

Private and Confidential

Via Courier

September 30, 2013

Our Ref: 600555/3001129

Canada Revenue Agency  
Information Holdings  
Operations Section - Pension  
875 Huron Road, A-200  
Ottawa, Ontario  
K1A 1A2

Dear Sir/Madam:

THE GLOBE AND MAIL EMPLOYEES RETIREMENT PLAN  
(REG #1075704)  
ACTUARIAL VALUATION AS AT DECEMBER 31, 2012

Enclosed are the following:

- Actuarial valuation for the above-named plan as at December 31, 2012; and
- Actuarial Information Summary (AIS) form.

Please call me if you have any questions.

Sincerely,



Emilie Roy

ER:rw

Enclosures

cc: Erin Adams, Jeanne O'Connell, Samantha Ross — The Globe and Mail Inc.  
John McIntosh, Rohan Kumar, Vickie Zou — Towers Watson

Direct Dial: 416.960.2840



**THE GLOBE AND MAIL INC.**  
**THE GLOBE AND MAIL EMPLOYEES RETIREMENT PLAN**  
**Actuarial Valuation as at December 31, 2012**

September 2013

Registration Number 1075704

This document is being filed with the Financial Services Commission of Ontario and the Canada Revenue Agency as required by statute and contains confidential financial information regarding the plan, the plan sponsor, and the plan members. Therefore, pursuant to subsection 20(1)(b) of the *Access to Information Act (Canada)*, or a corresponding provision under any comparable federal or provincial legislation, a government institution shall not disclose this document to any party as a result of a request under the *Access to Information Act (Canada)* or other applicable legislation.

**TOWERS WATSON** 



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# Introduction

## Purpose

This report with respect to the The Globe and Mail Employees Retirement Plan (the “plan”) has been prepared for The Globe and Mail Inc., the plan administrator, and presents the results of the actuarial valuation of the plan as at December 31, 2012.

The principal purposes of the report are:

- to present information on the financial position of the plan on both going concern and solvency bases;
- to review the hypothetical windup status of the plan;
- to provide the basis for employer contributions; and
- to provide certain additional information required for the administration of the plan.

This report outlines the changes in the plan’s financial situation since the previous actuarial valuation at December 31, 2011, provides the information and the actuarial opinion required by the *Pension Benefits Act (Ontario)* and Regulation thereto and provides the information required to maintain plan registration under the *Income Tax Act (Canada)* and Regulations thereto.

This report summarizes the results of the actuarial valuation and contains an actuarial opinion as an integral part of the report. Supporting detailed information on the significant terms of engagement, assets, actuarial basis, membership data and plan provisions is contained in the Appendices.

The information contained in this report was prepared for The Globe and Mail Inc., for its internal use and for filing with the Financial Services Commission of Ontario and the Canada Revenue Agency, in connection with the actuarial valuation of the plan prepared by Towers Watson Canada Inc. (“Towers Watson”). This report is not intended, nor necessarily suitable, for other parties or for other purposes. Further distribution of all or part of this report to other parties (except where such distribution is required by applicable legislation) or other use of this report is expressly prohibited without Towers Watson’s prior written consent. Towers Watson is available to provide additional information with respect to this report to the above-mentioned intended users upon request.

The numbers in this report are not rounded. The fact that numbers are not rounded does not imply a greater level of precision than if the numbers had been rounded.

## Significant Events Since Previous Actuarial Valuation

### Actuarial Basis

Since the previous actuarial valuation, the assumptions used in the solvency and hypothetical windup valuations have been updated to reflect market conditions at the actuarial valuation date. In addition, there have been changes to the going concern actuarial basis, as follows:

- the rate of salary increase was reduced from 4.0% at the last valuation to 3.5%;
- the interest on member contributions was reduced from 4.0% at last valuation to 3.5%; and
- other assumption changes were made as noted in Appendix C.

### Plan Provisions

This actuarial valuation reflects the plan provisions as at December 31, 2012 and does not make any provision for the possibility that a change or action (retroactive or otherwise) may be imposed by order of a regulatory body or a court as we were not aware of any definitive events that would require such change or action at the time this actuarial valuation was completed.

There have been no changes to the plan provisions since the previous actuarial valuation that affect the actuarial valuation's results.

### Legislative and Actuarial Standards Updates

Effective July 1, 2012, amendments to the *Pension Benefits Act (Ontario)* provide that certain members employed in the province of Ontario whose employment is terminated involuntarily will be eligible to grow-in to the plan's early retirement subsidies and all members employed in the province of Ontario will vest immediately in their accrued pension. The effect of the changes to the plan provisions resulting from these amendments to the *Pension Benefits Act (Ontario)* has not been reflected in the going concern valuation results presented in this report on the basis that it has no material financial impact on such actuarial valuation results.

On December 8, 2010, Ontario Bill 120, *Securing Pension Benefits Now and for the Future Act, 2010*, received Royal Assent. The amendments under Bill 120 provide a framework for certain changes in funding rules for plans registered in the province of Ontario that will be effective at a date to be proclaimed. The effect of these future changes to funding rules resulting from Bill 120 has not been reflected in this report. Future changes to contribution requirements resulting from Bill 120 will be reflected in the first actuarial opinion prepared and filed on or after the effective date of the relevant section(s) of Bill 120.

In November 2012, the Regulation to the *Pension Benefits Act (Ontario)* was amended to allow deferring for up to 12 months the commencement of the period during which special payments are required to be made to liquidate any new going concern unfunded actuarial liability and/or statutory solvency deficiency revealed at the actuarial valuation date.

A solvency relief report for the plan was filed with an effective date of December 31, 2011. In that report, the plan administrator elected the following temporary solvency funding relief options contained in the Regulation to the *Pension Benefits Act (Ontario)*:

- Option 4: Consolidate the remaining solvency schedules established in prior valuation reports and amortize the consolidated schedule over a five-year period beginning on the date of this report.

The contribution requirements presented in this report have been determined in accordance with the temporary solvency funding relief rules under the Regulation applicable to amortization payments that were consolidated or established in the solvency relief report.

On November 15, 2012, the Ontario government released regulations setting out the conditions under which sponsors of private-sector defined benefit pension plans may use letters of credit to secure up to 15% of the plan's solvency liabilities. These regulations came into effect on January 1, 2013.

## **Subsequent Events**

We completed this actuarial valuation in September 2013.

To the best of our knowledge and on the basis of our discussions with The Globe and Mail Inc., no events which would have a material financial effect on the actuarial valuation occurred between the actuarial valuation date and the date this actuarial valuation was completed.

# Section 1: Going Concern Financial Position

## 1.1 Statement of Financial Position

	December 31, 2012	December 31, 2011
<b>Going Concern Value of Assets</b>		
Defined benefit provision	\$ 116,444,943	\$ 107,940,374
Defined contribution provision	<u>12,332,186</u>	<u>10,259,267</u>
Total going concern value of assets	\$ 128,777,129	\$ 118,199,641
<b>Actuarial Liability</b>		
<i><b>Defined Benefit Provision</b></i>		
Active, disabled and suspended members	\$ 73,771,132	\$ 69,501,077
Retired members and beneficiaries	35,502,986	34,168,405
Terminated vested members	<u>4,955,818</u>	<u>4,661,134</u>
Total	\$ 114,229,936	\$ 108,330,616
<i><b>Defined Contribution Provision</b></i>	<u>12,332,186</u>	<u>10,259,267</u>
<b>Total Actuarial Liability</b>	\$ 126,562,122	\$ 118,589,883
<b>Actuarial Surplus (Unfunded Actuarial Liability)</b>	\$ 2,215,007	\$ (390,242)
Prior Year Credit Balance	<u>(1,530,229)</u>	<u>(0)</u>
<b>Actuarial Surplus (Unfunded Actuarial Liability) After Prior Year Credit Balance</b>	\$ 684,778	\$ (390,242)

### Comments:

- The financial position of the plan on a going concern basis is determined by comparing the going concern value of assets to the actuarial liability and is a reflection of the assets available for the benefits accrued in respect of credited service prior to the actuarial valuation date assuming the plan continues indefinitely.

- The prior year credit balance is employer contributions made prior to the actuarial valuation date that are in excess of the minimum required and are set aside as a reserve for application towards future contribution requirements.
- The increase in the defined benefit actuarial liability as at December 31, 2012, which would result from a 1% decrease in the assumed liability discount rate, is \$17,215,226. For purposes of this calculation, no changes were made to any of the other actuarial assumptions or actuarial methods.

## 1.2 Reconciliation of Financial Position

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Actuarial surplus (unfunded actuarial liability) as at January 1, 2012		\$ (390,242)
Net special payments		4,964,554
Application of:		
● Actuarial surplus	\$ 0	
● Prior year credit balance	<u>0</u>	0
Expected interest on:		
● Actuarial surplus (unfunded actuarial liability)	\$ (19,512)	
● Net special payments and transfer deficiency payments	122,600	
● Application of actuarial surplus	0	
● Application of prior year credit balance	<u>0</u>	103,088
Plan experience:		
● Investment gains (losses)	\$ (2,050,191)	
● Non-investment expenses gains (losses)	(173,654)	
● Retirement gains (losses)	762,698	
● Withdrawal gains (losses)	(665,832)	
● Mortality gains (losses)	(124,579)	
● Gains (losses) from miscellaneous sources	<u>(298,769)</u>	(2,550,327)
Change in actuarial basis:		
● Asset valuation method	\$ 0	
● Actuarial cost method	0	
● Actuarial assumptions	<u>87,934</u>	87,934
Change in plan provisions		<u>0</u>
Actuarial surplus (unfunded actuarial liability) as at December 31, 2012		\$ 2,215,007

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### 1.3 Reconciliation of Prior Year Credit Balance

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Prior year credit balance as at December 31, 2011	\$	0
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Actual employer contributions:

●	Defined benefit normal actuarial cost	\$ 3,444,337	
●	Provision for non-investment expenses	200,000	
●	Going concern amortization payments	0	
●	Solvency amortization payments	5,905,020	
●	Transfer deficiency payments	0	
●	Prior year credit balance	0	
●	Other contributions	0	9,549,357

Minimum employer contributions required:

●	Defined benefit normal actuarial cost	\$ (3,444,337)	
●	Provision for non-investment expenses	(200,000)	
●	Going concern amortization payments	0	
●	Solvency amortization payments	(4,374,791)	
●	Transfer deficiency payments	0	
●	Other contributions	0	(8,019,128)

Application against unfunded actuarial liability		0
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Prior year credit balance as at December 31, 2012	\$	1,530,229
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**Comment:**

- Actual contributions do not include amounts which were reported as outstanding contributions at the current actuarial valuation date (nor any applicable interest on such outstanding amounts) but include amounts reported as outstanding contributions at the previous actuarial valuation date and contributed prior to the current actuarial valuation date.

## Section 2: Solvency and Hypothetical Windup Financial Position

### 2.1 Statement of Solvency Financial Position

	December 31, 2012	December 31, 2011
<b>Solvency Value of Assets</b>		
<i>Defined Benefit Provision</i>		
Market value of assets	\$ 121,587,192	\$ 105,202,977
Provision for plan windup expenses	(350,000)	(350,000)
Total	<u>\$ 121,237,192</u>	<u>\$ 104,852,977</u>
<i>Defined Contribution Provision</i>	<u>12,332,186</u>	<u>10,259,267</u>
<b>Total Solvency Value of Assets</b>	<b>\$ 133,569,378</b>	<b>\$ 115,112,244</b>
<b>Solvency Liability</b>		
<i>Defined Benefit Provision</i>		
Active, disabled and suspended members	\$ 110,214,090	\$ 99,007,827
Retired members and beneficiaries	43,336,623	40,553,675
Terminated vested members	7,186,255	6,345,060
Total	<u>\$ 160,736,968</u>	<u>\$ 145,906,562</u>
<i>Defined Contribution Provision</i>	<u>12,332,186</u>	<u>10,259,267</u>
<b>Total Solvency Liability</b>	<b>\$ 173,069,154</b>	<b>\$ 156,165,829</b>
<b>Solvency Surplus (Unfunded Solvency Liability)</b>	<b>\$ (39,499,776)</b>	<b>\$ (41,053,585)</b>

#### Comments:

- The financial position of the plan on a solvency basis is determined by comparing the solvency value of assets to the solvency liability (the actuarial present value of benefits accrued in respect of credited service prior to the actuarial valuation date, calculated as if the plan were wound up on that date).



- The solvency actuarial valuation results presented in this report are determined under a scenario where, following a plan windup, the employer continues its operations.
- Under an amendment to the Regulation to the *Pension Benefits Act (Ontario)*, the employer had the option prior to November 26, 1992 to make an election to exclude from the solvency liability any benefits relating to plant closure and permanent layoff. This plan does not have any such benefits.
- In addition, the Regulation permits certain benefits to be excluded from the solvency liability, without requiring the employer to make an election. No such benefits have been excluded from the solvency liability.
- The increase in the defined benefit solvency liability as at December 31, 2012, which would result from a 1% decrease in the assumed liability discount rate, is be \$27,073,100. For purposes of this calculation, no changes were made to any of the other actuarial assumptions or actuarial methods.

## 2.2 Hypothetical Windup Financial Position

The hypothetical windup valuation results presented in this report are determined under the same scenario used for the solvency valuation.

If the plan were to be wound up on the actuarial valuation date, the hypothetical windup value of assets would be equal to the solvency value of assets and the hypothetical windup liability would be equal to the solvency liability. Consequently, the hypothetical windup surplus (unfunded hypothetical windup liability) as at the actuarial valuation date is \$(39,499,776).

## 2.3 Solvency Incremental Cost

The defined benefit solvency incremental cost for a given year represents the present value, at the actuarial valuation date, of the expected aggregate change in the solvency liability during the year, increased for expected benefit payments during the year. The solvency incremental cost in respect of 2013 is derived from the projection of the solvency liability, as follows:

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Solvency liability as at beginning of year	\$ 160,736,968
Solvency incremental cost for the year	5,992,206
Interest on solvency liability, solvency incremental cost and expected benefit payments	4,252,779
Expected benefit payments during year	<u>(3,394,703)</u>
Projected solvency liability as at end of year	\$ 167,587,250

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## 2.4 Determination of the Statutory Solvency Excess (Statutory Solvency Deficiency)

The minimum funding requirements under the Regulation to the *Pension Benefits Act (Ontario)* are based on the statutory solvency excess (statutory solvency deficiency) as at the actuarial valuation date. In calculating the statutory solvency excess (statutory solvency deficiency), various adjustments can be made to the solvency financial position including:

- recognition of the present value of existing amortization payments, including any going concern amortization payments established at the actuarial valuation date, due to be paid within the periods prescribed by the Regulation;
- smoothing of the asset value by use of an averaging technique;
- adjustment to the solvency liability by use of an averaging technique in determining the discount rate used to value the liabilities; and
- removal of any prior year credit balance from the asset value.

To the extent that there exists a statutory solvency deficiency, after taking account of these adjustments, additional amortization payments must be made. If there is no statutory solvency deficiency, the statutory solvency excess may be used to reduce the period of any existing solvency amortization payments.

### Statutory Solvency Excess (Statutory Solvency Deficiency)

	December 31, 2012	December 31, 2011
Solvency surplus (unfunded solvency liability)	\$ (39,499,776)	\$ (41,053,585)
Adjustments to solvency position:		
● Present value of existing amortization payments	\$ 39,006,663	\$ 16,001,086
● Smoothing of asset value	0	0
● Averaging of liability discount rate	0	0
● Prior year credit balance	(1,530,229)	0
● Total	\$ 37,476,434	\$ 16,001,086
Statutory solvency excess (statutory solvency deficiency)	\$ (2,023,342)	\$ (25,052,499)

**Comments:**

- Further details on the present value of existing amortization payments at December 31, 2012 are provided below.

**Details of Present Value of Existing Amortization Payments**


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Type of payment	Effective date	Month of last payment recognized in calculation	Annual amortization payment	Present value as at December 31, 2012 (at 3.00% per annum)
Solvency <sup>1</sup>	Jan. 1, 2012	Dec. 2016	\$ 3,434,325	\$ 12,940,316
Solvency	Jan. 1, 2013	Dec. 2017	5,614,913	26,066,347
Total			<u>\$ 9,049,238</u>	<u>\$ 39,006,663</u>

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**Notes:**

- <sup>1</sup> This schedule resulted from the consolidation of pre-existing solvency payment schedules as at December 31, 2011 into one five-year payment schedule.

# Section 3: Contribution Requirements

## 3.1 Contribution for Current Service (Ensuing Year)

	December 31, 2012	December 31, 2011
<b>Employer Normal Actuarial Cost</b>		
<b><i>Defined Benefit Provision</i></b>		
<i>Normal Actuarial Cost in Respect of Benefits</i>		
Estimated contribution	\$ 3,128,830	\$ 3,421,979
Estimated member contributions	1,209,930	1,260,909
% of member contributions	259%	271%
<i>Provision for Non-Investment Expenses</i>	\$ 200,000	\$ 200,000
<b>Total</b>	<b>\$ 3,328,830</b>	<b>\$ 3,621,979</b>
<b><i>Defined Contribution Provision</i></b>		
Estimated contribution	\$ 1,239,000	\$ 1,137,000
Estimated payroll	24,780,000	22,740,000
% of payroll	5.00%	5.00%
<b>Estimated Member Contributions</b>		
Defined benefit provision	\$ 1,209,930	\$ 1,260,909
Defined contribution provision	867,000	808,000

### Comments:

- The employer defined benefit normal actuarial cost rate changed by -10% of employee contributions due to the changes in membership profile and by -2% of employee contributions due to change in the actuarial basis since the previous actuarial valuation.
- The increase in the employer defined benefit normal actuarial cost rate between the actuarial valuation date and the next actuarial valuation date, which would result from a 1% decrease in the assumed liability discount rate, is 72% of employee contributions. For purposes of this calculation, no changes were made to any of the other actuarial assumptions or actuarial methods.

## 3.2 Contributions for Past Service

### Solvency Amortization Payments

The statutory solvency deficiency revealed at this actuarial valuation is \$2,023,342. This statutory solvency deficiency together with the remaining statutory solvency deficiency from the previous actuarial valuation must be liquidated by employer amortization payments at least equal to the amounts, payable monthly in arrears, and for the periods set forth below in order to comply with the Regulation to the *Pension Benefits Act (Ontario)*.

Effective date	Month of last payment	Annual amortization payment	Present value as at December 31, 2012 (at 3.00% per annum)
Jan. 1, 2012 <sup>1</sup>	Dec. 2016	\$ 3,434,325	\$ 12,940,316
Jan. 1, 2013	Dec. 2017	5,614,913	26,066,347
Jan. 1, 2014 <sup>2</sup>	Dec. 2018	448,921	2,023,342
Total		\$ 9,498,159	\$ 41,030,005

#### Notes:

- <sup>1</sup> This schedule resulted from the consolidation of pre-existing solvency payment schedules as at December 31, 2011 into one five-year payment schedule
- <sup>2</sup> This schedule results from the statutory solvency deficiency revealed as at December 31, 2012, for which commencement date is deferred for 12 months.

The employer may establish a letter of credit in order to cover all of or a portion of the above amortization payments that are due on or after January 1, 2013, to the extent the letter(s) of credit does not exceed 15% of the solvency liabilities.

### 3.3 Estimated Minimum Employer Contribution (Ensuing Year)

	December 31, 2012	December 31, 2011
<b>Employer Normal Actuarial Cost</b>		
Defined benefit provision	\$ 3,328,830	\$ 3,621,979
Defined contribution provision	<u>1,239,000</u>	<u>1,137,000</u>
Total	\$ 4,567,830	\$ 4,758,979
<b>Amortization Payments</b>		
Going concern	\$ 0	\$ 0
Solvency	<u>9,049,238</u>	<u>3,434,325</u>
Total	\$ 9,049,238	\$ 3,434,325
<b>Application of Prior Year Credit Balance</b>	(1,530,229)	(0)
<b>Application of Surplus</b>	<u>(0)</u>	<u>(0)</u>
<b>Estimated Minimum Employer Contribution</b>	\$ 12,086,839	\$ 8,193,304

**Comment:**

- This actuarial valuation reveals that the plan has an actuarial surplus. Notwithstanding the actuarial surplus, as a result of the statutory solvency deficiency present in this actuarial valuation, the plan sponsor must remit contributions not less than the minimum required by the *Pension Benefits Act (Ontario)* and Regulation thereto.

### 3.4 Estimated Maximum Employer Contribution (Ensuing Year)

	December 31, 2012	December 31, 2011
<b>Employer Normal Actuarial Cost</b>		
Defined benefit provision	\$ 3,328,830	\$ 3,621,979
Defined contribution provision	1,239,000	1,137,000
Total	<u>\$ 4,567,830</u>	<u>\$ 4,758,979</u>
<b>Greater of the Unfunded Actuarial Liability and the Unfunded Hypothetical Windup Liability</b>		
	<u>39,499,776</u>	<u>41,053,585</u>
<b>Estimated Maximum Employer Contribution</b>	<b>\$ 44,067,606</b>	<b>\$ 45,812,564</b>

**Comment:**

- The *Income Tax Act (Canada)* permits the employer to make contributions up to the above amount less the amortization payments made in respect of periods since December 31, 2012, provided that all assumptions made for the purposes of the hypothetical windup valuation remain reasonable at the time each contribution is made. In addition, the maximum employer contribution is to be adjusted with interest for the period between the actuarial valuation date and the date each contribution is made.



### 3.5 Timing of Contributions

To satisfy the requirements of Ontario pension legislation, the employer normal actuarial cost must be paid monthly and within 30 days of the month to which it pertains while the amortization payments must also be paid monthly but within the period to which they are applicable. Members' contributions must be remitted to the fund monthly and within 30 days of the month to which they pertain.

In addition, within 60 days after this report is filed with the Financial Services Commission of Ontario, the employer must make a special contribution equal to the excess, if any, of:

- the amount of employer contributions (employer normal actuarial cost and amortization payments) that should have been paid after December 31, 2012 according to the minimum contribution requirements revealed by this report (determined with regard to any reported prior year credit balance available to meet these minimum contribution requirements), over
- the actual amount of employer contributions in respect of periods after December 31, 2012.

Interest must be added to this excess, with such interest determined by reference to the going concern discount rate for payments in respect of employer normal actuarial cost or going concern amortization payments and the solvency discount rate for payments in respect of solvency amortization payments.

To satisfy the requirements of the *Income Tax Act (Canada)*, employer contributions that are remitted to the plan in the taxation year or within 120 days after the end of such taxation year are deductible in such taxation year provided they were made to fund benefits in respect of periods preceding the end of the taxation year.

### 3.6 Other Statutory Contributions

Additional contributions may be required in respect of the transfer values for members who terminate employment or active plan membership. Where applicable, such additional contributions must be remitted before the related transfer value may be paid in full to the terminated member. Details are provided in Appendix G.

### 3.7 Future Contribution Levels

Future contribution levels may change as a result of future changes in the actuarial methods and assumptions, the membership data, the plan provisions and the legislative rules, or as a result of future experience gains or losses, none of which has been anticipated at this time. Emerging experience, differing from the assumptions, will result in gains or losses that will be revealed in future actuarial valuations.

# Section 4: Actuarial Certification and Opinion

## 4.1 Actuarial Certification

Based on the results of these actuarial valuations, we hereby certify that, in our opinion, as at December 31, 2012:

- The plan has a prior year credit balance of \$1,530,229. The employer may use this prior year credit balance to meet the future contribution requirements of the plan.
- The actuarial surplus (unfunded actuarial liability), determined by comparing the actuarial liability, the measure of obligations of the plan on a going concern basis, to the going concern value of assets, is \$2,215,007.
- The solvency surplus (unfunded solvency liability), determined by comparing the solvency liability, as defined in the Regulation to the *Pension Benefits Act (Ontario)*, to the solvency value of assets, is \$(39,499,776).
- The statutory solvency excess (statutory solvency deficiency) revealed at this actuarial valuation is \$(2,023,342). This statutory solvency deficiency together with the remaining statutory solvency deficiency from the previous actuarial valuation must be liquidated by employer amortization payments at least equal to the amounts and for the periods set forth in Section 3 in order to comply with the Regulation to the *Pension Benefits Act (Ontario)*.
- The hypothetical windup surplus (unfunded hypothetical windup liability), determined by comparing the hypothetical windup liability, the measure of the obligations of the plan on a hypothetical windup basis including the value of any potential obligations that may have been excluded for purposes of the solvency valuation, to the hypothetical windup value of assets, is \$(39,499,776).
- The excess actuarial surplus, pursuant to section 147.2(2) of the *Income Tax Act (Canada)*, is \$0.
- The rule for computing the employer defined benefit normal actuarial cost in respect of benefits is 259% of member contributions. In addition, the employer should remit a contribution with respect to a provision for non-investment expenses. Based on the plan membership used for this actuarial valuation, the normal actuarial cost for 2013 is estimated to be:

## Defined Benefit Provision

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### Estimated employer normal actuarial cost

Normal actuarial cost in respect of benefits	\$ 3,128,830
Provision for non-investment expenses	200,000
Total	\$ 3,328,830

**Estimated member contributions** \$ 1,209,930

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The rule for computing the employer defined contribution normal actuarial cost is stipulated in the plan. Based on the plan membership used in this actuarial valuation, the defined contribution requirement for 2013 is estimated to be:

## Defined Contribution Provision

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Estimated employer normal actuarial cost <sup>1</sup>	\$ 1,239,000
Estimated member contributions	\$ 867,000

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### Note:

<sup>1</sup> Prior to any application of non-vested forfeitures.

The employer is required to make normal actuarial cost contributions to the plan in accordance with the above rules until the effective date of the next actuarial opinion.

- The maximum employer contributions permissible under the *Income Tax Act (Canada)* are described in Section 3.
- The transfer ratio, as defined in the Regulation to the *Pension Benefits Act (Ontario)*, is 0.75. The solvency ratio, defined as the ratio of the solvency value of assets prior to deduction of the provision for plan windup expenses to the solvency liabilities, is 0.76.
- The assessment base determined for the Pension Benefits Guarantee Fund (PBGF) is \$37,558,807. The PBGF liabilities are \$154,197,400. Additional liabilities for excluded plant closure benefits, in accordance with section 37(4)(a)(ii) of the Regulation to the *Pension Benefits Act (Ontario)*, are \$0.

- In accordance with the Regulation to the *Pension Benefits Act (Ontario)*, the next actuarial valuation should be performed with an effective date not later than December 31, 2013. The basis for employer contributions presented in this report is effective until the next actuarial opinion is filed.

## 4.2 Actuarial Opinion

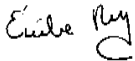
In our opinion:

- the membership data on which the actuarial valuations are based are sufficient and reliable for the purposes of the going concern, solvency and hypothetical windup valuations,
- the assumptions are appropriate for the purposes of the going concern, solvency and hypothetical windup valuations, and
- the methods employed in the actuarial valuation are appropriate for the purposes of the going concern, solvency and hypothetical windup valuations.

This report has been prepared, and our opinion has been given, in accordance with accepted actuarial practice in Canada. The actuarial valuations have been conducted in accordance with our understanding of the funding and solvency standards prescribed by the *Pension Benefits Act (Ontario)* and Regulation thereto, and in accordance with our understanding of the requirements of the *Income Tax Act (Canada)* and Regulations thereto. This actuarial opinion forms an integral part of the report.

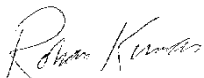
The results presented in this report have been developed using a particular set of actuarial assumptions. Other results could have been developed by selecting different actuarial assumptions. The results presented in this report are reasonable actuarial results based on actuarial assumptions reflecting our expectation of future events.

Towers Watson Canada Inc.



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Emilie Roy  
Fellow of the Canadian Institute of Actuaries



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Rohan Kumar  
Fellow of the Canadian Institute of Actuaries

Toronto, Ontario  
September 2013



# Appendix A: Significant Terms of Engagement

For purposes of preparing this actuarial valuation report, the plan administrator has directed that:

- The actuarial valuation is to be prepared as at December 31, 2012.
- For purposes of the going concern valuation, the terms of engagement require the use of the margins for adverse deviations described in Appendix C.
- For purposes of determining the going concern liability discount rate, the target asset class distribution is to be established in accordance with the most up to date investment policy.
- For purposes of determining the going concern financial position of the plan, the going concern actuarial value of assets is to be determined using the averaging technique described in the Asset Valuation Method section in Appendix C.
- Since to the best of the knowledge of the plan administrator, there is no partial plan windup with an effective date prior to the date of this actuarial valuation, involving members employed in Ontario, not yet completed where the partial windup portion of the plan is in a surplus position on the date of this actuarial valuation, this report is to be prepared on the basis that there will be no retroactive changes to previously filed partial windup reports, if any, and neither the applicable pension regulator nor the plan sponsor will order/declare any partial plan windup with an effective date prior to the actuarial valuation date.
- The hypothetical windup valuation results presented in this report are to be determined under a scenario where the employer continues to operate and certain expenses are paid from the pension fund (consistent with past practice) while the employer pays other plan expenses.
- This report is to be prepared on the basis that the employer is entitled to apply the actuarial surplus, if any, revealed in an actuarial valuation report to meet its contribution requirements under the plan while the plan remains a going concern, to the extent permitted by applicable pension legislation. (This report does not address the disposition of any surplus assets remaining in the event of plan windup.) If an applicable pension regulator or other entity with jurisdiction directs otherwise, certain financial measures contained in this report, including contribution requirements, may be affected.
- This report is to be prepared on the basis that the plan administrator is deferring the commencement of new solvency special payments determined in this report for 12 months.

Should these directions from the plan administrator be amended or withdrawn, Towers Watson reserves the right to amend or withdraw this report.



# Appendix B: Assets

## Statement of Market Value

	December 31, 2012	December 31, 2011
<b>Defined Benefit Provision</b>		
Invested assets:		
● Canadian equities	\$ 28,345,433	\$ 25,722,489
● Foreign equities	28,337,609	25,665,994
● Fixed income	63,789,799	52,247,161
● Cash and accrued income	1,156,265	282,686
● Total invested assets	<u>\$ 121,629,106</u>	<u>\$ 103,918,330</u>
Net outstanding amounts:		
● Contributions receivable	\$ 401,414	\$ 1,624,688
● Investment income / expenses receivable	(89,137)	(116,954)
● Benefits payable	(272,409)	(83,785)
● Expenses and other payables	(81,782)	(139,302)
● Total net outstanding amounts	<u>\$ (41,914)</u>	<u>\$ 1,284,647</u>
Total	\$ 121,587,192	\$ 105,202,977
<b>Defined Contribution Provision</b>		
Invested assets	\$ 12,332,186	\$ 10,287,794
Net outstanding amounts	<u>0</u>	<u>(28,527)</u>
Total	\$ 12,332,186	\$ 10,259,267
<b>Total Assets</b>	<b>\$ 133,919,378</b>	<b>\$ 115,462,244</b>

### Comments:

- The invested assets under the defined benefit provision are held by CIBC Mellon under account BBI F7023002.
- The invested assets under the defined contribution provision are held by Sun Life Financial.
- The data relating to the invested assets are based on the audited financial statements issued by PricewaterhouseCoopers LLP. The data relating to net outstanding amounts were furnished by

CIBC Mellon and Morneau Shepell and via the plan's audited financial statements. All such data has been relied upon by Towers Watson following tests of reasonableness with respect to contributions, benefit payments and investment income. However, Towers Watson has not independently audited or verified this data.

- The outstanding contributions receivable of \$401,414 are comprised of \$131,760 of employer defined benefit normal actuarial cost, \$62,151 of employee contributions and \$207,503 of employer non-investment expense contribution.

## Asset Class Distribution

The following table shows the target asset allocation stipulated by the plan's defined benefit component investment policy in respect of various major asset classes and the actual asset allocation as at December 31, 2012.

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	Target asset allocation <sup>1</sup>	Asset allocation as at December 31, 2012 <sup>2</sup>
Canadian equities	25%	23%
Foreign equities	20%	23%
Fixed income	55%	53%
Cash and accrued income	0%	1%
Total	<hr/> 100%	<hr/> 100%

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### Notes:

<sup>1</sup> This information was obtained from the investment policy in effect for the plan as at December 31, 2012.

<sup>2</sup> This information was obtained from PricewaterhouseCoopers LLP. All such data has been relied upon by Towers Watson and compared against the target asset allocation to assess reasonableness. However, Towers Watson has not independently audited or verified this data.

## Reconciliation of Invested Assets (Market Value) — Defined Benefit Provision

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Assets as at January 1, 2012	\$ 103,918,330
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Receipts:

●	Contributions:			
	–	Employer normal actuarial cost in respect of benefits	\$ 3,444,337	
	–	Employer amortization payments	4,374,791	
	–	Employer prepayments	1,530,229	
	–	Members' required contributions	1,304,762	
	–	Employer transfer deficiency payments	0	
	–	Provision for non-investment expenses	200,000	\$ 10,854,119
●		Investment return, net of investment expenses		11,322,958
●		Other receipts		0
●		Total receipts		\$ 22,177,077

Disbursements:

●	Benefit payments:			
	–	Pension payments	\$ 2,725,792	
	–	Lump sum settlements	1,306,017	
	–	Other benefit payments	0	\$ 4,031,809
●		Non-investment expenses		434,492
●		Other disbursements		0
●		Total disbursements		\$ 4,466,301

Assets as at December 31, 2012	\$ 121,629,106
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**Comments:**

- This reconciliation is based on the financial statements issued by CIBC Mellon. All such data has been relied upon by Towers Watson following tests of reasonableness with respect to contributions, benefit payments and investment income. However, Towers Watson has not independently audited or verified this data.
  
- The rate of return earned on the market value of assets, net of investment expenses, from January 1, 2012 to December 31, 2012 is approximately 10.6% p.a.

## Development of the Going Concern Value of Assets — Defined Benefit Provision

	2009	2010	2011	2012
Market value of invested assets at beginning of year	\$ 80,142,915	\$ 92,047,295	\$ 98,912,343	\$ 103,918,330
Net cash flow <sup>1</sup>	(401,337)	(2,466,698)	3,022,339	6,387,818
Assumed investment return <sup>2</sup>	5,196,246	5,902,906	6,025,411	5,355,612
Expected market value of invested assets at end of year	84,937,824	95,483,503	107,960,093	115,661,760
Actual market value of invested assets at end of year	92,047,295	98,912,343	103,918,330	121,629,106
Loss/(gain)	(7,109,471)	(3,428,840)	4,041,763	(5,967,346)
Unrecognized portion of loss/(gain)				
2009				\$ (1,421,894)
2010				(1,371,536)
2011				2,425,058
2012				(4,733,877)
Market related value of assets at December 31				\$ 116,486,857
Contributions receivable				401,414
Investment income /expenses receivable				(89,137)
Benefits payable				(272,409)
Expenses and other payables				\$ (81,782)
Going concern value of assets as at December 31, 2012				\$ 116,444,943

### Note:

<sup>1</sup> Net cash flow was calculated as contributions less benefit payments and non-investment expenses on a cash basis during the year.

<sup>2</sup> At 6.5% per year for 2009 and 2010, 6.0% for 2011 and 5.0% for 2012.

### Comments:

- The asset valuation method is described in Appendix C.

- The rate of return earned on the going concern value of assets, net of investment expenses, from January 1, 2012 to December 31, 2012 is approximately 3.1% p.a.



# Appendix C: Actuarial Basis – Going Concern Valuation

## Methods

### Defined Benefit Provision

#### *Asset Valuation Method*

The actuarial value of assets was calculated using a 5-year average of market values. Under this method, gains and losses relative to the long term expected return are recognized at 20% in the year of occurrence and an additional 20% in each of the subsequent years. The actuarial value of assets was then adjusted for net outstanding amounts.

The objective of the asset valuation method is to produce a smoother pattern of going-concern surplus (deficit) and hence a smoother pattern of contributions, consistent with the long-term nature of a going concern valuation.

Such smoothing is achieved by use of an averaging process which systematically recognizes investment returns different from expectations over a 5 year period, with 20% recognized at the valuation date and the remainder at a rate of 20% per year. This method will be expected to average periods of outperformance with periods of underperformance.

The expected return has been selected to equal the long-term expected return on the assets with a margin for adverse deviations with such expected return representing the assumptions in effect during the years included in the 5-year average. As such, it is anticipated that, on average, the asset valuation method will tend to produce a result that is somewhat less than the market value of assets.

#### *Actuarial Cost Method*

#### *Non-Schedule E Members*

The actuarial liability and the normal actuarial cost in respect of benefits were calculated using the unit credit cost method.

The actuarial liability for each active, disabled and suspended member was calculated as the actuarial present value of the member's benefits accrued to date. The calculation of the actuarial present value of the member's benefits reflects additional entitlements which may arise due to the application of the 50% employer cost-sharing rule, and is at least equal to the member's contributions with interest.

The actuarial liability for retired members and beneficiaries and terminated vested members was calculated as the actuarial present value of their respective benefits.

The normal actuarial cost in respect of benefits for each active and disabled member was calculated as the actuarial present value of the member's benefits accruing in the ensuing year but not less than the member's required contributions. The employer normal actuarial cost in respect of benefits for each active and disabled member was determined as the excess of the total normal actuarial cost in respect of benefits over the member's required contributions. The normal actuarial cost rate in respect of benefits determined by the unit credit cost method will be stable over time if the demographic characteristics of the active and disabled members remain stable from valuation to valuation. All other things being equal, a population of active and disabled members whose average age increases (decreases) between actuarial valuations will result in an increasing (decreasing) normal actuarial cost rate.

### ***Schedule E Members***

The actuarial liability and the normal actuarial cost in respect of benefits were calculated using the projected unit credit cost method.

Prospective benefits were calculated for each active, disabled and suspended member according to the plan provisions and actuarial assumptions. The actuarial liability was calculated as the actuarial present value of the member's prospective benefits multiplied by the ratio of the member's credited service prior to the valuation date to the member's total potential credited service (the service prorate method).

The actuarial liability for retired members and beneficiaries and terminated vested members was calculated as the actuarial present value of their respective benefits.

The normal actuarial cost in respect of benefits for each active and disabled member was calculated as the actuarial present value of the member's prospective benefits divided by the member's total potential credited service. The normal actuarial cost rate in respect of benefits determined by the projected unit credit cost method will be stable over time if the demographic characteristics of the active and disabled members remain stable from valuation to valuation. All other things being equal, a population of active and disabled members whose average age increases (decreases) between actuarial valuations will result in an increasing (decreasing) normal actuarial cost rate.

### **Defined Contribution Provision**

For the purposes of the going concern valuation, the determination of the actuarial liability and normal actuarial cost for the defined contribution provision does not involve the use of an actuarial cost method, nor does it involve actuarial assumptions. By definition, the actuarial liability under the defined contribution provision corresponds with the market value of the members' defined contribution accounts at the actuarial valuation date.



The employer normal actuarial cost for each active and disabled member was calculated as the expected employer contribution to be made to the member's defined contribution accounts in the year following the actuarial valuation date.

## Actuarial Assumptions — Defined Benefit Provision

	December 31, 2012	December 31, 2011
<b>Economic Assumptions (per annum)</b>		
Liability discount rate	5.00%	5.00%
Rate of salary increase	3.50% (nil for disabled members)	4.00% (nil for disabled members)
Escalation of YMPE under Canada/Québec Pension Plan <sup>1</sup>	3.50%	3.50%
Escalation of <i>Income Tax Act (Canada)</i> maximum pension limitation <sup>2</sup>	3.50%	3.50%
Rate of inflation	2.50%	2.50%
Interest on members' contributions	3.50%	4.00%
<b>Demographic Assumptions</b>		
Mortality	1994 Uninsured Pensioner Mortality Table, projected generationally using Scale AA (see Table 1)	1994 Uninsured Pensioner Mortality Table, projected generationally using Scale AA (see Table 1)
Withdrawal	Age-related rates (see Table 2)	Age-related rates (see Table 2)
Disability incidence/recovery	Nil	Nil
Retirement/pension commencement		
<ul style="list-style-type: none"> <li>● Active, disabled and suspended members</li> <li>● Terminated vested members</li> </ul>	Age-related rates (refer to Table 3)  Age 65	Age-related rates (refer to Table 3)  Age 65
<b>Other</b>		
Percentage of members with eligible spouses at pension commencement and electing joint and survivor pension form	100%	100%
Years male spouse older than female spouse	3	3
Provision for non-investment expenses	\$200,000 per year	\$200,000 per year

**Notes:**

- <sup>1</sup> The YMPE of \$51,100 for 2013 is the starting value for the YMPE projection as at the current actuarial valuation and is indexed starting in 2014.
- <sup>2</sup> The *Income Tax Act (Canada)* maximum pension limit of \$2,696.67 per year of service in 2013 is the starting value for maximum pension limit projection as at the current valuation and is indexed starting in 2014.

**Table 1 — Sample Mortality Rates**

1994 Uninsured Pensioner Mortality Table <sup>1</sup>			Scale AA Mortality Improvement Table <sup>2</sup>		
Age	Male	Female	Age	Male	Female
20	0.000545	0.000305	20	0.019	0.016
25	0.000711	0.000313	25	0.010	0.014
30	0.000862	0.000377	30	0.005	0.010
35	0.000915	0.000514	35	0.005	0.011
40	0.001153	0.000763	40	0.008	0.015
45	0.001697	0.001046	45	0.013	0.016
50	0.002773	0.001536	50	0.018	0.017
55	0.004758	0.002466	55	0.019	0.008
60	0.008576	0.004773	60	0.016	0.005
65	0.015629	0.009286	65	0.014	0.005
70	0.025516	0.014763	70	0.015	0.005
75	0.040012	0.024393	75	0.014	0.008
80	0.066696	0.042361	80	0.010	0.007
85	0.104559	0.072836	85	0.007	0.006
90	0.164442	0.125016	90	0.004	0.003
95	0.251189	0.200229	95	0.002	0.002
100	0.341116	0.297233	100	0.001	0.001
105	0.440585	0.415180	105	0.000	0.000

**Notes:**

- <sup>1</sup> The mortality rates for years after 1994 are computed using the mortality rates for the year 1994 ( $q_x^{1994}$  rates) and mortality improvement rates ( $AA_x$  rates).
- <sup>2</sup> Using the  $q_x^{1994}$  rates and the  $AA_x$  rates defined above, the resulting mortality rate for age x in calendar year y is:  
 $q_x^y = q_x^{1994} \cdot (1 - AA_x)^{y-1994}$ .

**Table 2 — Withdrawal Rates**

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<b>Service (Years)</b>	<b>Rates</b>
0 to 4	0.080
5 to 9	0.075
10 to 14	0.070
15 to 19	0.050
20 to 24	0.040
over 25	0.030

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**Table 3 — Retirement Rates**

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<b>Age</b>	<b>Rates</b>
55 to 57	0.050
58 to 60	0.100
61	0.150
62	0.250
63	0.250
64	0.300
65	1.000

---

## **Rationale for Actuarial Assumptions**

The rationale for the material actuarial assumptions used in the going concern valuation is summarized below.

The going concern assumptions do not include margins for adverse deviations, except as noted below.

### ***Liability discount rate***

The assumption is an estimate of the expected long-term return on plan assets, less a margin of 0.25% for adverse deviations. The expected long-term return is based on returns for each major asset class in which the plan is expected to be invested (net of investment expenses), the plan's investment policy with consideration of the effects of diversification and periodic rebalancing to maintain the target mix of the plan's investment policy but disregarding the expected additional returns and expenses associated with active management.

In carrying out the plan's investment policy, the plan administrator has opted to invest the plan's assets in a diversified portfolio, which includes certain asset classes subject to risk that provide potential for higher return. The expected long-term return for asset classes subject to risk includes an estimated risk premium. Based on historical experience, assets invested in instruments subject to risk are normally expected to yield higher returns in the long-run than assets invested in low-risk investments, but these returns may fluctuate significantly from year to year and not necessarily in line with changes in the plan's liabilities over long periods of time. As a result, investing in riskier asset classes will generally increase the potential for future asset-liability mismatch, which could lead to greater volatility in the plan's financial position and minimum contribution requirements.

### ***Rate of salary increase***

The assumption reflects an assumed rate of inflation of 2.50% per annum, plus an allowance of 1.00% per annum for the effect of real economic growth and productivity gains in the economy. No allowance has been made to reflect the average expected increase as a result of individual employee merit and promotion. The merit/promotion assumption is based on discussions with The Globe and Mail Inc. management concerning their future expectations.

### ***Escalation of YMPE under Canada/Québec Pension Plan***

The YMPE is indexed annually based on increases in the Industrial Aggregate Wage index for Canada. The assumption reflects an assumed rate of inflation of 2.50% per annum, plus an allowance of 1.00% per annum for the effect of real economic growth and productivity gains in the economy.

### ***Escalation of Income Tax Act (Canada) maximum pension limitation***

The maximum pension limitation under the *Income Tax Act (Canada)* is scheduled to be indexed annually based on assumed increases in the Industrial Aggregate Wage index. The assumption reflects an assumed rate of inflation of 2.50% per annum, plus an allowance of 1.00% per annum for the effect of real economic growth and productivity gains in the economy.

### ***Rate of inflation***

The assumption reflects an estimate of future rates of inflation considering economic and financial market conditions, and including an allowance of 0.50% per annum as a margin for adverse deviations.

### ***Mortality***

The 1994 Uninsured Pensioner Mortality Table reflects the mortality experience projected to 1994 for a large sample of North American pension plans. Applying Projection Scale AA generationally provides allowance for improvements in mortality after 1994 and is commonly considered reasonable for projecting mortality experience into the future. This table is commonly used for valuations where the mortality experience of the membership of a plan is insufficient to assess plan-specific experience and where there is no reason to expect the mortality experience of the plan to differ significantly from that of other pension plans. No allowance has been made for mortality prior to retirement with respect to terminated vested members in order to approximate the value of pre-retirement death benefits.

In July 2013, the Canadian Institute of Actuaries released a draft report summarizing the results of a Canadian pensioner mortality experience study. Once finalized, this report may lead to changes in the mortality assumption in future valuations.

### ***Withdrawal***

The rates of withdrawal were developed based on a review of plan experience for the years 2001 to 2010 and an assessment of future expectations.

### ***Percentage of involuntary terminations of employment***

No allowance has been made for involuntary terminations of employment on the basis that the impact of including such an assumption and valuing statutory grow-in rights would not have a material impact on the valuation results.

### ***Disability incidence/recovery***

There are no disability benefits under the plan other than the accrual of retirement income (earnings remain constant) and waiver of member contributions during disability. Consequently, the assumption

of no incidence of disability or recovery therefrom makes an appropriate allowance, in combination with the other assumptions, for such continued accruals.

### ***Retirement/pension commencement***

#### **Active, disabled and suspended members**

The rates of retirement were developed based on a review of plan experience for the years 2001 to 2010 and an assessment of future expectations. All members are assumed to commence their pension at retirement date.

#### **Terminated vested members**

All terminated members are assumed to commence their pension at the normal retirement age of 65, as the plan's termination benefit provides for an actuarially reduced benefit upon pension commencement prior to normal retirement age.

### ***Provision for non-investment expenses***

The liability discount rate is net of investment expenses (with the exception of any fees associated with employing an active investment management strategy). Explicit provision has been made in the normal actuarial cost for non-investment related expenses expected to be paid from the pension fund. The assumed level of expenses is based on recent experience of the plan and an assessment of future expectations.





# Appendix D: Actuarial Basis – Solvency and Hypothetical Windup Valuations

## Methods

### Defined Benefit Provision

#### *Asset Valuation Method*

The market value of assets, adjusted for net outstanding amounts, has been used for the solvency and hypothetical windup valuations. The resulting value has been reduced by a provision for plan windup expenses.

#### *Liability Calculation Method*

The solvency and hypothetical windup liabilities for active, disabled and suspended members were calculated as the actuarial present value of all benefits accrued up to the actuarial valuation date (treating all members as if vested). This calculation reflects additional entitlements which may arise due to the application of the 50% employer cost-sharing rule, and is at least equal to the member's contributions with interest.

The solvency and hypothetical windup liabilities for retired members and beneficiaries and terminated vested members were calculated as the actuarial present value of their respective benefits.

#### *Other Considerations*

The solvency and hypothetical windup actuarial valuations have been prepared on a hypothetical basis. In the event of an actual plan windup, the plan assets may have to be allocated between various classes of plan members or beneficiaries as required by applicable pension legislation. Such potential allocation has not been performed as part of these solvency and hypothetical windup valuations.

### Defined Contribution Provision

For the purposes of the solvency and hypothetical windup valuations, the determination of the liability for the defined contribution provision does not involve the use of a liability calculation method, nor does it involve actuarial assumptions. By definition, the solvency and hypothetical windup liability under the defined contribution provision corresponds with the market value of the members' defined contribution accounts at the actuarial valuation date.

## **Solvency Incremental Cost Actuarial Method — Defined Benefit Provision**

The defined benefit solvency incremental cost for a given year represents the present value, at the actuarial valuation date, of the expected aggregate change in the solvency liability during the year, increased for expected benefit payments during the year.

The solvency incremental cost reflects expected decrements and related changes in membership status, accrual of service, any expected changes in benefits, entitlements, members' contributions, pension formula or increases in the maximum pension limits, and projected pensionable earnings during the year.

The solvency incremental cost has been calculated for the year following the actuarial valuation date as the projected solvency liability at the end of the year, minus the solvency liability at the beginning of the year, increased for expected benefit payments during the year. Each of these amounts is discounted to the actuarial valuation date using the projected solvency liability discount rate.

The method used to calculate the projected solvency liability at the end of the year is the same as used in the solvency valuation.

## Actuarial Assumptions — Defined Benefit Provision

	December 31, 2012	December 31, 2011
<b>Economic Assumptions (per annum)</b>		
Liability discount rate		
● Annuity purchase	3.00%	3.30%
● Commuted value transfers	2.40% for 10 years, 3.60% thereafter	2.60% for 10 years, 4.10% thereafter
Discount rate for determining amortization payments <sup>1</sup>	3.00%	3.30%
Escalation of <i>Income Tax Act (Canada)</i> maximum pension limitation <sup>2</sup>	Nil	Nil
Inflation		
● Annuity purchase	2.60%	2.80%
● Commuted value	1.1% for 10 years, 1.3% thereafter	1.3% for 10 years, 2.5% thereafter
<b>Demographic Assumptions</b>		
Mortality	1994 Uninsured Pensioner Mortality Table, projected generationally using Scale AA	1994 Uninsured Pensioner Mortality Table, projected generationally using Scale AA
Withdrawal	N/A	N/A
Disability incidence/recovery	N/A	N/A
Retirement/pension commencement	Described in detail on page D-6	Described in detail on page D-6
<b>Other</b>		
Percentage of members with eligible spouses at pension commencement and electing joint and survivor pension form	100%	100%
Years male spouse older than female spouse	3	3

---

	December 31, 2012	December 31, 2011
Percentage of members receiving settlement by commuted value		
● Retired members and beneficiaries	0%	0%
● All other members		
– Québec members	100%	100%
– Under 55 years old (other provinces)	100%	100%
– Aged 55 years and over (other provinces)	0%	0%
Provision for expenses		
● Solvency	\$350,000	\$350,000
● Hypothetical windup	\$350,000	\$350,000

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**Notes:**

<sup>1</sup> For simplicity, equal to the greater of the liability discount rates for settlement by annuity purchase and the liability discount rate for settlement by commuted value.

<sup>2</sup> The *Income Tax Act (Canada)* maximum pension limit is \$2,646.67 per year of service as at December 31, 2012.

## **Rationale for Actuarial Assumptions**

The rationale for the material actuarial assumptions used in the solvency and hypothetical windup valuations is summarized below.

The actuarial assumptions used in the solvency and hypothetical windup valuations do not include margins for adverse deviations.

### ***Liability discount rate***

In the event of a plan windup, it is expected that a portion of the liabilities will be settled by a group annuity purchase and the balance of the liabilities will be settled by commuted value transfers.

For the calculation of the portion of the solvency and hypothetical windup liabilities relating to the benefits that are expected to be settled by a group annuity purchase, the liability discount rate corresponds to an approximation of the annuity purchase rates as at the valuation date following application of the relevant guidance on assumptions for solvency and hypothetical windup valuations issued by the Canadian Institute of Actuaries' Committee on Pension Plan Financial Reporting .

For the calculation of the portion of the solvency and hypothetical windup liabilities relating to the benefits that are expected to be settled by commuted value transfers, the liability discount rates have been determined in accordance with the *Standards of Practice for Pension Commuted Values* published by the Canadian Institute of Actuaries effective April 1, 2009 and revised effective February 1, 2011. For this actuarial valuation, the December 2012 rates have been used.

For the calculation of the portion of the solvency and hypothetical windup liability relating to benefits subject to pre-retirement indexation that are expected to be settled by commuted value transfers, the liability discount rates have been determined as the interest rate for pensions indexed at 50% of the increases in the Consumer Price Index (maximum of 2% per annum) in accordance with the Canadian Institute of Actuaries' *Standards of Practice for Pension Commuted Values*.

### ***Escalation of Income Tax Act (Canada) maximum pension limitation***

The *Income Tax Act (Canada)* maximum pension limitation specified in the Act as at the actuarial valuation date is applied without consideration for future scheduled increases, as pension entitlements are determined as at the actuarial valuation date.

### ***Rate of inflation***

For benefits that are expected to be settled by commuted value transfers, the assumption has been determined in accordance with the Canadian Institute of Actuaries' *Standards of Practice for Pension Commuted Values*. For the benefits that are expected to be settled by a group annuity purchase, the assumption has been set following application of the relevant guidance on assumptions for solvency

and hypothetical windup valuations issued by the Canadian Institute of Actuaries' Committee on Pension Plan Financial Reporting.

### ***Mortality***

For benefits that are expected to be settled by commuted value transfers, the assumption has been determined in accordance with the *Standards of Practice for Pension Commuted Values* published by the Canadian Institute of Actuaries effective April 1, 2009 and revised effective February 1, 2011. For the benefits that are expected to be settled by a group annuity purchase, the assumption has been set following application of the relevant guidance on assumptions for solvency and hypothetical windup valuations issued by the Canadian Institute of Actuaries' Committee on Pension Plan Financial Reporting. No pre-retirement mortality has been assumed in order to approximate the value of pre-retirement death benefits.

In July 2013, the Canadian Institute of Actuaries released a draft report summarizing the results of a Canadian pensioner mortality experience study. Once finalized, this report may lead to changes in the mortality assumption in future valuations.

### ***Retirement/pension commencement***

- Members eligible to retire: pension commences at the age that produces the highest actuarial value (including statutory grow-in rights for members in Ontario and Nova Scotia).
- Members with age plus continuous service greater than or equal to 55 years and employed in Ontario or Nova Scotia: pension commences at the age that produces the highest actuarial value of pension (including statutory grow-in rights).
- Other members: pension commences at age 65.

For benefits that are expected to be settled by commuted value transfers, this assumption is in accordance with the Canadian Institute of Actuaries' *Standards of Practice for Pension Commuted Values*. For the benefits that are expected to be settled by a group annuity purchase, this is consistent with the expected assumption that will be used by insurers to price the group annuity.

### ***Percentage of members receiving settlement by commuted value***

This assumption has been determined by considering the benefit provisions of the plan, legislative requirements to offer specific settlement options to various classes of members, and, in particular, the options to be provided to members upon plan windup.

The assumption also reflects the expectation that members further from retirement are more likely to elect to settle their pension benefit by a commuted value transfer, while members closer to retirement

are more likely to elect to settle their pension benefit through a group annuity purchase where this option is available.

***Provision for expenses***

Allowance was made for normal administrative, actuarial, legal and other costs which would be incurred if the plan were to be wound up (excluding costs relating to the resolution of surplus or deficit issues). The valuation is premised on a scenario in which the employer continues to operate after the windup date. In establishing the allowance for plan windup costs, certain administrative costs were assumed to be paid from the pension fund (consistent with past practice) while other costs were assumed to be borne directly by the employer.

## **Solvency Incremental Cost Actuarial Assumptions – Defined Benefit Provision**

### **Demographic and Benefit Projection Actuarial Assumptions**

The projected population, benefits and members' contributions valued in the solvency liability projection are based on the demographic and benefit projection assumptions used for the going concern valuation described in Appendix C.

#### ***New entrants***

No allowance has been made for new entrants between the current actuarial valuation date and next actuarial valuation date in the demographic projections on the basis that the defined benefit provisions of the plan are closed to new entrants.

### **Solvency Liability Projection Actuarial Assumptions**

The assumptions for the solvency liability projections for purposes of calculating the solvency incremental cost are the same assumptions as those used in the solvency valuation described previously.



# Appendix E: Membership Data

## Summary of Membership Data

### Active, disabled and suspended<sup>1</sup> members

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	December 31, 2012	December 31, 2011
<b>Defined Benefit Provision</b>		
● Number <sup>2</sup>	436	458
● Average age	49.3	48.2
● Average credited service	13.9	12.9
● Annual payroll <sup>3</sup>	\$ 39,049,412	\$ 41,348,974
● Average pay <sup>3</sup>	\$ 97,380	\$ 97,063
● Total annual pension	\$ 8,472,386	\$ 8,211,148
● Average annual pension	\$ 19,432	\$ 17,928

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#### Notes:

<sup>1</sup> Suspended members include members who have transferred to the defined contribution provision and members with frozen benefits who opted out of the plan (33 suspended members at December 31, 2011, and 29 suspended members at December 31, 2012).

<sup>2</sup> Number of members includes 362 bargaining members, 72 non-bargaining members and 2 members covered under Schedule E at December 31, 2012.

<sup>3</sup> Represents earnings during previous year, for active and disabled members only.



## Retired members and beneficiaries

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	December 31, 2012	December 31, 2011
● Number	103	100
● Average age	67.7	66.9
● Total annual pension	\$ 2,761,649	\$ 2,616,214
● Average annual pension	\$ 26,812	\$ 26,162

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## Terminated vested members

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	December 31, 2012	December 31, 2011
● Number	61	56
● Average age	49.4	48.9
● Total annual pension	\$ 660,303	\$ 642,284
● Average annual pension	\$ 10,825	\$ 11,469

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## Review of Membership Data

The membership data with respect to the defined benefit provision were supplied by The Globe and Mail Inc.'s third-party administrator, Morneau Shepell, as at December 31, 2012.

The membership data have been reviewed for reasonableness and found to be sufficient and reliable for the purposes of the valuation. Elements of the data review included the following:

- ensuring that the data were intelligible (i.e., that an appropriate number of records was obtained, that the appropriate data fields were provided and that the data fields contained valid information);
- preparation and review of membership reconciliations to ascertain that the complete membership of the pension plan was accounted for;
- review of consistency of individual data items and statistical summaries between the current valuation and the previous valuation;
- review of reasonableness of individual data items, statistical summaries and changes in such information since the previous valuation date; and
- comparison of the membership data and the plan's financial statements for consistency.

However, the tests conducted as part of the membership data review may not have captured certain deficiencies in the data.

## Membership Reconciliation — Defined Benefit Provision

	Active, Disabled and Suspended Members	Retired Members and beneficiaries	Terminated Vested Members	Total
As at December 31, 2011	458	100	56	614
● New entrants (including re-employed)	0	0	0	0
● Non-vested termination	0	0	0	0
● Vested termination	(8)	0	8	0
● Settlement	(8)	0	(3)	(11)
● Transfer	0	0	0	0
● Retirement	(5)	5	0	0
● New beneficiaries	0	0	0	0
● Deceased (with beneficiary)	0	0	0	0
● Deceased (without beneficiary)	0	(2)	0	(2)
● Deceased with lump sum payments	(1)	0	0	(1)
● Data correction	0	0	0	0
● Net change	<u>(22)</u>	<u>3</u>	<u>5</u>	<u>(14)</u>
As at December 31, 2012	436	103	61	600



# Appendix F: Summary of Plan Provisions

The following is an outline of the principal features of the plan which are of financial significance to valuing the plan benefits. For a detailed description of the benefits, please refer to the plan document.

## Eligibility

### Bargaining Employees

Each full time person who becomes a bargaining employee on or after July 3, 2009, may become a participant and actively accrue benefits under the defined contribution provisions of the plan for future service only, on the first day of the month following the completion of one year of employment or on the first day of any month thereafter. Such employees are required to join the defined contribution provisions of the plan upon reaching age 30.

Part-time employees shall be eligible to join upon meeting an hours and/or earnings test.

### Non-Bargaining Employees

Each full time person who becomes a non-bargaining employee on or after January 1, 2001, may become a participant and actively accrue benefits under the defined contribution provisions of the plan for future service only, on the first day of the month following the completion of one year of employment or on the first day of any month thereafter. Such employees are required to join the defined contribution provisions of the plan upon reaching age 30.

Part-time employees shall be eligible to join upon meeting an hours and/or earnings test.

Employees who are so designated may accrue benefits under Schedule E.

## **Summary of Defined Benefit Plan Provisions for All Eligible Members (except Members covered under Schedule E)**

### **Definitions**

#### ***Earnings***

#### **Bargaining Members**

Base wages or salary plus payments under the company's Merit Award program and earned commissions only, but excluding any other bonuses, overtime, night differential or statutory holiday differential.

#### **Non-Bargaining Members**

Base salary plus payments under the company's Variable Incentive Award compensation, overtime and commissions, but excluding any other fringe benefits and special payments.

#### ***Credited Service***

Years and completed months of service while a member under the defined benefit provisions of the plan or Predecessor Plan.

#### ***Predecessor Plan***

Thomson Newspapers Employees' Retirement Plan.

### **Member Contributions**

#### ***Bargaining Members***

3.5% of Earnings up to the Yearly Maximum Pensionable Earnings (YMPE) and 5% of earnings in excess of the YMPE, to a calendar year maximum of \$3,500.

#### ***Non-Bargaining Members***

1.75% of Earnings up to the YMPE and 2.5% of Earnings in excess of the YMPE, up to a calendar year maximum of \$1,750.



## Normal Retirement

### *Eligibility*

First day of the month coincident with or next following age 65.

### *Annual Pension*

The sum of:

- 1.4% of Earnings in 2003 up to \$39,900 plus 2.0% of any excess Earnings in 2003, times Credited Service to December 31, 2003, and
- for every year after 2003, 1.4% of Earnings up to that year's YMPE plus 2.0% of any excess Earnings.

In no event shall the annual pension be less than the accrued pension under the plan formula in effect at December 31, 2007: i.e., the sum of:

- 1.4% of Earnings in 1999 up to \$37,400 plus 2.0% of any excess Earnings in 1999, times Credited Service to December 31, 1999, and
- for every year after 1999, 1.4% of Earnings up to that year's YMPE plus 2.0% of any excess Earnings.

## Maximum Annual Retirement Income

The lesser of:

- 2% of highest 3 year average earnings times years of pensionable service,
- \$2,646.67 times years of pensionable service, or such higher limit as permitted under the Income Tax Act.

Also, to comply with Income Tax Act limits, the above maximum must be reduced by 0.25% per month that the pension commencement date precedes the earliest of age 60, attainment of 30 years of continuous service and the date at which age and continuous service totals 80 years.

## Early Retirement

### *Eligibility*

Age 55.

### ***Annual Pension***

Accrued pension reduced by 0.3333% for each month the early retirement date precedes age 62, and further reduced by an additional 0.1667% for each month the early retirement date precedes age 60.

### **Postponed Retirement**

#### ***Eligibility***

First day of month coincident with or next following actual retirement, but not later than December 1 of the calendar year during which the participant attains age 71 (or such later date as allowed under the Income Tax Act).

#### ***Annual Pension***

Amount determined at member's postponed retirement date, subject to provincial pension legislation.

### **Normal Form of Pension**

Pension payable for life with 5 year guarantee. Actuarially reduced to provide statutory joint and survivor pension and other optional forms.

### **Termination of Employment**

If a member terminates employment prior to age 55, his accrued normal retirement pension is payable from age 65.

Alternatively, such a member may elect an actuarially equivalent pension commencing anytime between ages 55 and 65, or he may transfer (subject to locking in requirements) the commuted value of his pension to an RRSP or his new employer's pension plan.

### **Disability Benefit**

#### ***Eligibility***

Qualify for benefits under company long term disability income plan.

#### ***Benefit***

Credited Service continues to accrue with Earnings deemed to accrue at the rate in effect immediately prior to becoming disabled. Member contributions are waived.

## **Death Benefit Before Retirement**

Lump sum value of post-December 31, 1986 accrued pension is payable to spouse or beneficiary plus the value of the member's pre-January 1, 1987 contributions, together with interest.

## **Death Benefit After Retirement**

Based on form of pension elected.

## **Minimum Employer Cost (on Termination, Death or Retirement)**

- An additional benefit equal to the excess of member contributions made since January 1, 1987 accumulated with interest to date of cessation of employment over 50% of the value of the benefit earned since January 1, 1987, is payable.
- Benefits in respect of service prior to January 1, 1987 shall be increased, as necessary, such that their value is at least equal to the member's contributions made prior to January 1, 1987, with interest.

## Summary of Defined Contribution Plan Provisions

### Definitions

#### *Earnings*

Base salary plus commissions, but excluding payments under the company's Variable Incentive Award compensation, overtime and any other fringe benefits and special payments.

#### Member's Contributions

2.5% of Earnings up to the YMPE, plus 5% of any excess Earnings.

#### Company Contributions

5% of Earnings.

#### Normal Retirement

First day of the month coincident with or next following attainment of age 65.

#### Early Retirement

Age 55.

#### Postponed Retirement

After age 65, but not later than December 1 of the calendar year during which the participant attains age 71 (or such later date as allowed under the Income Tax Act).

#### Annual Retirement Pension

Upon retirement, the member is entitled to the distribution of the member and company contributions, together with interest and investment earnings thereon. This amount can be used to purchase an annuity from an insurer, or may be transferred to another retirement vehicle, on a locked-in basis if required by pension legislation.

## **Termination Benefits**

Member will receive the value of his contributions and company contributions, together with interest and investment earnings thereon.

## **Death Benefits Before Retirement**

The member's spouse or beneficiary, if applicable, will receive the value of the member's contributions and company contributions, together with interest and investment earnings thereon.

## **Disability Before Retirement**

If the member qualifies for the long term disability income plan sponsored by the company, the member's contributions will be waived, but the company will continue its contributions up to the earlier of age 65 or recovery, based on the member's Earnings at the time his disability began.

## Summary of Defined Benefit Plan Provisions for Members Covered Under Schedule E

### Definitions

#### *Credited Service*

Sum of:

- Credited Service under Schedule E of the Predecessor Plan, and
- On and after January 1, 2001, continuous employment while accruing benefits under this Schedule E.

#### *Earnings*

Base salary including the company's management Annual Incentive Plan (short-term incentive plan), but excluding any other fringe benefits and special payments.

#### *Best Average Earnings*

Average of member's highest 36 consecutive months of Earnings.

### Member Contributions

None required.

### Normal Retirement

#### *Eligibility*

Age 65.

#### *Annual Pension*

The product of:

- 2% of Best Average Earnings; and
- the lesser of Credited Service and 35 years.

## **Early Retirement**

### ***Eligibility***

Age 55.

### ***Annual Pension***

Accrued pension reduced by 0.3333% for each month the early retirement date precedes age 62, and further reduced by an additional 0.1667% for each month the early retirement date precedes age 60.

## **Postponed Retirement**

### ***Eligibility***

First day of month coincident with or next following actual retirement, but not later than December 1 of the calendar year during which the participant attains age 71 (or such later date as allowed under the Income Tax Act).

### ***Annual Pension***

Amount determined at member's postponed retirement date, subject to provincial pension legislation.

## **Post Retirement Pension Adjustments**

Members' pensions are increased after retirement by 3% per year, subject to the total of such increases not exceeding the cumulative increase in the Consumer Price Index since the member's retirement. Where a member has retired before age 60, these increases become effective, on a cumulative basis, at age 60.

## **Maximum Retirement Income**

The maximum annual pension payable under the plan at retirement cannot exceed the lesser of:

- 2% of best consecutive three years' remuneration multiplied by Credited Service; and
- \$2,646.67 multiplied by Credited Service, or such higher limit as permitted under the Income Tax Act.

Also, to comply with Income Tax limits, the above maximum is reduced by 0.25% per month that the pension commencement date precedes the earliest of age 60, attainment of 30 years of continuous

service and the date at which age and continuous service totals 80 years. Separate reductions apply for benefits earned prior to 1992.

### **Normal Form of Payment**

If the member has a spouse, pension is payable for member's lifetime, with provision that if the member predeceases his spouse, 60% of the member's pension will continue to the spouse for the balance of her lifetime. If the member does not have a spouse, the pension is payable for the member's lifetime, with 10 years of guaranteed payments.

### **Termination of Employment**

If a member terminates employment prior to age 55, his accrued normal retirement pension is payable from age 65.

Alternatively, such a member may elect an actuarially equivalent pension commencing anytime between ages 55 and 65, or he may transfer (subject to locking in requirements) the commuted value of his pension to an RRSP or his new employer's pension plan.

### **Death in Service**

If a member dies while accruing service, the commuted value of the Schedule E accrued pension (excluding provision for post-retirement pension adjustments) is payable. If greater, the commuted value of the post January 1, 1987 accrued pension (without provision for post-retirement pension adjustments, if applicable) is payable.



# Appendix G: PBGF Assessment, Transfer Ratio and Solvency Ratio

## PBGF Assessment

December 31, 2012

### PBGF Assessment

#### Solvency liability:

● Total	\$ 160,736,968
● Ontario PBGF liability	154,197,400
● Ontario additional PBGF liability	0

#### Solvency value of assets:

● Total	\$ 121,587,192
● Ontario PBGF assets	116,638,593

PBGF assessment base \$ 37,558,807

#### Plan membership (including inactive members):

● Total	600
● Ontario	563

### Comments:

- The solvency value of assets reflects net outstanding amounts. The solvency value of assets is prior to deduction of a provision for plan windup expenses.
- For the purposes of calculating the PBGF assessment base, the solvency value of assets and the solvency liability exclude the defined contribution provision.
- The Ontario PBGF liability used for purposes of calculating the PBGF assessment excludes the Ontario additional PBGF liability.
- As specified in the Regulation to the *Pension Benefits Act (Ontario)*, the additional PBGF liability is the additional solvency liability for plant closure and permanent layoff benefits excluded for

those Ontario members who are immediately eligible for the benefit at the actuarial valuation date, if any.

## Transfer Ratio and Solvency Ratio

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December 31, 2012

### Transfer Ratio

Solvency value of assets	\$ 121,587,192
Lesser of estimated employer contributions for the period until the next actuarial valuation and prior year credit balance	\$ 1,530,229
Hypothetical windup liability	\$ 160,736,968
Transfer ratio	0.75

### Solvency Ratio

Solvency value of assets	\$ 121,587,192
Solvency liability	\$ 160,736,968
Solvency ratio	0.76

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### Comments:

- The solvency value of assets reflects net outstanding amounts. The solvency value of assets is prior to deduction of a provision for plan windup expenses.
- For the purposes of calculating the transfer ratio and solvency ratio, the solvency value of assets, the hypothetical windup liability and the solvency liability exclude the defined contribution provision.
- As the transfer ratio is less than 1.00, transfer deficiencies must be paid over a maximum period of five years unless the cumulative transfer deficiencies are within the limits prescribed by the Regulation to the *Pension Benefits Act (Ontario)* or the employer remits additional contributions in respect of the transfer deficiencies. Pursuant to Regulations 19(4) or 19(5) to the *Pension Benefits Act (Ontario)*, approval of the Superintendent will be required to make commuted value transfers if there has been a significant decline in the transfer ratio after the actuarial valuation date.

G-4

- Based on the solvency ratio defined as the ratio of solvency value of assets to solvency liabilities, the next actuarial valuation of the plan is due with an effective date not later than December 31, 2013.

## Appendix H: Certificate of the Plan Administrator

I hereby certify that to the best of my knowledge and belief:

- the significant terms of engagement contained in Appendix A of this report are accurate and reflect the plan administrator's judgement of the plan provisions and/or an appropriate basis for the actuarial valuation of the plan;
- the information on plan assets forwarded to Towers Watson Canada Inc. and summarized in Appendix B of this report is complete and accurate;
- the outstanding contributions of \$401,414 under the defined benefit provision as at December 31, 2012 have been contributed to the plan;
- the data forwarded to Towers Watson Canada Inc. and summarized in Appendix E of this report are a complete and accurate description of all persons who are members of the plan, including beneficiaries who are in receipt of a retirement income, in respect of service up to the date of the actuarial valuation;
- the summary of plan provisions contained in Appendix F of this report is accurate; and
- there have been no events which occurred between the actuarial valuation date and the date this actuarial valuation was completed that may have a material financial effect on the actuarial valuation.

Erin Adams  
Signature

Sept 26/13  
Date

Erin Adams  
Name

VP, Human Resources  
Title





## ACTUARIAL INFORMATION SUMMARY

Please see the instructions for completing this form. If an item does not apply, enter "N/A".

<b>Part I – Plan Information and Contributions</b>																																																																																												
<b>A. 001. Name of registered pension plan</b>																																																																																												
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<b>F. 006. Purpose of the report (indicate all reasons for which the report was prepared)</b>																																																																																												
<input type="checkbox"/> Initial report for a newly established plan			<input checked="" type="checkbox"/> Regular (triennial or annual) report for an ongoing plan			<input type="checkbox"/> Interim report in respect of an amendment to an ongoing plan			<input type="checkbox"/> Partial Termination																																																																																			
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<b>010. Employer</b> .....	3,328,830																																																																																											
<b>010a. Explicit expense allowance included in employer normal cost above</b> .....	200,000																																																																																											
<b>Normal cost (money purchase provision)</b>																																																																																												
<b>011. Members</b> .....	867,000																																																																																											
<b>012. Employer</b> .....	1,239,000																																																																																											
<b>Special payments</b>																																																																																												
<b>013. Special payments for going-concern unfunded liability and/or solvency deficiency</b> .....	9,049,238																																																																																											
<b>Fixed contributions</b>																																																																																												
<b>014. Estimated dollar amounts of fixed employer and, if applicable, member contributions (defined benefit provision)</b> .....	0																																																																																											
<b>014a. Estimated dollar amounts of fixed employer and, if applicable, member contributions (money purchase provision)</b> .....	0																																																																																											
<b>Part II – Membership and Actuarial Information</b>																																																																																												
<b>H. Membership information</b>																																																																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 15%;">Number</th> <th style="width: 15%;">Average Age</th> <th style="width: 20%;">Average Pensionable Service</th> <th style="width: 15%;">Average Salary</th> <th style="width: 15%;">Average Annual Pension</th> </tr> </thead> <tbody> <tr> <td><b>015. Active members</b> .....</td> <td style="text-align: center;">436</td> <td style="text-align: center;">49.30</td> <td style="text-align: center;">13.90</td> <td style="text-align: center;">97,380</td> <td style="text-align: center;">19,432</td> </tr> <tr> <td><b>016. Retired members</b> .....</td> <td style="text-align: center;">103</td> <td style="text-align: center;">67.70</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">26,812</td> </tr> <tr> <td><b>017. Other participants</b> .....</td> <td style="text-align: center;">61</td> <td style="text-align: center;">49.40</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">10,825</td> </tr> </tbody> </table>														Number	Average Age	Average Pensionable Service	Average Salary	Average Annual Pension	<b>015. Active members</b> .....	436	49.30	13.90	97,380	19,432	<b>016. Retired members</b> .....	103	67.70	N/A	N/A	26,812	<b>017. Other participants</b> .....	61	49.40	N/A	N/A	10,825																																																								
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<b>I. Actuarial basis for going-concern valuation (see instructions)</b>																																																																																												
<b>020. Asset valuation method</b>																																																																																												
<input type="checkbox"/> Market			<input checked="" type="checkbox"/> Smoothed Market			<input type="checkbox"/> Book			<input type="checkbox"/> Book and Market combination			<input type="checkbox"/> Other																																																																																
<b>021. Liability valuation method</b>																																																																																												
<input checked="" type="checkbox"/> Accrued benefit (unit credit)			<input type="checkbox"/> Entry age normal			<input type="checkbox"/> Individual level premium			<input type="checkbox"/> Aggregate																																																																																			
<input type="checkbox"/> Other (specify) _____																																																																																												

**I. Actuarial basis for going-concern valuation (cont'd)**

**Selected actuarial assumptions**

Where a flat rate is used, enter the rate under "Ultimate rate" and "N/A" under "Initial rate" and "Number of years."\*\*

**Valuation interest rate**

- 025. Active members .....
- 026. Retired members .....
- 027. Rate of indexation .....
- 028. Rate of general wage and salary increase .....
- 029. YMPE escalation rate .....
- 030. *Income Tax Regulations'* maximum pension limit escalation .....
- 031. Rate of CPI increase .....

Initial rate	Number of years*	Ultimate rate
N/A %	N/A	5.00 %
N/A %	N/A	5.00 %
N/A %	N/A	2.50 %
N/A %	N/A	3.50 %
N/A %	N/A	3.50 %
N/A %	N/A	3.50 %
N/A %	N/A	2.50 %

\* from valuation date before ultimate rate becomes effective

035. Year *Income Tax Regulations'* maximum pension limit escalation commences ..... 2014

**036. Mortality table**

- 1994 GAM Static
- 1994 Group Annuity Reserving (GAR)
- 1994 UP
- 80% of 1983 GAM
- Other (specify) \_\_\_\_\_

**036a. Generational Mortality Table**

Has an assumption of generational mortality improvements been made?  Yes  No

**036b. Projected Mortality Table**

Has a projection of mortality improvements been made?  Yes  No

YYYY  
|\_|\_|\_|

036b.(i) If **yes**, what is the year to which the mortality improvements have been projected (see instructions)? .....

**037. Allowance for promotion, seniority and merit increases**

- Included in (line 028) above
- Separate scale based on age or service
- No allowance

**038. Allowance for expenses**

- 038a. Allowance for investment expenses
- Implicit
- Explicit

- 038b. Allowance for administrative expenses
- Implicit
- Explicit

039. If a multi-employer plan, number of hours of work per member per plan year .....

040. Was a withdrawal scale used?  Yes  No

041. Were variable retirement rates used?  Yes  No

042. If **no**, what is the assumed retirement age? .....

**J. Actuarial basis for solvency valuation**

**Valuation interest rate**

- 045. Benefits to be settled by lump sum transfer .....
- 046. Benefits to be settled by purchase of deferred annuity .....
- 047. Benefits to be settled by purchase of immediate annuity .....
- 048. Rate of indexation .....

Initial rate	Select period	Ultimate rate
2.40 %	10	3.60 %
N/A %	N/A	3.00 %
N/A %	N/A	3.00 %
N/A %	N/A	N/A %

049. Mortality table  1994 UP Generational  1994 UP  Other (specify) \_\_\_\_\_

049a. Year of projection (see instructions) ..... YYYY  
|\_|\_|\_|

**K. Balance sheet information (DB provisions, see instructions)**

050. Market value of assets, adjusted for receivables and payables .....	121,587,192
051. Amount of contributions receivable included in market value above .....	401,414
<b>Going-concern valuation</b>	
052. Going-concern assets .....	116,444,943
053. Optional ancillary contributions account balance included in going-concern assets above for a flexible pension plan (if applicable) .....	0
<b>Going-concern liabilities</b>	
060. For active members .....	73,771,132
061. For retired members .....	35,502,986
062. For other participants .....	4,955,818
063. For optional ancillary benefits to be provided under a flexible pension plan (if applicable) .....	0
064. Other reserve .....	0



**K. Balance sheet information (DB provisions, see instructions) (cont'd)**

070. Net funded position—surplus/deficit	2,215,007
071. Additional voluntary contributions	0
072. Money purchase assets (if applicable)	12,332,186

**Solvency Valuation**

Complete lines 080 to 100 only if the report contains an explicit solvency valuation

**Solvency Assets**

080. Solvency assets with adjustment for expense provision, if any	121,237,192
081. Amount of wind-up expense provision reflected in line 080	350,000
082. Optional ancillary contributions account balance included in solvency assets above for a flexible pension plan (if applicable)	0

**Solvency Liabilities**

090. For active members	110,214,090
091. For retired members	43,336,623
092. For other participants	7,186,255
093. For optional ancillary benefits to be provided under a flexible pension plan (if applicable)	0
094. Other reserve	0
100. Net solvency position—surplus/deficit	(39,499,776)

If the plan provides benefit increases coming into effect during the period covered by the report but after the valuation date, have those increases been reflected in:

102. The going-concern liabilities in lines 060 to 064?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
103. The solvency liabilities in lines 090 to 094?	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No

**L. Actuarial gains or losses**

110. Was a gain or loss analysis done?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No																
111. If line 110 is <b>yes</b> , indicate the date of the last filed funding valuation report and the net funded position as at that date	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <th colspan="4">YYYY</th> <th colspan="2">MM</th> <th colspan="2">DD</th> </tr> <tr> <td>2</td><td>0</td><td>1</td><td>2</td> <td>0</td><td>1</td> <td>0</td><td>1</td> </tr> </table>	YYYY				MM		DD		2	0	1	2	0	1	0	1	(390,242)
YYYY				MM		DD												
2	0	1	2	0	1	0	1											

If line 110 is **yes**, indicate amount of gain or loss due to:

112. interest on surplus (unfunded liability)	(19,512)
113. special payments made	5,087,154
114. amounts used for contribution holiday	87,934
115. change in actuarial assumptions	0
116. change in the asset valuation method	0
117. change in liability valuation method	0
118. plan amendments/changes	0
119. investment experience	(2,050,191)
120. retirement experience	762,698
121. mortality experience	(124,579)
122. withdrawal experience	(665,832)
123. salary increase experience	0
124. optional ancillary contributions forfeited	0

Are there major contributing sources other than lines 112 to 124 above (if **yes**, specify)

125. Non-investment gains (losses)	(173,654)
126. N/A	N/A
127. all other sources (combined)	(298,769)

**M. Subsequent events**

135. Are there any subsequent event(s) that have not been reflected in the valuation? (refer to the SOP)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
--	------------------------------	--

**N. Statements of opinion**

136. Does the report include the statements of opinion required by the SOP (data, assumptions, methods, accepted actuarial practice)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
136a. Are any of the actuary's statements of opinion qualified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

**Part III – Information required by the Financial Services Commission of Ontario**

Financial Services  
Commission of  
Ontario



Commission des  
services financiers  
de l'Ontario

**O. Additional valuation information**

**Going-concern valuation**

140. Have escalated adjustments been included in going-concern liabilities?  N/A  Yes  No

**Solvency valuation**

141. Have any of the **excludable** benefits been excluded?  N/A  Yes  No

142. If line 141 is **yes**, enter the total amount of liabilities being excluded \_\_\_\_\_

143. With respect to the type of benefits provided under the plan for service after the valuation date, complete the following table:

Provision Type	Benefit Accruals for Service After Valuation Date (Yes/No)	Closed (Yes/No)
Defined Benefit	Yes	Yes
Defined Contribution	Yes	No

144. (i) Has an averaging method been applied to the market value of assets in determining the solvency asset adjustment?  Yes  No

a. If line (i) is **yes**, indicate the positive or negative amount by which the solvency assets are adjusted as a result of applying the averaging method \_\_\_\_\_

(ii) Has the averaging method used in determining the solvency asset adjustment changed since the last valuation?  Yes  No

If line (ii) is **yes**, complete (ii)a or (ii)b, as appropriate:

a. The change in method increases solvency asset adjustment by the amount of \_\_\_\_\_

b. The change in method decreases solvency asset adjustment by the amount of \_\_\_\_\_

**P. Miscellaneous**

145. Prior year credit balance \_\_\_\_\_ 1,530,229

146. Transfer ratio (express in decimal format) \_\_\_\_\_ 0.7500

**Guarantee fund assessment**

147. PBGF liabilities \_\_\_\_\_ 154,197,400

148. PBGF assessment base \_\_\_\_\_ 37,558,807

149. Amount of additional liability for plant closure and/or permanent layoff benefits as described in clause 37(4)(a)(ii)(A) of Regulation 909, R.R.O. 1990, as amended \_\_\_\_\_ 0

149a. Number of Ontario plan beneficiaries \_\_\_\_\_ 563

**Part IV – Information required by the Office of the Superintendent of Financial Institutions Canada**



Office of the Superintendent  
of Financial Institutions Canada

Bureau du surintendant des  
institutions financières du Canada

**Q. Additional solvency valuation information**

150a. Adjusted Solvency Ratio at the valuation date \_\_\_\_\_

150b. Adjusted Solvency Ratio one year prior (the **prior valuation date**) \_\_\_\_\_

150c. Adjusted Solvency Ratio two years prior (the **prior second valuation date**) \_\_\_\_\_

151. Average Solvency Ratio \_\_\_\_\_

152a. Solvency Liabilities \_\_\_\_\_

152b. Adjusted Solvency Asset Amount \_\_\_\_\_

152c. Solvency Deficiency \_\_\_\_\_

153. Value of the Letters of Credit included in solvency assets on the valuation date \_\_\_\_\_

160. Solvency ratio (express in decimal format) \_\_\_\_\_

162. Liability for active members who are within 10 years of pensionable age and whose entitlement is valued at an interest rate basis stated on line 045 \_\_\_\_\_

163. Liability for active members who are within 10 years of pensionable age and whose entitlement is valued at an interest rate basis stated on line 046 \_\_\_\_\_

164. Liability for active members who are not within 10 years of pensionable age \_\_\_\_\_



**Part VI – Information required by the Régie des rentes du Québec**

**S. Additional information**

185. Date on which the valuation report was prepared ..... 

YYYY	MM	DD							
186. Value of additional obligations arising from an amendment on a funding basis ..... \_\_\_\_\_
187. Value of additional obligations arising from an amendment on a solvency basis ..... \_\_\_\_\_
188. Surplus assets that can be appropriated to the payment of employer contributions ..... \_\_\_\_\_
189. Special amortization payments ..... \_\_\_\_\_
190. Total of the letters of credit taken into account in the assets on a solvency basis ..... \_\_\_\_\_
191. Pensions insured by an insurer taken into account in the actuarial valuation on a solvency basis ..... \_\_\_\_\_

**T. Additional information for plans whose employer is a municipality, a municipal housing bureau, an educational institution at the university level, or a childcare service**

195. Reserve on a funding basis ..... \_\_\_\_\_
196. Provision for adverse deviations on a funding basis ..... \_\_\_\_\_

	Present value	Amortization payments		
		Period 1	Period 2	Period 3
197. Technical funding deficiency				
198. Improvement funding deficiency				

**U. Additional information pertaining to pension plans other than those mentioned in section T**

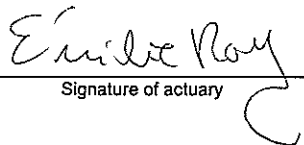
200. Reserve on a solvency basis ..... \_\_\_\_\_
201. Provision for adverse deviations on a solvency basis ..... \_\_\_\_\_

	Present value	Amortization payments		
		Period 1	Period 2	Period 3
202. Funding deficiency				
203. Technical solvency deficiency				
204. Improvement solvency deficiency				

**Part VII – Certification by Actuary**

As the actuary who signed the funding valuation report (the report), I certify that this completed form accurately reflects the information provided in the report.

Dated this 30 day of September, 2013  
(day) (month) (year)



Signature of actuary

Emilie Roy

Print or type name of actuary

Towers Watson

Name of firm

(416) 960-2840

Telephone number

emilie.roy@towerswatson.com

Email address\*

\* Optional information. The Canada Revenue Agency will not communicate on plan specific matters with clients by email, since we cannot guarantee the confidentiality of emailed information.