

November 18, 2015

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

RE: EB-2015-0166/EB-2015-0175 – Union Gas Limited – Pre-Approval of the Cost Consequences of NEXUS Long Term Contract – Undertaking J2.3

Please find attached Union's response to Undertaking J2.3 in the above proceeding in the Oral Hearing on November 16, 2015.

The Undertaking response will be filed in the RESS and copies sent to the Board.

If you have any questions with respect to this submission please contact me at (519) 436-5473.

Yours truly,

[Original signed by]

Karen Hockin
Manager, Regulatory Initiatives

cc: Charles Keizer, Torys
Mark Kitchen, Union Gas
All Intervenors

UNION GAS LIMITED

Undertaking of Mr. Tetreault
To Mr. Quinn

Union to provide information as described by Mr. Keizer at the outset: the landed cost for the North for supplies landed at Dawn; landed costs for the North for supplies landed at Kirkwall.

For the purposes of this response Union has calculated the 2018 bill impacts for an average residential customer consuming 2,200 m³ per year in the proposed Union North East Zone (Union NDA, Union NCDA and Union EDA) based on landed gas supply costs at Dawn and landed gas supply costs at Kirkwall.

As described in more detail below, an average residential customer in the Union North East Zone will see an approximately \$6 per year lower bill by landing gas at Dawn via the NEXUS pipeline as compared to landing gas at Kirkwall from Niagara.

Dawn Reference Price

To calculate the 2018 bill impacts based on landed gas supply costs at Dawn, Union has assumed a Dawn Reference Price of \$3.74/GJ and Union's proposed 2018 gas supply plan, as per the EB-2015-0181 proceeding (Dawn Reference Price). Union has also included the 2018 impacts of the capital pass-through projects and NEXUS annual gas cost savings of approximately \$39 million (or \$589 million over the 15 year term of the proposed NEXUS transportation contract). Please see Table 1 below for the calculation of the NEXUS gas cost savings. (This ties to Oral Hearing Transcript Volume 2, p. 67 lines 13-15. The figure provided in Oral Hearing Transcript Volume 3, p. 95 line 11 should be \$589 million rather than \$558 million)

Table 1
NEXUS Gas Cost Savings vs Dawn

Line No.	Particulars	
1	Landed cost at Dawn (per GJ) (1)	\$7.38
2	Landed cost on NEXUS/St. Clair (per GJ) (1)	\$6.70
3	NEXUS savings vs. Dawn (per GJ)	\$0.68
4	NEXUS contracted capacity (GJ/d)	158,258
5	Expected NEXUS gas cost savings (per day)	\$107,615
6	Total NEXUS gas cost savings (line 5 x 365 x 15)	\$589,192,125

Notes:

(1) Per Exhibit B.T1.Union.TCPL.2

Based on the assumptions described above, for an average Rate 01 residential customer consuming 2,200 m³ per year in the Union North East Zone the total bill is approximately \$940 per year. Please see Attachment 1, page 1, line 23.

Kirkwall Price

To calculate the 2018 bill impacts based on landed gas supply costs at Kirkwall, Union has assumed a landed Kirkwall gas cost of \$3.501/GJ. Union has also included its proposed 2018 gas supply plan, as per the EB-2015-0181 proceeding, as well as the 2018 impacts of the capital pass-through projects. Finally, Union has excluded the NEXUS annual gas cost savings of approximately \$39 million. Please see Table 2 for the calculation of the Kirkwall Price.

Table 2
Calculation of Kirkwall Price

<u>Line No.</u>	<u>Particulars (\$)</u>	
1	Niagara Price (per GJ)	\$3.2631
2	Tolls Niagara to Kirkwall (per GJ)	0.2282
3	Fuel (0.2967%)	0.0097
4	Kirkwall Price (per GJ)	<u>\$3.501</u>

Based on the assumptions described above, for an average Rate 01 residential customer consuming 2,200 m³ per year in the Union North East Zone the total bill is approximately \$946 per year. Please see Attachment 1, page 2, line 23.

Accordingly, for an average Rate 01 residential customer in the Union North East Zone, the total bill is estimated to be approximately \$6 per year lower as a result of landing gas at Dawn via the NEXUS pipeline as compared to landing gas at Kirkwall from Niagara.

UNION GAS LIMITED
Rate 01 Residential Bill Impacts at 2,200 m³ of 2018 Gas Supply Plan
Including Capital Pass Through Projects in 2018 and
NEXUS Gas Cost Savings for Union North East Zone

Line No.	Particulars (\$)	Union North East		
		NDA	NCDA	EDA
		(a)	(b)	(c)
	<u>Current Approved (1)</u>			
1	Monthly Customer Charge	252.00	252.00	252.00
2	Delivery	195.26	195.26	195.26
3	Transportation	145.57	172.44	172.44
4	Storage	84.84	95.60	95.60
5	Commodity (Alberta Border)	262.63	264.79	264.79
6	Total Bill	940.30	980.09	980.09
	<u>Proposed in EB-2015-0181 (2)</u>			
7	Monthly Customer Charge	252.00	252.00	252.00
8	Delivery	195.26	195.26	195.26
9	Transportation	65.30	65.30	65.30
10	Storage	132.54	132.54	132.54
11	Commodity (3)	321.58	321.58	321.58
12	Total Bill	966.68	966.68	966.68
	<u>Proposed vs Current Approved</u>			
13	Transportation (line 9 - line 3)	(80.27)	(107.14)	(107.14)
14	Storage (line 10 - line 4)	47.70	36.94	36.94
15	Commodity (line 11 - line 5)	58.95	56.79	56.79
16	Total Bill Impact (line 12 - line 6)	26.38	(13.41)	(13.41)
17	Bill Impact (%) (line 16 / line 6)	2.8%	-1.4%	-1.4%
	<u>Including 2018 Projects and NEXUS Gas Cost Savings (4)</u>			
18	Monthly Customer Charge	252.00	252.00	252.00
19	Delivery (5)	179.46	179.46	179.46
20	Transportation	71.68	71.68	71.68
21	Storage	141.59	141.59	141.59
22	Commodity (3), (6)	295.35	295.35	295.35
23	Total Bill	940.08	940.08	940.08
	<u>Including 2018 Projects and NEXUS Gas Cost Savings vs Current Approved</u>			
24	Delivery (line 19 - line 2)	(15.80)	(15.80)	(15.80)
25	Transportation (line 20 - line 3)	(73.89)	(100.76)	(100.76)
26	Storage (line 21 - line 4)	56.75	45.99	45.99
27	Commodity (line 22 - line 5)	32.72	30.56	30.56
28	Total Bill Impact (line 23 - line 6)	(0.22)	(40.01)	(40.01)
29	Bill Impact (%) (line 28 / line 6)	0.0%	-4.1%	-4.1%
	<u>Including 2018 Projects and NEXUS Gas Cost Savings vs Proposed in EB-2015-0181</u>			
30	Delivery (line 19 - line 8)	(15.80)	(15.80)	(15.80)
31	Transportation (line 20 - line 9)	6.38	6.38	6.38
32	Storage (line 21 - line 10)	9.04	9.04	9.04
33	Commodity (line 22 - line 11)	(26.23)	(26.23)	(26.23)
34	Total Bill Impact (line 23 - line 12)	(26.60)	(26.60)	(26.60)
35	Bill Impact (%) (line 34 / line 12)	-2.8%	-2.8%	-2.8%

Notes:

- (1) As per Union's April 2015 QRAM (EB-2015-0035)
- (2) As per EB-2015-0181, Exhibit A, Tab 2, page 28-29, Table 5.
- (3) The Union North West Zone is based on the Empress Reference Price of \$2.951/GJ and the Union North East Zone is based on the Dawn Reference Price of \$3.742/GJ, as per April 2015 QRAM (EB-2015-0035). Conversion to 10³m³ based on a heat value of 38.55 GJ/10³m³.
- (4) 2018 bill impacts of the Capital Pass Through Projects includes Parkway West, Brantford to Kirkwall/Parkway D, (EB-2012-0433/EB-2013-0074), Burlington Oakville Pipeline (EB-2014-0182), 2016 Dawn to Parkway System Expansion (EB-2014-0261) and 2017 Dawn Parkway Project (EB-2015-0200).
- (5) As per Union's proposal in EB-2015-0116, Exhibit A, Tab 1, Updated, pages 13-14, customer related variance of projects is recovered over all the delivery blocks.
- (6) Includes NEXUS gas cost savings of 1.1915 cents/m³ in Union North East. Unit rate savings calculated as landed cost at Dawn vs landed cost of NEXUS/St. Clair per Exhibit B.T1.Union.TCPL.2 (\$7.38/GJ - \$6.70/GJ) x 158,258 GJ x 365 = \$39,279,635 / 3,296,792 m³ Union 2013 sales service volumes.

UNION GAS LIMITED
Rate 01 Residential Bill Impacts at 2,200 m³ of 2018 Gas Supply Plan
Including Capital Pass Through Projects in 2018 and
Kirkwall Price for Union North East Zone

Line No.	Particulars (\$)	Union North East		
		NDA (a)	NCDA (b)	EDA (c)
	<u>Current Approved (1)</u>			
1	Monthly Customer Charge	252.00	252.00	252.00
2	Delivery	195.26	195.26	195.26
3	Transportation	145.57	172.44	172.44
4	Storage	84.84	95.60	95.60
5	Commodity (Alberta Border)	262.63	264.79	264.79
6	Total Bill	940.30	980.09	980.09
	<u>Proposed in EB-2015-0181 (2)</u>			
7	Monthly Customer Charge	252.00	252.00	252.00
8	Delivery	195.26	195.26	195.26
9	Transportation	65.30	65.30	65.30
10	Storage	132.54	132.54	132.54
11	Commodity (3)	321.58	321.58	321.58
12	Total Bill	966.68	966.68	966.68
	<u>Proposed vs Current Approved</u>			
13	Transportation (line 9 - line 3)	(80.27)	(107.14)	(107.14)
14	Storage (line 10 - line 4)	47.70	36.94	36.94
15	Commodity (line 11 - line 5)	58.95	56.79	56.79
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17	Bill Impact (%) (line 16 / line 6)	2.8%	-1.4%	-1.4%
	<u>Including 2018 Projects and Kirkwall Price for Union North East (4)</u>			
18	Monthly Customer Charge	252.00	252.00	252.00
19	Delivery (5)	179.46	179.46	179.46
20	Transportation	71.68	71.68	71.68
21	Storage	141.59	141.59	141.59
22	Commodity (3)	301.12	301.12	301.12
23	Total Bill	945.85	945.85	945.85
	<u>Including 2018 Projects and Kirkwall Price vs Current Approved</u>			
24	Delivery (line 19 - line 2)	(15.80)	(15.80)	(15.80)
25	Transportation (line 20 - line 3)	(73.89)	(100.76)	(100.76)
26	Storage (line 21 - line 4)	56.75	45.99	45.99
27	Commodity (line 22 - line 5)	38.49	36.33	36.33
28	Total Bill Impact (line 23 - line 6)	5.55	(34.24)	(34.24)
29	Bill Impact (%) (line 28 / line 6)	0.6%	-3.5%	-3.5%
	<u>Including 2018 Projects and Kirkwall Price vs Proposed in EB-2015-0181</u>			
30	Delivery (line 19 - line 8)	(15.80)	(15.80)	(15.80)
31	Transportation (line 20 - line 9)	6.38	6.38	6.38
32	Storage (line 21 - line 10)	9.04	9.04	9.04
33	Commodity (line 22 - line 11)	(20.45)	(20.45)	(20.45)
34	Total Bill Impact (line 23 - line 12)	(20.82)	(20.82)	(20.82)
35	Bill Impact (%) (line 34 / line 12)	-2.2%	-2.2%	-2.2%

Notes:

- (1) As per Union's April 2015 QRAM (EB-2015-0035)
- (2) As per EB-2015-0181, Exhibit A, Tab 2, page 28-29, Table 5.
- (3) The Union North West Zone is based on the Empress Reference Price of \$2.951/GJ and the Union North East Zone is based on the Kirkwall Price of \$3.501/GJ. Conversion to 10³m³ based on a heat value of 38.55 GJ/10³m³.
The Kirkwall Price is calculated as follows:

Niagara price (\$/GJ):	3.2631
Tolls Niagara to Kirkwall (\$/GJ):	0.2282
Fuel (0.2967%):	0.0097
Kirkwall Price (\$/GJ)	<u>3.5010</u>
- (4) 2018 bill impacts of the Capital Pass Through Projects includes Parkway West, Brantford to Kirkwall/Parkway D, (EB-2012-0433/EB-2013-0074), Burlington Oakville Pipeline (EB-2014-0182), 2016 Dawn to Parkway System Expansion (EB-2014-0261) and 2017 Dawn Parkway Project (EB-2015-0200).
- (5) As per Union's proposal in EB-2015-0116, Exhibit A, Tab 1, Updated, pages 13-14, customer related variance of projects is recovered over all the delivery blocks.