

500 Consumers Road
North York, ON M2J 1P8
P.O. Box 650
Scarborough, ON
M1K 5E3

Lesley Austin
Regulatory Coordinator, Regulatory Affairs
Tel 416-495-6505
Fax 416-495-6072
Email: Lesley.Austin@enbridge.com



May 9, 2012

VIA RESS, EMAIL and COURIER

Ms Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario, M4P 1E4

Dear Ms Walli:

**Re: Enbridge Gas Distribution Inc. ("Enbridge") - Undertaking Responses
Renewable Natural Gas Program Application ("Application")
Ontario Energy Board ("Board") File Number EB-2011-0242 / EB-2011-0283**

During the Renewable Natural Gas Hearing, from April 30, 2012 to May 4, 2012, Enbridge and Union Gas Limited ("Union") agreed to file responses to the Undertakings.

Enclosed please find joint and Enbridge specific Undertaking Responses to:

J2.4, J2.5, J2.6;
J3.2;
J4.2, J4.3, J4.8, and J4.10.

This submission has been filed through the Board's Regulatory Electronic Submission System ("RESS"), and two hard copies are being sent to the Board as directed. Enbridge's filing for this proceeding can be found on the Enbridge website at: www.enbridgegas.com/ratecase.

If you have any questions, please contact the undersigned.

Sincerely,

[Original signed by]

Lesley Austin
Regulatory Coordinator, Regulatory Affairs

cc: Mr. F. Cass, Aird & Berlis LLP (via email and courier)
All Interested Parties EB-2011-0242 (via email)

UNDERTAKING J2.4

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 3, page 43.

To provide cost estimates for the period April 2010 to conclusion of this process, for Union and Enbridge, and combined.

Enbridge's estimated project costs from April 2010 to process conclusion is as follows:

Costs (\$'000)	
Direct costs ¹	322
Additional direct costs (estimated to hearing conclusion) ²	190
Internal costs ³	340
Total	852

¹ As outlined in IR IE-5-21.

² Estimate based on best available information at the time of the request.

Includes legal costs and 50% share of costs for Alberta Innovates, Electrigan and Ipsos.

Does not include estimate for Intervenor costs for OEB hearing.

³ Estimate from April 2010 to conclusion of application.

Union's has also updated the response provided in IU-5-21 to include estimated project costs through to process conclusion.

Costs (\$'000)	
Direct costs ¹	314
Additional direct costs (estimated to hearing conclusion) ²	114
Total	428

¹ As outlined in IR IU-5-21.

² Estimate based on best available information at the time of the request.

Includes legal costs and 50% share of costs for Alberta Innovates, Electrigan and Ipsos.

Does not include estimate for Intervenor costs for OEB hearing.

(Union does not track internal costs by proceeding).

UNDERTAKING J2.5

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 3, page 103.

For multi-family sector, to provide number of Union customers versus Enbridge customers; and what their average gas use is for those customers versus Enbridge customers; and any other information on similarities or differences, on a best-efforts basis.

Enbridge and Union use different definitions for the multi-family segment and as such are unable to provide an accurate comparison of customers and average gas use for those customers.

UNDERTAKING J2.6

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 3, page 108.

To advise on cross-tab responses between concern over environment and willingness to support renewable gas program; and percentage increase supported with steps already taken to save energy.

Part a)

Eighty-five percent of respondents indicate that they are concerned (very or somewhat) about the current state of the environment. The sample size of the sub-group of respondents who say they are not at all concerned about the current state of the environment is too small to draw conclusions when comparing to other segments. The general conclusion is that those who are concerned about the environment are more supportive of premiums than those who are not very concerned.

The tables are shown below.

Using the table below as an example - Respondents who are very concerned (column A) are more supportive of premiums than respondents who are somewhat concerned (column B) and not very concerned (column C) about the environment. Respondents who are somewhat concerned (column B) are more supportive of premiums than respondents who are not very concerned (column C) about the environment.

Q10. If your utility purchased biogas and the result was that your gas utility bill increased by 4% — which is about \$3.00 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Q1. Overall, how concerned are you about the current state of the environment?						
	Total	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Don't know/ Refused
		A	B	C	D	E
Base: All respondents	1052	377	514	125	28**	8**
Strongly support	172	88	70	11	2	1
	16.3%	23.3%	13.6%	8.8%	7.1%	12.5%
		BC				
Somewhat support	432	162	225	40	4	1
	41.1%	43.0%	43.8%	32.0%	14.3%	12.5%
		C	C			
Somewhat oppose	211	62	110	35	3	1
	20.1%	16.4%	21.4%	28.0%	10.7%	12.5%
				A		
Strongly oppose	165	39	72	33	18	3
	15.7%	10.3%	14.0%	26.4%	64.3%	37.5%
				AB		
Don't Know	72	26	37	6	1	2
	6.8%	6.9%	7.2%	4.8%	3.6%	25.0%
Summary						
Top2Box (Strongly/ Somewhat support)	604	250	295	51	6	2
	57.4%	66.3%	57.4%	40.8%	21.4%	25.0%
		BC	C			
Low2Box (Somewhat/ Strongly oppose)	376	101	182	68	21	4
	35.7%	26.8%	35.4%	54.4%	75.0%	50.0%
			A	AB		

* small base; ** very small base (under 30)

Q11. If your utility purchased biogas and the result was that your gas utility bill increased by 2% — which is about \$1.50 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Q1. Overall, how concerned are you about the current state of the environment?						
	Total	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Don't know/ Refused
		A	B	C	D	E
Base: All respondents	1052	377	514	125	28**	8**
Strongly support	352	159	170	21	1	1
	33.5%	42.2%	33.1%	16.8%	3.6%	12.5%
		BC	C			
Somewhat support	353	130	177	39	5	2
	33.6%	34.5%	34.4%	31.2%	17.9%	25.0%
Somewhat oppose	178	51	89	33	4	1
	16.9%	13.5%	17.3%	26.4%	14.3%	12.5%
				AB		
Strongly oppose	124	23	55	27	16	3
	11.8%	6.1%	10.7%	21.6%	57.1%	37.5%
			A	AB		
Don't Know	45	14	23	5	2	1
	4.3%	3.7%	4.5%	4.0%	7.1%	12.5%
Summary						
Top2Box (Strongly/ Somewhat support)	705	289	347	60	6	3
	67.0%	76.7%	67.5%	48.0%	21.4%	37.5%
		BC	C			
Low2Box (Somewhat/ Strongly oppose)	302	74	144	60	20	4
	28.7%	19.6%	28.0%	48.0%	71.4%	50.0%
			A	AB		

* small base; ** very small base (under 30)

Q12. If your utility purchased biogas and the result was that your gas utility bill increased by 1% — which is about \$0.80 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Q1. Overall, how concerned are you about the current state of the environment?						
	Total	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Don't know / Refused
		A	B	C	D	E
Base: All respondents	1052	377	514	125	28**	8**
Strongly support	492	210	248	31	2	1
	46.8%	55.7%	48.2%	24.8%	7.1%	12.5%
		BC	C			
Somewhat support	283	101	133	41	6	2
	26.9%	26.8%	25.9%	32.8%	21.4%	25.0%
Somewhat oppose	125	31	66	24	3	1
	11.9%	8.2%	12.8%	19.2%	10.7%	12.5%
			A	A		
Strongly oppose	107	21	43	24	16	3
	10.2%	5.6%	8.4%	19.2%	57.1%	37.5%
				AB		
Don't Know	45	14	24	5	1	1
	4.3%	3.7%	4.7%	4.0%	3.6%	12.5%
Summary						
Top2Box (Strongly/ Somewhat support)	775	311	381	72	8	3
	73.7%	82.5%	74.1%	57.6%	28.6%	37.5%
		BC	C			
Low2Box (Somewhat/ Strongly oppose)	232	52	109	48	19	4
	22.1%	13.8%	21.2%	38.4%	67.9%	50.0%
			A	AB		

* small base; ** very small base (under 30)

Q13. If your utility purchased biogas and the result was that your gas utility bill increased by ½% — which is about \$0.40 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Q1. Overall, how concerned are you about the current state of the environment?						
	Total	Very concerned	Somewhat concerned	Not very concerned	Not at all concerned	Don't know / Refused
		A	B	C	D	E
Base: All respondents	1052	377	514	125	28**	8**
Strongly support	562	232	278	47	4	1
	53.4%	61.5%	54.1%	37.6%	14.3%	12.5%
		BC	C			
Somewhat support	239	87	115	29	7	1
	22.7%	23.1%	22.4%	23.2%	25.0%	12.5%
Somewhat oppose	100	25	54	20	0	1
	9.5%	6.6%	10.5%	16.0%	-	12.5%
			A	A		
Strongly oppose	106	21	41	25	16	3
	10.1%	5.6%	8.0%	20.0%	57.1%	37.5%
				AB		
Don't Know	45	12	26	4	1	2
	4.3%	3.2%	5.1%	3.2%	3.6%	25.0%
Summary						
Top2Box (Strongly/ Somewhat support)	801	319	393	76	11	2
	76.1%	84.6%	76.5%	60.8%	39.3%	25.0%
		BC	C			
Low2Box (Somewhat/ Strongly oppose)	206	46	95	45	16	4
	19.6%	12.2%	18.5%	36.0%	57.1%	50.0%
			A	AB		

* small base; ** very small base (under 30)

Part b)

Since 97% of respondents report having taken steps to save energy at home, the sample size of the sub-group of respondents that has not taken steps is too small to draw conclusions between the customers who have and have not done something to save energy.

Q10. If your utility purchased biogas and the result was that your gas utility bill increased by 4% — which is about \$3.00 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

	Save Energy			
	Total	Yes	No	Don't know /Refused
Base: All respondents	1052	V 1025	W 22**	X 5**
Strongly support	172	172	0	0
	16.3%	16.8%	-	-
Somewhat support	432	425	5	2
	41.1%	41.5%	22.7%	40.0%
Somewhat oppose	211	203	6	2
	20.1%	19.8%	27.3%	40.0%
Strongly oppose	165	155	9	1
	15.7%	15.1%	40.9%	20.0%
Don't Know	72	70	2	0
	6.8%	6.8%	9.1%	-
Summary				
Top2Box (Strongly/ Somewhat support)	604	597	5	2
	57.4%	58.2%	22.7%	40.0%
Low2Box (Somewhat/ Strongly oppose)	376	358	15	3
	35.7%	34.9%	68.2%	60.0%

* small base; ** very small base (under 30)

Q11. If your utility purchased biogas and the result was that your gas utility bill increased by 2% — which is about \$1.50 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Save Energy				
	Total	Yes	No	Don't know /Refused
		V	W	X
Base: All respondents	1052	1025	22**	5**
Strongly support	352	348	4	0
	33.5%	34.0%	18.2%	-
Somewhat support	353	347	2	4
	33.6%	33.9%	9.1%	80.0%
Somewhat oppose	178	171	7	0
	16.9%	16.7%	31.8%	-
Strongly oppose	124	116	7	1
	11.8%	11.3%	31.8%	20.0%
Don't Know	45	43	2	0
	4.3%	4.2%	9.1%	-
Summary				
Top2Box (Strongly/ Somewhat support)	705	695	6	4
	67.0%	67.8%	27.3%	80.0%
Low2Box (Somewhat/ Strongly oppose)	302	287	14	1
	28.7%	28.0%	63.6%	20.0%

* small base; ** very small base (under 30)

Q12. If your utility purchased biogas and the result was that your gas utility bill increased by 1% — which is about \$0.80 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

Save Energy				
	Total	Yes	No	Don't know / Refused
Base: All respondents	1052	V 1025	W 22**	X 5**
Strongly support	492	486	4	2
	46.8%	47.4%	18.2%	40.0%
Somewhat support	283	275	6	2
	26.9%	26.8%	27.3%	40.0%
Somewhat oppose	125	121	4	0
	11.9%	11.8%	18.2%	-
Strongly oppose	107	99	7	1
	10.2%	9.7%	31.8%	20.0%
Don't Know	45	44	1	0
	4.3%	4.3%	4.5%	-
Summary				
Top2Box (Strongly/ Somewhat support)	775	761	10	4
	73.7%	74.2%	45.5%	80.0%
Low2Box (Somewhat/ Strongly oppose)	232	220	11	1
	22.1%	21.5%	50.0%	20.0%

* small base; ** very small base (under 30)

Q13. If your utility purchased biogas and the result was that your gas utility bill increased by ½% —which is about \$0.40 more per month — would you strongly support, somewhat support, somewhat oppose or strongly oppose your utility purchasing biogas?

	Save Energy			
	Total	Yes	No	Don't know /Refused
Base: All respondents	1052	V 1025	W 22**	X 5**
Strongly support	562	553	6	3
	53.4%	54.0%	27.3%	60.0%
Somewhat support	239	230	8	1
	22.7%	22.4%	36.4%	20.0%
Somewhat oppose	100	99	1	0
	9.5%	9.7%	4.5%	-
Strongly oppose	106	98	7	1
	10.1%	9.6%	31.8%	20.0%
Don't Know	45	45	0	0
	4.3%	4.4%	-	-
Summary				
Top2Box (Strongly/ Somewhat support)	801	783	14	4
	76.1%	76.4%	63.6%	80.0%
Low2Box (Somewhat/ Strongly oppose)	206	197	8	1
	19.6%	19.2%	36.4%	20.0%

* small base; ** very small base (under 30)

UNDERTAKING J3.2

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 4, page 159.

To provide pricing for small, medium and large landfill.

The landfill sizes used in the Electrigaz reports do not correspond directly to those used by the Ontario Ministry of the Environment ("MOE"). MOE designates *large landfills* as those with total waste disposal capacities of 1.5 million cubic metres of material or greater. Therefore the MOE listing of large landfills found at Exhibit B, Tab 1, Appendix 2, Table 8, pages 18 and 19, includes *large, medium and small* sized example landfills as provided in the Electrigaz Reports.

The Electrigaz Costing report at Exhibit B, Tab 1, Appendix 4 at page 10 defines small, medium and large landfills by the first year RNG volumes to be injected into the distribution grid. The annual volumes of RNG produced increase in each year as more material enters the landfill.

- **Small landfill:** 243 m³/hr
- **Medium landfill:** 569 m³/hr
- **Large landfill:** 1,896 m³/hr

The attached chart shows the average pricing paid in each year for RNG produced by the three representative examples of landfills used in the Electrigaz Reports found at Exhibit B, Tab 1, Appendix 4 and 5, small, medium and large.

The average price paid is calculated as the amount of RNG under the 150,000GJ annual breakpoint (threshold) multiplied by \$13/GJ, and the amount over the 150,000GJ annual breakpoint multiplied by \$6/GJ. The total dollar value paid is then divided by the total volume received to calculate an average price paid.

For calculation of average prices for subsequent years, the \$13 and \$6 program prices are increased annually 30% of the Ontario CPI (inflation index) and the volumes produced by the landfill increase each year. This is representative of the additional gas produced by each year's landfill activity. It should be noted in year 13 of the large landfill project, new capital equipment is added, which increases the effective salable output of the project, which explains the drop in the average price received.

Year	1	2	3	4	5	6	7	8	9
Small LFG (Planned GJ)	80,939	82,204	85,389	87,439	89,416	91,303	93,116	94,845	96,467
Below threshold									
QJ below threshold	80,939	82,204	85,389	87,439	89,416	91,303	93,116	94,845	96,467
Price below threshold	\$ 13.00	\$ 13.00	\$ 13.18	\$ 13.27	\$ 13.36	\$ 13.44	\$ 13.64	\$ 13.83	\$ 13.72
Cost below threshold	\$ 1,052,209	\$ 1,086,947	\$ 1,124,821	\$ 1,169,686	\$ 1,194,117	\$ 1,227,807	\$ 1,263,389	\$ 1,292,431	\$ 1,323,826
Above threshold									
QJ above threshold	-	-	-	-	-	-	-	-	-
Price above threshold	\$ 6.00	\$ 6.04	\$ 6.08	\$ 6.12	\$ 6.16	\$ 6.21	\$ 6.25	\$ 6.26	\$ 6.33
Cost above threshold	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total cost	\$ 1,052,209	\$ 1,086,947	\$ 1,124,821	\$ 1,169,686	\$ 1,194,117	\$ 1,227,807	\$ 1,263,389	\$ 1,292,431	\$ 1,323,826
Average price	\$ 13.00	\$ 13.00	\$ 13.18	\$ 13.27	\$ 13.36	\$ 13.44	\$ 13.54	\$ 13.63	\$ 13.72
Med LFG (Planned GJ)	198,858	194,142	199,193	204,122	208,638	213,051	217,271	221,304	225,160
Below threshold									
QJ below threshold	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Price below threshold	\$ 13.00	\$ 13.00	\$ 13.18	\$ 13.27	\$ 13.36	\$ 13.44	\$ 13.64	\$ 13.83	\$ 13.72
Cost below threshold	\$ 1,950,000	\$ 1,963,163	\$ 1,976,414	\$ 1,989,755	\$ 2,003,105	\$ 2,016,707	\$ 2,033,330	\$ 2,044,024	\$ 2,057,822
Above threshold									
QJ above threshold	38,858	44,142	49,193	54,022	58,638	63,051	67,271	71,304	75,160
Price above threshold	\$ 6.00	\$ 6.04	\$ 6.08	\$ 6.12	\$ 6.16	\$ 6.21	\$ 6.25	\$ 6.26	\$ 6.33
Cost above threshold	\$ 233,148	\$ 268,784	\$ 289,155	\$ 330,739	\$ 381,475	\$ 391,251	\$ 428,748	\$ 448,457	\$ 475,855
Total cost	\$ 2,183,148	\$ 2,231,947	\$ 2,265,569	\$ 2,320,494	\$ 2,384,580	\$ 2,407,958	\$ 2,450,588	\$ 2,492,481	\$ 2,533,677
Average price	\$ 11.58	\$ 11.49	\$ 11.42	\$ 11.37	\$ 11.33	\$ 11.30	\$ 11.28	\$ 11.28	\$ 11.25
Large LFG (Planned GJ)	836,168	862,926	862,926	862,926	862,926	862,923	862,926	862,926	862,926
Below threshold									
QJ below threshold	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Price below threshold	\$ 13.00	\$ 13.00	\$ 13.18	\$ 13.27	\$ 13.36	\$ 13.44	\$ 13.64	\$ 13.83	\$ 13.72
Cost below threshold	\$ 1,950,000	\$ 1,963,163	\$ 1,976,414	\$ 1,989,755	\$ 2,003,105	\$ 2,016,707	\$ 2,033,330	\$ 2,044,024	\$ 2,057,822
Above threshold									
QJ above threshold	485,168	502,926	502,926	502,926	502,926	502,923	502,926	502,926	502,926
Price above threshold	\$ 6.00	\$ 6.04	\$ 6.08	\$ 6.12	\$ 6.16	\$ 6.21	\$ 6.25	\$ 6.26	\$ 6.33
Cost above threshold	\$ 2,910,938	\$ 3,037,925	\$ 3,059,431	\$ 3,079,078	\$ 3,098,899	\$ 3,120,784	\$ 3,141,648	\$ 3,163,092	\$ 3,184,407
Total cost	\$ 4,860,938	\$ 5,001,088	\$ 5,035,845	\$ 5,068,833	\$ 5,101,904	\$ 5,137,491	\$ 5,172,188	\$ 5,207,081	\$ 5,242,229
Average price	\$ 7.85	\$ 7.86	\$ 7.71	\$ 7.78	\$ 7.82	\$ 7.87	\$ 7.82	\$ 7.87	\$ 8.03

10	11	12	13	14	15	16	17	18	19	20
98,077	99,687	101,031	102,411	103,731	104,993	136,199	137,352	108,454	109,607	110,616
98,077	99,687	101,031	102,411	103,731	104,993	136,199	137,352	108,454	109,607	110,616
\$ 13.81	\$ 13.90	\$ 14.00	\$ 14.05	\$ 14.10	\$ 14.28	\$ 14.38	\$ 14.48	\$ 14.58	\$ 14.67	\$ 14.77
\$ 1,354,581	\$ 1,384,725	\$ 1,414,264	\$ 1,443,284	\$ 1,471,748	\$ 1,499,702	\$ 1,527,168	\$ 1,554,168	\$ 1,580,723	\$ 1,606,855	\$ 1,632,582
\$ 6.37	\$ 6.42	\$ 6.46	\$ 6.50	\$ 6.55	\$ 6.59	\$ 6.64	\$ 6.68	\$ 6.73	\$ 6.77	\$ 6.82
\$ 1,354,581	\$ 1,384,725	\$ 1,414,264	\$ 1,443,284	\$ 1,471,748	\$ 1,499,702	\$ 1,527,168	\$ 1,554,168	\$ 1,580,723	\$ 1,606,855	\$ 1,632,582
\$ 13.81	\$ 13.90	\$ 14.00	\$ 14.05	\$ 14.10	\$ 14.28	\$ 14.38	\$ 14.48	\$ 14.58	\$ 14.67	\$ 14.77
228,643	232,370	235,739	238,980	242,339	244,983	247,797	250,487	253,059	255,517	257,888
150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
\$ 13.81	\$ 13.90	\$ 14.00	\$ 14.05	\$ 14.10	\$ 14.28	\$ 14.38	\$ 14.48	\$ 14.58	\$ 14.67	\$ 14.77
\$ 2,071,712	\$ 2,085,896	\$ 2,099,774	\$ 2,113,946	\$ 2,128,217	\$ 2,142,582	\$ 2,157,045	\$ 2,171,605	\$ 2,186,263	\$ 2,201,021	\$ 2,215,877
78,645	82,370	85,739	88,960	92,339	94,983	37,797	130,487	103,059	105,517	107,888
\$ 6.37	\$ 6.42	\$ 6.46	\$ 6.50	\$ 6.55	\$ 6.59	\$ 6.64	\$ 6.68	\$ 6.73	\$ 6.77	\$ 6.82
\$ 502,605	\$ 528,614	\$ 553,949	\$ 578,637	\$ 602,706	\$ 626,180	\$ 649,083	\$ 671,440	\$ 693,273	\$ 714,604	\$ 735,453
\$ 2,574,317	\$ 2,614,310	\$ 2,653,723	\$ 2,692,585	\$ 2,730,923	\$ 2,768,762	\$ 2,806,128	\$ 2,843,045	\$ 2,879,536	\$ 2,915,624	\$ 2,951,338
\$ 11.25	\$ 11.25	\$ 11.26	\$ 11.27	\$ 11.28	\$ 11.30	\$ 11.32	\$ 11.35	\$ 11.38	\$ 11.41	\$ 11.45
652,925	652,926	652,926	653,657	654,312	653,912	633,576	642,424	651,073	659,342	667,247
150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
\$ 13.81	\$ 13.90	\$ 14.00	\$ 14.05	\$ 14.10	\$ 14.28	\$ 14.38	\$ 14.48	\$ 14.58	\$ 14.67	\$ 14.77
\$ 2,071,712	\$ 2,085,896	\$ 2,099,774	\$ 2,113,946	\$ 2,128,217	\$ 2,142,582	\$ 2,157,045	\$ 2,171,605	\$ 2,186,263	\$ 2,201,021	\$ 2,215,877
502,925	502,926	502,926	653,657	654,312	653,912	633,576	642,424	701,073	709,342	717,247
\$ 6.37	\$ 6.42	\$ 6.46	\$ 6.50	\$ 6.55	\$ 6.59	\$ 6.64	\$ 6.68	\$ 6.73	\$ 6.77	\$ 6.82
\$ 3,205,902	\$ 3,227,541	\$ 3,249,327	\$ 4,251,683	\$ 4,348,192	\$ 4,442,806	\$ 4,535,608	\$ 4,626,678	\$ 4,716,093	\$ 4,803,926	\$ 4,890,250
\$ 5,277,614	\$ 5,313,237	\$ 5,348,182	\$ 6,365,631	\$ 6,476,409	\$ 6,585,389	\$ 6,692,653	\$ 6,798,283	\$ 6,902,356	\$ 7,004,947	\$ 7,106,127
\$ 8.08	\$ 8.14	\$ 8.19	\$ 7.92	\$ 7.96	\$ 7.99	\$ 8.03	\$ 8.07	\$ 8.11	\$ 8.15	\$ 8.19

UNDERTAKING J4.2

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 5, page 60.

To provide annual impact on a residential customer of a starting price of \$12 with an escalator of 0.5 of CPI.

For Enbridge the impact of changing the average purchase cost of RNG from \$15/GJ as filed at EB-2011-0242, Exhibit C, Tab 1, Schedule 1, pages 1 to 3 to \$12/GJ would result in a decrease in the average customer bill impact from \$18.00 per year to \$12.80 per year, or a decrease of \$5.20 per year. CPI escalators are not factored into this analysis.

For Union, the impact of changing the average purchase cost of RNG from \$15/GJ as filed at EB-2011-0242, Exhibit C, Appendix 1, Schedule 1, to \$12/GJ would result in a decrease in the average customer bill impact from \$17.96 for the South and \$18.28 for the North to \$12.86 and \$13.49 respectively per year, or a decrease of approximately \$5.10 and \$4.79 respectively per year. CPI escalators are not factored into this analysis. Detailed description of bill impact calculations can be found in Attachment 1.

An increase in CPI escalator factor from 0.3% to 0.5% would result in an increase ROE for all projects. To maintain an ROE target of 11%, the prices paid for RNG would need to decrease. An example is illustrated in response to APAO Interrogatory #7, part 4, where the large farm case was recalculated using a 50% CPI escalation factor to provide an 11% ROE. This resulted in a price decrease from \$17.00/GJ to \$16.75/GJ for volumes up to 50,000GJ/year and from \$11.00/GJ to \$10.70/GJ for volumes over 50,000GJ/year. The need to reduce prices paid for RNG would hold true in all cases if the CPI escalator factor were increased, and returns were held at 11% level. Baseline Farm and Industrial, despite increasing the CPI escalation factor, still do not have a positive ROE.

UNION'S BILL IMPACT CALCULATIONS

When using an RNG price of \$12/GJ:

Impact of RNG Purchases on South General Service Customers

For the Southern Operations Area, when comparing to the Board-approved July 2011 QRAM filing, an RNG purchase of 1.7 PJs (1.8%) of South Sales Service Supply reduces the 12-month projected deferral amount credit in the South Purchased Gas Variance Account ("SPGVA") by \$13.172 million, from \$76.816 million to \$63.643 million. The SPGVA tracks the difference between actual gas supply costs and the gas supply costs included in rates approved by the Board for Union's Southern Operations area. As a result, there is a decrease of \$0.131/GJ in the Southern Portfolio Cost Differential ("SPCD"). The SPCD is determined by comparing the projected cost of serving south sales service customers, based on Union's south portfolio, to the cost of serving south sales service customers based on the Ontario Landed Reference Price, then dividing the difference by the south sales service demand. The reduction in the SPCD results in a corresponding increase of \$0.131/GJ (0.4945 cents/m³) in the south transportation rate.

Based on the increase of 0.4945 cents/m³ in the transportation rate, a typical M1 residential customer consuming 2,600 m³ per year will see a net bill increase of \$12.86 per year (1.5% of average residential bill) when compared to current Board-approved July 2011 QRAM rates. Bundled M1 direct purchase customers will see no bill impact.

Impact of RNG Purchases on North General Service Customers

For the Northern and Eastern Operations area, when comparing to the Board-approved July 2011 QRAM filing, an RNG purchase of 0.5 PJs (1.2%) of north system supply increases the 12-month projected deferral amounts in the North Purchased Gas Variance Account ("NPGVA") by \$4.277 million. The NPGVA tracks the difference between actual gas supply costs and the gas supply costs included in rates approved by the Board for Union's Northern and Eastern Operations area. The incremental deferral amount is divided by the forecast north sales volume to determine the corresponding increase in the commodity & fuel price adjustment of 0.5190 cents/m³.

Based on the increase of 0.5190 cents/m³ in the commodity & fuel price adjustment rate, a typical Rate 01 Eastern Zone residential customer consuming 2,600 m³ per year will see a net bill increase of \$13.49 per year (1.2% of average residential bill) when compared to current approved July 2011 QRAM rates. North Bundled Rate 01 direct purchase customers will see no bill impact.

UNDERTAKING J4.3

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 5, page 92.

To provide response as to whether Toronto pilot is resurrected if application not approved.

No, the “Toronto Pilot”¹ will not be resurrected if this application is not approved.

Toronto² stipulated that “In the event that the Biogas Pilot Project Agreement is not executed by September 1st, 2010, the General Manager, Solid Waste Management Services be authorized, at his sole discretion, to terminate negotiations with Enbridge.” This date has passed and no agreement was reached, and negotiations were terminated.

¹ Pre-filed evidence Exhibit C, Tab 1, Schedule 3, Page 2

² Staff Report, Reference Number 014PW, “Authority to Enter into a Biogas Pilot Project”, page 2, Item 5.
Retrieved at: www.toronto.ca/legdocs/mmis/2010/pw/bgrd/backgroundfile-29805.pdf.

UNDERTAKING J4.8

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 5, page 106.

To update response to Part (B) in Exhibit IE-11, No. 24 to reflect April 2012 QRAM.

The annual increase in gas costs based on Enbridge's April 1, 2012 QRAM (EB-2012-0054) would be approximately \$39.4 million.

UNDERTAKING J4.10

Undertaking of Enbridge Gas Distribution Inc. and Union Gas Limited

Transcript Volume 5, page 115.

To provide annual impact for each rate class using own-use allocation methodology.

For the purpose of this undertaking response, Enbridge assumed that $87,370 \text{ } 10^3 \text{ m}^3$ out of its total $104,209.1 \text{ } 10^3 \text{ m}^3$ storage fuel gas requirement would be sourced from RNG supplies. Based on the Company's July 1, 2011 QRAM (EB-2011-0129), storage fuel gas purchases were forecast to be at \$5.44/GJ. The price differential of RNG purchases at \$15/GJ and fuel gas of \$5.44 GJ/applied is \$9.56/GJ or $\$360.49 \text{ } 10^3 \text{ m}^3$. This differential applied to the $87,370 \text{ } 10^3 \text{ m}^3$ volume cap results in an incremental gas cost of approximately \$31.5 million. Storage fuel gas costs are recovered from all customers through Enbridge's delivery rates. Storage costs are allocated to the customer rate classes based on space and deliverability requirements which recognizes that these costs are incurred to meet seasonal and maximum deliverability, consequently heat sensitive customers (Rate 1 and 6) pay a higher unit rate than non heat sensitive customers. A typical residential customer on system gas or direct purchase would see a bill impact of approximately \$10.35 annually.