ONTARIO ENERGY BOARD

EB-2015-0166
EB-2015-0175

Union Gas Limited

Enbridge Gas Distribution Inc.

Applications for pre-approval of the cost consequences of long-term natural gas transportation contracts with NEXUS Gas Transmission.

FRPO REFERENCE DOCUMENT FOR ORAL HEARING

NOVEMBER 16-17, 2015

Ontario

Natural Gas Regulation in Ontario:

A Renewed Policy Framework

Report on the Ontario Energy Board

Natural Gas Forum

March 30, 2005

The Board will develop guidelines for the standardization of the quarterly rate adjustment mechanism, with the above objectives in mind. As part of this activity, the Board will consult in more detail on the underlying pricing that should be incorporated.

With respect to whether utilities should be able to offer fixed-term, fixed-price contracts, the Board concludes that it would not be appropriate at this time. The regulated gas supply option should be seen as a default supply – a no-written-contract, no-obligation, market-priced choice – where the mobility of the customer is essential. The Board believes that introducing a utility-provided fixed-term, fixed-price contract offer at this time would present two risks. First, the fixed-term aspect could reduce the utility's ability to ensure full customer mobility. Second, the fixed-price aspect would compete with the product offered by the retail marketeters. It would move the regulated supply away from being a default supply, and result in more direct competition between the utility and competitive suppliers. A fixed-term, fixed-price contract offer would require substantial additional regulatory oversight related to the underlying contracting, the customer-utility interface and the allocation of risk. The Board does not believe that this is the appropriate direction to take, and most stakeholders shared this view.

The Board believes that a utility-provided fixed-term, fixed-price contract offer is inappropriate at this time.

Long-Term Supply and Transportation Contracts

Stakeholders' Views

Many of the stakeholders (including customers, upstream players and utilities) asserted that the regulated gas supply is implicitly used to underpin future infrastructure development in the natural gas market. Some emphasized the importance of the utilities' creditworthiness, noting that utilities are among the few parties able to enter into the long-term contracts needed for infrastructure development. Views on the appropriate length and mixture of contracts within the portfolio were consistent among these stakeholders – the utilities should be allowed to enter into a range of contract terms from short-term to long-term. This mixture of contract terms would facilitate the development of infrastructure for new supply and allow the utilities to manage their risk, and thereby minimize price volatility for the customer. The only stakeholder that did not support a mixture of contract terms was the Vulnerable Energy Consumers Association, which stated that the regulated gas supply procurement portfolio should be based on an average of one-year forward gas supply contracts.

Other stakeholders, including the marketers, were not convinced that the utilities' role in regulated gas supply was essential to support upstream infrastructure investment. Noting the prominence of the Dawn Hub with its many counterparties and the large size of the Ontario natural gas market, these stakeholders questioned the claim that major capacity infrastructure additions depend on the utilities. In addition, one submission stated that the availability of substantial surplus capacity in TransCanada PipeLines' Mainline system suggests that utilities do not need to make any major decisions in the immediate future about contracts for new capacity.

Stakeholders who expressed the views outlined in the previous paragraph also expressed concerns about the risks associated with long-term supply commitments by the utilities, including stranded costs, reduced customer mobility and commitments that favour the upstream investments of the utility's parent company or affiliates. In their view, the utilities should be allowed to enter into only short-term commitments of one year or less.

Some stakeholders suggested that the Board develop guidelines or a regulatory framework and, in some cases, provide pre-approval of contracts to allow the utilities to make the necessary commitments in a timely manner. Others felt that the current review process was sufficient. Many stakeholders, including the ones that favoured long-term contracts for the utility, stated that the Board needed to verify that any actions taken by the utility were truly market driven and/or were the least-cost option, and not related to the utility's other commercial interests.

The Board's Conclusions

The Board believes that it is useful to separate the consideration of upstream transportation contracting from long-term supply contracting. The utilities currently undertake these activities separately: supply is contracted primarily on a short-term basis, whereas there is a "portfolio" of terms for upstream transportation contracts. And whereas supply contracting is related primarily to the regulated supply function, transportation contracting extends beyond that function.

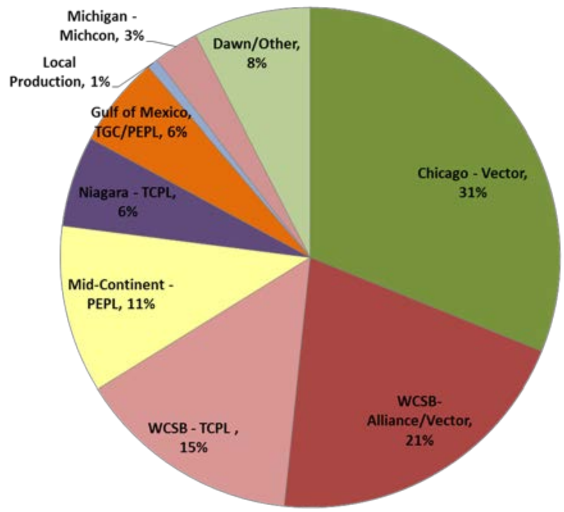
The Board is mindful of the importance of security of supply. However, it is not convinced that long-term utility supply contracts are essential for security of supply. The Board is of the view that access to a liquid hub provides the best assurance of secure access to competitively priced supply. In contrast, the Board is concerned that the potential risks to ratepayers from long-term supply contracts could be significant. Further, the Board views the regulated supply option as a default supply, which means that customer mobility is essential, prices need to reflect the market and retroactive adjustments (related to the PGVA) are kept to a minimum.

The Board is not in favour of new long-term utility supply contracts at this time.

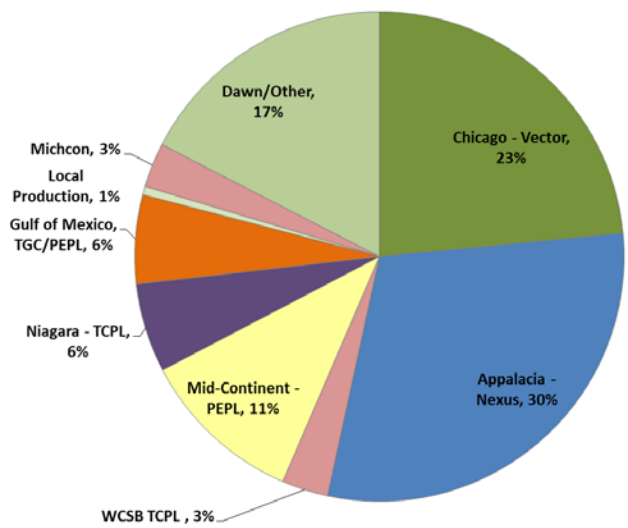
The Board agrees that, to some extent, utility upstream transportation contracts provide benefits to all customers, may reduce barriers for competitive suppliers who want to enter the market and help reduce gas price volatility. The trade-off is the potential risk involved, and the Board believes that utilities need a diversified portfolio to reduce that risk. To the extent that upstream transportation contracts underpin security of supply to the whole market, the Board believes that all customers should bear the costs.

The Board believes that there is a role for utilities in long-term upstream transportation contracting, subject to a prudence review.

Figure 5-2
January 2015 South Portfolio



November 2017 Projected South Portfolio



Looking at the entire Union transportation portfolio together (i.e. Union North and Union South), the NEXUS capacity will add Appalachian shale supplies and will reduce the overall reliance on

UNION GAS LIMITED

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

Reference: Exhibit A, Schedule 5

How would changes in the foreign exchange rate affect the difference between the prices shown in Schedule 5? If there is a difference, please provide a schedule showing the prices based on the current exchange rate.

Response:

Please see Attachment 1 for updated landed cost schedules at the current foreign exchange rate. For reference please also see the response at Exhibit B.T3.Union.Staff.18 for schedules reflecting the 1.4 exchange rate.

Since all ICF gas price forecasts are provided in $US/mmBtu, a change to the foreign exchange rate assumption only impacts Canadian pipeline tolls and the final conversion of each path to $CDN/GJ in Column K. The relative ranking of all pipeline paths remain the same.

Recalculated Landed Cost Analysis - Current Foreign Exchange Rate of 1.3133

Nov 2017 to Oct 2032 Transportation Contracting Analysis

	Route	Point of Supply	Basis Differential $US/mmBtu	Supply Cost $US/mmBtu	Unitized Demand Charge $US/mmBtu(1)(7)	Commodity Charge $US/mmBtu (1)	Fuel Charge $US/mmBtu (1)	100% LF Transportation Inclusive of Fuel $US/mmBtu	Landed Cost $US/mmBtu	Landed Cost $Cdn/G	Point of Delivery	Comment
	(A)	(B)	(C)	(D) = Nymex + C	(E)	(F)	(G)	(I) = E + F + G	(J) = D + I	**(K)**	(L)	
(6)	**TCPL Niagara to Kirkwall**	Niagara	-0.449	7.0511	0.1798	0.0000	0.0103	0.1902	$7.24	**$9.01**	Kirkwall	
(3)	**Rover****	Southwest PA	-0.954	6.5455	0.8000	0.0000	0.1577	0.9577	$7.50	**$9.34**	Dawn	
*	**NEXUS / St. Clair**	Southwest PA	-0.954	6.5455	0.7997	0.0000	0.1728	0.9725	$7.52	**$9.36**	Dawn	Includes St. Clair to Dawn costs
(5)	**NEXUS/St. Clair (Increase Upper end of toll by 15%)**	Southwest PA	-0.954	6.5455	0.8952	0.0000	0.1728	1.0680	$7.61	**$9.48**	Dawn	Toll is $ 0.77+ $ 0.635*15%. Includes St. Clair to Dawn costs
(6)	**Vector (2014 - 2017)**	Chicago	-0.103	7.3972	0.1883	0.0017	0.0732	0.2633	$7.66	**$9.54**	Dawn	
(2)	**Dawn**	Dawn	0.177	7.6769	0.0000	0.0000	0.0000	0.0000	$7.68	**$9.56**	Dawn	
(6)	**Michcon (2014-2015)**	Michcon Generic	0.023	7.5229	0.0630	0.0000	0.1398	0.2029	$7.73	**$9.62**	Dawn	Includes St. Clair to Dawn costs
(6)	**Vector (2012 - 2016)**	Chicago	-0.103	7.3972	0.2500	0.0990	0.0732	0.4222	$7.82	**$9.73**	Dawn	
(6)	**Trunkline / Panhandle**	Trunkline Field Zone 1A	-0.092	7.4075	0.2212	0.0268	0.2995	0.5475	$7.95	**$9.90**	Dawn	Includes Ojibway to Dawn costs
(6)	**Panhandle (2012-2017)**	Panhandle Field Zone	-0.377	7.1230	0.3492	0.0439	0.4687	0.8617	$7.98	**$9.94**	Dawn	Includes Ojibway to Dawn costs
(6)	**Alliance / Vector**	CREC	-1.067	6.4335	1.5608	-0.3405	0.3593	1.5795	$8.01	**$9.97**	Dawn	
(6)	**Panhandle (2014-2015)**	Panhandle Field Zone	-0.377	7.1230	0.4547	0.0439	0.4687	0.9672	$8.09	**$10.07**	Dawn	Includes Ojibway to Dawn costs
(6)	**Panhandle (2010-2017)**	Panhandle Field Zone	-0.377	7.1230	0.4547	0.0439	0.4687	0.9672	$8.09	**$10.07**	Dawn	Includes Ojibway to Dawn costs
(2)	**TCPL Empress to Dawn**	Empress	-0.722	6.7782	1.4550	0.0000	0.2745	1.7296	$8.51	**$10.59**	Dawn	
(6)	**TCPL Empress to Union CDA**	Empress	-0.722	6.7782	1.5790	0.0000	0.2793	1.8583	$8.64	**$10.75**	Union CDA	

(1) Unitized Demand Charges, Commodity Charges and Fuel Charges per Maximum Applicable Tariff and include capacity required to flow fuel for downstream pipeline segments
(2) For Reference Only
(3) Toll Estimates used in lieu of official toll for portion of path
(5) Sensitivity Analysis
(6) Existing Union Contract
* indicates path referenced in evidence for this analysis
** The analysis is based on an indicative rate for Rover of $0.80 USD/mmbtu. The analysis does not contemplate potential toll increases arising from factors such as capital cost overruns or pipeline undersubscription.

Assumptions used in Developing Transportation Contracting Analysis:

Annual Gas Supply & Fuel Ratio Forecasts	Point of Supply Col (B) above	Nov 2017 - Oct 2018	Nov 2018 - Oct 2019	Nov 2019 - Oct 2020	Nov 2020 - Oct 2021	Nov 2021 - Oct 2022	Nov 2022 - Oct 2023	Nov 2023 - Oct 2024	Nov 2024 - Oct 2025	Nov 2025 - Oct 2026	Nov 2026 - Oct 2027	Nov 2027 - Oct 2028	Nov 2028 - Oct 2029	Nov 2029 - Oct 2030	Nov 2030 - Oct 2031	Nov 2031 - Oct 2032	Average Annual Gas Supply Cost $US/mmBtu Col (D) above	Fuel Ratio Forecasts Col (G) above
Henry Hub (NYMEX)	Henry Hub	$4.62	$5.43	$6.12	$6.59	$6.81	$6.89	$7.06	$7.23	$7.56	$8.03	$8.44	$8.90	$9.26	$9.62	$9.96	$7.50	
TCPL Niagara to Kirkwall	Niagara	$4.62	$5.35	$5.96	$6.37	$6.54	$6.59	$6.71	$6.78	$7.00	$7.33	$7.71	$8.13	$8.56	$8.86	$9.26	$7.05	0.15%
Rover	Southwest PA	$4.09	$4.88	$5.50	$5.89	$6.06	$6.12	$6.25	$6.32	$6.53	$6.85	$7.19	$7.58	$7.98	$8.28	$8.66	$6.55	2.41%
NEXUS / St. Clair	Southwest PA	$4.09	$4.88	$5.50	$5.89	$6.06	$6.12	$6.25	$6.32	$6.53	$6.85	$7.19	$7.58	$7.98	$8.28	$8.66	$6.55	2.64%
NEXUS/St. Clair (Increase Upper end of toll by 15%)	Southwest PA	$4.09	$4.88	$5.50	$5.89	$6.06	$6.12	$6.25	$6.32	$6.53	$6.85	$7.19	$7.58	$7.98	$8.28	$8.66	$6.55	2.64%
Vector (2014 - 2017)	Chicago	$4.63	$5.41	$6.07	$6.52	$6.73	$6.81	$6.97	$7.14	$7.46	$7.91	$8.31	$8.75	$9.09	$9.42	$9.73	$7.40	0.99%
Dawn	Dawn	$4.82	$5.62	$6.29	$6.76	$6.98	$7.07	$7.24	$7.42	$7.75	$8.21	$8.63	$9.08	$9.43	$9.77	$10.09	$7.68	0.00%
Michcon (2014-2015)	Michcon Generic	$4.70	$5.49	$6.16	$6.62	$6.84	$6.92	$7.09	$7.26	$7.59	$8.05	$8.46	$8.91	$9.25	$9.59	$9.90	$7.52	1.86%
Vector (2012 - 2016)	Chicago	$4.63	$5.41	$6.07	$6.52	$6.73	$6.81	$6.97	$7.14	$7.46	$7.91	$8.31	$8.75	$9.09	$9.42	$9.73	$7.40	0.99%
Trunkline / Panhandle	Trunkline Field Zone 1A	$4.56	$5.37	$6.05	$6.51	$6.72	$6.80	$6.97	$7.14	$7.46	$7.93	$8.33	$8.79	$9.14	$9.49	$9.83	$7.41	4.04%
Panhandle (2012-2017)	Panhandle Field Zone	$4.42	$5.20	$5.84	$6.29	$6.48	$6.56	$6.71	$6.88	$7.19	$7.63	$8.02	$8.44	$8.76	$9.07	$9.36	$7.12	6.58%
Alliance / Vector	CREC	$3.69	$4.44	$5.08	$5.54	$5.77	$5.87	$6.04	$6.23	$6.55	$6.99	$7.36	$7.78	$8.09	$8.39	$8.67	$6.43	5.58%
Panhandle (2014-2015)	Panhandle Field Zone	$4.42	$5.20	$5.84	$6.29	$6.48	$6.56	$6.71	$6.88	$7.19	$7.63	$8.02	$8.44	$8.76	$9.07	$9.36	$7.12	6.58%
Panhandle (2010-2017)	Panhandle Field Zone	$4.42	$5.20	$5.84	$6.29	$6.48	$6.56	$6.71	$6.88	$7.19	$7.63	$8.02	$8.44	$8.76	$9.07	$9.36	$7.12	6.58%
TCPL Empress to Dawn	Empress	$4.03	$4.78	$5.42	$5.87	$6.09	$6.18	$6.36	$6.55	$6.88	$7.33	$7.72	$8.15	$8.47	$8.78	$9.07	$6.78	4.05%
TCPL Empress to Union CDA	Empress	$4.03	$4.78	$5.42	$5.87	$6.09	$6.18	$6.36	$6.55	$6.88	$7.33	$7.72	$8.15	$8.47	$8.78	$9.07	$6.78	4.12%

Sources for Assumptions:

Gas Supply Prices (Col D):	ICF Base Case Jan 2015			
Fuel Ratios (Col G):	Average ratio over the previous 12 months or Pipeline Forecast			
Transportation Tolls (Cols E & F):	Union Tolls in Effect Jan 2015			
Foreign Exchange (Col K)	$1 US =	1.3133	CDN	Updated August 7, 2015 Bank of Canada Closing
Energy Conversions (Col K)	1 dth = 1 mmBtu =	1.055056		
Union's Analysis Completed:	Updated August 2015 to change FX rate for Exhibit B.T1.Union.LPMA.7			

* indicates path referenced in evidence for this analysis

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2015-0166**	**Union Gas Limited**
	EB-2015-0175	**Enbridge Gas Distribution Inc.**

VOLUME: **Technical Conference**

DATE: **September 9, 2015**

Could Enbridge have switched to Rover at this time with no cost?

MR. LEBLANC: So I think it's under section 9 of the precedent agreement. You don't have to turn it up. I can tell you sort of what it says.

It basically says that, if there's a termination because of not being able to meet a condition precedent, which is what occurred -- so we told Nexus, "We're not able to recommend or gain internal approvals of this contract." And so the immediate obligation there is for us to meet and to -- with due diligence and work together to try to renegotiate a contract that can work for both sides. So we had that obligation to work with them, and we did that.

Now, I believe, and I have to confirm, but I believe, by that time, Rover was sold out, but even so, we had an obligation to negotiate with Nexus a -- or to renegotiate and see if we could come to terms. I think we actually did a pretty good job, and I would actually talk to that a little bit more.

Like, so the written response in FRPO 4, you know, it touches on the factors of why we didn't move forward, and, you know, we were, at the time, a little concerned about supply at Kensington. We didn't have a clear picture then. We didn't know -- really two things happened, at the end of the day: A bunch of projects come out of the woods, which gave us cause to pause, and the Niagara supply was becoming more and more of an issue for us. We had intentions of filling that Niagara supply with a combination of both base load and seasonal loads. We were having trouble getting that. And so the combination of those two things led us to say, you know, this contract, at 150, is too much for us. We've got to step away from it. And so then what we did -- you know, we liked Nexus. We thought it was a good opportunity, but it was just too much at 150.

So then we went back and renegotiated with Nexus and got more favourable terms. You know, we reduced the volume. We spent some time, and Sussex did some work for us to help us more clearly understand the supply there. We negotiated to connect into Vector and use our own transport rather than a full path on Nexus and ultimately came to an agreement that we thought was the best agreement for ratepayers.

MR. SCHUCH: Thank you. That is very helpful, and, thank you, John, for your indulgence.

MR. WOLNIK: Yes, you bet.

MR. DE ROSE: John --

MR. WOLNIK: Yes, sir,

MR. QUINN: Sorry, it's Dwayne. I had a few more minutes before we started our meeting so I was listening in. Jamie -- do you mind, John, if I just ask one question?

MR. WOLNIK: Yes. No, go ahead.

MR. QUINN: Jamie, you've talked about these challenges at Niagara, and I understand from experience that I've had that there are limited suppliers at Niagara. Yet you have been contracting -- or have you been contracting, or do you have any contracts currently in place, at Niagara?

MR. LEBLANC: Yes. We ultimately -- you know, the list was short and it got shorter as we sort of got to the fine strokes of getting supply.

It's actually why we also changed our -- renegotiated to change our contract with TransCanada, to allow the option of Chippewa or Niagara. And between those two points, we've been able to -- we haven't completely finished our contracting but we have contracted for a fair at of it and we believe we will be able to contract for the whole 200,000.

But it was not an easy task. What we found was most of that -- we talked yesterday about 1.4 PJs. Most of that gas that is coming to the border also has transportation beyond the border.

So buying at Nexus -- or at Niagara, sorry, has been a challenge for us.

You know, there just aren't that many suppliers and folks, rightly so, wanted to contract on to a more liquid point like Dawn.

And so there have been challenges, certainly, getting the volume -- you know, 200,000 a day is not a small amount of gas, and there certainly have been challenges to get that gas and we've had to go with --

MR. QUINN: But you've broken that up. The 200,000, you didn't go in one fell swoop. You broke that into multiple contracts, I presume?

MR. LEBLANC: That's correct. We signed three --

MR. QUINN: Okay. In that process -- sorry to cut you off, Jamie. I only have limited time. I am on John's clock, now.

But I just wanted to ask: Are you able to provide any information from those suppliers about indicative pricing going forward at Niagara versus Dawn, Henry Hub, or AECo? Did you receive any of that information in dealing with your suppliers?

MR. LEBLANC: When you say "going forward," I have pricing -- so, we have negotiated basically two-year but really 22-month contracts with them. So I certainly have indication of pricing for the next couple of years, but not beyond that, no.

MR. QUINN: Okay. Can you provide the average price relative -- assuming a lot of it (sic) is on index, what the pricing is moving forward as an undertaking?

MR. LEBLANC: So I can actually provide that directly. For the contracts that we have signed to date, the average pricing is Dawn minus 46 cents Canadian per gJ.

MR. QUINN: Minus 46 relative to where?

MR. LEBLANC: Dawn.

MR. QUINN: To Dawn. So 46 cents left from Dawn.

Okay, thank you very much. Those are my questions.

Thanks, John.

MR. WOLNIK: Yes, you're welcome.

I had one general question for Nexus, maybe just before we move on. And Union, in their contracting with

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Reference: Exhibit A, Tab 2, p. 12, lines 4-9

Preamble: Union describes forecasted annual cost impacts.

Please provide a table that contains the respective cost changes detailed in the reference as compared to the forecasts presented to the Board for these zones in the combined Parkway West and Dawn-Parkway proceedings (EB-2012-0433 and EB-2013-0074).

Response:

Please see Table 1 for a comparison of cost changes in this proceeding relative to the costs forecast in the Parkway West and Brantford-Kirkwall/Parkway D Project (EB-2012-0433/EB-2013-0074). This is not a relevant comparison as the data sets are for different gas supply portfolios, compare different timeframes and reflect different TransCanada tolls.

Column (a) in Table 1 represents calendar year 2018 of the 2015 to 2019 Gas Supply Plan. Calendar year 2018 reflects the annualized costs of all gas supply portfolio changes anticipated in 2015, 2016 and 2017. The TransCanada tolls assumed in this plan are as approved by the National Energy Board on an interim basis effective January 1, 2015.

The forecast data provided in column (b) reflects annualized storage and transportation costs for gas supply portfolio changes anticipated at November 1, 2015 in EB-2013-0074. The TransCanada tolls assumed in this plan are based on 2013 TransCanada compliance tolls effective July 1, 2013. The costs in column (b) do not contemplate further portfolio changes beyond 2015.

Table 1
Comparison of Union North Storage and Transportation Revenue Requirement

Line No.	Cost Allocation ($000)	Proposed 2018	EB-2013-0074 Costs	Variance
		(a)	(b)	(c) = (a - b)
	Transportation			
1	Cost of Gas - Transportation Demand	56,900	47,097	9,804
2	Cost of Gas - Transportation Fuel	1,549	733	817
3	Other Transportation	199	199	-
4	Total Transportation Costs	58,649	48,028	10,621
	Storage			
5	Cost of Gas - Storage Demand	41,395	15,861	25,535
6	Cost of Gas - Storage Fuel	664	339	325
7	Union Storage Costs (1)	17,819	20,336	(2,517)
8	Total Storage	59,878	36,535	23,343
9	Total Transportation and Storage	118,527	84,563	33,964

Notes:
(1) Union North storage costs include $2.5 million of allocated 2018 Dawn-Parkway costs associated with the Brantford-Kirkwall/Parkway D Project, as per EB-2013-0074, Schedule 10-2, line 23, column b) + column d).

A Spectra Energy Company

October 18th, 2013

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

Dear Ms. Walli:

RE: Union Gas Limited ("Union") - Undertakings
EB-2012-0451/EB-2012-0433/EB-2013-0074

Please find attached Union's response to the following Undertaking in the above captioned proceeding:

J9.2

Yours truly,

[original signed by]

Karen Hockin
Manager, Regulatory Initiatives
Encl.

cc: Crawford Smith, Torys
All intervenors

P.O. Box 2001, 50 Keil Drive North, Chatham, ON, N7M 5M1 www.uniongas.com
Union Gas Limited

UNION GAS LIMITED

Undertaking of Mr. Isherwood
To Ms. Dullett

Union to provide toll settlement impacts into the analysis.

Background

In EB-2013-0074, Section 11 Addendum, updated August 23, 2013, Union's gas cost savings associated with its long-term contracting proposal were estimated at $15.4 million per year for Union North sales service and bundled direct purchase customers based on final 2013 TCPL tolls. There were no gas cost savings estimated for Union South sales service customers.

For the purposes of calculating bill impacts in EB-2013-0074 in the August 23, 2013 update, Union reduced the $15.4 million per year in gas cost savings to approximately $13.0 million to reflect the 2013 Board-approved Gas Supply Plan. Union also excluded the $5.5 million in bundled direct purchase gas supply commodity costs (which are not included in Union's gas supply commodity rates), and updated for $0.2 million in Dawn-Parkway costs. As a result, a total of $18.7 million per year in gas costs savings was estimated for the purposes of calculating bill impacts (EB-2013-0074, Section 11, Schedule 2 (Addendum), updated August 23, 2013).

In undertaking J4.5, Union estimated the gas cost savings associated with its long term contracting proposal would be reduced from $15.4 million to $9.6 million per year. The reduction in gas cost savings assumed an additional cost of 3 cents/GJ for all Union North and Union South contracted TCPL transportation capacity. Based on Union's contracted TCPL transportation capacity of approximately 530,000 GJ/d, the gas costs savings would be reduced by $5.8 million per year.

For purposes of this request, Union estimated that the Union North portion of the $5.8 million per year reduction in gas cost savings would be approximately $4.1 million per year. Accordingly, Union North gas cost savings were estimated to be reduced from $15.4 million to $11.3 million per year. Union also estimated that Union South gas costs would increase by $1.7 million per year based on the assumed 3 cents/GJ additional cost.

Bill Impacts of the Revised Gas Cost Savings in J4.5

For the purpose of calculating Union North bill impacts, Union reduced the $11.3 million per year in gas cost savings to approximately to $8.9 million to reflect the 2013 Board-approved Gas Supply Plan. As described above, Union also excluded the $5.5 million in bundled direct purchase gas supply commodity costs and updated for the $0.2 million in Dawn-Parkway costs. As a result, a total of $14.6 million per year in gas cost savings was estimated for the purposes of calculating bill impacts.

Of the $4.1 million per year reduction in Union North gas cost savings, Union has estimated that $2.9 million per year would be allocated to the Rate 01 rate class. Accordingly, the overall gas cost savings allocated to Rate 01 would be reduced from $11.9 million (EB-2013-0074, Section 11, Schedule 4 column a) (Addendum), updated August 23, 2013) to $9.0 million per year.

In EB-2013-0074, Section 11, Schedule 7 (Addendum), Page 4 of 5, updated August 23, 2013, Union estimated that the bill impacts for the average Rate 01 sales service residential customer would be a reduction of approximately $21.00 to $22.00 per year. As a result of the gas cost savings reduction of $2.9 million per year described above, the Rate 01 bill impact would increase by approximately $7.00 to $8.00 per year. Accordingly, the revised bill impact for the average Rate 01 sales service residential customer would be a reduction of approximately $14.00 to $15.00 per year.

Please see pages 1 through 4 of Attachment 1 for the bill impacts associated with the reduction in Union North gas cost savings. Schedule 7 (Addendum) pages 1 through 4 have been extended to include the bill impacts based on the revised gas cost savings referenced in Exhibit J4.5.

Of the $1.7 million per year increase in Union South gas costs, Union has estimated that $1.5 million per year would be allocated to the Rate M1 rate class.

In EB-2013-0074, Section 11, Schedule 7 (Addendum), Page 5 of 5, updated August 23, 2013, Union estimated that the bill impacts of the Parkway Projects for the average Rate M1 sales service residential customer would be a reduction of $1.90 per year. As a result of the gas cost increase of $1.5 million per year described above, the Rate M1 bill impact would increase by approximately $1.50 per year. Accordingly, the revised bill impact for the average Rate M1 sales service residential customer would be a reduction of approximately $0.40 per year.

Please see page 5 of Attachment 1 for the bill impacts associated with the reduction in Union South gas cost savings. Schedule 7 (Addendum) page 5 has been extended to include the bill impacts based on the revised gas cost savings referenced in Exhibit J4.5.

UNION GAS LIMITED
General Service Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Updated to Reflect Undertaking J9.2
Annual Consumption of 2,200 m³

		(Fort Frances) Rate 01 - Residential (Annual Consumption of 2,200 m³)						
Line No.		EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (2)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.52	(2.84)		204.68	-		204.68
3	Total Delivery Charge	459.52	(2.84)	-0.6%	456.68	-	0.0%	456.68
	Supply Charges							
4	Transportation to Union	88.09	(54.28)		33.81	3.76		37.57
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	52.62	2.47		55.09	3.46		58.55
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	140.71	(51.81)	-36.8%	88.90	7.21	8.1%	96.11
9	Commodity & Fuel	276.77	33.23		310.00	-		310.00
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	276.77	33.23		310.00	-		310.00
12	Total Gas Supply Charge (line 8 + line 11)	417.48	(18.58)		398.90	7.21		406.11
						-		
13	Total Bill	877.00	(21.42)	-2.4%	855.58	7.21	0.8%	862.79
14	Net Customer Bill Impact (column b + e)							(14.21)

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).
(2) Updated to reflect indicative TCPL tolls per Undertaking J4.5.

UNION GAS LIMITED
General Service Customer Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Updated to Reflect Undertaking J9.2
Annual Consumption of 2,200 m³

		(Western) Rate 01 - Residential (Annual Consumption of 2,200 m³)						
Line No.		EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (2)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.52	(2.84)		204.68	-		204.68
3	Total Delivery Charge	459.52	(2.84)	-0.6%	456.68	-	0.0%	456.68
	Supply Charges							
4	Transportation to Union	89.88	(54.28)		35.60	3.76		39.36
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	53.35	2.46		55.81	3.46		59.27
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	143.23	(51.82)	-36.2%	91.41	7.21	7.9%	98.62
9	Commodity & Fuel	277.98	33.22		311.20	-		311.20
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	277.98	33.22		311.20	-		311.20
12	Total Gas Supply Charge (line 8 + line 11)	421.21	(18.60)		402.61	7.21		409.82
						-		
13	Total Bill	880.73	(21.44)	-2.4%	859.29	7.21	0.8%	866.50
14	Net Customer Bill Impact (column b + e)							(14.23)

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).
(2) Updated to reflect indicative TCPL tolls per Undertaking J4.5.

UNION GAS LIMITED
General Service Customer Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Updated to Reflect Undertaking J9.2
Annual Consumption of 2,200 m³

		(Northern) Rate 01 - Residential (Annual Consumption of 2,200 m³)						
		EB-2011-0210 Updated for Tolls 01-Oct-13			EB-2013-XXXX Approved XX/XX/2013			EB-2013-XXXX Approved XX/XX/2013
		Total	Bill Impacts		Total	Bill Impacts		Total
Line No.		Bill ($) (1)	($)	(%)	Bill ($) (1)	($)	(%)	Bill ($) (2)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.44	(2.84)		204.60	-		204.60
3	Total Delivery Charge	459.44	(2.84)	-0.6%	456.60	-	0.0%	456.60
	Supply Charges							
4	Transportation to Union	127.35	(54.27)		73.08	3.76		76.84
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	68.32	2.46		70.78	3.46		74.24
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	195.67	(51.81)	-26.5%	143.86	7.21	5.0%	151.07
9	Commodity & Fuel	279.46	33.19		312.65	-		312.65
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	279.46	33.19		312.65	-		312.65
12	Total Gas Supply Charge (line 8 + line 11)	475.13	(18.62)		456.51	7.21		463.72
						-		
13	Total Bill	934.57	(21.46)	-2.3%	913.11	7.21	0.8%	920.32
14	Net Customer Bill Impact (column b + e)							(14.25)

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).
(2) Updated to reflect indicative TCPL tolls per Undertaking J4.5.

UNION GAS LIMITED
General Service Customer Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Updated to Reflect Undertaking J9.2
Annual Consumption of 2,200 m³

		(Eastern) Rate 01 - Residential (Annual Consumption of 2,200 m³)						
		EB-2011-0210 Updated for Tolls 01-Oct-13			EB-2013-XXXX Approved XX/XX/2013			EB-2013-XXXX Approved XX/XX/2013
Line		Total	Bill Impacts		Total	Bill Impacts		Total
No.		Bill ($) (1)	($)	(%)	Bill ($) (1)	($)	(%)	Bill ($) (2)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.15	(2.85)		204.30	-		204.30
3	Total Delivery Charge	459.15	(2.85)	-0.6%	456.30	-	0.0%	456.30
	Supply Charges							
4	Transportation to Union	134.77	(54.25)		80.52	3.76		84.28
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	71.28	2.47		73.75	3.46		77.21
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	206.05	(51.78)	-25.1%	154.27	7.21	4.7%	161.48
9	Commodity & Fuel	280.77	33.21		313.98	-		313.98
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	280.77	33.21		313.98	-		313.98
12	Total Gas Supply Charge (line 8 + line 11)	486.82	(18.57)		468.25	7.21		475.46
						-		
13	Total Bill	945.97	(21.42)	-2.3%	924.55	7.21	0.8%	931.76
14	Net Customer Bill Impact (column b + e)							(14.21)

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).
(2) Updated to reflect indicative TCPL tolls per Undertaking J4.5.

UNION GAS LIMITED
General Service Customer Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Updated to Reflect Undertaking J9.2
Annual Consumption of 2,200 m³

Line No.	Rate M1 - Particulars ($)	EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (3)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	78.66	(1.64)		77.02	-		77.02
3	Storage Services	16.23	(0.25)		15.98	-		15.98
4	Total Delivery Charge (line 1 + line 2 + line 3)	346.89	(1.89)	-0.5%	345.00	-	0.0%	345.00
	Supply Charges							
5	Transportation to Union	96.80	-		96.80	1.46		98.26
6	Commodity & Fuel (2)	280.77	(0.01)		280.76	-		280.76
7	Total Gas Supply Charge (line 5 + line 6)	377.57	(0.01)		377.56	1.46		379.02
8	Total Bill (line 4 + line 7)	724.46	(1.90)	-0.3%	722.56	1.46	-0.3%	724.02
9	Net Customer Bill Impact (column b + e)							(0.44)

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).
(2) Reflects changes in the Gas Supply Administration charge only.
(3) Updated to reflect indicative TCPL tolls per Undertaking J4.5.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 15-48

THE BERKSHIRE GAS COMPANY
DIRECT TESTIMONY OF JENNIFER M. BOUCHER
EXHIBIT BGC-JMB-1

I. INTRODUCTION

Q. Please state your name, employer and business address.

A. My name is Jennifer M. Boucher. I am employed by The Berkshire Gas Company ("Berkshire" or the "Company") and my business address is 115 Cheshire Road, Pittsfield, MA 01201.

Q. What is your position with Berkshire?

A. I am the Manager – Regulatory Economics.

Q. Please briefly describe your educational and professional background.

A. I received a Masters Degree in Business Administration from Western New England College in 1999 and a Bachelors Degree in Business Administration from the Massachusetts College of Liberal Arts in 1994. I have held several positions with the Company including Planning Analyst, Administrator of Rates and Planning and Supervisor of Rates and Planning. I was promoted to Manager - Regulatory Economics in March 2006.

Q. Please summarize your responsibilities as Manager - Regulatory Economics.

A. My primary responsibility as Manager - Regulatory Economics is to prepare all of the external rate filings and reports to state regulatory agencies, including all semi-annual and out-of-period factor filings, monthly reports and annual reconciliations as related to the Cost of Gas Adjustment Clause and Local Distribution Adjustment Clause. I also manage retail service contracts with large customers and provide analysis on tariffs and pricing issues, as well as operating revenue forecasts for the Company's annual

Q. Please describe the process undertaken by the Company in negotiating the various terms and conditions within the Precedent Agreement.

A. The terms and conditions of the Precedent Agreement were negotiated within the context of a broad consortium of New England local distribution companies (the "LDCs") which provided a unique and extraordinary opportunity to leverage the aggregate capacity commitment of the LDCs in the NED Project, resulting in substantial key benefits and rates for the benefit of customers. Accordingly, the terms and conditions for each individual Precedent Agreement and related Transportation Agreements are nearly identical for each utility with the exception of items such as LDC-specific delivery points.

Q. How will this arrangement be implemented?

A. In response to an Open Season offering by Tennessee, Berkshire and Tennessee executed a binding Precedent Agreement effective as of October 8, 2014 to cover the terms and conditions for the relevant transportation services. See Attachment BGC-JMB-1(a). [redacted] In part, this status ensures that Berkshire's customers will benefit from the most favorable terms and conditions available pursuant to the NED Project. The specific benefits of this special status are explained later in the testimony. Prior to the in-service date (and assuming the receipt of all regulatory approvals), the Company and Tennessee will execute the Transportation Agreements in substantially the same forms as are attached to the Precedent Agreement to govern the operational stage of the project. See Attachment BGC-JMB-1(a), Exhibit A, Exhibit A-1.

Q. Please describe the terms of the Precedent Agreement.

A. The Precedent Agreement between the Company and Tennessee provides for Berkshire to secure up to 36,000 Dth/d with a primary receipt point at Wright, NY and primary delivery points to the Company's gas distribution system. The proposed Transportation