

April 30, 2015

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

Dear Ms. Walli:

**RE: EB-2014-0182 – Union Gas Limited (“Union”) – Burlington Oakville Pipeline Project – Union Submission on Motion**

On April 4, 2015 Ontario Greenhouse Vegetable Growers (“OGVG”) filed a motion to compel Union to respond fully to certain interrogatories (the Motion) filed in the above noted proceeding. Canadian Manufacturers & Exporters (“CME”) and the Association of Power Producers of Ontario (“APPrO”) filed letters in support of the Motion. On April 9, 2015 the Ontario Energy Board (the “Board”) issued a Notice of Motion and Procedural Order No. 2.

Procedural Order No. 2 outlined the timing for written submissions on the Motion. OGVG’s further submissions on its Motion were due April 16, 2015 and intervenors and Board staff’s written submissions on the merits of the Motion were due April 23, 2015. Union received submissions from Board staff, CME and APPrO.

The interrogatories in question are Exhibit B.OGVG.4, Exhibit B.OGVG.10, Exhibit B.APPrO.2 and Exhibit B.APPrO.5c). Union’s submissions on each interrogatory follow.

Exhibit B.OGVG.4

*“Using Union’s 2016 cost of incremental capacity per unit of capacity added, what is the cost of 220 TJ of Dawn Parkway capacity on an annualized basis.”*

Union’s original response stated Union did not understand the relevance of the question. Following OGVG’s Motion, Union provided an updated response on April 14, 2015. Board staff submitted it is satisfied with the updated response. OGVG did not make a submission on the updated response.

Union believes the updated response is fully responsive to the interrogatory since Union has set out the cost of 220 TJ/d of incremental Dawn to Parkway capacity on an annual basis.

Exhibit B.OGVG.10

*“Please provide all meeting minutes and correspondence (including letters, memos, emails or other electronic communication) that documents discussions held between Union and either TCPL or Enbridge or joint discussions to assess the feasibility of a firm exchange service between Union and Enbridge facilitated by TCPL”*

Union provided all material as requested in its response. There is no other correspondence to provide. Board staff submitted that Union “presented adequate evidence summarizing the outcome of its discussions on the potential of a firm exchange service and why this service is not a workable option from Union’s perspective”. No other parties made submissions on this interrogatory. Union’s response is fully responsive to the interrogatory.

Exhibit B.APPrO.2

*“Has Union approached TransCanada since the RH-001-2014 decision to see if TransCanada could provide any or all of the shortfall capacity to Burlington and Oakville? If so, please provide the details of any service that TransCanada was able to offer. If Union has not approached TransCanada subsequent to this NEB decision, please explain why it has not.”*

Union’s original response addressed Union’s attempts to secure firm TransCanada capacity. Following OGVG’s Motion, Union provided an updated response on April 14, 2015, outlining that Union and TransCanada continue to have discussions, including since the RH-001-2014 Decision, regarding the build out of facilities in the Parkway area.

Board staff submitted the updated response remains unclear. APPrO submitted the question of whether or not TransCanada was able to provide a comparable service between Parkway and Bronte remains unanswered. CME supported APPrO’s submission.

Union assumes that TransCanada could provide a firm transportation service from Parkway to Union ECDA. Union is not clear as to the scope of new facilities required to provide the firm transportation services to meet Union’s capacity requirements to 2035. As discussed in Exhibit A, Tab 7, the Proposed Pipeline is the best alternative to serve the growing design day demand of Union’s Burlington Oakville System. In Union’s Updated Exhibit B.APPrO.5c), the Net Present Value of the Proposed Pipeline is compared to the next best alternative (Parkway to Union ECDA transportation services – short haul transportation Option 1) when considering societal costs/benefits. With or without considering societal costs/benefits, the Proposed Pipeline represents the lowest Net Present Value and provides other benefits to Union and its customers as described in the Updated Exhibit B.APPrO.5c) and reproduced below.

*The Proposed Pipeline remains the best alternative with or without the inclusion of societal costs/benefits.*

- *The NPV without societal costs/benefits demonstrates that the Proposed Pipeline has a \$54.2 million advantage over the next best alternative, short haul transportation Option 1 (Parkway to Union ECDA), as shown in Attachment 3.*

- *The NPV including societal costs/benefits demonstrates that the Proposed Pipeline has a \$141.5 million advantage over short haul transportation Option 1 (Parkway to Union ECDA) as shown in Attachment 3.*
- *The cost of the Proposed Pipeline will be fixed following construction providing a framework for long term stable costs to Union's ratepayers. Contracting for firm transportation services exposes Union's ratepayers to increases in TransCanada tolls over the 20 year period from 2016 to 2035.*
- *Contracting for firm transportation services also exposes Union's customers to the risk of availability over the 20 year period from 2016 to 2035. As discussed at Exhibit A, Tab 7, page 10, Union assumed for the short haul firm transportation contracting alternatives that capacity would be contracted incrementally over the 20 year period coincident with design day demand increases. Without the availability of transportation services directly from TransCanada, Union would be required to contract for transportation services in the secondary market (similar to today). The Proposed Pipeline eliminates security of supply issues for Union's customers in Burlington, Oakville and southern Milton where design day demand is expected to experience significant growth.*
- *The Proposed Pipeline establishes a large diameter, high capacity transmission pipeline in rapidly expanding communities from which Union can efficiently grow its arterial distribution system. Union would not need to depend on a third party to provide future pipeline connections (along with metering stations) to grow its distribution system*

#### Exhibit B.APPrO.5c)

*"In Reference ii) above, Union indicates that approximately 40% of TransCanada's Contract Demand FT has a primary delivery point in Ontario. Please recalculate the NPV analysis for the scenarios in Table 7-5 and assume that tolls to other Ontario customers will decline by 40% of the revenue that would be paid to TransCanada if Union were to contract for a service from TransCanada and include these benefits in the NPV analysis."*

Union's original response provided the recalculated NPV based on APPrO's scenario. The interrogatory did not request Union provide the details underlying the calculation.

In its submissions, APPrO stated additional information was required in order to understand the implications of its scenario. Board staff submitted that the Board would be better able to evaluate the commercial alternatives to the build option if Union provided the details of the NPV calculation for APPrO's scenario.

Union provided the listing of key input parameters and assumptions that underpin Union's NPV calculations at Exhibit A, Tab 9, page 3 and Exhibit A, Tab 9, Schedule 3. Union made high level assumptions to provide the NPV calculation as requested in the APPrO scenario. Union now understands it is APPrO and Board staff's supplemental request for the detail underpinning the NPV calculation for APPrO's scenario. Please see the enclosed updated response to Exhibit B.APPrO.5c) in which Union demonstrates that with or without considering societal costs/benefits, the Proposed Pipeline represents the lowest NPV and provides other benefits to Union and its customers. Once the Proposed Pipeline has been constructed, the Parkway to Burlington Gate Station section of the TransCanada Mainline will not be a stranded asset as

TransCanada is using this path to provide its Niagara to Parkway Enbridge CDA transportation service (200 TJ/d) to Enbridge<sup>1</sup>.

Finally, the cover letter accompanying the Motion requested a Technical Conference. If it is useful to the Board, Union supports a Technical Conference for this proceeding, in which Union's witnesses could provide further clarification of Union's evidence and interrogatory responses.

If you have any questions or concerns on this matter, please contact me at (519) 436-5334.

Yours truly,

*[original signed by]*

Vanessa Innis  
Manager, Regulatory Initiatives

c.c.: Zora Crnojacki, Board Staff  
Charles Keizer, Torys  
Mark Kitchen, Union  
All Intervenors (EB-2014-0182)

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<sup>1</sup> TransCanada PipeLines Limited Mainline Settlement Agreement, among TransCanada PipeLines Limited, Enbridge Gas Distribution Inc., Union Gas Limited and Gaz Métro Limited Partnership, dated October 31, 2013, Section 8.2(b).

UNION GAS LIMITED

Answer to Interrogatory from  
The Association of Power Producers of Ontario (“APPrO”)

- Reference:
- i) EB-2012-0092 decision and specifically:  
*“Any project brought before the Board for approval should be supported by an assessment of the potential impacts of the proposed natural gas pipeline(s) on the existing transportation pipeline infrastructure in Ontario, including an assessment of the impacts on Ontario consumers in terms of cost, rates, reliability and access to supplies.”*
  - ii) EB-2014-0261 Union Letter to the Board dated February 6, 2015 indicates:  
*“ The aggregate Contract Demand of all FT contracts with primary delivery point in Ontario (non-export) is approximately 40% of the total TransCanada Mainline FT Contract Demand (energy-distance basis) as of November 1, 2016.”*
  - iii) Exhibit A, Tab 7, page 11, Table 7-5

Preamble: APPrO would like to understand how Union has taken into account the Board’s requirements in Reference i) above, including the impact of these requirements on the NPV analysis.

- a) Please describe in detail how Union has complied with the Board’s requirements in Reference i), above.
- b) Did Union request and/or receive any feedback from TransCanada on its assessment of the implications on its Mainline system from this proposed build? If so, please provide the feedback.
- c) In Reference ii) above, Union indicates that approximately 40% of TransCanada’s Contract Demand FT has a primary delivery point in Ontario. Please recalculate the NPV analysis for the scenarios in Table 7-5 and assume that tolls to other Ontario customers will decline by 40% of the revenue that would be paid to TransCanada if Union were to contract for a service from TransCanada and include these benefits in the NPV analysis.

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**Response:**

- a) Please see the response at Exhibit B.Staff.2-1.

b) Union consulted extensively with TransCanada during the negotiation of the Settlement Agreement. The resulting Settlement Tolls included TransCanada billing determinants that reflect the shift of Eastern LDC (Union, Enbridge and Gaz Métro) supply portfolios from long haul transportation to more short haul transportation. TransCanada's costs in calculating the Settlement Tolls included the costs for facility expansions associated with incremental short haul transportation capacity. TransCanada's Settlement Tolls also assumed that the Burlington Oakville Pipeline Project would be in-service November 1, 2016 and that the resulting firm transportation contracting changes would occur on the in-service date. Please also see Exhibit B. LPMA.3(a).

c) Union's initial response to the interrogatory was the following:

In order to respond to the question, Union has made a number of high level assumptions. The recalculation of the NPV analysis is based on the assumption that costs to other Ontario customers will decline by 40% of the revenue paid to TransCanada if Union contracted for a firm short haul service instead of building the Project. The Settlement Tolls are used in the calculation of the NPV; however, TransCanada may require incremental facilities to provide the short haul transportation services. The cost of these incremental facilities is not factored into the Settlement Tolls.

Union completed the NPV calculations for short haul transportation option 1 only (Parkway – Union ECDA) as it is the lowest cost of the alternatives to building the Project. The benefit to Ontario based on 40% of the revenue paid to TransCanada is \$11.4 million on an NPV basis. This is offset by increased costs for the TransCanada abandonment surcharge of \$5.5 million on an NPV basis, which were not included in Exhibit A, Tab 7, Table 7-5. Therefore the NPV of short haul transportation option 1 (Parkway – Union ECDA) would be reduced by \$5.9 million from \$151.3 million to \$145.4 million. The resulting NPV is much higher than the NPV of building the Project (\$102.6 million).

Union has further considered its answer and in the interest of providing a more complete response, offers the information below.

The least cost analysis is the NPV of the cash flows that Union's ratepayers would incur under the build and the commercial service alternatives. The APrO scenario requests Union to recalculate the NPV with a 40% allocation of TransCanada tolls attributed to the NPV. This introduces cash flows that are not Union ratepayer cash flows. The APrO scenario includes benefits beyond Union's rate payers, taking a societal cost/benefit perspective akin to Stage 3 of an EBO 188 or EBO 134 analysis. Union did not submit this filing under EBO 134 or EBO 188 guidelines as neither applies.

A societal cost/benefit perspective as proposed in the question cannot be selective in its elements. The calculation for the societal costs/benefits is detailed in Attachments 1 and 2. The "revenue decline" calculation in the scenario requested by APrO cannot be included in

the comparison without also including the other benefits from the construction of the pipeline. These construction benefits would be a favourable NPV impact to the build option of \$135.4 million, which is larger than the NPV cost of \$102.6 million of the Proposed Pipeline (without societal costs/benefits) to Union's ratepayers. Therefore, including the societal costs/benefits would result in an NPV benefit of \$32.8 million for the Proposed Pipeline.

The next best alternative is short haul transportation Option 1 (Parkway to Union ECDA) with an NPV cost of \$156.8 million (without societal costs/benefits) to Union's ratepayers. The societal costs/benefits attributed to Ontario customers as a result of the scenario requested by APPrO represent a favourable NPV impact of \$48.1 million. This decrease in NPV is possible since the contracted firm short haul transportation services are not included in the revenue requirement for the Settlement Tolls. The Settlement Tolls assume that the current firm Dawn to Union CDA and Parkway to Union CDA contracts are turned back in 2016 when the Proposed Pipeline is placed into service. Therefore, including the societal costs/benefits would result in an NPV cost of \$108.7 million for short haul transportation Option 1.<sup>1</sup>

For the purposes of the requested analysis, Union assumed that the TransCanada toll for the Parkway to Union ECDA path of \$0.142/GJ (Settlement Toll with Abandonment Surcharge) will remain at this level for 40 years. This high level assumption of a stable TransCanada toll over 40 years includes the framework established in the National Energy Board's RH-001-2014 Decision (including a segmented Eastern Ontario Triangle) and assumes that all capacity is available directly from TransCanada (i.e. Union would not be required to contract firm transportation services through the secondary market). Any impacts of facilities expansion on the TransCanada Mainline (on the Parkway to Union ECDA path as well as elsewhere within the Eastern Ontario Triangle), changes to TransCanada's billing determinants and changes to TransCanada's revenue requirement are addressed through the assumption of a stable TransCanada toll over 40 years.

The Proposed Pipeline remains the best alternative with or without the inclusion of societal costs/benefits.

- The NPV without societal costs/benefits demonstrates that the Proposed Pipeline has a \$54.2 million advantage over the next best alternative, short haul transportation Option 1 (Parkway to Union ECDA), as shown in Attachment 3.
- The NPV including societal costs/benefits demonstrates that the Proposed Pipeline has a \$141.5 million advantage over short haul transportation Option 1 (Parkway to Union ECDA) as shown in Attachment 3.

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<sup>1</sup> Not included in the NPV calculations is the incremental cost of the 135 TJ/d of Kirkwall to Amended Union CDA transportation service that Union will contract with TransCanada once the Proposed Pipeline is placed into service. This transportation service is required under all alternatives including the Proposed Pipeline and the short haul commercial contracting alternatives.

- The cost of the Proposed Pipeline will be fixed following construction providing a framework for long term stable costs to Union's ratepayers. Contracting for firm transportation services exposes Union's ratepayers to increases in TransCanada tolls over the 20 year period from 2016 to 2035.
- Contracting for firm transportation services also exposes Union's customers to the risk of availability over the 20 year period from 2016 to 2035. As discussed at Exhibit A, Tab 7, page 10, Union assumed for the short haul firm transportation contracting alternatives that capacity would be contracted incrementally over the 20 year period coincident with design day demand increases. Without the availability of transportation services directly from TransCanada, Union would be required to contract for transportation services in the secondary market (similar to today). The Proposed Pipeline eliminates security of supply issues for Union's customers in Burlington, Oakville and southern Milton where design day demand is expected to experience significant growth.
- The Proposed Pipeline establishes a large diameter, high capacity transmission pipeline in rapidly expanding communities from which Union can efficiently grow its arterial distribution system. Union would not need to depend on a third party to provide future pipeline connections (along with metering stations) to grow its distribution system.



[illegible]



[illegible]

[illegible]

Economic Benefits from Infrastructure Spending

Figures in \$ Millions

Line No	Description	Note	Capex Spend Out of Country	Capex Spend within Ontario	Capex Spend within Canada Excluding Ontario	Capex Total (d)= sum (a-c)	
			(a)	(b)	(c)		
1	Burlington-Oakville Pipeline		\$ 6	\$ 110	\$ 3	\$ 119	
2							
3	% of Total Spend		5%	92%	3%	100%	Line 1 /Total Line 1 Col (d)
4							
5	GDP						
6	GDP Factor	(a)		1.14			
7	GDP Impact \$ Millions			\$ 125.4			Line 1 * Line 6
8							
9	Employment (Jobs)						
10	Jobs Factor	(b)		16.7			
11	Jobs Created			1,837			Line 1 * Line 10
12							
13	Taxes Paid by Union Gas	(c)					
14	Property Tax			\$ 3.0			
15	Provincial Income Tax			\$ 7.0			
16	Total Provincial Taxes			\$ 10.0			
17	Federal Income Tax			\$ 10.0			
18	Total Taxes Paid			\$ 20.0			
19							
20	Total Value to Ontario						
21	GDP Impact \$ Millions			\$ 125.4			Line 7
22	Total Provincial Taxes			\$ 10.0			Line 16
23	NPV Total Value to Ontario			\$ 135.4			

Notes:

Source of Factors - Exhibit A, Tab 9, Schedule 7 as filed in EB 2014-0261 (Dawn Parkway 2016 Facilities):

The Economic Impact of Ontario's Infrastructure Investment Program Conference Board of Canada

(a) EB-2014-0261 Exhibit A, Tab 9, Schedule 7, pg 7 (\$ Real GDP \$114 million for each \$100 million invested) = 1.14

(b) EB-2014-0261 Exhibit A, Tab 9, Schedule 7, pg. 7 (1,670 jobs for each \$100 million invested ) = 1670/100 = 16.70 per \$1million

(c) Net Present Value taxes by Union paid over 40 years

Societal Impacts Calculation for APPrO 5c)

Line		Notes	\$ millions	
			NPV	
1	Option 1 As Filed	(a)	151.3	Exhibit A, Tab 9, Schedule 2
2	Add Abandonment		5.5	
3	Option 1 with Abandonment		156.8	Line 1 + Line 2
4	Build Case As Filed	(a)	102.6	Exhibit A, Tab 9, Schedule 2
5	Difference between Build Case as filed and Option 1 with Abandonment		54.2	Line 3 vs. Line 4
<u>APPrO Scenario Societal Impacts</u>				
Lost TCPL Revenue Allocated to Ontario				
6	Allocation factor	(b)	40%	
7	Option 1 with Abandonment		156.8	Line 3
8	Current Demands		(36.7)	Exhibit B.APPrO.5 Attachment 1
9	20 year Growth Demands		(11.4)	Exhibit B.APPrO.5 Attachment 1
10	APPrO 5c) Scenario Option 1 NPV		108.7	Sum Line 7 to Line 9
<u>Build Case with Societal Impacts</u>				
11	As Filed	(a)	102.6	Exhibit A, Tab 9, Schedule 2
12	Societal GDP Impact		(135.4)	Exhibit B.APPrO.5 Attachment 2
13	Build with Societal Impact		(32.8)	Line 11 + Line 12
14	Difference between Build Case with Societal Impacts and APPrO Scenario		141.5	Line 10 vs. Line 13

- Notes:
- (a) NPV is presented in evidence as positive as all alternatives are a cost to ratepayers. The lowest NPV is the lowest cost to ratepayers (Exhibit A, Tab 9 page 1, lines 20-21). Social benefits would therefore reduce the NPV cost to ratepayers. A negative NPV represents a benefit not a
- (b) Societal GDP total from Exhibit B.APPrO.5 Attachment 2