EB-2011-0210

Ontario Energy Board

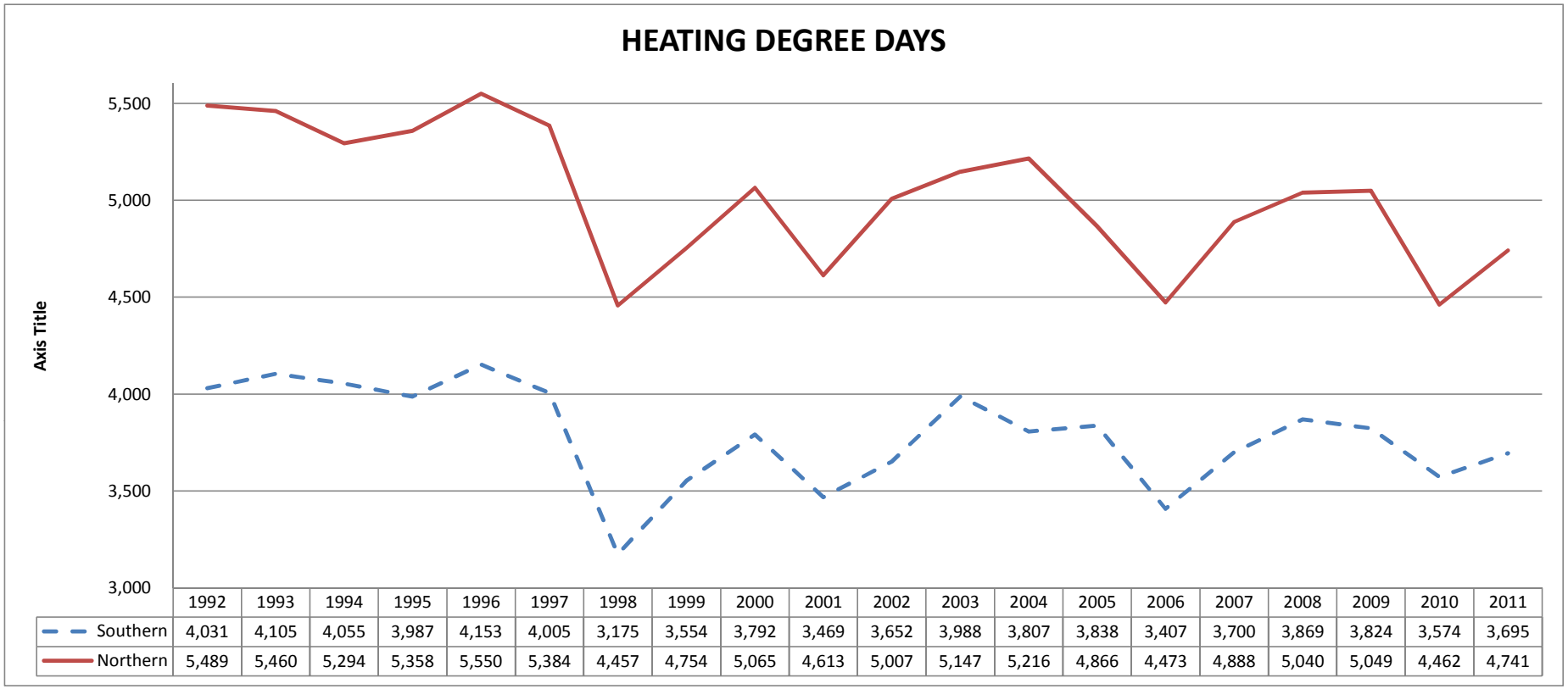
IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, (Schedule B);

AND IN THE MATTER OF an Application by Union Gas Limited, pursuant to section 36(1) of the *Ontario Energy Board Act, 1998*, for an order or orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas as of January 1, 2013.

LONDON PROPERTY MANAGEMENT ASSOCIATION

("LPMA")

CROSS-EXAMINATION COMPENDIUM



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Southern	4,031	4,105	4,055	3,987	4,153	4,005	3,175	3,554	3,792	3,469	3,652	3,988	3,807	3,838	3,407	3,700	3,869	3,824	3,574	3,695
Northern	5,489	5,460	5,294	5,358	5,550	5,384	4,457	4,754	5,065	4,613	5,007	5,147	5,216	4,866	4,473	4,888	5,040	5,049	4,462	4,741

Table 2

Normalized Average Consumption by Rate & Service Class (m^3 / year)

All NACs weather normalized according to the 2013 20-Year Declining Trend weather normal

	Residential		Commercial			Industrial		
Year	Rate M2	Rate 01	Old Rate M2	Rate 01	Rate 10	Rate M2	Rate 10	Rate CIA 10
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1991	2,940	3,029	18,696	10,471	104,964	73,495	273,591	2,501,299
1992	2,883	3,001	19,003	10,229	98,717	70,265	256,959	2,708,373
1993	2,830	2,914	18,416	10,000	98,246	74,784	269,677	2,933,314
1994	2,753	2,876	17,670	9,716	102,248	74,559	287,596	1,101,389
1995	2,782	2,810	17,799	9,510	104,512	73,905	270,517	1,315,339
1996	2,792	2,751	18,438	9,480	102,112	75,488	288,617	1,223,738
1997	2,760	2,741	18,222	9,454	99,958	78,169	242,400	968,749
1998	2,725	2,624	17,533	8,196	94,729	78,078	158,054	830,471
1999	2,689	2,646	17,572	7,959	87,960	82,876	178,165	982,337
2000	2,701	2,762	17,277	9,102	101,632	74,280	194,437	998,704
2001	2,598	2,575	17,074	8,794	91,677	82,091	204,217	835,453
2002	2,585	2,573	17,126	8,626	95,897	84,076	231,508	834,090
2003	2,535	2,584	17,052	8,693	91,545	83,026	267,897	877,057
2004	2,464	2,468	16,649	8,320	90,208	78,036	224,118	949,805
2005	2,386	2,417	16,133	8,126	88,468	82,054	245,088	908,018
2006	2,407	2,396	16,608	7,695	87,033	79,135	220,599	881,745
2007	2,392	2,384	16,324	7,949	91,365	81,102	253,843	889,643
2008	2,362	2,379	16,851	8,465	106,559	80,445	280,730	914,299
2009	2,290	2,328	16,526	8,350	105,374	75,122	310,569	872,901
2010	2,284	2,268	16,182	8,314	111,416	67,057	310,317	938,636
2011	2,264	2,269	17,213	8,580	124,714	73,561	372,911	1,074,867

NORMALIZED AVERAGE CONSUMPTION (NAC) m^3 per customer

Line No.	Rate & Service Customer Class	Actual 2007	Actual 2008	Actual 2009	Actual 2010	Actual 2011	Forecast 2012	Forecast 2013
1	Residential Rate M1	2,392	2,358	2,286	2,280	2,260	2,195	2,144
2	Residential Rate M2		105,799	120,123	107,593	123,152	105,423	102,936
3	Residential Rate 01	2,384	2,380	2,328	2,268	2,277	2,211	2,160
4	Commercial Rate M1	16,324	8,510	8,162	7,722	8,246	9,415	9,308
5	Commercial Rate M2		151,584	144,316	138,007	147,283	114,556	112,692
6	Tobacco Rate M1	17,613	9,570	10,453	18,565	18,097	14,578	13,728
7	Tobacco Rate M2		59,882	68,118	107,167	107,344	79,748	75,098
8	Commercial Rate 01	7,949	8,467	8,350	8,314	8,668	8,257	8,153
9	Commercial Rate 10	91,365	106,582	105,374	111,416	125,173	119,987	120,442
10	Industrial Rate M1	81,102	15,925	13,732	13,010	14,045	14,889	14,808
11	Industrial Rate M2		296,409	267,450	232,652	259,204	260,376	257,901
12	Industrial Rate 10	253,843	280,774	310,569	310,317	372,460	335,572	336,471
13	Industrial L.I.B, Rate 10	889,643	914,430	872,901	938,636	1,074,867	1,068,018	1,108,624
	Total NAC	3,975	3,971	3,842	3,754	3,830	3,688	3,610

RESIDENTIAL OLD RATE M2

	Intercept	Jan	Feb	Mar	Apr	May	Sep	Oct	Nov	Dec	Dummy_Jun	Dummy_Jul	Dummy_Aug	Dummy_Sep	EFFICIENCY	PERSONS PER HOUSE	TOTAL BILL	FORECAST USE
Coefficients	-86.929	0.629	0.615	0.628	0.612	0.593	0.272	0.426	0.520	0.594	80.902	77.125	74.623	82.171	592.211	26.932	-0.132	
Jan-13		672.926	0	0	0	0	0	0	0	0	0	0	0	0	0.15043	0	138.79	407.1
Feb-13		0	591.902	0	0	0	0	0	0	0	0	0	0	0	0.14992	0	115.47	350.6
Mar-13		0	0	515.443	0	0	0	0	0	0	0	0	0	0	0.14940	0	108.69	310.9
Apr-13		0	0	0	306.932	0	0	0	0	0	0	0	0	0	0.14888	0	72.22	179.6
May-13		0	0	0	0	149.260	0	0	0	0	0	0	0	0	0.14837	0	51.53	82.6
Jun-13		0	0	0	0	0	0	0	0	0	1	0	0	0	0.00000	2.56649	39.17	57.9
Jul-13		0	0	0	0	0	0	0	0	0	0	1	0	0	0.00000	2.56379	39.27	54.1
Aug-13		0	0	0	0	0	0	0	0	0	0	0	1	0	0.00000	2.56109	35.53	52.0
Sep-13		0	0	0	0	0	72.911	0	0	0	0	0	0	1	0.00000	2.55839	37.32	79.1
Oct-13		0	0	0	0	0	0	240.881	0	0	0	0	0	0	0.14578	0	52.84	95.0
Nov-13		0	0	0	0	0	0	0	393.914	0	0	0	0	0	0.14527	0	72.11	194.4
Dec-13		0	0	0	0	0	0	0	0	580.106	0	0	0	0	0.14475	0	103.49	329.7
																		2,193.0

i. Using 15.4 PJ of TCPL Storage Transportation Service ("STS") injection and TCPL Dawn Diversions. STS injection is a service that allows Union to move excess volumes from Union North to Parkway and ultimately to Dawn storage in the summer; and,

ii. Using 15.0 PJ of TCPL STS withdrawals primarily in the winter months to serve weather-driven demands. Gas is withdrawn from Dawn storage throughout the winter and is transported back to Union North via STS withdrawals without the need for contracting additional TCPL firm transportation ("FT") capacity to that delivery area.

Using contractual STS pooling rights to group all of Union's STS rights serving the various Union North delivery areas provides Union with the flexibility to serve the individual delivery areas in Union North with gas service in excess of that delivery area's specific STS rights. Unutilized TCPL and MichCon/GLGT FT capacity (held in order to serve peak day firm loads for sales service and bundled customers in Union North that cannot be managed via the above mechanisms) is forecast at 10.4 PJ for the 2013 test year. This results in Unabsorbed Demand Charges ("UDC"). If weather is colder than normal, and if it is economical to do so, Union will use this capacity to meet incremental supply requirements in either Union North or Union South, subject to TCPL's authorization of downstream diversions. This unutilized capacity result has increased from the 2007 Board-approved filing. In EB-2005-0520, the Board approved 4.4 PJ of UDC for unutilized TCPL FT capacity serving the Northern bundled customers. The increase in unutilized capacity is the result of decreases in weather-related throughput in the general service market in Union North as discussed in the evidence of Mr. Paul Gardiner at Exhibit C1, Tab 1,

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Ref: Exhibit E1, Tab 1, pages 5-6, Updated

a) With respect to the weather risk, does the adoption of the proposed 20 year declining trend methodology reduce Union's weather risk relative to the current Board approved methodology? If no, please explain why not.

b) Please provide a table that shows the distribution revenue for each rate class broken into fixed revenues (based on monthly charges and demand charges) and variable revenues (based on delivery charges) based on the Board Approved 2007 rates and volumes and the proposed 2013 rates and volumes.

c) With respect to the consumption risk, please provide a historical analysis of the actual large commercial and industrial customers natural gas distribution revenues relative to the 2 year ahead forecast (i.e. comparable to the test year forecast) for the last three years.

d) With respect to the cost escalation risk, is Union proposing any protection through deferral or variance accounts related to bad debt, vehicle fuel costs, company-used gas, unaccounted for gas or any other cost?

e) Please provide a summary of the significant changes in the company's business and/or financial risk that have occurred since the Board approved Union's last cost of capital parameters.

Response:

a) The adoption of the 20-year declining trend weather normal methodology provides a more balanced weather risk relative to the current blended ratio methodology. The current blended methodology used to set the weather normal is biased towards colder weather and does not possess symmetric upside and downside revenue risks. The 20-year declining trend has symmetric revenue risks.

b)

Line No.	Particulars ($ millions)	2007 Board Approved Fixed	2007 Board Approved Variable	2007 Board Approved Total (1)	2013 Forecast Fixed	2013 Forecast Variable	2013 Forecast Total (1)
	General Service						
1	Rate M1 Firm	-	-	-	254	124	379
2	Rate M2 Firm	190	220	410	7	38	45
3	Rate 01 Firm	57	76	133	77	61	138
4	Rate 10 Firm	2	19	22	2	15	17
5	Total General Service	249	316	565	339	239	578
	Wholesale - Utility						
6	Rate M9 Firm	0	0	1	1	0	1
7	Rate M10 Firm	-	0	0	-	0	0
8	Rate 77 Firm	0	-	0	-	-	-
9	Total Wholesale - Utility	0	0	1	1	0	1
	Contract						
10	Rate M4	10	4	14	7	4	11
11	Rate M7	6	1	7	4	0	4
12	Rate 20	6	1	7	8	2	10
13	Rate 100	11	5	16	9	4	13
14	Rate T-1	37	18	55	44	14	58
15	Rate T-3	4	1	6	4	1	5
16	Rate M5	2	6	8	1	8	9
17	Rate 25	0	2	2	0	2	2
18	Rate 30	-	-	-	-	-	-
19	Total Contract	76	39	115	76	35	111
20	Total Revenue	325	356	681	416	274	689

Note: (1) EB-2011-0210 Exhibit C1 Summary Schedule 4

c)

Forecast to Actual Revenue Comparison ($ Millions)

Line No.	Market		2007	2008	2009	2010	2011
1	Power	Forecast	26.0	25.6	31.1	29.9	30.2
2		Actuals	26.8	26.3	29.0	32.2	32.7
3		*Variance*	*0.8*	*0.7*	*-2.1*	*2.3*	*2.5*
4	Steel/Chem/Ref	Forecast	38.9	38.6	41.9	37.4	36.4
5		Actuals	38.5	37.7	37.0	36.7	38.4
6		*Variance*	*-0.4*	*-0.9*	*-4.9*	*-0.7*	*2.0*
7	LCI/Key	Forecast	45.9	43.8	42.8	37.2	35.3
8		Actuals	45.1	43.9	39.5	36.8	36.4
9		*Variance*	*-0.8*	*0.1*	*-3.3*	*-0.4*	*1.1*
10	Greenhouse	Forecast	4.2	3.9	6.0	5.6	5.2
11		Actuals	3.9	5.2	4.9	5.8	6.3
12		*Variance*	*-0.3*	*1.3*	*-1.1*	*0.2*	*1.1*
13	Wholesale	Forecast	6.1	6.3	6.3	6.0	5.6
14		Actuals	5.5	5.7	5.8	5.7	5.5
15		*Variance*	*-0.6*	*-0.6*	*-0.5*	*-0.2*	*0.0*
16	Grand Total	Forecast	121.1	118.3	128.0	116.1	112.7
17		Actuals	119.8	118.8	116.2	117.2	119.3
18		*Variance*	*-1.3*	*0.5*	*-11.8*	*1.2*	*6.7*

d) Union is not proposing any new deferral accounts in this proceeding.

e) Union has not performed an analysis of its financial or business risk because Union's proposal to increase its equity level to 40% is not based on changes in risk.

Union's proposal to increase its equity level from 36% to 40% is based on a comparison of other utilities with similar risk profiles as Union. As noted at Exhibit J.E-2-3-6, Union's equity level is the lowest in the comparator group even though the business risks of the utilities are comparable. A 40% equity level for Union properly reflects Union's business risks when viewed in conjunction with the Board's revised return on equity formula (EB-2009-0082).

Filed: 2012-05-04
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J.E-2-2-3
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UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Ref: Exhibit E1, Tab 1, page 4, Updated

a) Has Union had any problems raising capital in the markets under reasonable terms and conditions in the last five years? If yes, please provide details.

b) Is Union planning to raise any capital to finance investment growth in the 2013 test year?

Response:

a) Please see the response at Exhibit J.E-2-1-1.

b) No, Union is financing investment growth by suspending dividends for the second half of 2012 and all of 2013 in order to achieve a 40% equity component.

Line No	Company	Deemed Equity Ratio (a)	S&P (b)	DBRS (c)
1	Terasen (Fortis BC)	40%	A-	A (low)
2	Pacific Northern Gas	40% - 45%		
3	ATCO Electric Disco	39%	A	A (low)
4	Enmax Disco	41%	BBB+	A (low)
5	Epcor Disco	41%	BBB+	A (low)
6	ATCO Gas	39%	A	A (low)
7	Fortis Alberta	41%	A-	A (low)
8	Alta Gas	43%	BBB	BBB
9	Gaz Metro	39%	A-	A
10	Gazifere	40%		
11	Nova Scotia Power	40%	BBB+	A (low)
12	Heritage Gas Ltd.	45%		
13	Enbridge Gas Distribution	36%	A-	A
14	Union Gas	36%	BBB+	A

Ratings were not found for Pacific Northern Gas, Gazifere, and Hertiage Gas Ltd.

Ontario Energy Board

EB-2009-0084

Report of the Board

on the Cost of Capital for Ontario's Regulated Utilities

December 11, 2009

current ROE formula would have served to increase the allowed ROE during the recent credit crisis, which, in the Board's view, would have been directionally correct.[64]

The Board has determined that it is appropriate to use a corporate yield variable that is reflective of the borrowing costs of Canadian utilities, one that is well-understood and is based on an established index from a recognized source. **The Board has** accordingly **determined that it will use a utility bond spread based on the difference between the Bloomberg Fair Value Canada 30-Year A-rated Utility Bond index yield and the long Canada bond yield.** This is further described in Appendix B.

The Board agrees with the comment of Ms. McShane that separating the LCBF and the utility bond spread variables, as opposed to using one corporate bond yield variable that would implicitly incorporate the LCBF, provides transparency as it shows "what part is causing the ROE to move in either direction."[65]

The Board also determines that the utility bond spread reflected in the reset and refined formulaic ROE approach will be subject to a 0.50 adjustment factor, consistent with the empirical analyses provided by participants to the consultation.

4.3 Capital structure

The Board's current policy with regard to capital structure for all regulated utilities continues to be appropriate. As noted in the Board's draft guidelines, capital structure should be reviewed only when there is a significant change in financial, business or corporate fundamentals. [66] The Board's current policy is as follows:

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[64] Written Comments of the Electricity Distributors Association. September 8, 2009. Schedule 4.
[65] Ontario Energy Board. Transcript of Consultation Process on Cost of Capital Review. Ms. McShane's presentation, p. 161.
[66] Ontario Energy Board. Ontario Energy Board Draft Guidelines on a Formula-Based Return on Common Equity for Regulated Utilities. March 1997. p. 2

- The Board has determined that a split of 60% debt, 40% equity is appropriate for all electricity distributors. [67] Capital structure was not a primary focus of the consultation and the Board notes that the comments made by participants in the consultation largely supported the continuation of the Board's existing policy.

- For electricity transmitters, generators, and gas utilities, the deemed capital structure is determined on a case-by-case basis. The Board's draft guidelines assume that the base capital structure will remain relatively constant over time and that a full reassessment of a gas utility's capital structure will only be undertaken in the event of significant changes in the company's business and/or financial risk. [68]

4.4 Debt Rates

4.4.1 Long-term debt

The determination of the cost of long-term debt was not a primary focus of the consultation and the Board notes that the comments made by participants in the consultation largely supported the continuation of the Board's existing policies and practices.

While the Board agrees with this approach, it is important to note that the determination of the cost of long-term debt has typically received significant interest in the processes to establish electricity distribution and, to a lesser extent, electricity transmission rates. In contrast to the difficulty establishing the utility cost of equity that arises from a lack of transparency, the issues associated with the determination of a utility's long-term debt cost arise from different factors, including the relatively short period of time since the corporatization of electricity distribution and transmission utilities, the relatively short history of rate regulation by the Board, and the presence of significant amounts of affiliate debt.

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[67] Ontario Energy Board. Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors. December 20, 2006. p. 5
[68] Ontario Energy Board. Compendium to Draft Guidelines on a Formula-Based Return on Common Equity for Regulated Utilities. March, 1997. p. 30

4.5 Summary

The key elements of the Board's cost of capital policy are summarized in the following table.

Table 2: Components of the Board's Cost of Capital Policy

Capital structure	• 60% debt (56% long-term and 4% short-term) and 40% equity for electricity distributors. • Gas distributors, electricity transmitters and OPG will continue with approved capital structures.
Short-term debt rate	• Once a year, in January, obtain real market quotes from major banks, for issuing spreads over Bankers Acceptance rates for the cost of short-term debt. • The short term rate will be calculated as the average Bankers' Acceptance for the month 3 months in advance of the effective date for the rates, plus the spread for the year calculated above.
Long-term debt rate	• The deemed long-term debt rate will be based on the Long Canada Bond Forecast plus an average spread with an A-rated long-term utility bond yield). • Third-party embedded/actual debt with fixed rates, terms and maturity will get the actual rate. • Affiliate embedded/actual debt with fixed rates, terms and maturity will get the lower of actual and deemed debt rate at time of issuance. • Utility provides forecasts of new debt for a forward test year, where possible. New third-party debt will be accepted at the negotiated market rate. If a forecasted new rate is not available (i.e., due to timing), the deemed long-term debt rate may apply. • For new affiliated debt, the deemed long-term debt rate will be a ceiling on the allowed rate. The onus will be on the utility to demonstrate that the applied for rate and terms are prudent and comparable to a market-based agreement and rate on arms-length commercial terms. • Variable-rate debt will be treated like new affiliated debt. • Renegotiated or renewed debt will be considered new debt. • Where a utility has no actual debt, the deemed long-term debt rate shall apply.
Common equity return	• Refined formula-based ROE will be calculated as the base ROE + 0.5 X (change in Long Canada Bond Forecast from base year) + 0.5 X (change in the spread of (A-rated Utility Bond Yield – Long Canada Bond Yield) from the spread in the base year). This includes an implicit 50 basis points for transactional costs. • The ROE (and the short-term and long-term debt rates) will be based on data for the month 3 months in advance of the effective date for rates. • Reset formula for 2010: The base ROE in the refined formula will be calculated for 2010 as Long Canada Bond Forecast rate plus an ERP of 550 basis points, and reflects multiple, empirically supported, estimates provided in consultation which led to this report.

Filed: 2012-05-04
EB-2011-0210
J.E-1-2-3
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UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Ref: Exhibit E1, Tab 1, Updated

If the Board determines that there has been a significant change in the company's business and/or financial risk, does Union agree that in addition to the change in the equity component of the capital structure, the long term debt, short term debt and preference share components of the capital structure should also be reviewed and moved more in line with the electricity distributors? If not, please explain why not.

Response:

No. Union has common and preferred shareholders as well as tangible programs for its short-term and long-term debt. These should be recognized in the determination of capital structure as opposed to a deemed structure which may not recognize the real costs of capital incurred by the utility.

EB-2011-0210
Settlement Agreement
Appendix B
Schedule 3

UNION GAS LIMITED
Summary of Cost of Capital
Calendar Year Ending December 31, 2013

Line No.	Particulars	Utility Capital Structure ($000's) (a)	Utility Capital Structure (%) (b)	Cost Rate % (c)	Requested Return ($000's) (d)
	As Filed				
1	Long-term debt	2,257,972	60.35	6.50%	146,868
2	Unfunded short-term debt	(115,296)	(3.08)	1.31%	(1,510)
3	Total debt	2,142,676	57.27		145,358
4	Preference shares	102,248	2.73	3.05%	3,117
5	Common equity	1,496,617	40.00	9.58%	143,376
6	Total rate base	3,741,542	100.00		291,851
	Per Settlement Agreement				
7	Long-term debt	2,234,597	60.17	6.53%	145,957
8	Unfunded short-term debt	(108,513)	(2.92)	1.31%	(1,422)
9	Total debt	2,142,676	57.25		144,535
10	Preference shares	102,248	2.75	3.05%	3,117
11	Common equity	1,485,555	40.00	9.58% (2)	142,316
12	Total rate base	3,713,887	100.00		289,969
13	Change	(27,655) (1)			(1,883)

Notes

(1) Reductions to rate base

general	(12,000)
gas in inventory	(15,655)
	(27,655)

(2) Per Section 4.3 of the settlement agreement