

ACTUARIAL REPORT
(for pension expense purposes)
on the Pension Liabilities which
CENTRA GAS MANITOBA INC.
has as at
DECEMBER 31, 2011
with respect to the
Centra Gas Manitoba Inc.
Union Employees' Pension Plan

June, 2012

Prepared by:

TABLE OF CONTENTS

	<u>Page</u>
1. Purpose	1
2. Data	1
3. Membership	2
4. Assumptions	2
5. Contribution Requirements for Pension Expense	3
6. Valuation Procedure	3
7. Valuation Results	4
8. Reconciliation of Results	5
9. Projection Formula for Liabilities	6
10. Accounting for Pension Obligations	6
11. Actuarial Opinion.....	7

APPENDICES

- I Summary of Data
- II Summary of the Union Plan
- III Summary of Actuarial Assumptions

I. PURPOSE

The purpose of this Report is to:

- indicate the liabilities which the Centra Gas Manitoba Inc. (the Company) has at December 31, 2011, with respect to the employees participating in the Centra Gas Manitoba Inc. Union Employees' Pension Plan (Union Plan), and
- determine the formula for pension expense as at December 31, 2011.

The liabilities have been computed on a going concern basis. This basis contemplates the continued existence of the pension plan and the funding arrangements for the benefits under the pension plan.

The Union Plan self-insures all benefits and therefore is exposed to investment and demographic risks. There are only 3 members accruing new pensions under the Union Plan at the valuation date. It may be desirable at some time in the future, if conditions are appropriate, to consider alternatives to settling the accrued benefit obligations under this Union Plan in a manner agreeable to the members and the Company.

The guidance for the calculation of the liabilities and the preparation of this Report are the Practice-Specific Standards for Pension Plans of the Canadian Institute of Actuaries and IAS 19, Employee Benefits issued by the International Accounting Standards Committee.

2. DATA

All members actively employed by the Company on June 20, 2001 ceased to accrue future service benefits under the Union Plan and commenced to accrue future service benefits under the Manitoba Civil Service Superannuation Plan, as employees of Manitoba Hydro.

The data on which the valuation is based was provided by the Civil Service Superannuation Board (Superannuation Board). Due to time constraints, the data provided by the Superannuation Board was sent without performing their normal annual edit checks. The details of the data provided are described in Appendix I.

However, we checked the data for missing information, illogical information and reconciled with the prior valuation data. A few minor changes to the data resulted from the checks made.

3. MEMBERSHIP

The data provided indicated that the Union Plan had the following participants:

	<i>December 31, 2011</i>	<i>December 31, 2010</i>
Retired Members	138	136
Terminated Vested Members	18	19
Active Members	3	3
Suspended Members	221	228
Total	<u>380</u>	<u>386</u>

A reconciliation of the number of member records used in the calculations is shown in Appendix I.

The numbers shown for retired members includes 28 beneficiary records at December 31, 2011 and 30 at December 31, 2010.

4. ASSUMPTIONS

The assumptions used in this valuation and the assumptions used in the last valuation are shown in Appendix III.

The selection of the demographic assumptions is made by the actuary. The demographic assumptions used for this valuation are the same as those used for the 2010 Report.

The selection of the economic assumptions is made by management with consultation provided by the actuary. The economic assumptions used for this Report were reduced. In particular, the discount rate was reduced from 6.50% to 5.25%. This change was made to better reflect the yields available on high quality corporate bonds.

The assumptions are, for the most part, on a best estimate basis but with some allowance for adverse deviation. For this valuation, the Union Plan had an investment experience loss and a liability experience gain as reported in the reconciliation part of this Report.

5. CONTRIBUTION REQUIREMENTS FOR PENSION EXPENSE

As indicated, all active members employed by the Company on June 20, 2001 ceased to accrue future service benefits under the Union Plan. Only members who are disabled continue to accrue service under the Union Plan.

The Company is expected to

- make normal actuarial cost (current service cost) contributions to the Union Plan, in the year of accrual, in respect of benefits accruing for members who are disabled, and
- amortize any unfunded liabilities due to benefit changes, actuarial gains or losses due to deviations from expected experience and any transitional assets or obligations.

6. VALUATION PROCEDURE

The accrued benefit actuarial cost method with salary projection has been used to determine the accrued liabilities and the current service cost applicable to each year after the valuation date. Under this method, the accrued liabilities are equal to the amount needed to fund the projected benefits accrued for service up the valuation date. The current service cost or normal cost is equal to the estimated cost of benefits expected to accrue for service in the year following the valuation date.

The liabilities are computed separately for each employee and each potential benefit in the future for that employee. For each benefit, we determine:

- the probability of that benefit becoming payable each year in the future based on the assumptions outlined in Appendix III,
- a discount factor which makes allowance for the interest expected to be earned between the valuation date and the date of payment to finance a portion of the future payment, and
- the amount of the future benefit. Pensions are based on service completed prior to the valuation date and projected salaries immediately prior to the event causing the pension to be paid.

The liability for each benefit for an employee is the sum of the product of these 3 factors for each year in the future. The sum of these liabilities obtained for all employees is the liability for that benefit in respect of employees.

The liabilities for pensioners and deferred pensioners is determined by a similar process except that the amount of payment is based on the pension in payment or the pension on record in the case of deferred pensioners.

7. VALUATION RESULTS

The following table shows the financial position of the Union Plan as at December 31, 2011 and December 31, 2010:

	December 31, 2011	December 31, 2010
ASSETS		
Market Value of Assets	\$ 39,261,060	\$ 40,212,782
Accounts Receivable	166,775	659,652
TOTAL VALUE OF ASSETS	\$ 39,427,835	\$ 40,872,434
LIABILITIES		
Retired Members (138 / 136)	\$ 21,486,300	\$ 19,322,700
Terminated Vested Members (18 / 19)	226,300	215,300
Active Members (3 / 3)	528,200	425,000
Suspended Members (221 / 228)	22,097,900	19,256,000
Money Purchase/Voluntary/Accounts Payable	684,023	979,054
TOTAL LIABILITIES	\$ 45,022,723	\$ 40,198,054
UNFUNDED LIABILITY	\$ (5,594,888)	\$ 674,380
Funded Ratio	87.6%	101.7%

The computed expected average remaining service life (EARSL) of the suspended members of the Union Plan is slightly higher than 10. However since the Union Plan does not receive new members, it is anticipated the EARSL will be decreasing each year into the future. As a result, we recommend an EARSL of 10.

8. RECONCILIATION OF RESULTS

The financial position of the Union Plan as at December 31, 2011 can be reproduced if the financial position as at December 31, 2010 is adjusted to recognize the various changes in the financial position which occurred during the period under review.

	ASSETS		SURPLUS (UNFUNDED LIABILITY)
	Market Value	LIABILITIES	
Open 12-31-2010	\$ 40,872,434	\$ 40,198,054	\$ 674,380
- Normal Cost contributions	18,000	18,000	-
- special payments (cash to current year)	2,168,002	-	2,168,002
- special payments (change in accounts receivable)	(469,436)	-	(469,436)
- expenses	(87,052)	-	(87,052)
- interest expected	2,640,559	2,474,900	165,659
- investment experience gain/(loss) (Note 1)	(3,588,272)	-	(3,588,272)
- benefit payments	(2,126,400)	(2,126,400)	-
- effect of changes in assumptions	-	4,744,800	(4,744,800)
- liability experience (gain)/loss (Note 2)	-	(286,631)	286,631
	<u>\$ 39,427,835</u>	<u>\$ 45,022,723</u>	<u>\$ (5,594,888)</u>
Close 12-31-2011	<u>\$ 39,427,835</u>	<u>\$ 45,022,723</u>	<u>\$ (5,594,888)</u>

Notes:

- The investment experience was unfavourable during 2011 and resulted in an investment experience loss of \$3,588,272. The actual rate of return was -2.33% compared to the assumed rate of 6.50%.
- The demographic experience was favourable in 2011 and resulted in a liability experience gain of \$286,631. Of this amount, -\$174,300 was attributable to greater than expected increases in hourly rates and \$192,800 was attributable to favourable retirement experience and \$173,800 was attributable to favourable mortality experience. The balance, equal to \$94,331 is due to an adjustment to the money purchase and voluntary amounts, termination and other experience and is within an acceptable level of deviation.
- Overall experience was less favourable than expected in 2011. In the future, there will be periods when actual experience is more favourable than expected and other periods when actual experience is less favourable than expected, resulting in future gains and losses.

9. PROJECTION FORMULA FOR LIABILITIES

The following formula can be used to project the estimated increase in liabilities in the 12 to 18 months after the valuation date:

- Add interest at the rate of 5.25% per year to the liabilities at the beginning of the period.

The interest addition for the current service cost and the payments from the accounts should be prorated to recognize investment for half the period, on average.

- Add employer contributions at the rate of 15.24% of the disabled employee payroll (equal to \$147,700 as at December 31, 2011) for the 3 disabled members who are still accruing pension in the Union Plan.
- Deduct the actual pension and benefit payments made to the Fund for the period.

10. ACCOUNTING FOR PENSION OBLIGATIONS

Generally for the Union Plan, the pension expense for a period is equal to:

- (a) current service cost, plus
- (b) interest on accrued benefit obligations, less
- (c) expected interest on assets, plus
- (d) amounts to amortize the past service costs, plus
- (e) amounts to amortize the actuarial gains/losses, plus
- (f) amounts to amortize the net transitional asset/obligation.

II. ACTUARIAL OPINION

In our opinion, for the purposes of this Report:

- The financial and the membership data is sufficient and reliable.
- The assumptions, in aggregate which have been used, are appropriate for the purpose of determining the accounting requirements of the Union Plan on a going concern basis.
- The method which has been used is appropriate for the purpose of determining the accounting requirements of the Union Plan on a going concern basis.
- We are not aware of any other matters or events occurring since the completion of this Report, which will materially affect the calculation of the liabilities as at December 31, 2011.
- This Report has been prepared and my opinion given in accordance with accepted actuarial practice in Canada.

DATED at Winnipeg, this 29th day of June, 2012

ELLEMENT & ELLEMENT



Louis Ellement, F.S.A., F.C.I.A.

CG Union rpt 2011.doc

APPENDIX I

Summary of Data

A. RECONCILIATION OF MEMBERSHIP

	<i>Terminated</i>		<i>Active</i>	<i>Suspended</i>	<i>Total</i>
	<i>Retired</i>	<i>Vested</i>			
	<i>Members</i>	<i>Members</i>	<i>Members</i>	<i>Members</i>	<i>Members</i>
December 31, 2010	136	19	3	228	386
Adjustments	-	-	-	-	-
Change in Status	-	-	-	-	-
Transfer in/(out)	-	-	-	-	-
Member Deaths:					
- cash settlement	-	-	-	(1)	(1)
- beneficiary pension	-	-	-	-	-
- accounts payable	-	-	-	-	-
Terminations:					
- cash/transfer	-	-	-	-	-
- deferred pension	-	-	-	-	-
- reciprocal transfer	-	-	-	-	-
- accounts payable	-	-	-	-	-
Disablements	-	-	-	-	-
Retirements	7	(1)	-	(6)	-
Pensioner Deaths:					
- pension ceases	(5)	-	-	-	(5)
- pension continues	-	-	-	-	-
- beneficiary pension	-	-	-	-	-
December 31, 2011	<u>138</u>	<u>18</u>	<u>3</u>	<u>221</u>	<u>380</u>

B. DETAILS OF MEMBERSHIP

The following statistics are applicable to each category of member as at December 31, 2011 and December 31, 2010:

▪ **RETIRED MEMBERS**

Age Band	<u>December 31, 2011</u>		<u>December 31, 2010</u>	
	Count	Average Monthly Pension	Count	Average Monthly Pension
45 - 49	-	\$ -	-	\$ -
50 - 54	1	1,548	1	921
55 - 59	8	1,318	7	1,128
60 - 64	24	1,817	26	1,830
65 - 69	27	985	26	1,035
70 - 74	31	1,217	27	1,191
75 - 79	19	980	20	995
80 - 84	12	887	14	874
85 - 89	14	870	12	779
90 - 94	2	636	3	620
95 - 99	-	-	-	-
Total / Average	138	\$ 1,179	136	\$ 1,168

▪ **TERMINATED VESTED MEMBERS**

Age Band	<u>December 31, 2011</u>		<u>December 31, 2010</u>	
	Count	Average Monthly Pension	Count	Average Monthly Pension
< 20	-	-	-	-
20 - 24	-	-	-	-
25 - 29	-	-	-	-
30 - 34	-	-	-	-
35 - 39	-	-	-	-
40 - 44	1	\$ 124	2	\$ 110
45 - 49	3	193	2	241
50 - 54	2	49	2	49
55 - 59	2	224	2	224
60 - 64	2	75	7	91
65 - 69	5	97	2	172
70 - 74	3	80	2	70
Total / Average	18	\$ 118	19	\$ 125

▪ ACTIVE MEMBERS

Age Band	<u>December 31, 2011</u>			<u>December 31, 2010</u>		
	Count	Average Service	Average Salary	Count	Average Service	Average Salary
< 20	-	-	-	-	-	-
20 - 24	-	-	-	-	-	-
25 - 29	-	-	-	-	-	-
30 - 34	-	-	-	-	-	-
35 - 39	-	-	-	-	-	-
40 - 44	1	13.0	\$ 42,276	1	12.0	\$ 39,975
45 - 49	1	12.0	42,276	1	11.0	39,975
50 - 54	-	-	-	-	-	-
55 - 59	1	36.4	63,122	1	35.4	60,275
60 - 64	-	-	-	-	-	-
65 - 69	-	-	-	-	-	-
70 - 74	-	-	-	-	-	-
Total / Average	3	20.5	\$ 49,225	3	19.5	\$ 46,742

▪ SUSPENDED MEMBERS

Age Band	<u>December 31, 2011</u>			<u>December 31, 2010</u>		
	Count	Average Service	Average Salary	Count	Average Service	Average Salary
< 20	-	-	-	-	-	-
20 - 24	-	-	-	-	-	-
25 - 29	-	-	-	-	-	-
30 - 34	3	0.7	\$ 61,705	4	1.1	\$ 56,589
35 - 39	18	1.7	65,176	23	1.8	64,083
40 - 44	27	3.2	73,052	24	3.7	68,510
45 - 49	56	8.4	69,620	60	9.0	67,434
50 - 54	63	12.4	70,609	66	12.5	66,967
55 - 59	39	15.9	67,999	39	18.2	65,523
60 - 64	15	19.3	70,275	12	18.2	68,286
65 - 69	-	-	-	-	-	-
70 - 74	-	-	-	-	-	-
Total / Average	221	10.3	\$ 69,610	228	10.7	\$ 66,602

C. SOURCE OF INFORMATION

The information used in this valuation is listed below.

The data on which the valuation is based was provided by the Superannuation Board.

1. RETIRED MEMBERS AND BENEFICIARIES

Information was provided for each member or beneficiary receiving a pension as at December 31, 2011. The details of the information provided included: name, social insurance number, date of birth, date of retirement, pension option chosen, and amount of monthly pension and monthly bridge payable.

2. TERMINATED VESTED MEMBERS

Information was provided for each person entitled to a paid-up pension. The details of the information provided included: name, social insurance number, sex, date of birth, date of termination, and amount of monthly pension earned to the date of termination.

3. ACTIVE AND DISABLED MEMBERS

Information was provided for each active or disabled member of the Union Plan. The details of the information provided included: name, social insurance number, sex, date of birth, credited service to December 31, 2011, hourly rate of pay, job classification, required contributions with interest to December 31, 2011 and any voluntary or money purchase contributions with interest to December 31, 2011.

Members who are disabled or who are on a leave of absence due to maternity continue to accrue service under the Union Plan.

In addition, information was provided in regards to termination benefit payouts, deaths that occurred, or change of status to suspended members since the date of the last valuation, December 31, 2010.

4. SUSPENDED MEMBERS

Information was provided for each suspended member of the Union Plan. The details of the information provided included: name, social insurance number, sex, date of birth, credited service to June 20, 2001, hourly rate of pay, job classification, required contributions with interest to December 31, 2011 and any voluntary or money purchase contributions with interest to December 31, 2011.

In addition, information was provided in regards to termination benefit payouts and any deaths that occurred since the date of the last valuation, December 31, 2010.

5. The State Street statements as at March 31, 2011, December 31, 2011 and March 31, 2012.
6. A copy of the Plan Text as amended and restated effective May 31, 2010.

We also had available a copy of the Actuarial Report for purposes of pension expense for the Union Plan performed as at December 31, 2010 (2010 Report).

Data tests were performed to ensure consistency with the data provided and plan benefits. The data provided as at December 31, 2011 was reviewed for missing and illogical information and was compared to the data provided at December 31, 2010.

A P P E N D I X I I

Summary of the Union Plan

The following description of the Union Plan is a summary only. The summary was based on the Union Plan Text, amended and restated effective May 31, 2010.

For more complete information, reference should be made to the Text of the Union Plan.

The effective date of the Union Plan is January 1, 1977.

Effective June 20, 2001, all members actively employed by the Company ceased to accrue future service benefits under the Union Plan and commenced to accrue future service benefits under Manitoba Civil Service Superannuation Plan.

CONTRIBUTIONS

The employer is required to pay into the Fund amounts, as determined by the Actuary, sufficient to pay the benefits promised.

Prior to June 20, 2001, members were permitted to make optional contributions.

NORMAL RETIREMENT

The normal retirement age is 65.

EARLY RETIREMENT

A member may retire prior to the normal retirement date with a reduction in pension upon attainment of age 55 and at least 2 years of service. The reduction is equal to $\frac{1}{4}\%$ per month for each month between the date of retirement and the earlier of:

- (i) the date of attainment of age 62,
- (ii) the date of attainment of age 60 and 10 years of eligible service, or
- (iii) the date of attainment of the rule of 80 and the attainment of age 55. The rule of 80 is satisfied when the aggregate of the member's age and eligible service equals 80.

Members who retire on or after the attainment of age 55 are entitled to a bridge benefit payable on the last day of each month until the attainment of age 65.

PENSION FORMULA

The sum of:

- (i) the accrued monthly pension relating to:
 - (a) the member's credited service prior to January 1, 1989 multiplied by the monthly benefit rate,
 - (b) the member's credited service between January 1, 1989 and December 31, 1990 multiplied by 1.53 times the member's basic hourly rate,
 - (c) the member's credited service on and after January 1, 1991 multiplied by 1.53 times the member's hourly rate.
- (ii) the monthly pension purchased by the member's accumulated optional contributions with interest, and
- (iii) the monthly pension purchased by the member's money purchase pension account.

INDEXING

Pensions are indexed, post-retirement to 2/3 of inflation subject to a maximum annual cost-of-living increase equal to 4.00%.

NORMAL FORM

- (i) Member without a spouse: Lifetime annuity.
- (ii) Member with a spouse: Joint and 50% survivor annuity.
- (iii) Bridge benefit: Lifetime annuity to age 65.

TERMINATION BENEFITS

Prior to the Curtailment Date:

On the completion of less than 2 years of service, a lump sum payment equal to the sum of the member's accumulated optional or required contributions with interest plus the balance of the member's money purchase pension account.

On completion of 2 or more years of service, a member is entitled to:

- (i) a paid-up pension commencing at age 65,
- (ii) lump sum payment equal to the member's accumulated optional contributions with interest, and
- (iii) transfer the balance of the member's money purchase pension account to another registered vehicle.

A member, who becomes entitled to a paid-up pension after the curtailment date, may receive the paid-up pension on an early retirement date subject to the applicable reduction. The member is also eligible for the bridge benefit subject to the applicable reduction.

After the Curtailment Date:

A member is entitled to a paid-up pension commencing at age 65.

DISABILITY BENEFITS

If a member becomes totally disabled and benefits are paid under the Company's Sickness and Accident and/or Long Term Disability Income Plan or other income replacement, plan the member is entitled to all benefits under the Union Plan as though he were actually at work.

Members who are disabled or who are on a leave of absence due to maternity continue to accrue service under the Union Plan on and after June 20, 2001.

DEATH BENEFITS PRIOR TO RETIREMENT

In the event of death of a member other than a retired member, a benefit is payable equal to:

The sum of:

- (i) lump sum payment equal to the member's accumulated optional contributions with interest,
- (ii) lump sum payment equal to the balance of the member's money purchase pension account,
- (iii) for all credited service, if there is a surviving spouse, a spouse's pension equal to the greater of:
 - (a) 50% of the member's accrued pension for this period of credited service, and
 - (b) the pension that can be provided by the commuted value of the member's accrued pension for this period of credited service.

If there is no surviving spouse, the benefit under (iii) and (iv)(A) above are not payable and the benefits, if any, under (i), (ii) and (iv)(B) shall be paid to the member's beneficiary or estate.

A P P E N D I X I I I

Summary of Actuarial Assumptions

	<u>December 31, 2011</u>	<u>December 31, 2010</u>
1. Asset Valuation	Market Value	same
2. Actuarial Cost Method	ABCM with salary projection	same
3. Annual Rate of Return on the Assets of the Fund	5.25%	6.50%
Annual Rate of Inflation Included in Rate of Return	2.00%	2.50%
4. General salary increases (service and merit is separate and age specific)		
▪ general salary increase rate for the year following the valuation date	2.75%	3.00%
▪ general salary increase rate for future periods	2.75%	3.00%
5. Annual Salary Merit Increases	see Table	same
6. Indexing of Pensions Post-retirement (2/3 of the assumed rate of inflation)	1.33%	1.67%
7. Annual Increase in Earnings under Canada Pension Plan	2.75%	3.00%
8. Annual Increase in Payment Rates		
▪ Canada Pension Plan	2.75%	3.00%
▪ Old Age Security	1.75%	2.00%
9. Annual Increase in Maximum Pension under ITA	2012: \$2,646.67 Indexed ≥ 2013: 2.75%	same 3.00%
10. Annual Rate of Interest Credited to Employee Contributions	3.25%	4.50%
11. Annual Rates of Death	UP2020 see Table	same
12. Proportion of Employees with a Spouse Males / Females	90%/75%	same
13. Years male spouse older than female spouse	3	same
14. Annual Rates of Termination of Service	see Table	same
15. Annual Rates of Disability	see Table	same
16. Annual Rates of Retirement	see Table	same

Actuarial Report on Pension Liabilities as at December 31, 2011
 Centra Gas Manitoba Inc.
 Union Employees' Pension Plan

<u>Age</u>	<u>Mortality – UP2020</u>		<u>Termination</u>		<u>Disability</u>		<u>Retirement</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
20	0.03%	0.02%	-	-	-	-	-	-
25	0.05	0.02	-	-	-	-	-	-
30	0.08	0.03	-	-	-	-	-	-
35	0.08	0.04	-	-	-	-	-	-
40	0.09	0.05	-	-	-	-	-	-
45	0.12	0.07	-	-	-	-	-	-
50	0.17	0.10	-	-	-	-	-	-
55	0.29	0.20	-	-	-	-	13.68%	13.50%
60	0.56	0.42	-	-	-	-	23.55	20.73
65	1.08	0.81	-	-	-	-	100.00	100.00
70	1.72	1.30	-	-	-	-	-	-
75	2.77	1.98	-	-	-	-	-	-
80	5.14	3.53	-	-	-	-	-	-
85	8.71	6.23	-	-	-	-	-	-
90	14.82	11.56	-	-	-	-	-	-
95	23.84	19.01	-	-	-	-	-	-
100	33.24	28.96	-	-	-	-	-	-

Service and Merit

<u>Age</u>	<u>Unisex</u>
20	3.00%
25	2.50
30	2.00
35	1.50
40	1.00
45	0.50
50	0.25
55	0.00
60	0.00
65	0.00