K1.1

# SCHOOL ENERGY COALITION

# CROSS-EXAMINATION MATERIALS

# ENBRIDGE 2012 RATES

# EB-2011-0277

2012 REVENUE PER CUSTOMER CAP, DISTRIBUTION AND
TOTAL REVENUE DETERMINATION

| Row | | Col. 1<br>2012 | |
|---|---|---|---|
| 1. | 2011 Total Approved Revenue ($millions) | 2,404.9 | |
| 2. | Gas Costs to operations (at Oct. 1, 2010 ref. price) | 1,416.3 | |
| 3. | 2011 Approved Distribution Revenue | 988.6 | |
| 4. | 2011 Gas in storage related carrying costs (at Oct. 1, 2010 ref. price) | (30.9) | |
| 5. | DSM 2011 amount | (26.7) | |
| 6. | CIS / Cust. Care 2011 amount | (97.4) | |
| 7. | Power generation projects 2011 amount | (3.5) | |
| 8. | Distribution Revenue Sub-total | 830.1 | |
| 9. | Ratepayer 50% share of 2012 incremental tax amounts | (4.6) | |
| 10. | Distribution Revenue base (subject to the escalation formula, $millions) | 825.5 | |
| 11. | Average Number of Customers (Beginning) | 1,965,537 | |
| 12. | Distribution Revenue per Customer 2012 (Beginning) | $ 419.99 | |
| 13. | GDP IPI FDD | 1.72% | |
| 14. | Inflation Coefficient (allowed % of GDP IPI FDD) | 45.00% | |
| 15. | Escalation Factor, 100 plus (GDP IPI FDD multiplied by the inflation coeff.) | 100.77% | |
| 16. | Distribution Revenue per Customer 2012 (Ending) | $ 423.23 | |
| 17. | Average Number of Customers (Ending) | 1,984,734 | |
| 18. | Distribution Revenue (resulting from the escalation formula, $millions) | 839.99 | |
| | Y-Factors | | |
| 19. | 2012 Gas in storage related carrying costs (at October 1, 2011 ref. price) | 30.60 | |
| 20. | 2012 DSM Y-factor amount | 28.10 | /u |
| 21. | CIS / Customer Care 2012 approved amount | 99.20 | |
| 22. | Power generation projects 2012 amount | 6.60 | |
| 23. | Total 2012 Y-Factors | 164.50 | /u |
| | Z-Factors | | |
| 24. | 2012 Pension funding requirement | 16.60 | /u |
| 25. | 2012 Crossbore / Sewer Lateral program requirement | 3.80 | |
| 26. | Total 2012 Z-Factors | 20.40 | /u |
| 27. | Total 2012 Distribution Revenues | 1,024.89 | /u |
| 28. | 2012 Gas Costs to operations (at October 1, 2011 ref. price) | 1,515.50 | |
| 29. | 2012 Total Revenue ($millions) | 2,540.39 | /u |

EGD – REGISTERED PENSION PLAN ("RPP")

| ($ millions) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Going Concern Basis[1] | 2011[2] | 2010 | 2009 | 2008[3] | 2007 | 2006 | 2005 | 2004 | |
| Assets | 712.3 | 736.2 | 698.7 | 634.7 | 802.3 | 821.2 | 767.3 | 706.3 | |
| Liabilities | 709.4 | 685.7 | 641.5 | 637.1 | 615.6 | 614.4 | 576.6 | 529.7 | |
| Funding Excess/(Deficiency) | 2.9 | 50.5 | 57.2 | (2.4) | 186.7 | 206.8 | 190.7 | 176.6 | /u |
| | | | | | | | | | |
| Solvency Basis[4] | | | | | | | | | |
| Assets | 711.7 | 735.6 | 698.1 | 635.2 | 801.7 | 820.6 | 766.7 | 705.7 | /u |
| Liabilities | 789.4 | 702.0 | 666.1 | 611.7 | 664.8 | 640.9 | 631 | 562 | |
| Funding Excess/(Deficiency) | (77.7) | 33.6 | 32.0 | 23.5 | 136.9 | 179.7 | 135.7 | 143.7 | /u |

[1] Calculated assuming the plan will be in existence long term.
[2] Per Mercer's Report "Estimated 2012 Funding Costs – EGD Pension Plans", filed as Appendix B to this Exhibit.
[3] Although 2008 shows a deficit, funding was not required as the last filing in 2006 showed a plan surplus. The filing of an annual cost certificate was only required after June 23, 2009.
[4] Calculated on a short term basis (i.e the plan will be wound up).

MERCER

CONSULTING. OUTSOURCING. INVESTMENTS.

# ESTIMATED 2012 FUNDING COSTS
## EGD PENSION PLANS
03 OCTOBER 2011

MARSH & McLENNAN COMPANIES

**Note to reader regarding actuarial valuations and projections:**

This report may not be relied upon for any purpose other than those explicitly noted in the Introduction, nor may it be relied upon by any party other than the parties noted in the Introduction. Mercer is not responsible for the consequences of any other use. A projection is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future.

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

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

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

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

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

# CONTENTS

# 1

## Introduction

### Purpose

At the request of Enbridge Gas Distribution Inc. (the "Company"), we have estimated the projected December 31, 2011 financial position and 2012 minimum funding requirements for the Pension Plan for Employees of Enbridge Gas Distribution Inc. and Affiliates (the "EGD RPP" or the "Plan") based on economic conditions at August 31, 2011. Actual results as at December 31, 2011 will differ from this projection based on the economic environment as at December 31, 2011. We understand this report will be provided to the Ontario Energy Board (the "OEB") in conjunction with the Company's application for recovery of 2012 pension costs from ratepayers.

Note that information contained in this report reflects all assets, liabilities and costs in respect of all employers participating in the EGD RPP, except where specifically noted.

The information presented is prepared for the internal use of the Company and for filing with the OEB. This information presented is not intended or suitable for any other purpose.

# 2

## Background Information

### Determination of Contribution Requirements

The EGD RPP consists of a defined benefit ("DB") provision and a defined contribution ("DC") provision. Minimum required contributions to the DB component are determined based on actuarial valuations filed with the Financial Services Commission of Ontario ("FSCO") and the Canada Revenue Agency ("CRA"). Valuations may be filed at the plan sponsor's discretion, but must be filed at least once every three years. Contributions in between filings are fixed (with the below noted exception).

An actuarial valuation of the EGD RPP was filed as at December 31, 2009. Accordingly, the next valuation must be filed no later than December 31, 2012.

We have also conducted an actuarial valuation for management information purposes as at December 31, 2010 that was not filed with FSCO or CRA. This valuation is the basis for the projections contained herein.

### Regulatory Changes

Regulation 239 / 09 to the *Pension Benefits Act (Ontario)* was filed on June 23, 2009 and included a number of changes to the Regulations. In particular, for fiscal years 2009 to 2012 (inclusive), plan sponsors taking contribution holidays are required to file a Cost Certificate with FSCO within 90 days of the start of the fiscal year as evidence that sufficient surplus[1] remains to justify the contribution holiday.

If a contribution holiday cannot be justified, then contributions must resume in accordance with the most recently filed valuation with FSCO and CRA.

[1] On both a going-concern and solvency basis.

## Historical Funding

Due to historical plan surplus in the DB component, DB cash contributions have not been required for over 10 years. In addition, the DB surplus has been used to cover contributions to the DC component. Historical costs to the DB and DC component are summarized below.

| | DB Service Cost | DC Service Cost | Total Plan Service Cost | Total Plan Contribution |
|---|---|---|---|---|
| 2002 | $8.5M | $0.5M | $9.0M | $0 |
| 2003 | $8.6M | $0.7M | $9.3M | $0 |
| 2004 | $8.9M | $0.8M | $9.7M | $0 |
| 2005 | $9.9M | $0.8M | $10.7M | $0 |
| 2006 | $12.1M | $1.1M | $13.2M | $0 |
| 2007 | $14.4M | $1.3M | $15.7M | $0 |
| 2008 | $15.7M | $1.4M | $17.1M | $0 |
| 2009 | $14.8M | $1.4M | $16.2M | $0 |
| 2010 | $14.7M | $1.4M | $16.1M | $0 |
| 2011 | $16.3M | $1.4M | $17.7M | $0 |
| **Total** | **$123.9M** | **$10.8M** | **$134.7M** | **$0** |

## Current Economic Environment

The financial markets have not been favourable to pension plans in Canada in 2011. In particular, the health of pension plans has deteriorated due to the following events:

- Solvency discount rates have dropped by approximately 0.80% from the beginning of the year to August 31, 2011.[2] A reduction in discount rates leads to an increase in liabilities.
- Equity markets have been slightly negative through August 31, 2011.

For the average Canadian pension plan, these factors have resulted in a decrease in solvency and transfer ratios of over 10% as at August 31, 2011.

[2] Solvency discount rates are based on the yields on long-term Government of Canada bonds, plus a prescribed spread set by the Canadian Institute of Actuaries. To August 31, 2011, long-term bond yields have decreased 0.50%, and the prescribed spread had dropped by 0.30%.

## Implications for the EGD RPP

If not for the regulation changes noted above, the contribution holiday could have been maintained through 2012 until the next valuation falls due regardless of interim plan experience. Even with the regulation changes, the contribution holiday was expected to continue for three to five years following the December 31, 2009 valuation if plan experience was as expected. However, poor experience as noted above has caused the financial health of the plan to deteriorate more than expected. Accordingly, contributions will likely be required in 2012.

# 3

## Financial Results

### Estimated Financial Position at December 31, 2011

We have projected the results of the December 31, 2010 actuarial valuation of the EGD RPP to December 31, 2011 for the purpose of estimating the Plan's financial position and determining whether or not the current contribution holiday can be maintained in 2012. **The projection is based on the economic environment as at August 31, 2011 and assumptions described in Appendix C. The actual economic environment as at December 31, 2011 and actual plan experience between August 31, 2011 and December 31, 2011 may differ significantly from these assumptions.**

For simplicity, we have only included the assets and liabilities with respect to the DB provision of the EGD RPP in the balance sheets shown below.

### *Projected Going-Concern Balance Sheet at December 31, 2011*

The table below details the going-concern financial position of the EGD RPP as at December 31, 2010, as well as the projected position as at December 31, 2011.

| Going-Concern Financial Position ($Millions) | 12.31.2010 (Actual) | 12.31.2011 (Projected) |
|---|---|---|
| Assets | $736.2 | $712.3 |
| Liabilities | $685.7 | $709.4 |
| Funding excess (shortfall) | $50.5 | $2.9 |
| Funded ratio | 107% | 100% |

### *Projected Solvency Balance Sheet at December 31, 2011*

The table below details the solvency financial position of the EGD RPP as at December 31, 2010, as well as the projected position as at December 31, 2011.

| Solvency Financial Position ($Millions) | 12.31.2010 (Actual) | 12.31.2011 (Projected) |
|---|---|---|
| Assets | $735.6 | $711.7 |
| Liabilities | $702.0 | $789.4 |
| Solvency excess (deficiency) | $33.6 | ($77.7) |
| Solvency ratio | 105% | 90% |

## Summary of Minimum Required Contributions – EGD RPP

Based on the projected solvency position at December 31, 2011, the EGD RPP is not expected to have sufficient surplus to maintain the current contribution holiday in 2012 under the circumstances postulated in this report. Therefore, in accordance with Regulation 239/09 minimum contributions to the DB component are expected to revert back to the current service cost contribution rates determined in the December 31, 2009 valuation. DC contributions will also be required.

Special payments to amortize the solvency deficiency will not be required if a valuation is not filed as at December 31, 2011.

| Estimated Cash Contributions – Valuation Not Filed ($Millions) | 2012 |
|---|---|
| DB current service cost (projected) | $15.6 |
| Special payments (projected) | n/a |
| Total DB contributions (projected) | $15.6 |
| DC current service cost (projected) | $1.5 |
| **Total DB and DC contributions (projected)** | **$17.1** |

If a valuation of the EGD RPP were to be filed as at December 31, 2011, the current service cost would be recalculated based on current market assumptions and special payments to amortize the solvency deficiency would also be required. In this scenario, 2012 contribution requirements are estimated to be as follows:

| Estimated Cash Contributions – Valuation Filed ($Millions) | 2012 |
|---|---|
| DB current service cost (projected) | $17.0 |
| Special payments (projected) | $17.4 |
| Total DB contributions (projected) | $34.4 |
| DC current service cost (projected) | $1.5 |
| **Total DB and DC contributions (projected)** | **$35.9** |

For greater clarity, the contributions required if a valuation is filed reflect the true cost of the plan in the current economic environment, even though legislation permits lesser funding if a valuation is not filed.

## *Enbridge Gas Distribution Inc.'s Share of Funding*

In addition to Enbridge Gas Distribution Inc., two other smaller employers participate in the EGD RPP. The following tables provide the same results as those on page 6, but are only in respect of Enbridge Gas Distribution Inc.'s share of costs.

| **Estimated Cash Contributions – Valuation Not Filed ($Millions) – *EGDI ONLY*** | **2012** |
|---|---|
| DB current service cost (projected) | $14.7 |
| Special payments (projected) | n/a |
| Total DB contributions (projected) | $14.7 |
| DC current service cost (projected) | $1.3 |
| **Total DB and DC contributions (projected)** | **$16.0** |

| **Estimated Cash Contributions – Valuation Filed ($Millions) – *EGDI ONLY*** | **2012** |
|---|---|
| DB current service cost (projected) | $16.0 |
| Special payments (projected) | $16.9 |
| Total DB contributions (projected) | $32.9 |
| DC current service cost (projected) | $1.3 |
| **Total DB and DC contributions (projected)** | **$34.2** |

## Summary of Minimum Required Contributions – SERP/SSERP

Enbridge also sponsors two supplementary pension arrangements:

- The Supplementary Executive Retirement Plan of Enbridge Gas Distribution and Affiliates (the "SERP"); and
- The Supplementary Senior Executive Retirement Plan of Enbridge Gas Distribution Inc. (the "SSERP").

We estimate cash contributions of approximately $0.6M will be required for the SERP in 2012. No contribution requirements are anticipated in respect of the SSERP.

Enbridge Gas Distribution Inc. is the only employer participating in the SERP and SSERP.

## Important to Note

The purpose of this report is to estimate the December 31, 2011 financial position and 2012 minimum required contributions. However, the occurrence and/or level of required contributions in 2012 is highly dependent on:

- Equity market returns between August 31, 2011 and December 31, 2011;
- Changes in long-term government bond yields between August 31, 2011 and December 31, 2011;
- Changes the prescribed spread used to determine solvency discount rates; and
- Demographic experience (only revealed if Enbridge chooses to file an actuarial valuation as at December 31, 2011).

These items will cause actual results as at December 31, 2011 to differ from the estimate provided in this report.

For illustrative purposes, we estimate that it would take one of the following events (or a combination thereof) in order for the financial position of the EGD RPP to improve enough to maintain the contribution holiday for 2012:

1. The pension fund returns 16% (net of expenses) between September 1, 2011 and December 31, 2011.
2. Discount rates increase by 1.0% (either from changes in long-term government bond yields or the prescribed spread used in calculating solvency discount rates) between September 1, 2011 and December 31, 2011.

# 4

## Actuarial Opinion

In our opinion, for the purposes of the projection,

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

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

| | |
|---|---|
| Chris Heller<br>FCIA, FSA | Allen Hornung<br>FCIA, FSA |
| October 3, 2011 | October 3, 2011 |
| Date | Date |

# APPENDIX A

## Required Disclosures

### Terms of Engagement

In accordance with our terms of engagement with the Company, our projections are based on the following material terms:

- They have been prepared in accordance with applicable pension legislation and based on methods and actuarial assumptions that are consistent with actuarial standards of practice in Canada;

- We have reflected a margin for adverse deviations in our going concern projection by reducing the going-concern discount rate by 0.59% per year; and

- We have reflected the Company's decisions for determining the solvency funding requirements, summarized as follows:

  - The same plan wind-up scenario was hypothesized for both hypothetical wind-up and solvency valuations;

  - Certain excludable benefits were excluded from the solvency liabilities; and

  - The solvency financial position was determined on a projected market value basis.

- We have projected assets forward using benchmark asset returns (net of expenses) to August 31, 2011 and our best estimate of asset returns (net of expenses) for the remainder of 2011. Projected cash flows over 2011 have also been incorporated.

- We have projected liabilities forward using the expected cost of benefits accruing over 2011, reflecting interest over 2011 and adjusting year-end assumptions based on the economic environment as at August 31, 2011. Projected cash flows over 2011 have also been incorporated.

Our calculations are based on the assumptions and methodology described in Appendix C. We have used the same going-concern valuation assumptions and methods as were used for the valuation as at December 31, 2010.

The hypothetical wind-up and solvency assumptions have been updated to reflect market conditions as at August 31, 2011. Emerging experience will affect the funded position of the Plan.

Our calculations are based on an extrapolation of a valuation performed using membership data as at December 31, 2010. The membership data used in our calculations is summarized in Appendix D.

Our calculations reflect the provisions of the Plan as at August 31, 2011. Based on the information provided by the Company, no substantive amendments have been made to the Plan since that date. A summary of the plan provisions is provided in Appendix E.

## Subsequent Events

After checking with representatives of the Company, to the best of our knowledge there have been no events subsequent August 31, 2011 which, in our opinion, would have a material impact on the results of the projection.

## Next Required Valuation

In accordance with pension benefits legislation, the next actuarial valuation of the EGD RPP to be filed with FSCO and CRA will be required as at a date not later than December 31, 2012, or as at the date of an earlier amendment to the Plan. Unless a new cost certificate is filed as of January 1, 2012 demonstrating that the EGD RPP has sufficient surplus, employer current service cost contributions must resume in 2012.

## Gain and Loss Analysis

A reconciliation of the actual going-concern financial position of the EGD RPP between December 31, 2010 and the projected going-concern financial position at December 31, 2011 follows:

| Reconciliation of financial status ($millions) | 2011 |
|---|---|
| Funding excess (shortfall) as at December 31, 2010 | $50.4 |
| Interest on funding excess (funding shortfall) at 5.75% per year | $2.9 |
| DB contributions drawn from funding excess, with interest | ($16.3) |
| DC contributions drawn from funding excess, with interest | ($1.4) |
| Net investment return different than expected | ($32.7) |
| Funding excess (shortfall) as at December 31, 2011 | $2.9 |

## Solvency Incremental Cost

The solvency incremental cost is an estimate of the present value of the projected change in the EGD RPP solvency liabilities from December 31, 2010 to December 31, 2011 (before assumption changes), adjusted for benefit payments expected to be made over the period.

The estimated 2011 solvency incremental cost determined in this projection is $24.8M.

## Discount Rate Sensitivity

The following table summarises the effect on the liabilities and current service costs of the EGD RPP shown in this report of using a discount rate which is 1.00% lower than that used in the projection:

| Scenario | Projection Basis | Reduce Discount Rate by 1% |
|---|---|---|
| Going-concern liabilities | $709.4 | $811.6 |
| Solvency liabilities | $789.4 | $920.7 |
| DB current service cost | $17.0 | $21.0 |

## Projected Hypothetical Wind-up Balance Sheet at December 31, 2011

The table below details the hypothetical wind-up financial position of the EGD RPP as at December 31, 2010, as well as the projected position as at December 31, 2011.

| Solvency Financial Position ($Millions) | 12.31.2010 (Actual) | 12.31.2011 (Projected) |
|---|---|---|
| Assets | $735.6 | $711.7 |
| Liabilities | $828.5 | $931.6 |
| Wind-up excess (deficiency) | ($92.9) | ($219.9) |

The assumptions and methodology used to determine the projected hypothetical wind-up balance sheet as at December 31, 2011 are described in Appendix C.

# APPENDIX B

## Plan Assets

The DB assets of the EGD RPP are held in trust by CIBC Mellon. We have relied upon the audited fund statements provided by PriceWaterhouseCoopers LLP as at December 31, 2010.

The starting point for our projection of assets was the market value of EGD RPP DB assets as at December 31, 2010 of $736.2M.

### Investment Policy

The EGD RPP plan administrator adopted a statement of investment policy and procedures, last revised in 2011. This policy is intended to provide guidelines for the manager(s) as to the level of risk which is commensurate with the Plan's investment objectives. A significant component of this investment policy is the asset mix.

The target asset mix as at August 31, 2011 is provided for information purposes:

| | Investment Policy Target |
|---|---|
| Canadian equities | 21.0% |
| Global equities | 17.0% |
| Emerging market equities | 6.5% |
| Fixed income – universe | 30.0% |
| Fixed income – real return | 10.0% |
| Infrastructure | 9.0% |
| Real estate | 6.5% |
| Cash and cash equivalents | 0.0% |
| | 100% |

Because of the mismatch between the EGD RPP assets (which are invested in accordance with the above investment policy) and the liabilities (which tend to behave like long bonds) the Plan's financial position will fluctuate over time. These fluctuations could be significant and could cause the EGD RPP to become under, or over, funded even if the Company contributes to the Plan based on the funding requirements presented in this report.

# APPENDIX C

## Actuarial Methods and Assumptions

### Actuarial Methods – Projected Going-concern Basis at December 31, 2011

#### *Valuation of Assets*

For purposes of this estimate, we have projected the market value of EGD RPP DB assets at December 31, 2010 using benchmark asset returns (net of all expenses) of -0.68% from January 1, 2011 to August 31, 2011, and our best estimate of asset returns (net of all expenses) of 1.95% from September 1, 2011 to December 31, 2011. Therefore, the annual rate of return over 2011 (net of all expenses) assumed in our projection is 1.27%.

Projected cash flows over 2011 have been incorporated into our projection.

**Actual assets as at December 31, 2011 will differ from this estimate.**

#### *Valuation of Actuarial Liabilities and Current Service Cost*

For purposes of this projection, we have continued to use the projected unit credit actuarial cost method for the valuation of actuarial liabilities and current service cost of the EGD RPP. Under this method, we determine the present value of benefit cash flows expected to be paid in respect of service accrued prior to the valuation date, based on projected final average earnings.

### Actuarial Assumptions – Projected Going-Concern Basis at December 31, 2011

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

For purposes of this projection, we have used the same going-concern valuation assumptions as were used for the December 31, 2010 valuation of the EGD RPP, summarized on the following page.

| Assumption | Current Valuation |
|---|---|
| Discount rate: | 5.75% |
| Inflation: | 2.25% |
| ITA limit / YMPE Increases: | 2.75% |
| Pensionable Earnings Increases: | 4.00% |
| Post retirement Pension Increases: | 1.125% |
| Retirement Rates: | Age related table |
| Termination Rates: | Age related table |
| Mortality Rates: | 100% of the rates of the 1994 Uninsured Pensioner Mortality Table |
| Mortality Improvements: | Fully generational using Scale AA |
| Disability Rates: | None |
| Eligible Spouse at Retirement: | 80% |
| Spousal Age Difference: | Male two years older |
| DB/DC Choice: | Continue in current component |
| Benefits Subject to Consent: | Consent on early retirement |

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

**Our assumptions are based on the economic environment as of August 31, 2011 and input provided by the Company for the December 31, 2010 valuation. Actual assumptions as at December 31, 2011 will reflect the economic environment and input from the Company at that time, and may differ from those used in this projection.**

Sample rates from the age related tables are summarized below:

| Age | Termination - Male | Termination - Female | Retirement |
|---|---|---|---|
| 20 | 5.0% | 9.5% | 0.0% |
| 25 | 5.0% | 13.0% | 0.0% |
| 30 | 5.0% | 11.0% | 0.0% |
| 35 | 4.6% | 8.5% | 0.0% |
| 40 | 3.0% | 4.0% | 0.0% |
| 45 | 2.5% | 3.9% | 0.0% |
| 50 | 1.5% | 2.8% | 0.0% |
| 55 | 0.0% | 0.0% | 5.0% |
| 56 | 0.0% | 0.0% | 5.0% |
| 57 | 0.0% | 0.0% | 7.5% |
| 58 | 0.0% | 0.0% | 7.5% |
| 59 | 0.0% | 0.0% | 10.0% |
| 60 | 0.0% | 0.0% | 20.0% |
| 61 | 0.0% | 0.0% | 20.0% |
| 62 | 0.0% | 0.0% | 20.0% |
| 63 | 0.0% | 0.0% | 20.0% |
| 64 | 0.0% | 0.0% | 20.0% |
| 65 | 0.0% | 0.0% | 100.0% |

A 20% retirement rate is assumed in lieu of the above rate in the year in which a member qualifies for early retirement with an unreduced pension and in each subsequent year until age 65.

For members who terminate from the Plan before being eligible to retire we have assumed two-thirds will elect a commuted value determined on a basis consistent with the 2009 CIA Standard, and that one-third will elect a deferred, with pension commencement at age 55.

The following is a summary of the rationale for the material assumptions that are expected to be used as at December 31, 2011.

**Discount Rate**

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

The discount rate is comprised of the following:

- Estimated returns for each major asset class consistent with market conditions on the valuation date and the target asset mix specified in the Plan's investment policy.
- Additional returns assumed to be achievable due to active equity management equal to the fees related to active equity management. Such fees were determined by the difference between the provision for total investment expenses and the hypothetical fees that would be incurred for passive management of all assets.
- Implicit provision for investment and non-investment administrative expenses determined as the expected rate of investment and administrative expenses to be paid from the fund in the future. While recent experience has differed from the assumption, our discussions with management have led us to conclude that this assumption is appropriate.
- A margin for adverse deviations of 0.59%.

The discount rate was developed as follows:

| | |
|---|---|
| Assumed investment return | 6.73% |
| Additional returns for active management | 0.11% |
| Investment management and administrative expense provision | (0.50%) |
| Margin for adverse deviation | (0.59%) |
| Net discount rate | 5.75% |

**Inflation**

The inflation assumption is based on the mid-point of the Bank of Canada's inflation target range of between 1% and 3%, and market expectations of long-term inflation implied by the yields on nominal and real return bonds at the valuation date of 2.5%.

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

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

**Pensionable Earnings**

This assumption is based on Company expectations.

## Actuarial Methods and Assumptions – Projected Solvency and Wind-up Basis at December 31, 2011

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

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

The circumstances in which the Plan wind-up is assumed to have taken place are as follows:

- Membership in the Plan ceases on the valuation date; and
- No projection of salaries and YMPE are assumed to occur after the valuation date for active and suspended members.

Thereby giving rise to the following benefits:

- Active and suspended members not within 10 years of pensionable age (under the age of 55) receive the termination benefit under the Plan;
- Active and suspended members within 10 years of pensionable age (age 55 and older) receive the retirement benefit under the Plan; and
- Deferred pensioners, pensioners and survivors receive the benefit to which they are entitled on the valuation date.

It is assumed that, on Plan wind-up, the Company would grant consent to early retirement for all active members age 55 and over.

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

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

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

Benefits provided as an immediate or deferred pension are assumed to be settled through the purchase of annuities based on an estimate of the cost of purchasing annuities. However, there is limited data available to provide credible guidance on the cost of a purchase of indexed annuities in Canada. Therefore, we have relied upon the *Canadian Institute of Actuaries Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2010 and December 30, 2011*, reflecting additional supplemental information to August 2011.

In determining the financial position of the Plan on the solvency basis, we have valued those benefits that would have been paid had the Plan been wound-up on the valuation date, with the exception of certain benefits which may be excluded, as permitted by the Act. Specifically, future cost-of-living increases on pensions in payment were excluded from our calculation of solvency liabilities. All members are assumed to be fully vested in their accrued benefits.

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

The assumptions below are based on economic conditions as at August 31, 2011.

| | |
|---|---|
| **Basis for Benefits Assumed to be Settled Through a Lump Sum** | |
| Non-indexed interest rate: | 3.40% per year for 10 years, 4.70% per year thereafter |
| Partially-indexed (50%) interest rate: | 2.40% per year for 10 years, 3.30% per year thereafter |
| Partially-indexed (55%) interest rate: | 2.30% per year for 10 years, 3.10% per year thereafter |
| **Basis for Benefits Assumed to be Settled Through the Purchase of an Annuity** | |
| Non-indexed interest rate: | 3.70% per year |
| Partially-indexed (50%) interest rate: | 2.29% per year |
| Partially-indexed (55%) interest rate: | 2.11% per year |
| Termination expenses: | $600,000 |

## *Termination Expenses*

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

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

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

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

## *Incremental Cost*

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

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

- Pensionable earnings, the *Income Tax Act* pension limit and the Year's Maximum Pensionable Earnings increase in accordance with the related going-concern assumptions;
- Active members accrue pensionable service in accordance with the terms of the Plan; and
- Cost of living adjustments are consistent with the inflation assumption used for the going-concern valuation.

# APPENDIX D

## Membership Data

### Analysis of Membership Data at December 31, 2010

For purposes of this estimate, we have based our projection on EGD RPP membership data as at December 31, 2010, which was provided by Enbridge. Membership data was projected forward based on the assumptions described in Appendix C.

EGD RPP membership data as at December 31, 2010 are summarized below.

| | 12.31.2010 |
|---|---|
| **Active and Disabled Members Accruing Defined Benefit Service (Non-SMEs)** | |
| Number | 1,742 |
| Total base earnings at the valuation date | $128,113,000 |
| Average base earnings at the valuation date | $73,500 |
| Average years of Non-SME DB pensionable service | 13.3 years |
| Average age | 46.0 years |
| **Active and Disabled Members Accruing Defined Benefit Service (SMEs)** | |
| Number | 31 |
| Total base earnings at the valuation date | $6,189,000 |
| Average base earnings at the valuation date | $199,600 |
| Average years of Non-SME DB pensionable service | 12.3 years |
| Average years of SME DB pensionable service | 2.8 years |
| Average age | 50.0 years |
| **Suspended Defined Benefit Members Accruing Defined Contribution Service** | |
| Number | 85 |
| Total base earnings at the valuation date | $7,226,000 |
| Average base earnings at the valuation date | $85,000 |
| Average years of Non-SME DB pensionable service | 5.4 years |
| Average age | 45.0 years |
| **Other Suspended Defined Benefit Members (Non-SMEs)** | |
| Number | 13 |
| Total base earnings at the valuation date | $1,263,000 |
| Average base earnings at the valuation date | $97,200 |
| Average years of Non-SME DB pensionable service | 4.7 years |
| Average age | 39.0 years |
| **Other Suspended Defined Benefit Members (SMEs)** | |
| Number | 15 |
| Total base earnings at the valuation date | $3,596,000 |
| Average base earnings at the valuation date | $239,700 |
| Average years of Non-SME DB pensionable service | 8.9 years |
| Average years of SME DB pensionable service | 1.5 years |
| Average age | 48.5 years |

| | 12.31.2010 |
|---|---|
| **Active Defined Contribution Members without Defined Benefit Service** | |
| Number | 202 |
| Total base earnings at the valuation date | $16,115,000 |
| Average base earnings at the valuation date | $79,800 |
| Average age | 40.5 years |
| **Suspended Defined Contribution Members without Defined Benefit Service** | |
| Number | 9 |
| Total base earnings at the valuation date | $1,121,000 |
| Average base earnings at the valuation date | $124,600 |
| Average age | 38.1 years |
| **Deferred Pensioners** | |
| Number | 192 |
| Total annual pension* | $935,000 |
| Average annual pension* | $4,900 |
| Average age | 48.9 years |
| **Pensioners and Survivors** | |
| Number | 1,432 |
| Total annual lifetime pension | $28,339,700 |
| Average annual lifetime pension | $19,800 |
| Total annual temporary pension | $2,088,000 |
| Average annual temporary pension | $6,900 |
| Average age | 71.7 years |

# APPENDIX E

## Summary of EGD RPP Provisions

For purposes of this projection, we have reflected the provisions of the EGD RPP in effect on August 31, 2011. Since December 31, 2010, the Plan has been amended to allow immediate vesting, and to reflect various housekeeping items.

### DB Component

The following is a summary of the main provisions of the DB component of the EGD RPP in effect on August 31, 2011. This summary is not intended as a complete description of the Plan.

| | |
|---|---|
| **Background** | The EGD RPP became effective January 1, 1971.<br>Benefits are based on a set formula and are entirely paid for by Enbridge.<br>Effective July 1, 2001, the Plan was redesigned for all active or suspended members at that date. Prior to the redesign, participants in the DB component of the Plan accrued Contributory credited service. Following the redesign, all active and suspended members were required to elect to participate in either the DB component or the DC component of the Plan for future service. Participants in the DB component of the Plan accrue non-contributory or SME credited service.<br>In the future, members who are not SMEs may switch between the DB and DC components on the January 1 following the date they achieve 40 points or 60 points. Any changes will affect service after the decision point only. Members who are SMEs must participate in the DB component of the Plan. |
| **Eligibility for Membership** | New employees become members of the Plan immediately. They may elect to participate in either the DB or DC component of the Plan. SMEs must participate in the DB component. |
| **Vesting** | All employees are immediately vested as of July 1, 2011. |
| **Employee Contributions** | No employee contributions are required or permitted based on the current plan provisions. Prior to July 1, 2001, employee contributions were required. |
| **Retirement Dates** | Normal Retirement Date<br>• The normal retirement date is the first day of the month coincident with or next following the member's 65th birthday.<br>Early Retirement Date<br>• A member becomes immediately vested and may choose to retire as early as age 55. |

| | |
|---|---|
| **Normal Retirement Pension** | **Contributory Service:**<br>2.0% of Final Five Year Average Earnings multiplied by years of contributory credited service;<br>less<br>100% of the Contributory Canada Pension Plan Entitlement.<br>**Non-Contributory Service:**<br>1.2% of Final Three Year Average Earnings multiplied by years of non-contributory credited service;<br>less<br>50% of the Non-Contributory Canada Pension Plan Entitlement;<br>**SME Credited Service:**<br>2.0% of Final Three Year Average Earnings multiplied by years of SME credited service. |
| **Final Five Year Average Earnings** | Final Five Year Average Earnings is calculated using the highest 60 consecutive months of earnings received by the member in the 120 months immediately prior to termination or retirement, including 50% of the actual bonus received for senior executive employees. |
| **Final Three Year Average Earnings** | Final Three Year Average Earnings is calculated using the highest 36 consecutive months of earnings received by the member in the 120 months immediately prior to termination or retirement, plus the sum of the highest three Pensionable Bonus payments made in the last five years divided by 3. |
| **Canada Pension Plan Entitlement** | **Contributory Service:**<br>One thirty-fifth of 25% of the lesser of the average earnings in the 60 months immediately preceding the date of exit and average of the YMPE in the five calendar years, including the current year, preceding the date of exit, multiplied by contributory credited service, to a maximum of 35 years.<br>**Non-Contributory Service:**<br>Calculated as if the member had reached age 65, multiplied by the ratio of the member's non-contributory credited service after the later of January 1, 1966 or age 18, to the number of years of possible CPP coverage to age 65, recognizing the permitted dropout period of 15%, and reduced by 6% per year for every year the retirement date precedes age 65, to a maximum reduction of 30%. |

| | |
|---|---|
| **Early Retirement Pension** | The following benefits apply if a member retires early with the Company's consent:<br>• If the member has attained age 60, the pension payable is as described above in the Normal Retirement section.<br>• If the member has 30 years of continuous Service or has attained age 60, the member is eligible for the benefits described in the previous paragraph plus, for contributory credited service, an additional benefit of a bridge pension payable to age 65 equal to 100% of the Contributory Canada Pension Plan Entitlement.<br>• If the member has not attained age 60 the member is also eligible, for non-contributory credited service, for an additional benefit of a bridge pension payable to age 60 equal to 50% of the Non-Contributory Canada Pension Plan Entitlement.<br>• If the member has not attained age 60 or 30 years of continuous service at retirement, an early retirement reduction of 5% per year is applicable from age 60 in respect of contributory and non-contributory credited service. For SMEs, the early retirement reduction is 3% per year for SME credited service. The reduction applies to the benefit described in the immediately preceding paragraphs including the bridge pensions.<br>If a member retires without company consent the benefit is actuarially equivalent to the benefit payable at age 65. |
| **Maximum Pension** | The total annual pension payable from the Plan upon retirement, death or termination of employment cannot exceed the lesser of:<br>• 2% of the average of the best three consecutive years of total compensation paid to the member by Enbridge; and<br>• $2,552.22, or such other maximum as may apply from time to time<br>indexed to the date of pension commencement, multiplied by his total credited Service and reduced for early retirement in accordance with the *Income Tax Act* rules. |
| **Indexation of Pensions in Payment** | On December 1 of each year a contractual cost of living increase equal to a percentage of the annual increase in the Consumer Price Index will apply to pensions in payment for at least one year. This percentage is 55% for contributory credited service and 50% for non-contributory and SME credited service. Indexation only applies to members that retire from active membership.<br>Prior to July 1, 2001, any increases to pensions in payment were on an ad-hoc basis. |

| | |
|---|---|
| **Death Benefits** | **Death Before Eligible for Early Retirement**<br>If a member dies before he is eligible for early retirement benefits, the member's spouse, or beneficiary if there is no spouse, will receive a lump sum settlement equal to 100% of the commuted value of the member's reduced accrued pension deferred to age 55, in respect of all credited service.<br>**Death After Eligibility for Early Retirement**<br>If a member dies after his early retirement date and before his pension payments have begun, the member's spouse, or beneficiary if there is no spouse, will receive either a lump sum settlement or an immediate pension equal in value to 100% of the commuted value of the member's reduced accrued pension, in respect of all credited service.<br>**Death After Retirement**<br>The death benefit payable is in accordance with the form elected.<br>The normal form of pension is a Joint and 60% Survivor annuity for members with a spouse and a life annuity with a 15-year guarantee period for single members. |
| **Termination Benefits** | If a member's employment terminates for reasons other than death or retirement, the member is entitled to their reduced accrued pension deferred to age 55. The Member has the option to transfer the value of the benefit to a locked-in RRSP. |
| **Disability Benefits** | Disabled members are eligible to retire at age 65. For members whose disability commenced before July 1, 2001 salary is assumed to increase with the Average Industrial Wage, while for members whose disability commences after July 1, 2001 salary is assumed to increase with inflation, subject to a maximum of 5% per year, to retirement. The disabled member continues to accrue credited service while disabled. |

## DC Component

The following is a summary of the main provisions of the DC component of the EGD RPP in effect on August 31, 2011. This summary is not intended as a complete description of the Plan.

| | |
|---|---|
| **Background** | The DC component of the EGD RPP became effective July 1, 2001.<br>Employer contributions are remitted to individual member accounts and are credited with interest.<br>Members receive the balance of their individual employer account upon termination, death or retirement. |
| **Eligibility for Membership** | New employees become members of the Plan immediately. They may elect to participate in either the DB or DC component of the Plan. SMEs must participate in the DB component. |
| **Vesting** | All employees are immediately vested as of July 1, 2011. |
| **Employee Contributions** | No employee contributions are required or permitted. |
| **Employer Contributions** | Employer contributions to the DC component are based on a member's points.<br>• less than 40 points: 4.0% of pensionable earnings[3]<br>• 40 to 60 points: 5.5% of pensionable earnings<br>• greater than 60 points: 7.0% of pensionable earnings |
| **Maximum Contribution** | The employer contributions are limited to the amounts under the ITA. |
| **Pensionable Earnings** | Base salary plus 50% of actual bonus received. |

[3] For members who were participating in the DC component of the Plan at June 30, 2001, the minimum employer contribution is 5.0% of pensionable DC earnings.

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# BOARD STAFF INTERROGATORY #4

## INTERROGATORY

Ref: Ex. B /Tab 2/ Sch 5

Please report the pension plan's annual investment returns for the last 5 years and compare them to the annual investment returns of a group of peers of comparable size and scale operating in Canada.

## RESPONSE

Please see the table provided below.

| | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|
| EGD RPP | 10.6% | 1.0% | -18.4% | 16.7% | 9.8% |
| Comparable Peers* | | | | | |
| 90th percentile | 14.3 | 8.9 | -11.7 | 19.2 | 12.7 |
| 75th percentile | 13.0 | 7.7 | -13.2 | 17.3 | 11.6 |
| 50th percentile | 11.4 | 3.7 | -14.7 | 13.9 | 10.3 |
| 25th percentile | 8.7 | 1.7 | -19.6 | 12.1 | 8.7 |
| 10th percentile | 7.2 | 0.1 | -24.3 | 4.4 | 7.9 |

*Based on companies on the TSX composite with pension assets between $100M - $2B

Witnesses: S. Kancharla
R. Lei
A. Patel

## BOARD STAFF INTERROGATORY #5

### INTERROGATORY

Ref: Ex. B /Tab 2/ Sch 5

(a) Does EGD directly manage the plan or is it managed by another entity?

(b) Please name the corporate entity managing the plan.

(c) Does the plan include only the employees and retirees of EGD or are there other members (such as employees of affiliated companies) included in the plan? If so, please provide details as to the numbers of any such employees and the identity of the affiliates.

### RESPONSE

a) EGD does not directly manage the plan.

b) The plan is managed by the Pension Administration Group at Enbridge Inc. under the direction of the Pension Committee, which sets the plan goals and asset mix policy, while the investments are managed by various investment managers. EGD has seat a on the Pension Committee.

c) The EGD RPP plan includes Enbridge Gas Distribution Inc., and two affiliates, Gazifère Inc. and Enbridge Gas New Brunswick Inc. However, the cash contribution requested in the Z factor only pertains to Enbridge Gas Distribution Inc.

The EGD SERP and EGD SSERP only includes Enbridge Gas Distribution Inc.

Member details by plan and affiliate are:

| | Enbridge Gas Distribution Inc. | Enbridge Gas New Brunswick Inc. | Gazifere Inc. |
|---|---|---|---|
| EGD RPP | 3,477 | 143 | 101 |
| EGD SERP | 29 | N/A | N/A |
| EGD SSERP | 5 | N/A | N/A |

Witnesses: S. Kancharla
R. Lei
A. Patel

31 March 2011

# Pension Plan for Employees of Enbridge Gas Distribution Inc. and Affiliates

## Actuarial Cost Certificate as at January 1, 2011

MERCER

Canada Revenue Agency Registration Number: 0242016

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**Note to reader regarding actuarial valuations:**

This report may not be relied upon for any purpose other than those explicitly noted in the Introduction or by any party other than the parties noted in the Introduction. Mercer is not responsible for the consequences of any other use. A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future.

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

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

Furthermore, should the plan be wound up, the going-concern funded status and solvency financial position, if different from the wind-up financial position, become irrelevant. Emerging experience, including the growth of wind-up liabilities compared to the plan's assets (including future contributions and investment returns), will affect the wind-up funded position of the plan assuming it is wound-up in the future. In fact, even if the plan were wound-up on the valuation date, the financial position would continue to fluctuate until the benefits are fully settled.

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

# Contents

1

# Introduction

## *To Enbridge Gas Distribution Inc.*

At the request of Enbridge Gas Distribution Inc. (the "Company"), we have estimated the financial position of the Pension Plan for Employees of Enbridge Gas Distribution Inc. and Affiliates (the "Plan") as at January 1, 2011 on a going-concern basis and on a solvency basis. The purpose of our calculations was to provide the information required to be included in an actuarial cost certificate prepared pursuant to section 7.1 of the Ontario *Pension Benefits Act Regulations*. Note that the Plan is made up of defined contribution ("DC") and defined benefit ("DB") components.

The information presented is prepared for the internal use of the Company and for filing with the Financial Services Commission of Ontario ("FSCO"). This information presented is not intended or suitable for any other purpose.

In accordance with pension benefits legislation, the next actuarial valuation of the Plan will be required as at a date not later than December 31, 2012, or as at the date of an earlier amendment to the Plan. Unless a new cost certificate is filed as of January 1, 2012 demonstrating that the Plan has sufficient surplus, employer current service cost contributions must resume in 2012.

## Terms of Engagement

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

- It has been prepared in accordance with applicable pension legislation and based on methods and actuarial assumptions that are consistent with actuarial standards of practice in Canada;

- As instructed by the Company, we have reflected a margin for adverse deviations in our going-concern valuation by reducing the going-concern discount rate by 0.59% per year; and,

- We have reflected the Company decisions for determining the solvency funded position. Certain excludable benefits were excluded from the solvency liabilities.

Our calculations reflect the provisions of the Plan as at December 31, 2009. Based on the information provided by the Company, no substantive amendments have been made to the Plan since that date. A summary of the plan provisions is provided in Appendix F of our Report on the Actuarial Valuation for Funding Purposes of the Plan as at December 31, 2009, dated September 30, 2010.

Our calculations are based on an extrapolation of a valuation performed using membership data as at December 31, 2009. The membership data used in our calculations was summarized in Appendix E of our Report on the Actuarial Valuation for Funding Purposes of the Plan as at December 31, 2009, dated September 30, 2010.

The assumptions used in our calculations are described in Appendix B. We have used the same going-concern valuation assumptions and methods as were used for the valuation as at December 31, 2009, except for the discount rate, which has been updated to reflect market conditions on January 1, 2011. These changes have resulted in an increase of $21,645,000 in the estimated going-concern funding target and an increase of $768,000 in the employer current service cost. The solvency assumptions have been updated to reflect market conditions at the valuation date. Emerging experience will affect the funded position of the Plan.

After checking with representatives of Enbridge Gas Distribution Inc., to the best of our knowledge there have been no events subsequent to the valuation date which, in our opinion, would have a material impact on the results of the valuation.

Comments made in our report on the actuarial valuation of the Plan as at December 31, 2009 regarding the Ontario Court of Appeal's decision in *Aegon Canada Inc. and Transamerica Life Canada versus ING Canada Inc.* and Supreme Court of Canada dismissal of the appeal in Monsanto Canada Inc. versus Superintendent of Financial Services ("*Monsanto*"), as well as other similar decisions, continue to apply to this report.

2

# Valuation Results

## Going-concern Financial Position

The plan's estimated financial position as at January 1, 2011 on a going-concern basis, in comparison with that shown in the last filed actuarial valuation at December 31, 2009, are summarized as follows:

| | 01.01.2011 | 12.31.2009 |
|---|---|---|
| **Assets** | | |
| Market value of assets | $734,426,000 | $698,698,000 |
| **Going-concern funding target** | | |
| ▪ active and suspended members | $356,767,600 | $308,389,300 |
| ▪ pensioners and survivors | $321,634,900 | $326,142,300 |
| ▪ deferred pensioners | $7,593,000 | $7,003,400 |
| Total | $685,995,500 | $641,535,000 |
| Funding excess (shortfall) | $48,430,500 | $57,163,000 |
| Assets over funding targets | 107% | 109% |

## Reconciliation of Financial Status

| | |
|---|---|
| Funding excess (shortfall) as at previous valuation | $57,163,000 |
| Interest on funding excess (funding shortfall) at 6.00% per year | $3,429,800 |
| DB contributions drawn from funding excess, with interest | ($15,129,500) |
| DC contributions drawn from funding excess, with interest | ($1,446,500) |
| Net investment return different than expected | $26,058,700 |
| Impact of changes in assumptions and methods | ($21,645,000) |
| Funding excess (shortfall) as at current valuation | $48,430,500 |

## Solvency Financial Position

The plan's estimated solvency position as at January 1, 2011, in comparison with that shown in the last filed actuarial valuation at December 31, 2009, are summarized as follows:

| | **01.01.2011** | **12.31.2009** |
|---|---|---|
| **Assets** | | |
| Market value of assets | $734,426,000 | $698,698,000 |
| Termination expense provision | ($600,000) | ($600,000) |
| Solvency assets | $733,826,000 | $698,098,000 |
| **Solvency liabilities before exclusion of benefits:** | | |
| ▪ active and suspended members | $437,831,700 | $380,226,900 |
| ▪ pensioners and survivors | $378,050,800 | $384,153,400 |
| ▪ deferred pensioners | $9,113,600 | $8,726,600 |
| Total solvency liabilities before exclusion of benefits | $824,996,100 | $773,106,900 |
| Value of excluded benefits | ($126,131,200) | ($107,030,000) |
| Solvency liabilities | $698,864,900 | $666,076,900 |
| Surplus (shortfall) on a market value basis | $34,961,100 | $32,021,100 |
| Transfer ratio | 0.89 | 0.90 |

## Hypothetical Wind-up Financial Position

The plan's estimated hypothetical wind-up position as at January 1, 2011, in comparison with that shown in the last filed actuarial valuation at December 31, 2009, are summarized as follows:

| | **01.01.2011** | **12.31.2009** |
|---|---|---|
| **Assets** | | |
| Market value of assets | $734,426,000 | $698,698,000 |
| Termination expense provision | ($600,000) | ($2,000,000) |
| Wind-up assets | $733,826,000 | $696,698,000 |
| | | |
| **Hypothetical wind-up liabilities:** | | |
| ▪ active and suspended members | $437,831,700 | $380,226,900 |
| ▪ pensioners and survivors | $378,050,800 | $384,153,400 |
| ▪ deferred pensioners | $9,113,600 | $8,726,600 |
| Total wind-up liability | $824,996,100 | $773,106,900 |
| Wind-up excess (shortfall) | ($91,170,100) | ($76,408,900) |

## Current Service Cost (December 31, 2009)

Based on the results of the last actuarial valuation filed as at December 31, 2009 and adjusted for the impact of the change in discount rate, the employer's DB current service cost until the next valuation date is set at 12.07% of members' pensionable earnings.

As such, the estimated employer DB current service cost for 2011 is as follows:

**Estimated DB Current Service Cost**

| | **2011** |
|---|---|
| Estimated members' pensionable earnings | $132,322,700 |
| Employer's DB current service cost as a percentage of members' pensionable earnings | 12.07% |
| Estimated employer's DB current service cost | $15,977,500 |

## Impact on Contribution Holidays

In accordance with Sections 7(3.1) and 7(3.2) of the *Ontario Pension Benefits Act Regulations*:

- Surplus identified in the most recently filed actuarial valuation can only be used to reduce contributions for current service cost if an administrator files, within the first 90 days of the fiscal year, an actuarial cost certificate for the fiscal year; and,
- The maximum amount of any surplus identified in the most recently filed actuarial valuation report that can be used in such manner is equal to the lesser of:
  - The amount, if any, by which the going concern assets reported in the actuarial cost certificate filed for the fiscal year exceed the sum of the estimated going-concern funding target liabilities as reported in the certificate ($48,430,500); and,
  - The amount, if any, by which the solvency assets reported in the actuarial cost certificate filed for the fiscal year exceed the sum of the estimated solvency liabilities as reported in the certificate ($34,961,100).

As the estimated employer DB current service cost (i.e. $15,977,500) is lower than the lesser of these two amounts (i.e. $34,961,100), in accordance with Section 7(3) of the *Ontario Pension Benefits Act Regulations* the contribution holiday can continue.

In addition, since the DB component of the Plan is fully funded on both going concern and solvency bases, subject to the *Ontario Pension Benefits Act Regulations,* the Plan terms and any collective or employment agreement, the Company may apply DB assets in satisfaction of its contribution requirements for the DC component of the Plan. DC contribution requirements for 2011 are estimated to be $1,439,900.

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# Actuarial Opinion

In our opinion, for the purpose of determining the estimated funded status of the Plan as at January 1, 2011:

- The membership data are sufficient and reliable.
- The assumptions are appropriate.
- The methods employed are appropriate and consistent with accepted actuarial practice in Canada.

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada except that it does not include the following disclosures which were not required to be provided under our terms of the engagement with the Company:

- Sensitivity of the valuation results to a 1% decrease in the discount rate; and,
- The solvency incremental cost.

This report has been prepared in accordance with the funding and solvency standards set by the *Ontario Pension Benefits Act*.

| | |
|---|---|
| Chris Heller | Allen Hornung |
| FCIA, FSA | FCIA, FSA |
| March 31, 2011 | March 31, 2011 |
| Date | Date |

Appendix A

# Plan Assets

The DB assets of the Plan are held in trust by CIBC Mellon. We have relied upon the unaudited fund statements provided by CIBC Mellon, for the period from December 31, 2009 to January 1, 2011.

The pension fund transactions for the period from December 31, 2009 to January 1, 2011 are summarized as follows:

**Reconciliation of Plan Assets (Market Value)**

| | **2010** |
|---|---|
| January 1 | $698,698,000 |
| Adjustment to assets to reflect audited statements | $2,364,000 |
| | $701,062,000 |
| PLUS | |
| Company contributions | |
| ▪ Current service | $0 |
| ▪ Special payments | $0 |
| Investment income | $69,592,000 |
| | $69,592,000 |
| LESS | |
| Pensions paid | $29,305,000 |
| Lump-sum refunds | $1,051,000 |
| Transfers to DC | $1,405,000 |
| Investment expenses | $2,733,000 |
| Other expenses | $1,734,000 |
| | $36,228,000 |
| December 31 | $734,426,000 |

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

## *Investment Policy*

The plan administrator last revised its Statement of Investment Policies and Procedures effective May 2007. This policy is intended to provide guidelines for the manager(s) as to the level of risk which is commensurate with the DB component of the Plan's investment objectives. A significant component of this investment policy is the asset mix.

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

| | **DB Investment Policy** | | | **Actual Asset Mix** |
|---|---|---|---|---|
| | **Minimum** | **Target** | **Maximum** | **as at January 1, 2011** |
| Canadian equities | 18.0% | 21.0% | 24.0% | 22.0% |
| Foreign equities | 22.5% | 31.5% | 40.5% | 30.9% |
| Fixed income – universe | 19.5% | 32.5% | 35.5% | 41.0% |
| Fixed Income – real return | 7.0% | 10.0% | 13.0% | |
| Infrastructure | 2.0% | 5.0% | 8.0% | 5.9% |
| Cash and short term assets | 0.0% | 0.0% | 5.0% | 0.2% |
| | | 100% | | 100% |

Appendix B

# Actuarial Methods and Assumptions

## Actuarial Methods – Going-concern Basis

### *Valuation of Assets*

For this valuation, we have continued to use the market value of assets.

### *Valuation of Actuarial Liabilities*

We have continued to use the same actuarial valuation method as was used in the last actuarial valuation of the Plan and summarized in Appendix C of our Report on the Actuarial Valuation for Funding Purposes of the Plan as at December 31, 2009, dated September 30, 2010.

For the purposes of this report, going concern liabilities of the plan and the estimated service costs were calculated at December 31, 2009 using the assumptions described below and then rolled forward from December 31, 2009 to January 1, 2011 using the expected growth in liabilities as a result of new service accruals, and actual benefit payments between these two dates.

## Actuarial Assumptions – Going-concern Basis

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

For purposes of this report, we have lowered the discount rate to 5.75% from 6.00% at December 31, 2009. All other assumptions used in our calculations were the same as those used in the most recent actuarial valuation of the Plan as at December 31, 2009. Emerging experience will result in gains or losses that will be revealed and considered in future actuarial valuations.

The assumptions used in the most recent actuarial valuation of the Plan as at December 31, 2009 are described in detail in our actuarial valuation report as at that date. The following is a summary of the rationale for the discount rate change since the last valuation at December 31, 2009.

### *Discount rate*

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

The discount rate is comprised of the following:

- Estimated returns for each major asset class consistent with market conditions on the valuation date and the target asset mix specified in the Plan's investment policy.
- Additional returns assumed to be achievable due to active equity management (net of related expenses).
- Implicit provision for expenses determined as the expected rate of investment and administrative expenses to be paid from the fund in the future.
- A margin for adverse deviations, based on the proportion of the Plan assets invested in equities and the excess return expected on equities, over government bond yields.

The discount was developed as follows:

| | |
|---|---|
| Assumed investment return | 6.61% |
| Active management | 0.23% |
| Implicit expense provision | (0.50%) |
| Margin | (0.59%) |
| Net discount rate | 5.75% |

The previous valuation assumed a discount rate of 6.00%.

## Actuarial Methods and Assumptions – Solvency Basis

With the exception of the assumptions summarized in the table on the following page, the assumptions and methods used in our calculations were the same as those used in the most recent actuarial valuation of the Plan as at December 31, 2009.

**Basis for benefits assumed to be settled through a lump sum**

| | |
|---|---|
| Non-indexed interest rate: | 3.70% per year for 10 years, 5.00% per year thereafter |
| Partially-indexed (50%) interest rate: | 2.80% per year for 10 years, 3.70% per year thereafter |
| Partially-indexed (55%) interest rate: | 2.70% per year for 10 years, 3.60% per year thereafter |
| Maximum pension limit: | ▪ $2,552.22 per year of service for members over age 55<br>▪ $2,552.22 per year of service, projected forward to the age which maximizes value at 2.77% for 10 years, and 3.54% per year thereafter, for members under age 55 |

**Basis for benefits assumed to be settled through the purchase of an annuity**

| | |
|---|---|
| Non-indexed interest rate: | 4.48% per year |
| Partially-indexed (50%) interest rate: | 2.77% per year |
| Partially-indexed (55%) interest rate: | 2.60% per year |
| Maximum pension limit: | ▪ $2,552.22 per year of service for immediate annuities<br>▪ $2,552.22 per year of service, projected forward to the age which maximizes value at 2.77% for 10 years, and 3.54% per year thereafter, for deferred annuities |

For the purposes of this report, solvency liabilities of the plan were calculated at December 31, 2009 using the assumptions described above and then rolled forward from December 31, 2009 to January 1, 2011 using the expected growth in liabilities as a result of new service accruals, actual pay increases, actual cost-of-living (COLA) increases granted to pensioners, and actual benefit payments between these two dates.

The value of benefits assumed to be settled through a lump sum transfer is based on the assumptions described in Section 3800 – *Pension Commuted Values* of the Canadian Institute of Actuaries' Standards of Practice applicable for January 1, 2011 for benefits expected to be settled through a lump sum transfer in accordance with relevant portability requirements.

Benefits provided as an immediate or deferred pension are assumed to be settled through the purchase of annuities based on an estimate of the cost of purchasing annuities. However, there is limited data available to provide credible guidance on the cost of a purchase of indexed annuities in Canada. Therefore, we have relied upon preliminary guidance from the Canadian Institute of Actuaries regarding appropriate annuity proxy discount rates as at January 1, 2011.

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

Appendix C

# Employer Certification

With respect to the estimate of the financial position of the Pension Plan for Employees of Enbridge Gas Distribution Inc. and Affiliates, as at January 1, 2011, I hereby certify that, to the best of my knowledge and belief:

- a copy of the official plan documents and of all amendments made up to January 1, 2011, were provided to the actuary;
- the valuation reflects Enbridge's decisions in regards to determining the solvency funding requirements;
- the asset information summarised in Appendix A is reflective of the Plan's assets;
- all events subsequent to December 31, 2009 that may have an impact on the results of the valuation have been communicated to the actuary.

March 29, 2011
Date

Signed

SONIA HÉROUX
Name

MERCER

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## CCC INTERROGATORY #3

### INTERROGATORY

(B/T2/S5/p. 4)

Pension costs are a cost of operating the distribution business. Please explain why EGD's management has not been able to "control" this cost. Please explain why EGD has not been able to "manage a growing pension obligation due to employee services rendered."

### RESPONSE

As outlined in Exhibit B, Tab 2, Schedule 5, paragraphs 19 and 20, EGD manages its pension plan over the long term. As a result it is unable to control the annual pension costs as managing pension costs on a short term basis would compromise the long term objects of the plan. Furthermore, the plan deficit primarily results from external economic factors that are not controllable by EGD.

The market forces of lower returns on invested assets and lower discount rates relating to future obligations has had the dual effect of retarding the growth of invested assets coupled with an increase in the present value of future obligations. The combined effect of this is the creation of a deficit, which in turn triggers a contribution requirement resulting in added costs.

Furthermore, due to a new regulation introduced on June 23, 2009 relating to the requirement for an annual cost certificate, EGD no longer has a guaranteed three year contribution holiday if the annual cost certificate shows a plan deficit. Since the plan is managed on a long term basis EGD does not have the ability to control costs as investment mandates are set with a long term view.

Witnesses: S. Kancharla
R. Lei
A. Patel