable.

#### **Financial Position**

The financial position on a solvency basis is the same as the financial position on the Hypothetical Wind-up basis shown in the previous section. The transfer ratio is 110% for Retained Group, 108% for Partial Wind-up Group, compared to 128% for Retained Group, 139% for Partial Wind-up Group at the previous valuation.



# Minimum Funding Requirements

The Act prescribes the minimum contributions that the Company must make to the Plan. The minimum contributions in respect of a defined benefit component of a pension plan are comprised of going concern current service cost and special payments to fund any going concern or solvency shortfalls.

There is a funding excess and no special payments are required for solvency purposes on the basis of the assumptions and methods described in this report. Under these circumstances the Act does not require the employer to contribute to the Plan until after the funding excess has been applied towards the employer's current service cost.

Once the funding excess has been so applied, employer contributions must resume. On the basis of the assumptions and methods described in this report, the rule for determining the minimum required employer monthly contributions, as well as an estimate of the employer contributions, from the valuation date until the next required valuation are as follows:

Employer's contribution rule			Estimated employer's contributions			
Period beginning	Monthly current service cost <sup>9</sup>	Explicit monthly expense allowance	Monthly current service cost including expense allowance	Funding excess applied <sup>10</sup>	Minimum monthly contributions	
December 31, 2011	14.6%	\$0	\$758,833	\$758,833	\$0	
December 31, 2012	14.6%	\$0	\$779,701	\$779,701	\$0	
December 31, 2013	14.6%	\$0	\$801,143	\$801,143	\$0	

The estimated contribution amounts above are based on projected members' pensionable earnings. Therefore, actual employer's current service cost will be different from the above estimates and, as such, the contribution requirements should be monitored closely to ensure contributions resume in accordance with the Act.

# **Other Considerations**

#### Differences between Valuation Bases

There is no provision in the minimum funding requirements to fund the difference between the hypothetical wind-up and solvency shortfalls, if any.

<sup>&</sup>lt;sup>9</sup> Expressed as a percentage of members' pensionable earnings.

<sup>&</sup>lt;sup>10</sup> Notwithstanding the funding excess in the Plan, the terms of the Plan may require the Company to make current service cost contributions.

In addition, although minimum funding requirements do include a requirement to fund the going concern current service cost, there is no requirement to fund the expected growth in the hypothetical wind-up or solvency liability after the valuation date, which could be greater than the going concern current service cost.

### Timing of Contributions

Funding contributions are due on monthly basis. Contributions for current service cost must be made within 30 days following the month to which they apply. Special payment contributions must be made in the month to which they apply.

#### Retroactive Contributions

The Company must contribute the excess, if any, of the minimum contribution recommended in this report over contributions actually made in respect of the period following the valuation date. This contribution, along with an allowance for interest, is due no later than 60 days following the date this report is filed.

#### Payment of Benefits

The Act imposes certain restrictions on the payment of lump sums from the Plan when the transfer ratio revealed in an actuarial valuation is less than one. If the transfer ratio shown in this report is less than one, the plan administrator should ensure that the monthly special payments are sufficient to meet the requirements of the Act to allow for the full payment of benefits, and otherwise should take the prescribed actions.

Additional restrictions are imposed when:

- The transfer ratio revealed in the most recently filed actuarial valuation is less than one and the administrator knows or 'ought to know' that the transfer ratio of the Plan has declined by 10% or more since the date the last valuation was filed.
- The transfer ratio revealed in the most recently filed actuarial valuation is greater than or equal to one and the administrator knows or 'ought to know' that the transfer ratio of the Plan has declined to less than 0.9 since the date the last valuation was filed.

As such, the administrator should monitor the transfer ratio of the Plan and, if necessary, take the prescribed actions.

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# Maximum Eligible Contributions

The *Income Tax Act* (the "ITA") limits the amount of employer contributions that can be remitted to the defined benefit component of a registered pension plan. However, notwithstanding the limit imposed by the ITA, for plans which are not 'Designated' as defined in the ITA, in general, the minimum required contributions under the Act can be remitted.

In accordance with Section 147.2 of the ITA and *Income Tax Regulation* 8516, for a plan which is underfunded on either a going concern or on a hypothetical wind-up basis the maximum permitted contributions are equal to the employer's current service cost, including the explicit expense allowance if applicable, plus the greater of the going concern funding shortfall and hypothetical wind-up shortfall.

For a plan which is fully funded on both going concern and hypothetical wind-up bases, the employer can remit a contribution equal to the employer's current service cost, including the explicit expense allowance if applicable, as long as the surplus in the plan does not exceed a prescribed threshold. Specifically, in accordance with Section 147.2 of the ITA, for a plan which is fully funded on both going concern and hypothetical wind-up bases, the plan may not retain its registered status if the employer makes a contribution while the going concern funding excess exceeds 25% of the going concern funding target.

#### **Schedule of Maximum Contributions**

Since the surplus exceeds 25% of the going concern funding target, no contributions are permitted until the funding excess has been reduced to less than \$90,280,000 (i.e. 25% of the Retained group's going concern funding target of \$361,121,000<sup>11</sup>), otherwise the Plan's registered status may be revoked.

<sup>11</sup> Excluding the liability in respect of Crown DC balances

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# **Actuarial Opinion**

In our opinion, for the purposes of the valuations,

- · the membership data on which the valuation is based are sufficient and reliable
- the assumptions are appropriate
- · the methods employed in the valuation are appropriate

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada. It has also been prepared in accordance with the funding and solvency standards set by the Ontario Pension Benefits Act.

Benedict O. Ukonga

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

October 25, 2012

Date

Kimi Lee

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

October 25, 2012

Date

# APPENDIX A

# Prescribed Disclosure

## **Definitions**

The Act defines a number of terms as follows:

Defined Term	Description	Retained Group	Partial Windup Group	
Transfer Ratio	The ratio of:  (a) solvency assets minus the lesser of the Prior Year Credit Balance and the minimum required employer contributions until the next required valuation; to  (b) the sum of the solvency liabilities and liabilities for benefits, other than benefits payable under qualifying annuity contracts that were excluded in calculating the solvency liabilities.	1.10	1.08	
Prior Year Credit Balance	dit plan in excess of the minimum required contributions (note:		\$0	
Solvency Assets	Market value of assets including accrued or receivable income and excluding the value of any qualifying annuity contracts.	\$495,817,000	\$300,352,000	
Solvency	The sum of:			
Asset Adjustment	(a) the difference between smoothed value of assets and the market value of assets	\$0	\$0	
	<ul> <li>(b) the present value of any going concern special payments (including those identified in this report) within 5 years following the valuation date</li> </ul>	\$0	\$0	
	(c) the present value of any previously scheduled solvency special payments (excluding those identified in this report)	\$0	\$0	
		\$0	\$0	

Defined Term	Defined Term Description		Partial Windup Group
Solvency Liabilities	Liabilities determined as if the plan had been wound up on the valuation date, including liabilities for plant closure benefits or permanent layoff benefits that would be immediately payable if the employer's business were discontinued on the valuation date of the report, but, if elected by the plan sponsor, excluding liabilities for,	\$451,016,000	\$289,060,000
	<ul> <li>(a) any escalated adjustment,</li> <li>(b) excluded plant closure benefits,</li> <li>(c) excluded permanent layoff benefits,</li> <li>(d) special allowances other than funded special allowances,</li> <li>(e) consent benefits other than funded consent benefits,</li> <li>(f) prospective benefit increases,</li> <li>(g) potential early retirement window benefit values, and</li> <li>(h) pension benefits and ancillary benefits payable under a qualifying annuity contract.</li> </ul>		
Solvency Liability Adjustment	The amount by which solvency liabilities are adjusted as a result of using a solvency valuation interest rate that is the average of market interest rates calculated over the period of time used in the determination of the smoothed value of assets.	\$0	\$0
Solvency	The amount, if any, by which the sum of:		
Deficiency	(a) the solvency liabilities	\$451,016,000	\$289,060,000
	(b) the solvency liability adjustment	\$0	\$0
	(c) the prior year credit balance	\$0	\$0
		\$451,016,000	\$289,060,000
	Exceeds the sum of		
	(d) the solvency assets	\$495,817,000	\$300,352,000
	(e) the solvency asset adjustment	\$0	\$0
		\$495,817,000	\$300,352,000
		\$0	\$0

### **Timing of Next Required Valuation**

In accordance with the Act the next valuation of the Plan would be required at an effective date within one year of the current valuation date if:

- The ratio of solvency assets to solvency liabilities is less than 80%.
- The ratio of solvency assets to solvency liabilities is less than 85% and solvency liabilities exceed solvency assets by \$5 million or more.
- The employer elected to exclude plant closure or permanent lay-off benefits under Section 5(18) of the regulations, and has not rescinded that election.

Otherwise, the next valuation of the Plan would be required at an effective date no later than three years after the current valuation date.

Accordingly, the next valuation of the Plan will be required as of December 31, 2014.

### **Special Payments**

As the Plan does not have a going concern deficit or a solvency deficit, no special payments are required.

### Pension Benefit Guarantee Fund (PBGF) Assessment

For purposes of the Pension Benefits Guarantee Fund, the 2011 assessment payable pursuant to Paragraph 37(4) of the Regulations under the Ontario Pension Benefits Act is to be determined as \$5 per Ontario member. The Pension Benefits Guarantee Fund Assessment Base for the plan is \$0.

# APPENDIX B

# Plan Assets

The pension fund is held in trust by The Canada Life Assurance Company. In preparing this report, we have relied upon fund statements prepared by The Canada Life Assurance Company.

We have also relied on information provided by The Canada Life Assurance Company regarding the defined contribution account balances for those members of the Plan who accrued defined contribution benefits during 1999 as well as the split of pension plan cash flows (e.g. employee contributions, monthly benefit payments, lump sum benefit payments, and expenses), from January 1, 2009 to December 31, 2011 between the partial wind-up and retained groups.

#### Reconciliation of Market Value of Plan Assets

The pension fund transactions since the last valuation for the total Plan assets are summarized in the following table:

DB Only (Market Value)	2009	2010	2011
January 1	\$732,885,000	\$791,754,000	\$834,160,000
PLUS			
Members' contributions	\$1,528,000	\$1,503,000	\$1,460,000
Company's contributions	\$0	\$0	\$0
Investment income & Net capital gains (losses)	\$82,390,000	\$66,684,000	\$28,472,000
	\$83,918,000	\$68,187,000	\$29,932,000
LESS			
Pensions paid	\$19,160,000	\$19,200,000	\$45,572,000
Terminations	\$2,566,000	\$2,605,000	\$3,392,000
Administrative and investment management expenses	\$3,323,000	\$3,976,000	\$5,319,000
•	\$25,049,000	\$25,781,000	\$54,283,000
December 31	\$791,754,000	\$834,160,000	\$809,809,000
Gross rate of return 12	11.4%	8.6%	3.5%
Rate of return net of expenses12	10.9%	8.0%	2.9%

For the purposes of the June 30, 2005 partial wind-up report, the allocation of Plan assets between the members affected by the partial wind-up and those not affected by the partial wind-up was done based on the "standard method" under Policy W100-102. This initial asset allocation, as outlined in our June 30, 2005 partial wind-up report, was \$273,124,000 (including \$589,000 of defined contribution account balances) to the partial wind-up group and \$479,866,000 (including \$1,033,000 of defined contribution account balances) to the retained group. As at January 1, 2009 these amounts had grown to \$300,899,000 (including \$579,000 in

<sup>12</sup> Assuming mld-period cash flows

defined contribution account balances) for the partial wind-up group and \$433,424,000 (including \$859,000 of defined contribution account balances) for the retained group.

The reconciliation of the defined benefit assets for the retained and partial wind-up groups from January 1, 2009 to December 31, 2011 are as follows:

Reconciliation of Plan Assets 2009 - DB only (Market Value)

Necolicination of F	Retained	Partial Wind-Up	Total
January 1	\$432,565,000	\$300,320,000	\$732,885,000
PLUS			
Members' contributions	\$1,519,000	\$9,000	\$1,528,000
Company's contributions	\$0	\$0	\$0
Investment income & Net capital gains (losses)	\$61,596,000	\$20,794,000	\$82,390,000
	\$63,115,000	\$20,803,000	\$83,918,000
LESS			
Pensions paid	\$14,526,000	\$4,634,000	\$19,160,000
Terminations	\$2,566,000	\$0	\$2,566,000
Expenses	\$2,089,000	\$1,234,000	\$3,323,000
	\$19,181,000	\$5,868,000	\$25,049,000
December 31	\$476,499,000	\$315,255,000	\$791,754,000
Gross rate of return <sup>13</sup>	14.5%	7.0%	11.4%
Rate of return net of expenses 13	14.0%	6.6%	10.9%

<sup>13</sup> Assuming mid-period cash flows

Reconciliation of Plan Assets 2010 - DB only (Market Value)

	Retained	Partial Wind-Up	Total
January 1	\$476,499,000	\$315,255,000	\$791,754,000
PLUS			
Members' contributions	\$1,502,000	\$1,000	\$1,503,000
Company's contributions	\$0	\$0	\$0
Investment income & Net capital gains (losses)	\$48,574,000	\$18,110,000	\$66,684,000
	\$50,076,000	\$18,111,000	\$68,187,000
LESS			
Pensions paid	\$14,214,000	\$4,986,000	\$19,200,000
Terminations	\$2,605,000	\$0	\$2,605,000
Expenses	\$2,391,000	\$1,585,000	\$3,976,000
	\$19,210,000	\$6,571,000	\$25,781,000
December 31	\$507,365,000	\$326,795,000	\$834,160,000
Gross rate of return <sup>14</sup>	10.4%	5.8%	8.6%
Rate of return net of expenses <sup>14</sup>	9.9%	5.3%	8.0%

Reconciliation of Plan Assets 2011 - DB only (Market Value)

	Retained	Partial Wind-Up	Total
January 1	\$507,365,000	\$326,795,000	\$834,160,000
PLUS			
Members' contributions	\$1,460,000	\$0	\$1,460,000
Company's contributions	\$0	\$0	\$0
Investment income & Net capital gains (losses)	\$14,916,000	\$13,556,000	\$28,472,000
	\$16,376,000	\$13,556,000	\$29,932,000
LESS			
Pensions paid	\$14,541,000	\$5,417,000	\$19,958,000
Terminations	\$3,392,000	\$25,614,000	\$29,006,000
Administrative and investment management expenses	\$2,404,000	\$2,915,000	\$5,319,000
	\$20,337,000	\$33,946,000	\$54,283,000
December 31	\$503,404,000	\$306,405,000	\$809,809,000
Gross rate of return <sup>15</sup>	3.00%	4.4%	3.5%
Rate of return net of expenses 15	2.5%	3.4%	2.9%

<sup>&</sup>lt;sup>14</sup> Assuming mid-period cash flows

<sup>&</sup>lt;sup>15</sup> Assuming mid-period cash flows

As noted in the June 30, 2005 partial wind-up report, the final allocation of Plan assets between the retained and partial wind-up groups could change due to a number of factors including (but not limited to) refinements in membership data.

As a result of the data cleanup exercise undertaken by Canada Life in 2010, the data changes that arose during the preparation of the benefit statements for the partial wind-up group in 2011, and miscellaneous other data changes and updates since June 2005, the initial allocation of the Plan's assets between the partial wind-up group and the retained portion of the Plan at June 30, 2005 has changed. This change resulted in the assets of the Plan that would have been allocated to the partial wind-up group being higher by approximately \$4,992,000 as at June 30, 2005. This amount, adjusted with the gross rate of return on the total fund between July 2005 and March 2008, and with the gross rate of return on the non-segmented assets between April 2008 and December 2011 would have grown to approximately \$6,557,000.

In addition to the assets shown above, there is \$970,000 in defined contribution account balances for the retained group and \$390,000 in defined contribution account balances for the partial wind-up group as at December 31, 2011.

Therefore, the market value of assets at December 31, 2011 is \$497,817,000 for the retained group and \$313,352,000 for the partial wind-up group.

We have tested the pensions paid, the lump-sums paid and the contributions for consistency with the membership data for the Plan members who have received benefits or made contributions. The results of these tests were satisfactory.

# **Investment Policy**

The plan administrator adopted a statement of investment policy and procedures. This policy is intended to provide guidelines for the manager(s) as to the level of risk which is commensurate with the Plan's investment objectives. A significant component of this investment policy is the asset mix.

The constraints on the asset mix and the actual asset mix at the valuation date are provided for information purposes:

#### **Retained Group**

4-11121		Investment Policy			Actual Asset Mix as
		Minimum	Target	Maximum	at December 31, 2011
Fi	xed Income		***************************************		
•	Cash and Short Term Bonds	0%	3%	10%	3%
٠	Canadian Bonds	20%	30%	40%	31%
•	Real Return Bonds	0%	10%	20%	10%
•	Total	35%	43%	- 50%	44%
E	quity				
•	Canadian Equities	15%	27%	35%	26%
٠	Foreign Equities	15%	30%	35%	30%
•	Total	50%	57%	65%	56%
		***	100%		100%

#### Partial Wind-Up Group

***************************************	Investment Policy	Actual Asset Mix as
	Target	at December 31, 2011
Fixed Income		
<ul> <li>Cash and Short Term Bonds</li> </ul>	60%	59%
Canadian Bonds (incl.  Real Return Bonds)	28%	29%
Total	88%	88%
Equity		
Canadian Equities	12%	12%
Foreign Equities	0%	0%
• Total	12%	12%
	100%	100%

# APPENDIX C

# Methods and Assumptions – Going Concern Valuation of Assets

For this valuation, we have continued to use the market value of Plan assets. For the partial wind-up group, to ensure consistency between the going-concern and solvency bases, the \$13,000,000 provision for remaining wind-up expenses was deducted from the partial wind-up group's going concern assets.

## **Going Concern Funding Target**

Over time, the real cost to the employer of a pension plan is the excess of benefits and expenses over member contributions and investment earnings. The actuarial cost method allocates this cost to annual time periods.

For purposes of the going-concern valuation, for the retained group, we have continued to use the *projected unit credit actuarial cost method*. Under this method, for Staff members and Field Management members' benefits that are based on final average earnings, we determine the actuarial present value of benefit cash flows expected to be paid in respect of service accrued prior to the valuation date, based on projected final average earnings. For the portion of Field Management members' pension benefits that are based on accumulated contributions and/or account balances, we determine the present value of benefits that the member would receive based on current account balances and commissions projected with interest or inflation, as the case may be, to the date of member's termination, death, or retirement. This is referred to as the funding target.

The funding excess or funding shortfall, as the case may be, is the difference between the market or smoothed value of assets and the funding target. A funding excess on a market value basis indicates that the current market value of assets and expected investment earnings are expected to be sufficient to meet the cash flows in respect of benefits accrued to the valuation date as well as expected expenses — assuming the plan is maintained indefinitely. A funding shortfall on a market value basis indicates the opposite — that the current market value of the assets is not expected to meet the plan's cash flow requirements in respect of accrued benefits and absent additional contributions.

As required under the Act, a funding shortfall must be amortized over no more than 15 years through special payments. A funding excess may, from an actuarial standpoint, be applied immediately to reduce required employer current service contributions unless precluded by the terms of the plan or by legislation.

The actuarial cost method used for the purposes of this valuation produces a reasonable matching of contributions with accruing benefits. Because benefits are recognized as they accrue, the actuarial cost method provides an effective funding target for a plan that is maintained indefinitely.

The going-concern funding target for all partial wind-up members is set equal to their wind-up liabilities.

#### Current Service Cost

The current service cost is the present value of projected benefits to be paid under the plan with respect to service expected to accrue during the period until the next valuation.

Current service cost has been calculated for the retained group. As all partial wind-up members terminated prior to the valuation date, there are no current service costs for these members.

The employer's current service cost is the total current service cost reduced by the members' required contributions.

The employer's current service cost has been expressed as a percentage of members' pensionable earnings to provide an automatic adjustment in the event of fluctuations in membership and/or pensionable earnings.

Under the projected unit credit actuarial cost method, the current service cost for an individual member will increase each year as the member approaches retirement. However, the current service cost of the entire group, expressed as a percentage of members' pensionable earnings, can be expected to remain stable as long as the average age of the group remains constant.

### **Actuarial Assumptions – Going Concern Basis**

The present value of future benefit payment cash flows is based on economic and demographic assumptions. At each valuation we determine whether, in our opinion, the actuarial assumptions are still appropriate for the purposes of the valuation, and we revise them, if necessary. Emerging experience will result in gains or losses that will be revealed and considered in future actuarial valuations.

The table below shows the various assumptions used in the current valuation in comparison with those used in the previous valuation.

Assumption	Current valuation	Previous valuation
Discount rate:	5.35%	5.80%
Inflation:	2.00%	1.30%
Productivity improvement:	0.75%	1.00%
ITA limit / YMPE Increases:	2.75%	2.30%
Pensionable earnings increases:	Revised Merit and Promotional Increases Table with 2.75% general wage inflation.	Merit and Promotional Increases Table with 2,30% general wage inflation.
Post retirement pension increases:	2.00%	1.30%
Interest on employee contributions:	5.35%	5.80%
Retirement rates:	Revised age related table	Age related table
Termination rates:	Revised age related table	Age related table
Mortality rates:	85% of the rates of the 1994 Uninsured Pensioner Mortality Table	100% of the rates of the 1994 Uninsured Pensioner Mortality Table
Mortality improvements:	Fully generational using Scale AA	Fully generational using Scale AA
Eligible spouse at retirement:	80% (100% for Field)	80% (100% for Field)
Spousal age difference:	Male 3 years older	Male 3 years older
Terminating employees' settlement election (lump sum transfer or deferred pension)	Same as with solvency/hypothetical wind-up valuation	All terminating employees assumed to elect a deferred pension
Discount rate for lump sum settlements (on termination of employment)	2.6% for the first 10 years after date of exit, and 4.1% thereafter	N/A
nflation for lump sum settlements (on ermination of employment)	1.31% for the first 10 years after date of exit, and 2.44% thereafter	N/A
Mortality for lump sum settlements (on ermination of employment)	UP 94 Generational	N/A

The assumptions are best-estimate with the exception that the discount rate includes a margin for adverse deviations, as shown below.

**Age Related Tables** 

Sample rates from the age related tables are summarized in the following table:

Age	Term	ination	Retirement		Merit / F	romotion
	New Table	Previous Table	New Table	Previous Table	New Table	Previous Table
20	20.0%	15.0%	0.0%	0.0%	6.3%	8.0%
25	16.0%	15.0%	0.0%	0.0%	4.5%	6.2%
30	11.0%	10.0%	0.0%	0.0%	3.0%	4.2%
35	9.0%	8.5%	0.0%	0.0%	1.9%	3.0%
40	7.0%	5.0%	0.0%	0.0%	1.1%	2.0%
45	5.0%	4.0%	0.0%	0.0%	0.6%	1.3%
50	3.5%	4.0%	0.0%	0.0%	0.5%	1.0%
55	0.0%	0.0%	8.5%	15.0%	0.0%	0.5%
56	0.0%	0.0%	5.2%	7.5%	0.0%	0.0%
57	0.0%	0.0%	4.6%	7.5%	0.0%	0.0%
58	0.0%	0.0%	5.0%	7.5%	0.0%	0.0%
59	0.0%	0.0%	6.2%	7.5%	0.0%	0.0%
60	0.0%	0.0%	14.4%	25.0%	0.0%	0.0%
61	0.0%	0.0%	15.0%	25.0%	0.0%	0.0%
62	0.0%	0.0%	14.8%	25.0%	0.0%	0.0%
63	0.0%	0.0%	15.0%	25,0%	0.0%	0.0%
64	0.0%	0.0%	25.5%	25.0%	0.0%	0.0%
65	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%

# Pensionable Earnings

The benefits ultimately paid will depend on each member's final average earnings. To calculate the pension benefits payable upon retirement, death or termination of employment, we have taken historical earnings including those in 2011, and 2012 salary rates, and assumed that such pensionable earnings will increase at the assumed rate.

### **Rationale for Assumptions**

A rationale for each of the assumptions used in the current valuation is provided below.

#### **Discount Rate**

We have discounted the expected benefit payment cash flows using the expected investment return on the market value of the fund. Other bases for discounting the expected benefit payment cash flows may be appropriate, particularly for purposes other than those specifically identified in this valuation report.

The discount rate is comprised of the following:

- Estimated returns for each major asset class consistent with market conditions on the valuation date and the target asset mix specified in the Plan's investment policy
- Additional returns assumed to be achievable due to active equity management equal to the fees
  related to active equity management. Such fees were determined by the difference between the
  provision for total investment expenses and the hypothetical fees that would be incurred for passive
  management of all assets.
- Implicit provision for passive investment expenses determined as an average rate of passive investment expenses.
- Implicit provision for non-investment expenses determined as an average rate of non-investment expenses paid from the fund over the last 4 years.
- · A margin for adverse deviation of 0.15% (as selected by the Company).

The discount was developed as follows:

Assumed investment return	5.90%
Passive investment management expense provision	(0.10%)
Implicit non-investment expense provision	(0.30%)
Margin for adverse deviation	(0.15%)
Net discount rate	5.35%

#### Inflation

The inflation assumption is based on market expectations of long-term inflation implied by the yields on nominal and real return bonds at the valuation date.

#### Income Tax Act Pension Limit and Year's Maximum Pensionable Earnings

The assumption is based on historical real economic growth and the underlying inflation assumption,

#### Pensionable Earnings

The merit and promotion table was based on an experience study conducted in 2012 considering increases over the years 2006 to 2011. Based on the results of the experience study, and after discussions with the Company, the rates of merit and promotion increases were revised for this valuation. These revised rates represent our and the Company's current best estimate of future increases following the valuation date.

#### Retirement rates

The retirement table was based on an experience study conducted in 2008 (and updated in 2009, 2010, 2011 and 2012) considering retirements over the period 2007 to 2011. Based on the results of this analysis, and after discussions with the Company, the retirement rates were revised for this valuation to reflect the changing pattern in retirement behaviour observed in the experience study. These revised rates represent our and the Company's current best estimate of future retirement experience under the Plan.

#### Termination rates

The termination table is based on an experience study that was conducted in 2008 (and updated in 2009, 2010, 2011 and 2012) considering terminations from the Plan and two registered pension plans sponsored by affiliated companies over the years 2007 to 2011. After discussions with the Company, these rates represent our (and the Company's) current best estimate of future termination experience under the Remaining Plan.

#### Basis used to determine termination benefits assumed to be settled through lump sum transfers

On the termination of employment, employees have a choice between electing a deferred pension, or electing a lump sum transfer in lieu of a deferred pension. We have used the same settlement election assumption that was used for the solvency/hypothetical wind-up valuation. In addition, we have used the same economic and demographic assumptions as was used in the solvency/hypothetical wind-up valuations to value the benefits assumed to be settled through lump sum transfers.

#### **Mortality Rates**

The assumption is based on an analysis of actual experience of this Plan and two registered pension plans sponsored by affiliated companies over the years 2007 to 2011.

Based on the assumption used, the life expectancy of a member age 65 at the valuation date is 20.9 years for males and 23.4 years for females.

#### Indexation of Pensions in Payment

For members hired before January 1, 2001, pensions in payment are increased each year according to a formula related to increases in the Consumer Price Index (CPI) and the average fund rate of return. For members hired after January 1, 2001, pensions in payment are increased on an ad hoc basis at the discretion of the Company. Note that some Field Management Members hired before January 1, 2001 elected to receive some or all of their pension in a non-indexed form when they retired.

For this valuation, we have assumed that pensioner increases will only be affected by increases in CPI, and will not be affected by the fund rate of return. Consequently, pensions payable to those members hired before January 1, 2001 are assumed to increase annually at the rate of CPI. Pensions payable to members hired after January 1, 2001 are assumed not to be indexed.

#### Disability Rates

Use of a different assumption would not have a material impact on the valuation.

#### **Eligible Spouse**

For this valuation, we continued to assume that 80% of Staff Members and 100% of Field Management Members will have an eligible spouse on the earlier of death or retirement, and that the male partner will be three years older than the female partner.

#### Spousal Age Difference

The assumption is based on an industry standard showing males are typically 3 years older than their spouse.

# APPENDIX D

# Methods and Assumptions – Hypothetical Wind-up and Solvency

### **Hypothetical Wind-up Basis**

The Canadian Institute of Actuaries requires actuaries to report the financial position of a pension plan on the assumption that the plan is wound-up on the effective date of the valuation, with benefits determined on the assumption that the pension plan has neither a surplus nor a deficit. For the purposes of the hypothetical wind-up valuation, the plan wind-up is assumed to occur in circumstances that maximize the actuarial liability.

To determine the actuarial liability on the hypothetical wind-up basis, we have valued those benefits that would have been paid had the Plan been wound up on the valuation date, including benefits that would be immediately payable if the employer's business were discontinued on the valuation date, with all members fully vested in their accrued.

No benefits payable on plan wind-up were excluded from our calculations.

We have considered that members under the earliest retirement age specified in the Plan would be entitled to a deferred pension payable from their normal retirement date or such earlier age for which plan eligibility requirements have been satisfied at December 31, 2011. Members over the earliest retirement age specified in the Plan are considered to be entitled to an immediate pension, reduced in accordance with the plan rules. We have also considered that Ontario and Nova Scotia members whose age plus years of service equal at least 55 at December 31, 2011 would be entitled to a deferred pension payable from the age that would produce the greatest value if employment were to have continued for the purpose of determining eligibility for early retirement benefits. For each individual plan member, accumulated contributions with interest plus 50% of the present value of the pension accumulated are established as a minimum actuarial liability.

Upon plan wind-up members are given options for the method of settling their benefit entitlements. The options vary by eligibility and by province of employment, but in general, involve either a lump sum transfer or an immediate or deferred pension.

Partial wind-up members' benefits are being settled in accordance with members' actual or deemed elections pursuant to section 73(2) of the PBA or such similar rules in other provinces.

The value of benefits assumed to be settled through a lump sum transfer is based on the assumptions described in Section 3500 – *Pension Commuted Values* of the Canadian Institute of Actuaries' Standards of Practice applicable for December 31, 2011.

For greater certainty in calculating estimated lump sum amounts:

- For partial wind-up members who terminated employment prior to February 1, 2005, the calculations were done based on the recommendations of the Canadian Institute of Actuaries applicable on the member's date of termination of employment.
- For partial wind-up members who terminated employment after February 1, 2005 but prior to April 1, 2009, the calculations were done based on the Canadian Institute of Actuaries' Standard of Practice effective February 1, 2005, for Determining Pension Commuted Values applicable on their dates of termination.
- For partial wind-up members who terminated employment after April 1, 2009 but before
  February 1, 2011, the calculations were done based on the Canadian Institute of Actuaries'
  Standard of Practice effective April 1, 2009, for Determining Pension Commuted Values
  applicable on their dates of termination.
- For active, disabled and deferred vested members not included in the partial wind-up, the
  calculations were done based on the Canadian Institute of Actuaries' Standard of Practice
  for Determining Pension Commuted Values effective February 1, 2011 applicable for
  December 31, 2011.

Benefits provided as an immediate or deferred pension are assumed to be settled through the purchase of annuities based on an estimate of the cost of settlement of these benefits through the purchase of annuities.

However, there is limited data available to provide credible guidance on the cost of a purchase of indexed annuities in Canada. In accordance with the *Canadian Institute of Actuaries'*Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2011 and December 30, 2012, we have assumed that an appropriate proxy for estimating the cost of such purchase is using the yield on the long-term Government of Canada Real Return bonds.

As noted, we have used the annuity proxy determined in accordance with the CIA Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2011 and December 30, 2012 to estimate the cost of purchasing annuities. This basis does not reflect the actual mortality experience of the Plan members which has been significantly lower than standard mortality rates. If an insurance company were to assume these obligations and take the past mortality experience of the Plan, industry or employment type into account, it is quite likely that they would demand a higher price.

We have not included a margin for adverse deviation in the solvency and hypothetical wind-up valuations.

The assumptions are as follows:

#### Form of Benefit Settlement Elected by Member

Lump sum

Retained Members:

For active, disabled and deferred vested members in the retained group:

- 70% of under age 50,
- 50% of from age 50 to 55, and
- 30% of over age 55

elect to receive their benefit entitlement in a lump sum

Partial wind-up Members:

Actual member elections for those whose elections were received

Annuity purchase

**Retained Members:** 

All remaining retained members are assumed to elect to receive their benefit entitlement in the form of a deferred or immediate pension. These benefits are assumed to be settled through the purchase of deferred or immediate pension

Partial wind-up members:

Actual member elections for those whose elections were received.

Members whose elections were not received were deemed to have elected

an annuity purchase

Basis for Benefits Assumed to be Settled through a Lump Sum

Mortality rates:

Retained members: UP94 generational mortality table

Partial wind-up members: in accordance with CIA recommendations at members' dates of termination i.e. GAM83 (50% male) for terminations occurring before February 1, 2005, UP94 Projected to 2015 using Scale AA (50% male) for terminations occurring after January 31, 2005 and before April 1, 2009, and UP94 Projected to 2020 using Scale AA (50% male) for

terminations after April 1, 2009 and before February 1, 2011

Nominal Interest rate:

Retained members: 2.60% per year for the first 10 years following

December 31, 2011, 4.10% per year thereafter

Partial wind-up members: in accordance with CIA

recommendations/Standards of Practice at member's date of termination

inflation rate:

Retained members: 1.31% per year for the first 10 years following

December 31, 2011, 2.44% per year thereafter

Partial wind-up members: In accordance with CIA

recommendations/Standards of Practice at member's date of termination

Post retirement indexing:

In determining the amount of post retirement indexing included in the calculation of commuted values we have reflected the indexing formula specified in the plan which limits the amount of post retirement increases to the lesser of inflation and the average fund rate of return less 4%.

Basis for Benefits Assumed to be Settled through the Purchase of an Annuity

Mortality rates:

UP94 generational mortality table

Nominal Interest rate:

Immediate Retirement:

Indexed: 2,46% Non-indexed: 3.31% **Deferred Retirement:** 

Indexed: 3.31% per year during the deferral period and 2.46% after

commencement Non-indexed: 3.31%

Inflation rate:

2.00% per year

**Retirement Age** Maximum value:

Members are assumed to retire at the age which maximizes the value of

their entitlement from the Plan based on the eligibility requirements which

have been met at the valuation date

Grow-in:

The benefit entitlement and assumed retirement age of Ontario and Nova Scotia members whose age plus service equals at least 55 at the valuation date, reflect their entitlement to grow into early retirement subsidies

Other Assumptions

Final average earnings:

Based on actual pensionable earnings over the averaging period

Family composition:

80% of currently single and 100% of currently married Members will have a spouse on the earlier of death or retirement. Where available, we have used the actual difference between the age of the member and the spouse. Otherwise, we have assumed that the male partner will be three years older

than the female partner.

Termination expenses:

Retained Members:

\$2,000,000

Partial wind-up Members:

\$13,000,000 (remaining)

To determine the hypothetical wind-up position of the retained portion of the plan, a provision has been made for estimated termination expenses payable from the Plan's assets in respect of actuarial, administration and legal expenses that may reasonably be expected to be incurred in terminating the Plan and to be charged to the Plan.

Because the settlement of all benefits on wind-up is assumed to occur on the valuation date and is assumed to be uncontested, the provision for termination expenses does not include custodial, investment management, auditing, consulting and legal expenses that would be incurred between the wind-up date and the settlement date or due to the terms of a wind-up being contested. Expenses associated with the distribution of any surplus assets that might arise on an actual wind-up are also not included in the estimated termination expense provisions.

The provision for termination expense for the partially-wound up portion of the plan was based on an estimate of the administrative, communications, actuarial, legal and other fees related to the partial wind-up that was provided to us by the Company.

In determining the provision for termination expenses payable from the Plan's assets, we have assumed that the plan sponsor would be solvent on the wind-up date. We have also assumed. without analysis, that the Plan's terms as well as applicable legislation and court decisions would permit the relevant expenses to be paid from the Plan.

Actual fees incurred on an actual plan wind-up may differ materially from the estimates disclosed in this report.

#### **Incremental Cost**

In order to determine the incremental cost, we estimate the hypothetical wind-up liabilities at the next valuation date. We have assumed that the cost of settling benefits by way of a lump sum or purchasing annuities remains consistent with the assumptions described above. Since the projected hypothetical wind-up liabilities will depend on the membership in the Plan at the next valuation date, we must make assumptions about how the Plan membership will evolve over the period until the next valuation.

We have assumed that the Plan membership will evolve in a manner consistent with the going concern assumptions as follows:

- Members terminate, retire and die consistent with the termination, retirement and mortality rates used for the going concern valuation.
- Pensionable earnings, the Income Tax Act pension limit and the Year's Maximum
   Pensionable Earnings increase in accordance with the related going concern assumptions.
- · Active members accrue pensionable service in accordance with the terms of the Plan.
- Cost of living adjustments are consistent with the inflation assumption used for the going concern valuation.

#### **Solvency Basis**

In determining the financial position of the Plan on the solvency basis, we have used the same assumptions and methodology as were used for determining the financial position of the Plan on the hypothetical wind-up basis.

The solvency position is determined in accordance with the requirements of the Act.

# APPENDIX E

# Membership Data

# **Analysis of Membership Data**

The actuarial valuation is based on membership data as at December 31, 2011, provided by The Canada Life Assurance Company.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), pensionable earnings, credited service, contributions accumulated with interest and pensions to retirees and other members entitled to a deferred pension. Contributions, lump sum payments and pensions to retirees were compared with corresponding amounts reported in financial statements. The results of these tests were satisfactory.

Plan membership data are summarized below. For comparison, we have also summarized corresponding data from the previous valuation.

#### **Retained Members**

	12.31.11	12.31.08
Active Members		
Number	1,053	1,223
Total pensionable earnings for the following year <sup>16</sup>	\$71,087,227	\$73,251,446
Average pensionable earnings for the following year <sup>16</sup>	\$67,509	\$59,895
Average years of pensionable service	13.1	10.1
Average age	47.6	44.8
Accumulated contributions with interest	\$30,460,887	\$25,248,195
Deferred Pensioners		
Number	518	730
Total annual pension	\$2,977,345	\$3,739,382
Average annual pension	\$5,748	\$5,122
Average age	49.4	48.0
Pensioners and Survivors		
Number	803	830
Total annual lifetime pension	\$15,048,157	\$14,458,671
Average annual lifetime pension	\$18,740	\$17,420
Average age	76.5	75.4

<sup>&</sup>lt;sup>16</sup> For the December 31, 2008 valuation, earnings shown is earnings for the prior year

## **Partial Wind-Up Members**

	12.31.11	12.31.08
Active Members	**************************************	
Number	0	20
Total pensionable earnings	\$0	\$1,682,463
Average years of pensionable service	0	19.2
Average age	0	54.4
Accumulated contributions with Interest	\$0	\$1,949,063
Deferred Pensioners	MC MARCH ( 1 ( 1 ( 1 ) MC C MARCH ( 1 ) Springerhalm relationships relation to the contract of	
Number	1,158	1,899
Total annual pension	\$8,710,497	\$12,605,175
Average annual pension	\$7,522	\$6,638
Average age	46.2	43.4
Pensioners and Survivors		
Number	256	227
Total annual lifetime pension	\$5,326,316	\$4,458,475
Average annual lifetime pension	\$20,806	\$19,641
Average age	63.5	62.0

The membership movement for all categories of membership since the previous actuarial valuation is as follows:

	Actives	Deferred Vested	Pensioners and Beneficiaries	Partial Wind-Up	Total
Total at 12.31.2008	1,223	730	830	2,146 <sup>17</sup>	4,929
New entrants					<del>//////-//////////////////////////////</del>
Terminations:					•
<ul> <li>not vested</li> </ul>					
<ul> <li>transfers/ tump sums</li> </ul>	(60)	(129)			(189)
<ul> <li>deferred pensions</li> </ul>	(64)	64			0
In-transit		(1)			(1)
Deaths	(4)	(2)	(91)		(97)
Beneficiaries			8		8
Benefits expired			(3)		(3)
Retirements	(42)	(18)	60		
Data Correction In	4	13	2		19
Data Correction Out	(4)	(139)	(3)		(146)
Total at 12.31.2011	1,053	518	803	2,146 <sup>18</sup>	4,520

<sup>&</sup>lt;sup>17</sup> Includes 20 members who were accruing benefits at December 31, 2008, 1,899 deferred vested members, and 227 pensioners.

 $<sup>^{18}</sup>$  Includes 1,158 deferred vested members, 256 pensioners, and  $\dot{7}32$  members whose basic benefits were settled through lump sum transfers.

The distribution of the active members not affected by the partial wind-up by age and pensionable service as at 12.31,2011 is summarized as follows:

	Years of Pensionable Service							
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 +	Total
Under 20								
20 to 24								
25 to 29	1							1
30 to 34		46	19	1				66
35 to 39		57	97	5				159
40 to 44		30	127	25	3			185
45 to 49		28	120	25	25			198
50 to 54		11	94	26	13	19	1	164
55 to 59		10	63	9	11	7	10	110
60 to 64		6	40	4	10	4	4	68
65 <del>+</del>	1		9	1	2		2	15
Total	2	188	569	96	64	30	17	966

In addition, there are 87 disabled active members.

The distribution of the inactive members not affected by the partial wind-up by age as at the valuation date is summarized as follows:

	Deferred	Pensioners	Pensioners and Survivors	
Age	Number	Average annual Pension	Number	Average annual Pension
< 45	172	4,523		<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>
45 - 49	96	5,055		
50 - 54	104	6,082		
55 - 59	89	7,613	25	13,585
60 - 64	38	7,778	67	18,676
65 - 69	10	5,058	140	16,891
70 - 74	5	3,728	142	18,849
75 - 79	2	5,292	126	20,766
80 - 84	1	*	124	20,412
85 - 89			108	18,296
90 - 94	1	*	53	18,974
95 - 99			18	15,925
Total	518	5,748	803	18,740

<sup>\*</sup> For confidentiality reasons, average pensions are not shown for age groups with less than 2 members.

The distribution of the inactive members affected by the partial wind-up by age as at the valuation date is summarized as follows:

	Deferred	Pensioners	Pensioners and Survivors		
Age	Number	Average annual Pension	Number	Average annua Pension	
< 45	489	3,345	1	*	
45 - 49	284	8,520			
50 - 54	215	11,043	1	*	
55 - 59	133	14,988	52	15,833	
60 - 64	34	8,256	90	23,186	
65 - 69	2	*	88	21,575	
70 - 74	1	*	24	20,165	
75 - 79					
80 - 84					
85 - 89					
90 - 94					
95 - 99					
Total	1158	7,522	256	20,806	

<sup>\*</sup> For confidentiality reasons, average pensions are not shown for age groups with less than 2 members.

# APPENDIX F

Summary of Plan Provisions
This valuation is based on the plan provisions in effect on December 31, 2011. The Plan has been amended and restated since the date of the previous valuation.

The following is a summary of the main provisions of the Plan in effect on December 31, 2011. This summary is not intended as a complete description of the Plan.

#### Background

The Canada Life Assurance Company Trusteed Canadian Staff Pension Fund (1965) was established on December 31, 1964. The Canada Life Assurance Company Trusteed Canadian Staff Pension Fund (1958) and The Canada Life Assurance Company Trusteed Canadian Agents Fund were merged into this plan effective January 1, 1997 and the combined plan was renamed the Canada Life Canadian Employees Pension Plan.

Benefits are based on a set formula and, other than the required employee contributions which are based on employees' earnings, are entirely paid for by the Company.

#### Crown Life Insurance Company

On January 1, 1999, the Canada Life Canadian Employees Pension Plan was amended for those members who became employees of Canada Life as a result of Canada Life's acquisition of the Crown Life Insurance Company of Canada. This amendment provided pension benefits based on the terms of the Pension Plan for Crown Life Insurance Company of Canada Employees ("Crown Canada Plan") for the period of service from January 1, 1999 to December 31, 1999. For service on and after January 1, 2000, these employees earn pension benefits based on the same terms as other members of the Canada Life Canadian Employees Pension Plan; however, prior service in the Crown Canada Plan is counted for the purpose of determining eligibility for benefits.

Since these provisions only affected one year of service, they are not described in detail in this report. A detailed summary is available in the plan documents and in our funding valuation report on the Crown Canada Plan.

# Eligibility for membership

Each person hired by the Company as a Staff employee on a full-time or a permanent part-time basis is eligible, but not required, to join the plan on the 1<sup>st</sup> of the month coincident with or next following the date of hire. Each such person is required to join the plan upon the 1<sup>st</sup> of the month coinciding with or following two years of continuous service.

Each person who is hired by the Company as a Field Management employee is required to join the plan upon the 1<sup>st</sup> of the month coinciding with or following the date of hire.

An employee who is employed by the Company on a temporary basis is eligible, but not required, to join the plan following the completion of one year of continuous service

#### Employee Contributions

Each member is required to contribute 2.5% of the member's pensionable earnings up to an annual maximum contribution of \$2,500. Employees who have accrued 35 years of pensionable service are not required to make any additional contribution into the plan.

#### **Retirement Dates**

- The normal retirement date for Staff members is the last day of the month in which the member attains age 65. The normal retirement date for Field Management members is the last day of the month in which the member attains age 60.
- If a Staff member has at least two years of continuous service, the member may choose to retire as early as age 55. If a Field Management member has at least two years of continuous service, the member may choose to retire as early as age 50.
- If a member is both a Staff member and a Field Management member (i.e. the member has both Staff service and Field Management service), the member can elect to commence the Staff portion of his or her pension as early as age 50. In any case, the member must commence both Staff and Field Management pensions at the same time.
- An active member may postpone retirement beyond the normal retirement date; however, in accordance with the plan provisions, all members must commence their pension prior to the end of the month in which they attain age 71.

#### Normal Retirement Pension (Staff)

The retirement income benefit payable at the normal retirement date in respect of Staff pensionable service is equal to:

1.6% of annualized average pensionable earnings for the 36 consecutive months in the last 180 months before retirement for which they are the highest, up to the average of the YMPE in the year of the event and YMPE in the two immediately preceding years

#### **PLUS**

2.0% of the excess, if any, of the member's annualized average pensionable earnings for the 36 consecutive months in the last 180 months before retirement for which they are the highest, in excess of the average of the YMPE in the year of the event and YMPE in the two immediately preceding years

#### MULTIPLIED BY

The member's Staff pensionable service, capped at 35 years.

Normal Retirement Pension (Field Management) The retirement benefits payable at normal retirement in respect of Field Management pensionable service is equal to the sum of the following four components:

#### Post-1988 Field Management Benefit

For each year of Field Management pensionable service on or after January 1, 1988 (up to a maximum of 35 years of pensionable service), the member will receive a pension equal to:

1.5% of annualized average pensionable earnings for any 5 calendar years in the last 10 years before retirement for which they are the highest, up to the average of the YMPE in the year of the event and YMPE in the two immediately preceding years

#### **PLUS**

2.0% of the excess, if any, of the member's annualized average pensionable earnings for any 5 calendar years in the last 10 years before retirement for which they are the highest, in excess of the average of the YMPE in the year of the event and YMPE in the two immediately preceding years

#### Annuity Purchase Benefit

The Annuity Purchase Benefit provides an annual pension payable to the Field Management member, with the amount of the pension based on the employee contributions and (notional) company grants that are accumulated with interest until the member's retirement, death, or termination and are converted to a pension based on a factor specified in the plan text. The Annuity Purchase Benefit is equal to:

The member's earnings-related required contributions and company grants (made prior to December 31, 1987), with interest, multiplied by the applicable factor from Table A

#### PLUS

commission-related required contributions and notional company grants, with interest, multiplied by the applicable factor from Table B.

#### · Commission Earnings Benefit

The Commission Earnings Benefit provides an annual pension payable to the Field Management member, with the amount of the pension calculated based on the member's indexed commission earnings multiplied by the applicable factor from Table C.

#### Designated Appointee Benefit

The Designated Appointee Benefit provides an annual pension payable to the Field Management member, with the amount of the annual pension equal to 0.5% of the member's final 10-year average earnings multiplied by the Field Management member's designated appointee pensionable service.

Tables A, B, and C referred to in the above plan description are shown on the following page.

Retirement Age	Table A	Table B	Table C
50	0.0602	0.0598	0.0048
51	0.0614	0.0610	0.0052
52	0.0626	0.0623	0.0056
53	0.0638	0.0637	0.0060
54	0.0656	0.0651	0.0064
55	0.0674	0.0666	0.0069
56	0.0686	0.0681	0.0074
57	0.0704	0.0697	0.0080
58	0.0722	0.0712	0.0087
59	0.0740	0.0729	0.0094
60	0.0758	0.0747	0.0100
61	0.0770	0.0765	0.0107
62	0.0782	0.0783	0.0114
63	0.0800	0.0802	0.0121
64	0.0818	0.0821	0.0129
65	0.0835	0.0841	0.0139
66	0.0859	0.0862	0.0147
67	0.0877	0.0882	0.0154
68	0.0895	0.0903	0.0163
69	0.0919	0.0924	0.0173

Pensionable earnings	As of January 1, 2004, the definition of pensionable earnings under the plan was amended to exclude bonuses paid in respect of periods of service after December 31, 2003. At the same time, the plan was amended to guarantee that the member's highest 3-year average earnings at the time of termination of employment, retirement, or death would not be lower than they were at December 31, 2003.		
Early Retirement Pension (Staff)	If a member with Staff pensionable service retires early, the member will be entitled to a pension in respect of his or her Staff pensionable service that is calculated the same way as for a normal retirement. The basic pension payable, however, will be reduced as follows:		
	If member has:	Early retirement reduction:	
	Age 60 with more than 30 years of pensionable service	No reduction for early retirement	
	Age 60 with less than 30 years of pensionable service	The member's normal retirement date pension will be reduced by 0.4% multiplied by the lesser of:	
		<ul> <li>The number of months by which the pension commencement date precedes the member's normal retirement date; and</li> </ul>	
		<ul> <li>The number of months by which the member's pensionable service is less than 30 years.</li> </ul>	
	Under age 60 with more than 30 years of pensionable service	The member's normal retirement date pension will be reduced by 0.4% for each month by which the pension commencement date precedes the member's attainment of age 60.	
	Under age 60 and less than 30 years of pensionable service	The member's normal retirement date pension will be reduced by 0.4% multiplied by:	
		<ul> <li>the number of months by which the pension commencement date precedes the member's normal retirement date; minus</li> </ul>	
		<ul> <li>the number of months by which the member's pensionable service exceeds 25 years.</li> </ul>	

## Early Retirement Pension (Staff)

If, however, the member attained age 50 and completed at least 20 years of pensionable service as of January 1, 1997, the reduction of the member's pension in respect of his or her Staff pensionable service shall not exceed 0.4% multiplied by the lesser of the number of months by which the pension commencement date precedes the member's normal retirement date; and the number of months by which the pension commencement date precedes the date at which the member would have attained age 60 and completed at least 30 years of pensionable service.

If a member is both a Staff member and a Field Management member (i.e. the member has both Staff service and Field Management service), the member can elect to commence the Staff portion of his pension as early as age 50; however the amount of the Staff pension will be reduced so that the amount of pension is actuarial equivalent of the pension otherwise payable at age 55.

## Early Retirement Pension (Field Management)

If a member with Fleid Management pensionable service retires early, the member will be entitled to a pension in respect of his or her Field Management pensionable service that is calculated the same way as for a normal retirement. The pension payable however, will be reduced as follows:

Post-1988 Fleld Management Benefit	The normal retirement date pension will be reduced by 0.4% for each month by which the member's pension commencement date precedes the member's normal retirement date.
Annuity Purchase Benefit	The annual pension is calculated by multiplying the member's accumulated contributions and grants by the appropriate factor from Table A or Table B, as appropriate.
Commission Earnings Benefit	The annual pension is calculated by multiplying the member's indexed commission earnings by the appropriate factor from Table C.
Designated Appointee Benefit	The normal retirement date pension will be reduced by 0.6% for each month by which the member's pension commencement date precedes the member's normal retirement date.

## Postponed Retirement Pension

A member who continues to be an active employee of Canada Life may elect to postpone retirement. In that case, the member would continue to accrue service (up to his or her 71th birthday).

For Staff members, the pension shall not be less than the actuarial equivalent of the pension accrued by the member as of his normal retirement date, increased by the amount by which the pension would have been indexed.

For Field Management members, the pension will be determined as follows:

Post-1988 Field Management Benefit	The pension shall not be less than the actuarial equivalent of the pension accrued by the member as of his normal retirement date, increased by the amount by which the pension would have been indexed.		
Annuity Purchase Benefit	The Annuity Purchase Benefit provides an annual pension payable to the Field Management member, with the amount of the pension based on the employee contributions and (notional) company grants that are accumulated with interest until the member's retirement, death, or termination and are converted to a pension based on a factor specified in the plan text. The accumulated contributions and grants are multiplied by the factor from Table A or Table B, as applicable.		
Commission Earnings Benefit	The Commission Earnings Benefit is based on the member's indexed commission earnings multiplied by the applicable factor from Table C.		
Designated Appointee Benefit	The Designated Appointee Benefit will be equal to the amount accrued by the member as of his normal retirement date.		
The total annual pension payable from the Plan upon retirement, death or termination of employment cannot exceed the lesser of:			
<ul> <li>2% of the highest average compensation paid to the member by the Company, multiplied by total pensionable service; and</li> </ul>			
<ul> <li>The maximum dollar permitted under the Income Tax Act, multiplied by the member's total pensionable service.</li> </ul>			

The maximum pension is determined at the date of pension

commencement, termination or death.

Maximum Pension

# Death benefits (Pre Retirement)

If a member with Staff pensionable service dies before the pension commencement date, the member's spouse will receive an immediate pension equal to 60% of the pension accrued by the member at his death, with a guarantee of at least 120 monthly payments. Alternatively, the spouse may elect a deferred pension or a lump sum settlement equal to the value of the immediate pension. If the member has no spouse, the member's beneficiary will receive a lump sum equal to the present value of 120 monthly payments of 60% of the normal retirement date pension accrued by the member up to his death. In either situation, the death benefit payable to the member's beneficiary will be at least equal to the commuted value of the member's benefits.

If a member with Field Management pensionable service dies before his pension commencement date, death benefits shall be equal to the sum of the following:

### An immediate pension equal to 60% of the Post-Post-1988 Field 1988 Field Management pension benefits accrued Management by the member up to his death, with a guarantee Benefit of at least 120 monthly payments. Alternatively, the spouse may elect a deferred pension or a lump sum settlement equal to the value of the immediate pension. If the member has no spouse, the member's beneficiary will receive a lump sum settlement egual to the commuted value of 60% of the pension accrued by the member at his death, as would have been payable to the member at the member's normal retirement date, with a quarantee of at least 120 monthly payments. **Annuity Purchase** The member's spouse, or beneficiary if there is no spouse, will receive a benefit equal to the value of Benefit the member's earnings related company grants with Interest, earnings related required contributions with interest, commission related notional company grants with interest; and, commission related required contributions with interest. A lump sum equal to the value of the Commission Commission Earnings Benefit that the member would have **Earnings Benefit** been entitled to at his normal retirement date. If the member has a spouse, the spouse may elect an immediate unreduced annuity or a deferred annuity of equal value. A lump sum equal to the value of the Designated Designated Appointee Benefit that the member would have Appointee been entitled to at his normal retirement date. If Benefit the member has a spouse, the spouse may elect an immediate unreduced annuity or a deferred annuity of equal value.

# Death benefits (Post Retirement)

The normal form of payment for the Staff member's benefit and for the Field Management member's benefit for pensionable service on and after January 1, 1988 is as follows:

- For a member with a spouse the normal form of payment is a joint and survivor 60% pension, with 60 monthly payments of 60% of the member's pension guaranteed.
- For a member without a spouse, the normal form of payment is a lifetime pension, with 120 monthly payments of 60% of the member's pension guaranteed.

The normal form of payment for the Field Management member's Designated Appointee, Commission Earnings, and Annuity Purchase Benefits is a lifetime pension, with 120 monthly payments of 100% of the member's pension guaranteed.

For all benefits the member may elect to receive an optional form of pension on an actuarial equivalent basis.

## Termination Benefits

Less than two years of continuous service:

· A refund of the member's contributions with interest.

At least two years of continuous service:

• A deferred lifetime pension, based on the member's earnings, contributions and credited service up to the date of termination. Deferred pensions are payable commencing at the applicable normal retirement date. However, a member may elect to commence receipt of pension early subject to early retirement reduction factors described in the above sections Early Retirement Pension (Staff Members) and Early Retirement Pension (Field Management Members). If a member is entitled to a deferred pension, the member may also transfer the commuted value of that pension into another retirement vehicle in accordance with the applicable federal and provincial legislation.

## Pension Indexing

The annual pensions payable to members who were hired by Canada Life prior to January 1, 2001 (including former TD employees who became Canada Life employees on January 1, 2001), and their respective spouses and beneficiaries shall be increased each January 1 following the member's retirement date (except as noted below). The amount of the pension increase will be equal to (a) minus (b) where:

- (a) is the member's annual pension at his or her pension commencement date multiplied by the lesser of:
  - (i) the cumulative return based on the excess of the Current Year Rate for Indexing over 4% for each year measured from the member's pension commencement date to January 1 of the plan year; and.
  - (ii) the cumulative Consumer Price Index Rate measured from the member's pension commencement date to January 1 of the plan vear; and.
- (b) is the member's annual pension as at December 31 of the previous plan year.

In no event shall the adjustment on any January 1 decrease the member's pension below the amount of the annual pension payable on December 31 of the immediately preceding year.

The first increase for pension benefits payable in respect of Field Management pensionable service will not take place until January 1 following the member's attainment of age 60.

Effective January 1, 2003, the Current Year Rate for Indexing means the average of the fund rates of return over the first 15 of the preceding 16 plan years. Between January 1, 2001 and January 1, 2003, the Current Year Rate for Indexing meant the average of the fund rates of return over the first 5 of the preceding 6 plan years. Prior to January 1, 2001, the Current Year Rate for Indexing meant the rate earned by the Company on its life insurance and annuity funds during the preceding calendar year, excluding the effect of the Company's investment in its subsidiaries.

Note that some Field Management members hired before January 1, 2001 elected to receive some or all of their pension in a non-indexed form when they retired. These benefits are not indexed for inflation.

Pension benefits for members hired after December 31, 2000 may be increased, from time to time, at the discretion of the Company in accordance with such method as the Company may in its discretion adopt effective any January 1.

REPORT ON THE ACTUARIAL VALUATION FOR FUNDING **PURPOSES AS AT DECEMBER 31, 2011** 

THE CANADA LIFE CANADIAN EMPLOYEES PENSION PLAN

# APPENDIX G

# **Employer Certification**

With respect to the Report on the Actuarial Valuation for Funding Purposes as at December 31, 2011, of The Canada Life Canadian Employees Pension Plan I hereby certify that, to the best of my knowledge and bellef:

- The valuation reflects the terms of the Company's engagement with the actuary, particularly the requirement to include a margin of 0.15% in the discount rate used to perform the going concern valuation:
- The valuation reflects the Company's decisions in regards to determining the solvency funding requirements:
- A copy of the official plan documents and of all amendments made up to December 31, 2011 were provided to the actuary and is reflected appropriately in the summary of plan provisions contained herein:
- The asset information summarised in Appendix B is reflective of the Plan's assets;
- The membership data provided to the actuary included a complete and accurate description of every person who is entitled to benefits under the terms of the Plan for service up to December 31, 2011.

All events subsequent to December 31, 2011 that may have an impact on the Plan have been communicated to the actuary.

Signed Helen Kasdorf Senior Vice-President, Corporate Resources Name



Mercer (Canada) Limited 161 Bay Street, P.O. Box 501 Toronto, Onterio M5J 2S5 +1 416 868 2000

Consulting. Outsourcing. Investments.

This is Exhibit "F" referred to in the affidavit of Marcus Robertson sworn before me, this 8<sup>th</sup> day of March, 2013

A Commissioner for taking affidavits, etc.

SHELAGH MARGARET MATHERS Barrister, Solicitor, Notary Public

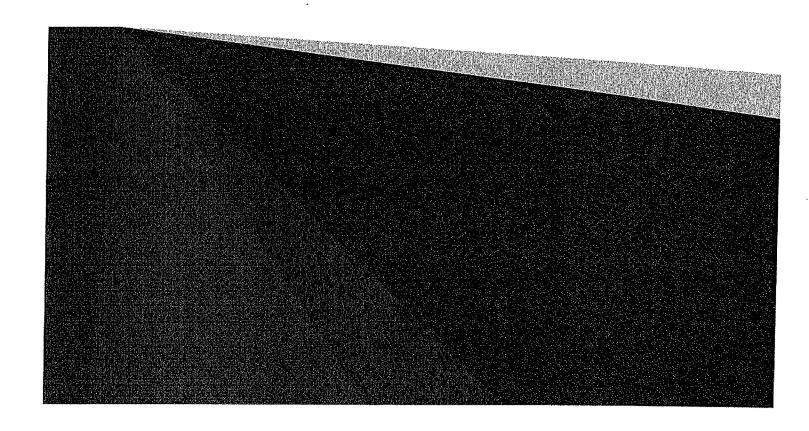
MATHERS LAW OFFICE

6 TALBOT STREET SUITE NO. 4 PICTON, ON KOK 2TO



# THE CANADA LIFE CANADIAN EMPLOYEES PENSION PLAN

# REPORT ON THE TRANSFER OF THE LIABILITIES OF THE REMAINING PORTION OF THE 2005 PARTIAL WIND-UP TO THE ONGOING PORTION OF THE PLAN THE CANADA LIFE ASSURANCE COMPANY 11 OCTOBER 2012



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# Introduction

.At the request of the Canada Life Assurance Company ("Canada Life" or the "Company"), we have prepared this report on the financial position of the portion of the Canada Life Canadian Employees Pension Plan (the "Plan") affected by the June 30, 2005 partial wind-up of the plan (the "partial wind-up group) as at August 31, 2012.

# Purpose

The purpose of this report is to:

- Determine the liabilities of the members of the partial wind-up group who did not elect the transfer option ('remaining partial wind-up members") and whose liabilities will be transferred to the ongoing portion of the Plan as at August 31, 2012;
- Determine the surplus remaining in the partially wound-up portion of the Plan as at August 31,
   2012 after the transfer is complete;
- Satisfy the requirements of the Financial Services Commission of Ontario (FSCO) regarding the distribution of assets from the partially wound-up portion of a pension plan.

The information contained in this report was prepared for the internal use of Company and for filing with the Financial Services Commission of Ontario. This report is not intended or suitable for any other purpose.

# June 30, 2005 Partial Wind-Up

A partial wind-up was declared by Canada Life as a result of the workforce integration measures taken after the acquisition of the Company by The Great-West Life Assurance Company ("Great-West Life") on July 10, 2003. All members of the Plan whose employment with Canada Life terminated in conjunction with the integration, other than those members of the plan who were employed in the province of Québec, have been included in the partial wind-up. This includes members whose employment was terminated during the integration period by Canada Life, as well as those who resigned or retired voluntarily. It also includes those members who were informed during the integration period that their employment would be terminated as a result of the integration and whose employment was terminated after June 30, 2005. The integration period started effective July 10, 2003, the date Canada Life was acquired by Great-West Life, and ended on June 30, 2005 (the "Partial Wind-Up Date").

On September 4, 2003, the Superintendent approved Canada Life's request to commence monthly pension payments from the pension fund to those members and former members of the Plan who are eligible for, and who elect to receive, an immediate pension.

A report on the partial wind-up of the Plan as at June 30, 2005 was filed with the Superintendent of the Financial Services Commission of Ontario (the "Superintendent") in March, 2006.

MARSH & MCLENNAN COMPANIES On April 14, 2011, the Superintendent approved the distribution of basic benefits for the partial wind-up group as set out in the June 30, 2005 partial wind-up report.

On and around June 30, 2011, benefit statements were distributed to all members of the partial wind-up group. Members were given the option of either electing a lump sum transfer of their benefit entitlements from the pension fund, or to have a deferred or immediate annuity purchased on their behalf. Lump sum transfers were made to members who elected the lump sum transfer option. These lump sums were made as members' elections were received.

On May 14, 2012, requests for annuity quotes for the remaining partial wind-up members were submitted to seven insurance companies in Canada. By June 12, 2012, all of the seven insurance companies had declined to quote on the annuities. As a result of the inability to purchase annuities for the remaining partial wind-up members, the Company has decided to transfer these members' liabilities back to the ongoing portion of the Plan.

In accordance with FSCO Policy W100-233, because members' initial benefit statements indicated that annuities would be purchased, Canada Life will be providing the remaining partial wind-up members with revised statements indicating the following:

- Annuities will no longer be purchased and members' benefits will be payable (or continue to be paid) from the Plan;
- Any subsequent settlement of benefits will be subject to the terms of the Plan and the funded status of the Plan at that time; and
- Members can re-elect to transfer the lump sum value of their benefit entitlements out of the Plan.

Lump sum transfers will be made to any remaining partial wind-up member who elects a lump sum transfer on their revised benefit statement. The effects of any lump sum transfers on the liabilities transferred to the ongoing portion of the Plan will be reflected in a subsequent (or final) report on the June 30, 2005 partial wind-up. In addition, the treatment of any remaining surplus will also be dealt with in a subsequent (or final) report on the June 30, 2005 partial wind-up.

# Calculation Methodology, Assumptions and Data

Our calculations reflect the provisions of the Plan as at December 31, 2011. A summary of the main plan provisions can be found in our December 31, 2011 actuarial valuation report.

Our calculations reflect the asset information in respect of the partial wind-up group provided to us by Canada Life. Details of the assets are provided in Appendix A.

Our calculations are based on the remaining members of the partial wind-up group as at August 31, 2012. A summary of the membership data is provided in Appendix C.

In accordance with the FSCO Policy W100-233, we have estimated the liabilities of the remaining partial wind-up members based on the guidance on estimating the cost of annuities in the



REPORT ON THE TRANSER OF THE LIABILITIES OF THE REMAINING PORTION OF THE 2005 PARTIAL WIND-UP TO THE ONGOING PORTION OF THE PLAN

educational note published by the Canadian Institute of Actuaries' Committee on Pension Plan Financial Reporting effective on August 31, 2012. Appendix B provides a summary of the assumptions used.

This report has been prepared on the assumption that all of the assets of the pension fund that have been allocated to the partial wind-up group are available to meet all of the claims in respect of the partial wind-up group.

On July 29, 2004, the Supreme Court of Canada dismissed the appeal in Monsanto Canada Inc. versus Superintendent of Financial Services ("Monsanto"), thereby upholding the requirements to distribute surplus on partial plan wind-up under The Pension Benefits Act (Ontario). The decision has retroactive application and applies on the termination of Ontario employees if they are included in a partial plan wind-up, regardless of the province in which the pension plan is registered.

With the exception of the June 30, 2005 partial wind-up of the Plan, we are not aware of any other partial plan wind-up having been declared in respect of the Plan where the Monsanto decision may apply. In preparing these estimates, we have therefore assumed that the portion of the Plan's assets allocated to the partial wind-up group are available to cover that group's estimated liabilities. The subsequent declaration of a partial wind-up of the Plan where *Monsanto* may apply in respect of a past event, or disclosure of an existing past partial wind-up, could cause an additional claim on Plan assets (and consequent re-allocation of the assets allocated to the partial wind-up group), the consequences of which would be addressed in a subsequent report. We note the discretionary nature of the power of the regulatory authorities to declare partial wind-ups and the lack of clarity with respect to the retroactive scope of that power. We are making no representation as to whether the regulatory authorities might declare a partial wind-up in respect of other events in the Plan's history.

# **Subsequent Events**

Lump sum transfers will be made to any remaining partial wind-up member who elects a lump sum transfer on their revised benefit statement. After checking with representatives of the Company, to the best of our knowledge there have been no other events subsequent to August 31, 2012, which, in our opinion, would have a material impact on the results in this report.

Valuation Results — Hypothetical Wind-up
The estimated financial position of the partial wind-up group as at August 31, 2012, compared with that of the previous valuation, is as follows:

	08.31.2012	12.31.2011
Assets		
Market value of assets	\$312,707,000	\$318,205,000
Increased asset allocation to PWU group	\$6,866,000	\$6,557,000
In-transit benefit payments	\$0	\$0
Crown DC balances	\$316,000	\$390,000
Pending expense reimbursements	(\$14,700,000)	(\$11,800,000)
Provision for future termination expenses	(\$12,700,000)	(\$13,000,000)
Wind-up assets	\$292,489,000	\$300,352,000
Present value of accrued benefits for:		
active members	\$0	\$0
<ul> <li>pensioners and survivors</li> </ul>	\$124,121,000	\$124,698,000
<ul> <li>deferred pensioners</li> </ul>	\$162,206,000	\$157,742,000
<ul> <li>pending payouts</li> </ul>	\$123,000	\$6,230,000
Crown DC members	\$316,000	\$390,000
Total wind-up liability	\$286,766,000	\$289,060,000
Wind-up excess (shortfall)	\$5,723,000	\$11,292,000
Transfer ratio	1.06	1.08

# **Reconciliation of the Financial Position**

A reconciliation of the financial position at the last valuation (i.e. a wind-up excess of \$11,292,000) to the estimated financial position at August 31, 2012 (i.e. a wind-up excess of \$5,723,000) is as follows:

Wind-up excess (shortfall) as at previous valuation	\$11,292,000
Interest on liabilities at 2.8% per year	(\$5,333,000)
Net investment return on assets and pending transfer	\$5,424,000
Impact of actual settlement elections	\$1,321,000
Impact of changes in the estimated cost of purchasing annuities	(\$5,144,000)
Interest on pending expense reimbursements	(\$2,177,000)
Decrease in provision for future termination expenses	\$300,000
Net impact of other elements of gains and losses	\$40,000
Estimated wind-up excess (shortfall) at August 31, 2012	\$5,723,000

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# **Actuarial Opinion**

In our opinion, for the purposes of determining the liabilities of the remaining members of the partial wind-up group that will be transferred to the ongoing portion of the Plan, and the surplus (if any) remaining in the partially wound-up portion of the Plan:

- the membership data on which the calculations are based are sufficient and reliable.
- · the assumptions are appropriate, and
- · the methods employed are appropriate

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada and in accordance with the policies of the Financial Services Commission of Ontario.

Benedict O. Ukonga

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

October 11, 2012

Date

Douglas Johnson

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

October 11, 2012

Date



# Appendix A

# Plan Assets

The pension fund is held in trust by the trustees. In preparing this report, we have relied upon fund statements prepared by The Canada Life Assurance Company.

We have also relied on information provided by the Canada Life Assurance Company regarding the defined contribution account balances for those partial wind-up members who accrued defined contribution benefits during 1999 as well as information on pension plan cash flows (e.g. monthly benefit payments, lump sum benefit payments, and expenses), from December 31, 2011 to August 31, 2012 in respect of members of the partial wind-up group.

A reconciliation of the assets allocated to the partial wind-up group from the date of the last valuation to August 31, 2012 and before pending expense reimbursements is as follows:

DB Assets only	2012
January 1	\$318,205,000
PLUS	
Members' contributions	\$0
Company's contributions	\$0
Investment income & net capital gains (losses)	\$5,879,000
	\$5,879,000
LESS	
Pensions paid and lump sums paid	\$11,377,000
	\$11,377,000
August 31	\$312,707,000
Gross Rate of return	1.9%

In addition to the assets shown above, there is a pending asset transfer of \$6,866,000 as at August 31, 2012 from the ongoing portion of the Plan to the partial wind-up group. There is also \$14,700,000 of pending expense reimbursements payable to the Company. As a result, the total market value of assets for the partially wound up portion of the Plan (before the provision for future termination expenses) is \$304,873,000.

# Appendix B

# **Actuarial Methods and Assumptions**

# Valuation of Assets

For this valuation, the market value of the assets allocated to the partial wind-up group is used.

## Valuation of Liabilities

No benefits payable on plan wind-up were excluded from our calculations.

We have considered that members under the earliest retirement age specified in the Plan would be entitled to a deferred pension payable from their normal retirement date or such earlier age for which plan eligibility requirements have been satisfied at their employment termination date. Members over the earliest retirement age specified in the Plan are considered to be entitled to an immediate pension, reduced in accordance with the plan rules. We have also considered that Ontario and Nova Scotia members whose age plus years of service equal at least 55 at their employment termination date would be entitled to a deferred pension payable from the age that would produce the greatest value if employment were to have continued for the purpose of determining eligibility for early retirement benefits. For each individual plan member, accumulated contributions with interest plus 50% of the present value of the pension accumulated are established as a minimum actuarial liability.

All remaining partial wind-up members elected, or were deemed to elect, to have their benefits settled through the purchase of immediate or deferred annuities.

We have estimated the cost of purchasing these annuities in accordance with the Canadian Institute of Actuaries' Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2011 and December 30, 2012 and applicable for August 31, 2012.

We have not included a provision for adverse deviation in these calculations.



The assumptions are as follows:

	August 31, 2012	December 31, 2011	
Form of benefit settlement electe	ed by member:		
Annuity purchase	All remaining members are assumed to elect to receive their benefit entitlement in the form of a deferred or immediate pension. These benefits are assumed to be settled through the purchase of deferred or immediate annuities		
Benefits assumed to be settled to	nrough annuity purchase		
Nominal interest rate	Immediate retirement	<u>Immediate retirement</u>	
	Indexed: 2.36% per year	Indexed: 2.46% per year	
	Non-indexed: 3.04% per year	Non-indexed: 3.31% per year	
	Deferred retirement	Deferred retirement	
	Indexed: 3.04% during the deferral period, 2.36% after commencement	Indexed: 3.31% during the deferral period, 2.46% after commencement	
	Non-indexed: 3.04% per year	Non-indexed: 3.31% per year	
Mortality rate	UP 94 with generational mortality improvements (sex distinct)	UP 94 with generational mortality improvements (sex distinct)	
Inflation	1.95% per year	2.0% per year	
	We have assumed that the life insurance company would price the annuities as if they were fully indexed for inflation.	We have assumed that the life insurance company would price the annuities as if they were fully indexed for inflation.	
Provision for wind-up expenses <sup>1</sup> :	\$12.7 million	\$13 million	
Final average earnings	Based on actual pensionable earnings over the averaging period	Based on actual pensionable earnings over the averaging period	
Family composition	80% of currently single and 100% of currently married Members will have a spouse on the earlier of death or retirement. Where available, we have used the actual difference between the age of the member and the spouse. Otherwise, we have assumed that the male partner will be three years older than the female partner.		

<sup>&</sup>lt;sup>1</sup> Provided to us by Canada Life

# Appendix C

# Membership Statistics

The estimated financial position is based on the membership data of the partial wind-up group as at August 31, 2012.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), accrued pensions, credited service, contributions accumulated with interest and pensions to members whose pensions had commenced. Lump sum payments and pensions to retirees were compared with corresponding amounts reported in financial statements. The results of these tests were satisfactory.

# Plan membership data is summarized below.

	08.31.12	12.31.11
Remaining Deferred Pensioners		
Number	1,092	1,158
Total annual pension	\$8,500,917	\$8,710,497
Average annual pension	\$7,785	\$7,522
Average age	47.1	46.2
Remaining Pensioners and Survivors		
Number	256	256
Total annual lifetime pension	\$5,326,316	\$5,326,316
Average annual lifetime pension	\$20,806	\$20,806
Average age	64.1	63.5

# Distribution of Remaining Inactive Members Affected by the Partial Wind-Up By Age Group as at 08.31.2012

	Deferred Pensioners		Pensioners and Survivors	
Age	Number	Average Annual Pension	Number	Average Annual Pension
< 45	446	\$3,435	1	*
45 - 49	270	\$8,760		
50 - 54	211	\$11,151	1	*
55 - 59	129	\$15,239	52	\$15,833
60 - 64	34	\$8,256	90	\$23,186
65 - 69	1	*	88	\$21,575
70 - 74	1	*	24	\$20,165
75 - 79				
80 - 84				
85 - 89				
90 - 94				
95 - 99				
100 +				
Total	1,092	\$7,785	256	\$20,806
4				

<sup>\*</sup> For confidentiality reasons, average pensions are not shown for age groups with 2 or fewer members.

# Appendix D

# **Employer Certification**

With respect to the Report on the Transfer of the Liabilities of the Remaining Portion of the 2005 Partial Wind-up to the Ongoing Portion of the *Canada Life Canadian Employees Pension Plan*, as at August 31, 2012, I hereby certify that, to the best of my knowledge and belief:

- a copy of the official plan documents and of all amendments made up to August 31, 2012, were
  provided to the actuary and is reflected appropriately in the summary of plan provisions
  contained in the filed December 31, 2011 valuation report,
- the asset information summarised in Appendix A is reflective of the Plan's assets allocated to the 2005 partial wind-up group,
- the membership data provided to the actuary included a complete and accurate description of every person within the partial wind-up group who is entitled to benefits under the terms of the Plan, and
- all events subsequent to August 31, 2012 that may have an impact on the results shown in this
  report have been communicated to the actuary.

Date

Signed

WALLACE B. ROBINGE

Name

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REPORT ON THE TRANSER OF THE LIABILITIES OF THE REMAINING PORTION OF THE 2005 PARTIAL WIND-UP TO THE ONGOING PORTION OF THE PLAN



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