# EB-2015-0166 / EB-2015-0175 Ontario Energy Board

**Union Gas Limited / Enbridge Gas Distribution** 

# Pre-Approval of the Cost Consequences of Long-Term Transportation Contracts with NEXUS Gas Transmission

# Reply Submission by UNION GAS LIMITED SUMMARY AND COMPENDIUM

**December 2, 2015** 

## TABLE OF CONTENTS

## Tab Document

- 1. Union Reply Summary
- 2. Board Report in EB-2008-0280
- 3. Filing Guidelines for the Pre-Approval of Long-Term Natural Gas supply and/or Upstream Transportation Contracts, EB-2008-0280
- 4. (1) Exhibit B.T1.Union.Staff.2

(2) Exhibit B.T1.Union.Energy Probe.1

5. (1) Transcript of Oral Hearing, Vol. 2, pages 7, 85, 86 and 112

(2) Exhibit A, Schedule 3 – Sussex Report, May 2015, page 30, Figure 3.13

- 6. BOMA Argument, Attachment 6 FERC Filing for NEXUS, pages 20-21
- 7. Union Argument-in-Chief, Section "E" Risk Assessment
- 8. Exhibit A, Schedule 3 Sussex Report, May 2015, pages 35-37.
- 9. Exhibit B.T1.Union.FRPO.2
- 10. APPrO Argument, pages 12-13.
- 11. Undertaking Response J2.3
- 12. Transcript of Oral Hearing, Vol. 1, pages 68-69
- 13. BOMA Argument, Attachment 6 FERC Filing for NEXUS, page 2
- 14. Exhibit B.T1.Union.Staff.5
- 15. Exhibit B.T1.Union.BOMA.2
- 16. Exhibit B.T1.Union.Energy Probe.3
- 17. Exhibit 1.T1.EGDI.SEC.2, Attachment 2 Confidential Sussex Memo, pages 1 and 9
- 18. Transcript of Oral Hearing, Vol. 1, pages 96-97
- 19. Exhibit B.T2.Union.Staff.17

## Tab Document

20.	(1) Rover Pipeline LLC, Request for Expedited Commission Approval and Schedule Recovery, November 9, 2015
	(2) FERC, Notice of Schedule for Environmental Review of the Rover Pipeline, Panhandle Backhaul, and Trunkline Backhaul Projects, November 9, 2015
	(3) Transcript of Oral Hearing, Vol. 3, pages 89-90
	(4) BOMA Argument, Attachment 4 – FERC Filing for Rover, pages 7, 8 and 28
21.	Transcript of Oral Hearing, Vol. 3, pages 28-30
22.	Exhibit B.T1.Union.APPrO.5
23.	Transcript of Technical Conference, Vol. 1, pages 48-51
24.	Undertaking Response J2.1
25.	(1) Exhibit K2.2
	(2) Undertaking Response J2.2
26.	(1) Exhibit B.T2.Union.Staff.17
	(2) Exhibit 1.T1.EGDI.Staff.9
27.	(1) Exhibit B.T1.Union.LPMA.2
	(2) Undertaking Response JT2.1
28.	Transcript of Oral Hearing, Vol. 2, pages 95-98.

# Tab 1

## **ONTARIO ENERGY BOARD**

**IN THE MATTER OF** The Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B, and in particular, S. 36 thereof;

**AND IN THE MATTER OF** an Application by Union Gas Limited for preapproval of the cost consequences of long-term natural gas transportation contracts with NEXUS Gas Transmission;

**AND IN THE MATTER OF** an Application by Enbridge Gas Distribution Inc. for pre-approval of the cost consequences of long-term natural gas transportation contracts with NEXUS Gas Transmission.

### **REPLY SUMMARY OF UNION GAS LIMITED**

### A. Introduction

1. This is a summary of the reply submission of Union Gas Limited ("**Union**") in EB-2015-0166/EB-2015-0175 in respect of Union's request for pre-approval of costs arising from a long-term contract for transportation capacity in respect of the NEXUS Project (the "**NEXUS Contract**").

- 2. Pre-approval of the costs arising from the NEXUS Contract should be granted because:
- (a) In accordance with the Board's Report<sup>1</sup> and the Filing Guidelines for Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts (the "Guidelines") approved in EB-2008-0280, the NEXUS Contract "supports the development of new natural gas infrastructure", being a substantial new greenfield pipeline that directly connects Dawn to a natural gas supply predominantly in the Utica basin and the NEXUS Contract is not typical of the transportation contracts entered into by Union in its day-to-day operations.

<sup>&</sup>lt;sup>1</sup> Report of the Board, *Draft Filing Guidelines for the Pre-approval of Long-term Natural Gas Supply and/or Upstream Transportation Contracts*, EB-2008-0280 ("Board's Report").

- (b) Being eligible for pre-approval on the basis above, the NEXUS Contract is needed to replace the declining and more costly flows from the Western Canadian Sedimentary Basin ("WCSB").
- (c) Corresponding to the transfer of cost responsibility to the ratepayers are the significant benefits that follow that cost if pre-approval is granted.
- (d) As a prudent counterparty and recognizing the cost consequences of pre-approval, Union has negotiated a very favourable agreement which protects ratepayers by locking in and capping transportation costs and thereby a significant portion of future gas costs while fully mitigating risks related to project capital costs and resulting rate impacts, project delays and potential for more favourable terms being negotiated by similarly situated shippers.
- (e) A denial of pre-approval would leave ratepayers without the benefits arising from the NEXUS pipeline and expose ratepayers to the incalculable risk and uncertainty of the costs of alternate pipeline arrangements should there be any to provide that part of Union's portfolio comprised of by the NEXUS Contract.

3. A number of parties are supportive of Union's application, including APPrO, CME, Energy Probe, LPMA, and VECC. Board Staff, BOMA, FRPO, TCPL, and SEC ("**Opposing Intervenors**") oppose Union's request for pre-approval. Union's reply is organized as follows to address those who oppose:

- (a) the ambit of the Board's discretion;
- (b) application to Union's pre-approval request;
- (c) purchase at Dawn is not equivalent to purchase at the basin;
- (d) ratepayer risk;
- (e) will supply get to Dawn;
- (f) Niagara; and
- (g) other matters

#### **B.** The Ambit of the Board's Discretion

4. The Guidelines are, as the name suggests, merely a guide to the Board for purposes of fulfilling the Guidelines' objective, which is to ensure that new natural gas infrastructure is available for the benefit of ratepayers when those opportunities would otherwise be foreclosed to ratepayers because of a distributor's reluctance to take on costs and obligations that are in support of project development, but that do not reflect day-to-day business activity and have the uncertainty of a future disallowance.

5. At their core, the Guidelines are for the benefit of both the ratepayer and the distributor an opportunity, and its resulting benefits are available to ratepayers when in the ordinary course they would not be available, and the distributor is able to pursue such opportunities without exposure to a future significant financial consequence.

6. It is in this balanced and purposeful approach and spirit that the Board must apply the Board's Report and Guidelines when exercising its discretion. This is consistent with the Board's statutory obligations for natural gas – the protection of the interests of consumers, to facilitate the rational expansion of transmission and the maintenance of a financially viable gas industry.

7. The Board's Report and Guidelines should not be restrictively applied, as suggested by Board Staff and Opposing Intervenors, by selectively parsing the wording of the Board's Report or the Board's cover letter that accompanied the Guidelines to the point where no credible application for cost pre-approval could be made.

8. In assessing pre-approval, the Board, pursuant to its Guidelines, must balance the opportunity to facilitate new infrastructure and the transfer of associated costs to the ratepayer relative to the need and associated benefits, together with mitigated risks.

9. In effect, the Board's ambit of review contains two fundamental aspects. First, eligibility criteria related to the nature of the infrastructure and the contract. Second, the consideration once a request is eligible, as to whether the contractual result is needed, does it provide benefits that follow from the cost responsibility assumed by the ratepayer and are the risks mitigated to provide reasonable bounds in respect of those costs. In effect, once establishing eligibility, is the contract in question prudent and appropriate for the ratepayers to accept the cost responsibility.

10. With respect to eligibility, the Board's Report stated as follows:

"The Board believes that these applications should be limited to those that support the development of new natural gas infrastructure (e.g., new transportation facilities to access new natural gas supply sources). The Board does not believe that the preapproval process for long-term contracts should be used for the utility's normal day-to-day contracting, renewals of existing contracts and other long-term contracts. These contracts should continue to be addressed in the utilities rate application."<sup>2</sup>

11. The key phrase is with respect to applications that are "limited to those that <u>support</u> the development of <u>new natural gas infrastructure</u>" (emphasis added). Instead, Board Staff and Opposing Intervenors have chosen to selectively parse the words of the Board's Report and focus only on the example given and the need for new transportation to access new natural gas supplies. They have attempted to restrict the Board's consideration for this by focusing on the words of the cover letter that accompanied the Board's Report and Guidelines, where the example of new natural gas supplies were sources such as "Liquified Natural Gas" and the undefined term of "frontier production".

12. It seems unreasonable for the Board to accept the proposition proposed by Board Staff and the Opposing Intervenors that the entirety of the intent of the Board's Report and Guidelines is found in one example cited in the report and the accompanying cover letter.

13. In fact, a closer examination of the Board's Report reveals the more purposeful intent of the support of new natural gas infrastructure that would not arise in the day-to-day operation of the utility.

14. In considering whether long-term contracts are appropriate, the Board commented on stakeholder consultations forming part of the process giving rise to the Board's Report and Guidelines. The Board noted that long-term contracts for up-stream transportation were considered to be justifiable by stakeholders and only "<u>some</u> of these stakeholders suggested that this could also support access to new natural gas sources." (Board Report, p. 2) (emphasis added)

- 4 -

<sup>&</sup>lt;sup>2</sup> Board's Report in EB-2008-0280, page 4.

15. This is very different than the reconstruction of unsubstantiated stakeholder views set out in FRPO's submissions, where new sources of supply or "frontier supply" were suggested to be a key consideration. Not only does the above aspect of the Board's Report show this not to be the case, but it is also informative that the Board clearly differentiated new natural gas infrastructure associated with long-term commitments for transportation from that relating to supply. In effect, they can exist independent of one another and still be eligible for pre-approval consideration.

16. In reaching its conclusions that long-term contracts were appropriate, the Board stated with respect to supply contracts:

"The Board agrees with stakeholders that long-term supply contracts may be justified in limited circumstances such as supporting the development of new natural gas infrastructure."<sup>3</sup>

17. For purposes of this proceeding, more importantly, with respect to transportation contracts, the Board stated:

"With regards to long-term transportation contracts, the Board notes that the natural gas utilities ("utilities") currently have a portfolio of contract lengths. This reflects an upstream transmitter's market requirement to have long-term contracts to support new large infrastructure investments while contracts for existing capacity are generally shorter. Also, the Board is of the view that long-term transportation contracts may help to ensure an adequate natural gas supply in the Ontario market from a diverse portfolio of sources. This may increase supply reliability and reduce price volatility, which would benefit all market participants. Consequently, long-term transportation contracts may be justified."<sup>4</sup> (emphasis added)

18. This is the central issue in Union's request for pre-approval. The NEXUS Contract supports the development of new large natural gas infrastructure to ensure an adequate natural gas supply from a diverse portfolio, thereby increasing supply reliability and reducing price volatility.

<sup>&</sup>lt;sup>3</sup> Board's Report in EB-2008-0280, page 2.

<sup>&</sup>lt;sup>4</sup> Board's Report in EB-2008-0280, page 3.

19. Therefore, based on the Board's Report, it is not imperative that a long-term transportation contract be coupled with access to new gas supply; in particular, new gas supply that would not otherwise be accessible to Ontario without the long-term contract.

20. The very restrictive interpretation of the Board's Report and Guidelines applied by the Board in EB-2010-0300/0333, and as supported by Board Staff and the Opposing Intervenors, should not be applied by the Board in this proceeding.

21. According to Board Staff, Union's application should be denied because there is no basis to conclude that the NEXUS Contract provides access to supply that would not be accessible to the Ontario market if pre-approval is not granted. Board Staff supports this conclusion on the basis of two propositions: (i) that pipeline paths that bring Appalachian gas to Ontario already exist; and (ii) there likely will be new greenfield pipeline paths developed that bring Appalachian gas to Ontario in the future.<sup>5</sup> In particular, Board Staff believes that pre-approval cannot be considered where there is no substantive evidence that new infrastructure will not be constructed to bring Appalachian supplies to Ontario.<sup>6</sup>

22. Board Staff's propositions are so restrictive that, if applied, the Board's Report and Guidelines are rendered meaningless and their purposeful application would be lost.

23. The Board Staff's first proposition, that the gas supply accessible by virtue of the transportation contract <u>only</u> be accessible by way of that capacity, denies the reality of the current North American natural gas market and transportation system. This would include multiple pipelines that are in turn interconnected. Not only can Appalachian gas reach Ontario; in fact, almost any gas production can reach Ontario without a direct connection to the supply source – whether from the Canadian Artic if connected to western pipelines or from the Texas Gulf (as long as capacity is available and it is economic to do so).

24. With respect to Board Staff's second proposition, this is purely conjecture as to whether pipelines will be or when pipelines will be built to Ontario. In any event, Board Staff's comment that there must be evidence that no new infrastructure will be constructed to bring Appalachian

<sup>&</sup>lt;sup>5</sup> Board Staff Argument, page 3.

<sup>&</sup>lt;sup>6</sup> Board Staff Argument, page 4.

supplies to Ontario establishes a threshold that no applicant can pass since there is always potential for future construction. It would be impossible to prove this is absolute.

25. Therefore, the eligibility requirement proposed by Board Staff and Opposing Intervenors impose on the pre-approval process a criteria that lacks realistic application. It fails to apply the underlying purpose of the Board's Report – to take advantage of opportunities that would not otherwise be available in day-to-day operations and that are presented by the long-term transportation contracts that support the development of new natural gas infrastructure which ensure an adequate natural gas supply for a diverse portfolio to facilitate supply reliability and reduced price volatility.

## C. Application to Union's Pre-Approval Request

26. Union submits that the NEXUS Contract represents the type of significant long term contract that would warrant pre-approval as the Board has contemplated. In Union's view, its application in the present proceeding meets the filing requirements set out by the Guidelines. The table below highlights certain key requirements in relation to this application.<sup>7</sup>

	NEXUS
	• The required infrastructure is defined.
Underpins Significant Greenfield Infrastructure	• The NEXUS pipeline project includes 250 miles of NPS 36 greenfield pipe at a cost of approximately \$2 billion to provide 1.5 Bcf/d transport to the market.
Volume	• NEXUS represents a more significant volume of 158,258 GJ/d which represents approximately one third of Union's overall gas supply portfolio.
	• This does not represent typical day to day contracting.
Cost of Contract	• Tolls are known and are fixed in the contract terms, which mitigates the risk of pre-approval to ratepayers.
Infrastructure Project	• Project is defined and the cost to Union (shipper) is known and capped.
Contract or PA	• PA has been signed.
Magnitude of Cost Commitment	• Significant financial commitment of more than \$700 million over the 15 year term of the agreement.

<sup>&</sup>lt;sup>7</sup> Exhibit B.T1.Union.Staff.2, page 3. Also see Exhibit B.T1.Union.Energy Probe.1, page 1 for a detailed table showing the information requested in each part of the Guidelines and the corresponding references in Union's evidence.

27. The NEXUS project is new greenfield natural gas infrastructure that will directly link to Dawn. That portion of the NEXUS pipeline from Kensington to Willow Run is entirely a greenfield development. For purpose of cost efficiency and reduced environmental impact, the NEXUS project includes transportation on DTE's pipeline from Willow Run to the St. Clair Pipeline.<sup>8</sup> Notwithstanding that there is a contracted portion of existing pipe, the greenfield nature of the NEXUS project is not diminished since the project cannot occur without the greenfield portion of the pipeline. Nor can it get to Dawn without the leased capacity on existing infrastructure.

28. In the event the Board concludes that the development of new lateral gas infrastructure should include a new supply, the pipeline enables the direct connection of Dawn to a new source supply. Given that the Kensington gas processing plant is located in the heart of the Utica production area, the primary source for the NEXUS pipeline is from Utica, which is a new supply source that had little to no production when Union bid into the NEXUS open season in 2012. At that time, Utica producers were in the very early stages of development activities, including drilling test wells to assess the appropriate drilling locations.<sup>9</sup> Recent findings in relation to this brand new supply source have far exceeded initial expectations. For instance, some producers in the Utica basin have developed wells with record-breaking productions in their portfolio. In light of this knowledge, placing the start of the NEXUS pipeline at Kensington has proved to be a prudent decision that will provide significant access to a new supply basin and an attractive place to purchase gas.<sup>10</sup>

29. The fact that production has expanded since 2012 is not determinative of whether a supply source such as Utica is new or not. BOMA believes that the growth in production demonstrates that Utica is not new. However, producers have an economic objective to prove out and develop resources. Investments continue to be made and the development of supply and transportation do not happen in lock-step to supply markets. In fact, contrary to BOMA's

<sup>&</sup>lt;sup>8</sup> Transcript of Oral Hearing, Vol. 1, page 29.

<sup>&</sup>lt;sup>9</sup> Transcript of Oral Hearing, Vol. 2, pages 7, 85 and 112; Exhibit A, Schedule 3 – Sussex Report, page 30, Figure 3.13.

<sup>&</sup>lt;sup>10</sup> Transcript of Oral Hearing, Vol. 2, pages 85 and 86.

assertion that there is no shortage of pipeline capacity into and out of Utica basin, the very reasons for the NEXUS pipeline is because of a shortage of take away capacity.

30. As expressed in NEXUS FERC filing, provided as part of BOMA's submission:

"Additional pipeline capacity is needed to transport gas from this region to market. As one recent report explained, the enormous reserves and strong economies of Marcellus and Utica shale plays remain constrained by insufficient take-away pipeline capacity."<sup>11</sup>

Although growing in size Utica is new supply to the market. Production from the Utica and Marcellus basin is expected to more than double by 2035.<sup>12</sup>

31. Without the assurance provided by contract pre-approval, Union will not commit to a contract of this magnitude. The NEXUS Contract requires a significant long term commitment by Union (approximately \$715 million over a 15 year term) and represents 31% of Union's annual upstream portfolio.<sup>13</sup> The long term commitment required by the NEXUS Contract does not represent typical day-to-day contracting. Without pre-approval of the associated cost consequences, committing to a transportation contract for one-third of Union's overall supply portfolio over 15 years would expose Union to a unusually large financial risk which the shareholders are not willing to bear.

32. As such, based on the foregoing Union's request for pre-approval is eligible.

## D. Purchase at Dawn is not Equivalent

33. The gist of the submissions of Board Staff and Opposing Intervenors is that if Appalachian natural gas can find its way to Dawn (via Chicago, Niagara or the Rover pipeline), then the opportunities provided by the NEXUS Contract can be forgone by ratepayers. If the benefits arising from the acquisition of supply only at Dawn as opposed to the basin as intended by the NEXUS Contract were the same, then the position of Board Staff and Opposing Intervenors would have merit. However, this is not the case and the position of Board Staff and Opposing Intervenors is incorrect and should not be accepted by the Board.

<sup>&</sup>lt;sup>11</sup> BOMA Argument, Attachment 6, page 20.

<sup>&</sup>lt;sup>12</sup> Transcript of Oral Hearing, Vol. 1, pages 36-37.

<sup>&</sup>lt;sup>13</sup> Exhibit B.T1.Union.Staff.1, page 1.

34. Unfortunately for ratepayers, Board Staff is readily willing to accept on behalf of ratepayers a price premium associated with short-term natural gas purchases at Dawn. (Staff, p. 7) Board Staff holds this position notwithstanding that Board Staff agrees that a new pipeline bringing Appalachian gas directly to Dawn would benefit Ontario because of increased supply security and diversity. However, Board Staff ignores the benefits of purchasing gas at the basin as facilitated by NEXUS endorses purchases at Dawn, albeit at a higher cost, because of a mistaken understanding of risk to the ratepayer.

35. Board Staff wrongly concludes that under the NEXUS Contract a significant portion of total gas supply requirements will be locked in for a 15-year period and that the NEXUS Contract reduces supply flexibility due to the 15-year term and the amount of capacity contracted. Board Staff believes that short-term contracting options at a market hub increases supply flexibility.<sup>14</sup>

36. Board Staff is mistaken because they have ignored the distinction between a long-term contract for supply and one for transportation.

37. The NEXUS Contract is for transportation capacity only. It establishes a path, but does not restrict or dictate the term of any contract for supply that would flow on that path. Union, as it would at any hub, will be free to contract for supply of any term and be able to do so through a competitive process. It retains the same flexibility from a supply perspective as it would in purchasing Appalachian gas at a hub. Most importantly, unlike the result proposed by Board Staff, Union's ability to purchase at the basin provides benefits that the purchase at a hub will not provide since it is less risk to ratepayers and it is economically beneficial. This is a key distinction between Union's position and that of Board Staff and the Opposing Intervenors.

### E. Ratepayer Risk

38. Contrary to the submissions of the Board Staff, the risk to the ratepayer is twofold, that is, the nature of the risk (i) if the contract is pre-approved and (ii) if pre-approval is denied.

<sup>&</sup>lt;sup>14</sup> Board Staff Argument, page 7.

39. The pre-approval of the costs of the NEXUS contract will have the effect of mitigating the ratepayers' risk.<sup>15</sup> The fixing of the transportation costs under the NEXUS contract will lock in the transportation cost for the 15-year term, and will provide ratepayers access to a basin that has more production than the WCSB at its peak and that is expected to double by 2035.<sup>16</sup> As shown in the evidence and in Union's Argument in-Chief<sup>17</sup>, the other risk factors of capital costs, withdrawal from the project and competitive terms have been dealt with through the negotiated capital cost tracker mechanism, an ability to withdraw if the project is not complete by November 1, 2018 and a most favoured nations clause. As noted above, the gas supply flexibility will remain the same as will the associated supply risk. The one outstanding risk is the opportunity cost of a lower transportation cost being available in the future. However, there is the certainty that the costs are capped in exchange for which the ratepayer receives the corresponding benefits of supply security and diversity and reduced volatility of supply price.<sup>18</sup>

40. Parties have generally agreed that these benefits arise from the NEXUS contract.

41. A direct connection to the basin will offer Ontario customers major benefits, including increased diversity and security of supply, and more stability in natural gas pricing. With respect to diversity of supply, the Sussex Report concludes that the NEXUS project will bring supply basin diversity, transportation path diversity, and price index diversity.<sup>19</sup>

Supply basin diversity – Direct access to the Marcellus/Utica production augments the current gas supply basins and market hubs accessed by the Ontario LDCs, which include natural gas production or availability in the WCSB, Chicago Hub, Gulf of Mexico, and U.S. Mid-continent. By diversifying its natural gas supply basins, the Ontario LDCs will increase the overall reliability of their portfolio and, therefore, service to customers. Similarly, natural gas supply basin diversity mitigates the risk to the Ontario LDCs of any

<sup>&</sup>lt;sup>15</sup> Exhibit A, Schedule 3 – Sussex Report, page 36.

<sup>&</sup>lt;sup>16</sup> Exhibit A, Schedule 3 - Sussex Report, page 32; Exhibit A, page 22; Transcript of Oral Hearing, Vol. 1, pages 36-37.

<sup>&</sup>lt;sup>17</sup> Union Argument-in-Chief, pages 17-19.

<sup>&</sup>lt;sup>18</sup> Union Argument-in-Chief, pages 12-13.

<sup>&</sup>lt;sup>19</sup> Exhibit A, Schedule 3 – Sussex Report, page 59.

individual supply basin being negatively impacted by operational, regulatory, economic, social, or political developments that inhibit or reduce natural gas production.<sup>20</sup>

- Transportation path diversity A contract on NEXUS provides the Ontario LDCs with additional diversity in their transportation portfolio and, therefore, more reliability from a delivery perspective. Currently, the Ontario LDCs receive most of their flowing natural gas supplies via transportation paths that connect the WCSB, U.S. Mid-continent, or Chicago Hub to Ontario. NEXUS will provide an alternative natural gas supply basin and transportation path by directly connecting the Marcellus/Utica basin to the Dawn Hub. By adding a new pipeline path, the Ontario LDCs will increase the reliability of the overall transportation portfolio and, therefore, service to their customers. For example, NEXUS provides an alternative delivery path if one of the existing pipelines utilized by the Ontario LDCs experiences a delivery curtailment. The additional pipeline path diversity may also provide the Ontario LDCs with increased leverage in negotiating with other pipelines with respect to services and associated rates.<sup>21</sup>
- Price index diversity In addition to natural gas supply basin and transportation path diversity, direct access to the Marcellus and Utica supply basins will provide the Ontario LDCs with increased price diversity. Specifically, the Marcellus/Utica gas supply basins will have certain price signals and price indices not previously accessed by the Ontario LDCs, thus increasing overall price diversity and providing more stability with respect to natural gas costs for the Ontario LDCs' customers. By way of example, adding direct access to Marcellus/Utica supplies may provide the Ontario LDCs with the ability to leverage diverse price signals and maximize flow on specific pipelines when warranted by market conditions.<sup>22</sup>

Price diversity is key. As an example to illustrate the last point, during the price spikes at Dawn and Chicago in the winter of 2013-2014, the fluctuations in spot prices at Dominion South Point

<sup>&</sup>lt;sup>20</sup> Exhibit A, Schedule 3 – Sussex Report, page 35.

<sup>&</sup>lt;sup>21</sup> Exhibit A, Schedule 3 – Sussex Report, page 36.

<sup>&</sup>lt;sup>22</sup> Exhibit A, Schedule 3 – Sussex Report, page 37.

were minor in comparison.<sup>23</sup> Price index diversity introduced by the NEXUS project will be a particularly important benefit to the Ontario market.

42. Contrary to some parties' views that there would be greater security of supply if less natural gas was brought into Dawn and more through Niagara, Union agrees with LPMA that the Board should look at security of supply on an Ontario-wide basis. Current transportation from the Marcellus/Utica basin through Niagara is about 221,000 Gj/day coupled with about 274,000 Gj/day of NEXUS capacity provides balance and security of supply.

43. As indicated by APPro in its submissions additional purchases at Dawn by the LDCs can have a negative price effect:

"Enbridge has already shifted a substantive part of its portfolio to Dawn. In comparing Enbridge's Dawn purchases in 2015 and 2018, they will increase their purchases from 4% to 46% of their portfolio. Similarly, Union's Dawn/Other based purchases will increase from 5% in January 2015 to 22% in January 2018. Union has further indicated that in the event that pre-approval of the cost consequences are not provided, some portion of the 150,000 Dth/d may also be acquired at Dawn. The combination of the utilities changing their portfolios to acquire more of their gas at Dawn from Western Canada or other longhaul sources increases the demand for gas at Dawn which will in fact increase prices for all parties and have a detrimental impact to these other stakeholders. Approving the cost consequences of the NEXUS contracts will provide for purchases at source and will not exacerbate this situation any further."<sup>24</sup>

44. Union has been criticized by some parties with respect to its estimate of cost savings of over \$700 million which arises from the comparison of the cost to sales service customers under the NEXUS contract relative to current contracted supplies over the term of the NEXUS Contract. Union recognizes that it intends to decontract its Alliance and TransCanada based supplies in any event. However, the resulting savings estimate does have merit since it still reflects the cost consequences that decontracting relative to the NEXUS Contract if pre-approval is granted. Furthermore, if Union is denied and the NEXUS Contract is not completed Union will have to explore the WCSB as a supply source. TCPL in its argument takes the position that WCSB supply brings certain benefits Ontario and should thus be a source for Ontario in the

<sup>&</sup>lt;sup>23</sup> Exhibit B.T1.Union.FRPO.2, page 1.

<sup>&</sup>lt;sup>24</sup> APPrO Argument, page 15.

future.<sup>25</sup> This position reinforces the validity of Union's comparison of NEXUS versus WCSB supply being displaced to arrive at the \$700 million of cost savings.

45. In any event, Union has clearly demonstrated a cost savings of approximately \$39 million per year or \$589 million over the term of the NEXUS Contract when the landed cost differential between NEXUS St. Clair path versus just buying at Dawn is considered.<sup>26</sup> No party has disputed this benefit arising from the NEXUS Contract.

46. FRPO suggests it is difficult to contest Union's analysis regarding the bill impacts to a northern residential customer based on the landed gas supply costs at Dawn versus at Kirkwall. FRPO is concerned that "Union is relying on marginal economics from the 2013 proceedings that may have been under-informed on associated costs of feeding northern communities such as Kapuskasing from Dawn".<sup>27</sup> Undertaking J2.3 as filed by Union addresses exactly that issue and concludes that the northern communities will see approximately \$6 saving on the average bill with NEXUS gas landing at Dawn versus at Kirkwall.<sup>28</sup> Union's comprehensive analysis incorporates the best available information for 2018 impacts, including: (i) capital pass through impacts of 2015 Dawn Parkway, 2016 Dawn Parkway, 2017 Dawn Parkway, and 2016 Burlington Oakville projects; (ii) 2018 gas supply plan as filed in the Dawn Reference Price proceeding (EB-2015-0181); and (iii) layering in the impacts of landing NEXUS gas at Dawn as opposed to Niagara gas. This robust analysis concludes that the northern customers, including customers at Kapuskasing, are better off with NEXUS gas landed at Dawn. There is no basis for the concern expressed by FRPO in this regard.

47. However, there is the corresponding risk to ratepayer from a denial deemed by the Board Staff and Opposing Intervenors. Board Staff and the Opposing Intervenors fail to recognize that the purchase at Dawn will not result in the same benefits as that arising from the NEXUS Contract. In the absence of NEXUS, ratepayers will no longer have a fixed transportation rate and ratepayers will be exposed to uncertainties in respect to all components of gas purchase,

<sup>&</sup>lt;sup>25</sup> TCPL Argument, pages 19-20.

<sup>&</sup>lt;sup>26</sup> Undertaking J2.3.

<sup>&</sup>lt;sup>27</sup> FRPO Argument, page 15.

<sup>&</sup>lt;sup>28</sup> Undertaking J2.3.

which Union will manage as part of its normal operations but are subject to the uncertainties of the market. The benefits under the NEXUS Contract described above will be lost.

## F. Will supply make it to Dawn?

48. Board Staff and Opposing Intervenors wrongly believe there are few consequences to a denial of pre-approval because it is their belief that Appalachian Gas will arrive at Dawn and be available to Ontario because NEXUS will go ahead without Union, Rover will deliver to Dawn or Appalachian gas can be sourced in Chicago and delivered to Dawn. Buying gas at Dawn will provide some diversity, but buying gas in the basin at Kensington will provide diversity of suppliers, new products and of pricing.

49. In the event of denial, even though Union will have to buy additional supply at Dawn, not all the 150,000 GJ/day will be bought at Dawn.<sup>29</sup> Even if Union buys at Niagara, there are a limited number of suppliers. The purchase of Marcellus/Utica gas at Dawn would mean that Union would be limited only to producers on Rover, NEXUS or Niagara. Under the NEXUS Contract, by buying at the basin Union would have access to many more producers at prices based on a different set of economic dynamics unrelated to pricing at Dawn or Chicago, and thereby added diversity.

50. Furthermore, NEXUS and Rover producers may not sell all their supply at Dawn as they have the ability to sell at the best pricing point along the path. Not all of the 1.6 BcF/day will arrive at Dawn and will only do so if it is the highest price along the path.

51. The foregoing is premised on the notion that NEXUS and Rover will proceed and gas supply will reach Dawn. However, in the event of the denial of pre-approval Union will not proceed with the Contract.

52. BOMA has asserted that this is a rouse and that Union's parent will make the decision to proceed and because it is in Spectra's interest for the pipeline to proceed Union will continue with the Contract. However, this is incorrect and reflects a failure to understand that the interests of Union and its parent are aligned with respect to future participation. First, the fact that Union

<sup>&</sup>lt;sup>29</sup> Transcript of Oral Hearing, Vol. 2, page 66.

has clearly stated its position means that Spectra has already endorsed Union's position. Second, the risk of disallowance affects Spectra in the same manner as Union since it is a direct reduction to return through unrecoverable costs.<sup>30</sup>

53. BOMA asserts that Union and Enbridge only account for 17% of the total capacity of the NEXUS pipeline and that NEXUS' recent FERC filing provides an indication of strong support from producers. However, a closer review of the FERC filing (provided as Attachment No. 6 of BOMA's Submissions) shows a different picture with a total contracted capacity of 835,000 Dth/d. Union and Enbridge's contractual commitment represents 31% of (260/835) of the contracted capacity. Based on the pipelines total capacity only 55% has been subscribed for. Without Union and Enbridge only 38% of the pipe would be subscribed, putting the pipeline at risk.<sup>31</sup>

54. TCPL submits that NEXUS may proceed without cost pre-approval as it is a supplier push project.<sup>32</sup> Similarly, FRPO submits that projects to transport Appalachian supply are being supported by producers, not utilities.<sup>33</sup> However, there is no evidence on the record to this effect that would exclude the significant "demand pull" aspect of the project. The NEXUS project includes both demand pull and supply push entities. Without this balanced support, there is a higher risk that the project will not be completed.<sup>34</sup> As stated in the preceding paragraph, the Union and Enbridge committed volumes represent a significant portion of the NEXUS capacity contracted to Dawn (over 30%) and without the participation of the LDCs, the project may not proceed.<sup>35</sup> These numbers further support the fact that NEXUS is not just a supplier push pipeline and that it depends on the demand pull contribution of Union and Enbridge. When DTE's 150,000 Dth/d is added to this calculation, the market represents in total 49% (i.e. 410/835) of the capacity currently contracted by demand pull LDCs.

<sup>&</sup>lt;sup>30</sup> Transcript of Oral Hearing, Vol. 1, page 69

<sup>&</sup>lt;sup>31</sup> BOMA Argument, Attachment 6, page 7.

<sup>&</sup>lt;sup>32</sup> TCPL Argument, page 12.

<sup>&</sup>lt;sup>33</sup> FRPO Argument, page 5.

<sup>&</sup>lt;sup>34</sup> Exhibit B.T1.Union.Staff.5, page 1.

<sup>&</sup>lt;sup>35</sup> Exhibit B.T1.Union.BOMA.2, page 1.

55. Based on the duration and magnitude of financial commitment required from Union and Enbridge in relation to NEXUS, the producers that are shippers on the pipeline will need to make large long term commitments as well in order to secure NEXUS capacity. Making such substantial investments in transportation infrastructure will inevitably divert capital away from the producers' core business of producing natural gas, thus requiring producers to carefully evaluate and monitor the project risk and prospect of success when committing to a major infrastructure build. The withdrawal of Union's and Enbridge's participation will signal a lack of endorsement for NEXUS and negatively impact the viability of the project.<sup>36</sup> Given the cautious approach taken by Utica producers with respect to selling at Dawn<sup>37</sup> and the significant and growing natural gas demand already existing in other large regional markets in proximity to the basin<sup>38</sup>, producers will naturally gravitate towards markets with the least risk and highest profit maximizing potential<sup>39</sup>. As discussed below, a focused effort on the part of Ontario LDCs (e.g. working with producers to assure and educate them about selling at Dawn) will be required to attract Utica supply to the Ontario market.

56. Many of the Utica producers have options to go into other markets, and are cautious with respect to entering new markets such as Dawn. For starters, selling at Dawn entails a number of differences from their usual practices, including with respect to import/export requirements, differences in taxes and currency, and a different system of measurement units.<sup>40</sup> Many producers without affiliated Canadian entities or significant Canadian business (such as in the WCSB) have also taken a cautious approach to doing business or initiating business in Canada. In this regard, Union has worked closely with Utica producers (including the NEXUS shippers) to facilitate their understanding of the Dawn market and the requirements of doing business in Canada.<sup>41</sup> Such focused efforts are required in order to attract Utica gas to Dawn. If Union did not remain an anchor shipper then this would undoubtedly be viewed as a negative signal and a lack of endorsement.<sup>42</sup> Without pre-approval and the assurance that the NEXUS project will

<sup>&</sup>lt;sup>36</sup> Exhibit B.T1.Union.Energy Probe.3, page 2; Exhibit A, page 4.

<sup>&</sup>lt;sup>37</sup> Transcript of Oral Hearing, Vol. 1, page 96.

<sup>&</sup>lt;sup>38</sup> Exhibit 1.T1.EGDI.SEC.2, Attachment 2, page 9, Figure 7.

<sup>&</sup>lt;sup>39</sup> Transcript of Technical Conference, Vol. 2, page 155.

<sup>&</sup>lt;sup>40</sup> Transcript of Oral Hearing, Vol. 1, page 96.

<sup>&</sup>lt;sup>41</sup> Transcript of Oral Hearing, Vol. 1, page 96.

<sup>&</sup>lt;sup>42</sup> Exhibit B.T1.Union.Energy Probe.3, page 2.

move forward, the Dawn Hub and Ontario consumers would miss an opportunity to gain significant access to Utica production as well as the accompanying benefits of increased choice, market liquidity at Dawn, and diversity and security of supply.<sup>43</sup>

57. TCPL asserts that pre-approval of the NEXUS costs is not necessary as more options will come to the Ontario market.<sup>44</sup> Based on the processes undertaken by Union and Enbridge since the open season in 2012 to secure favourable terms through the NEXUS contract, it is clear that lengthy lead times are required to procure upstream transportation capacity. Given the cautious approach taken by many Utica producers, Ontario customers cannot afford to wait another five years or more to gain significant access to the fastest growing basin on the continent at terms that may or may not be as favourable as the NEXUS contract that is before the Board today.

58. There is significant market competition for the supply available from the growing Utica basin. The neighbouring regions alone (e.g. Mid-Atlantic, South Atlantic, and East North Central) already account for about 25 to 30 Bcf/day of natural gas consumption, which is forecast to grow steadily over the next several decades.<sup>45</sup> Numerous projects are also in progress to take these supplies to other markets, including the Gulf Coast, U.S. Midwest, U.S. Northeast, and U.S. Southeast. It is critical for Union and Ontario consumers that contractual commitments to the NEXUS project be made and supported to ensure Ontario and those market participants that access supplies at Dawn are able to gain access to these supplies in a similar fashion to the other markets in the eastern half of North America. This will ensure Ontario and Dawn stay well connected to new affordable and competitively priced North American supplies.<sup>46</sup>

59. Likewise, there is no guarantee that supply from Rover will be delivered to Dawn. While Rover had aimed to start construction on the pipeline by mid-2016<sup>47</sup>, FERC has indicated that the final environmental review will not be completed until Q4 2016<sup>48</sup>, which means construction is not likely to commence until well into 2017. Further, based on Rover's FERC filings, Rover has

<sup>&</sup>lt;sup>43</sup> Exhibit B.T2.Union.Staff.17, page 4.

<sup>&</sup>lt;sup>44</sup> TCPL Argument, page 2.

<sup>&</sup>lt;sup>45</sup> Exhibit I.T1.EGDI.SEC.2, Attachment 2, page 9, Figure 7.

<sup>&</sup>lt;sup>46</sup> Exhibit A, page 17.

<sup>&</sup>lt;sup>47</sup> Rover Pipeline LLC, *Request for Expedited Commission Approval and Schedule Recovery*, November 9, 2015.

<sup>&</sup>lt;sup>48</sup> FERC, Notice of Schedule for Environmental Review of the Rover Pipeline, Panhandle Backhaul, and Trunkline Backhaul Projects, November 9, 2015.

contractual commitments requiring that it construct and place in service certain planned facilities by June 2017.<sup>49</sup> If service to Dawn is not in service by certain deadlines, producers can reduce their contracted volumes on the Rover pipieline.<sup>50</sup>

60. FRPO has asserted that Marcellus/Utica gas could also be sourced from Chicago and come to Dawn via Vector. However, although connections are available to get to Chicago, based on testimony over three pipelines would have to accessed.<sup>51</sup> In effect, the price at Dawn would have to be sufficiently high to encompass the pancaking of those tolls and the cost of the gas. The distance from Kensington to Chicago on the pipelines on which transportation is required exceeds the distance on NEXUS. The corresponding cost would very likely be higher coming from Chicago than via NEXUS. It is not reasonable to consider Chicago as an alternative to NEXUS.

### G. Niagara

61. In its submission, TCPL cites the Platts table that ranks Dawn as a Tier 1 liquid hub for each year since 2009.<sup>52</sup> However, TCPL did not include a similar table on the record that shows Niagara as a Tier 2 or Tier 3 hub in terms of its liquidity.<sup>53</sup> This contrast in the measured liquidity at Dawn versus at Niagara corresponds to Union's experience in procuring gas supply at both hubs.<sup>54</sup> Due to the illiquid nature of the Niagara market and the infrastructure projects going into service at that point, the price of gas at Niagara transportation capacity for November 2015, that gas was priced higher than the equivalent Dawn price less the TransCanada Niagara to Dawn toll.<sup>55</sup>

<sup>&</sup>lt;sup>49</sup> BOMA Argument, Attachment 4 - Rover FERC Filing, pages 7-8.

<sup>&</sup>lt;sup>50</sup> Transcript of Oral Hearing, Vol. 2, pages 89-90; BOMA Argument, Attachment 4 - Rover FERC Filing, page 28.

<sup>&</sup>lt;sup>51</sup> Transcript of Oral Hearing, Vol. 3, pages 28-30.

<sup>&</sup>lt;sup>52</sup> TCPL Argument, page 14.

<sup>&</sup>lt;sup>53</sup> Exhibit B.T1.Union.APPrO.5, page 4.

<sup>&</sup>lt;sup>54</sup> Transcript of Technical Conference, Vol. 1, pages 48-51.

<sup>&</sup>lt;sup>55</sup> Undertaking J2.1.

62. It is Union's understanding that with the current commitments, the upstream pipelines that provide supply to Niagara and that are planned for 2015-2016 are largely sold out<sup>56</sup> and significant incremental infrastructure would be required to import any substantial additional gas from the Appalachian basin into Ontario (beyond 2015/2016) at Niagara or Chippawa<sup>57</sup>. Union expects that significant incremental infrastructure would also be required on the TransCanada system to move natural gas from Niagara further into Ontario beyond the current 2015/2016 volume.<sup>58</sup>

63. TCPL asserts that the NEXUS option as proposed would reduce Union's path diversity, whereas the Niagara option would increase diversity.<sup>59</sup> It has consistently been Union's position that the opportunity that the NEXUS pipeline provides should not be viewed as development of NEXUS instead of Niagara, but development of NEXUS and Niagara for the benefit of the Ontario market.<sup>60</sup> By 2017, Enbridge and Union will have contracted for approximately 273 TJ/d of NEXUS pipeline capacity into Dawn and will combine to bring over 221 TJ/d from Niagara into Ontario. In this regard, both Marcellus volumes through Niagara and predominantly Utica volumes through Dawn (via Rover and/or NEXUS) are being supported, which will help offset the decreased volumes from WCSB via TransCanada and Alliance/Vector.<sup>61</sup> This will provide further diversity for Ontario and balance in its access to Marcellus and Utica production.

64. In its argument, BOMA cites Enbridge Undertaking J2.4 and Union Undertaking J2.1 to support the assertion that purchasing gas via NEXUS to Dawn is more expensive than acquiring gas from the same fields at Kirkwall or Dawn via the TCPL-Niagara route.<sup>62</sup> This assertion is based on a misunderstanding of the intent and basis of these filings. Union's undertaking response provides Union actual purchases at Niagara in comparison to those at Dawn, J2.1 shows price at Niagara closely aligning with Dawn when the transportation tolls for moving that gas

<sup>&</sup>lt;sup>56</sup> Exhibit K2.2 shows total upstream capacity of 1.2 PJ at Niagara. Undertaking J2.2, Attachment 1 shows that nearly all of that capacity is contracted.

<sup>&</sup>lt;sup>57</sup> Exhibit B.T2.Union.Staff.17, page 2; Exhibit 1.T1.EGDI.Staff.9, page 2.

<sup>&</sup>lt;sup>58</sup> Exhibit B.T2.Union.Staff.17, page 2.

<sup>&</sup>lt;sup>59</sup> TCPL Argument, pages 17-19.

<sup>&</sup>lt;sup>60</sup> Exhibit B.T2.Union.Staff.17; Transcript of Oral Hearing, Vol. 2, page 66.

<sup>&</sup>lt;sup>61</sup> Exhibit B.T2.Union.Staff.17, page 3.

<sup>&</sup>lt;sup>62</sup> BOMA Argument, page 9.

back to Union's system are incorporated.<sup>63</sup> Further, J2.4 shows Dawn and Niagara on a landed cost basis with Niagara being bought at a price of Dawn minus 46 cents. When the transportation tolls to move Niagara gas to Dawn is added to the cost of gas at Niagara to ensure a proper comparison, the cost variation is minor. Union has explained at the oral hearing that landed cost analysis serves as a reasonableness check.<sup>64</sup> As noted previously, additional factors to be considered include the illiquidity of Niagara, upstream capacity to Niagara being sold out, and the requirement for significant incremental infrastructure in order to import any substantial additional gas into Ontario via Niagara or Chippawa.

65. In its submission, TCPL claims that the 15 year commitments associated with the NEXUS Contract will result in an increased need for Dawn Parkway capacity which is expected to impose further costs to Ontario in the future.<sup>65</sup> This claim is incorrect. Clear evidence on the record has shown that NEXUS is not creating additional need for Union to expand the Dawn Parkway System.<sup>66</sup> FRPO references a prior undertaking response filed by Union in this proceeding (JT2.1) in arguing that "Union understands delivering system gas from Niagara to Kirkwall would create a system benefit in reducing Dawn Parkway facilities".<sup>67</sup> This is an incorrect statement based on a mischaracterization of JT2.1. In fact, JT2.1 clarifies with respect to a scenario involving the delivery of supply at Kirwall instead of Dawn that such shift would not eliminate the need for the proposed 2017 facilities.<sup>68</sup>

#### H. Other Matters

#### Partial Recovery

66. In its argument, APPrO supports pre-approval of the cost consequences relating to the greenfield infrastructure, but recommends excluding the portion of Union's contract costs for its path on the existing DTE system between Willow Run and St. Claire.<sup>69</sup> Based on Union's evidence, there is only one path under one contract and one toll, and the entire path is required to

<sup>&</sup>lt;sup>63</sup> Undertaking J2.1.

<sup>&</sup>lt;sup>64</sup> Transcript of Oral Hearing, Vol. 2, page 93.

<sup>&</sup>lt;sup>65</sup> TCPL Argument, page 11.

<sup>&</sup>lt;sup>66</sup> Exhibit B.T1.Union.LPMA.2, page 2.

<sup>&</sup>lt;sup>67</sup> FRPO Argument, pages 8-9.

<sup>&</sup>lt;sup>68</sup> Undetaking J2.1.

<sup>&</sup>lt;sup>69</sup> APPrO Argument, page 4.

move gas from Kensington to Ontario.<sup>70</sup> Contracting on the existing DTE path represents an efficient and cost effective use of existing infrastructure. Notwithstanding that there is a leased portion of existing pipe, the greenfield nature of the NEXUS project is not diminished since the project cannot occur without the greenfield portion of the pipeline. Therefore, it would not be appropriate to pre-approve only the costs associated with the greenfield portion. If the Board is nevertheless inclined to do so, Union submits that the allocation should be based on the ratio of the toll (rather than the distance).

67. APPrO also indicted that the cost should exclude the potential 15% increase to the greenfield portion of the toll. However, APPrO fails to appreciate that the NEXUS Contract is in respect to the project yet to be built. As a result, costs can change. In order to cap the risk transfer n respect to project cost, Union negotiated an upper bound. This provides for a prudent allocation of risk. Unlike the rate payer, Union should not absorb the consequence of the cost increase since it receives no benefit for the cost.

### Affiliate Relationship Code

68. BOMA expressed concern that Union was not compliant with ARC because of the parent subsidiary relationship between Spectra and Union and Spectra's fifty percent interest in the NEXUS project. According to BOMA the relationship between Spectra and DTE, the two sponsors of the Nexus project, was vague and uncertain. However, based upon the NEXUS FERC filing that BOMA provided with its submissions, it is clear that NEXUS is 50% owned by Spectra Energy Partners, LP and DTE Energy Company. As neither is in control of NEXUS, NEXUS is not an affiliate of Union since NEXUS is not an affiliate of Spectra. As a result, the ARC does not apply to the relationship between NEXUS and Union.

69. However, Union did indicate during the hearing that it would comply with the spirit of the ARC.<sup>71</sup> For example, Union will pay a negotiated rate that is comparable to what the other

<sup>&</sup>lt;sup>70</sup> Transcript of Oral Hearing, Vol. 1, pages 28-30.

<sup>&</sup>lt;sup>71</sup> Transcript of Oral Hearing, Vol. 2, page 95.

shippers pay on the NEXUS path, and has the right to elect the regulated recourse rate if such rate is less than the negotiated rate.<sup>72</sup> As a result, the application of the ARC is not an issue.

### **Combined** Negotiations

70. FRPO asserted that to the extent that the Board does not grant pre-approval of the costs, Union should lower its capacity and combine with Enbridge to negotiate most favoured nations status. This scenario is unworkable since the terms of the process specifically did not allow combined capacity with non-affiliates to achieve anchor shipper status.<sup>73</sup>

<sup>&</sup>lt;sup>72</sup> Transcript of Oral Hearing, Vol. 2, page 96-97.

<sup>&</sup>lt;sup>73</sup> Transcript of Oral Hearing, Vol. 2, page 68.

# Tab 2

Attachment B

**Ontario Energy Board** 

# **Report of the Board**

Draft Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts

# EB-2008-0280

February 11, 2009

# **Table of Contents**

1	INTRO	DDUCTION	1
	1.1	Background	1
	1.2	Structure of the Report	2
2	ARE I	ONG-TERM CONTRACTS APPROPRIATE?	2
	2.1	Consultation Highlights	2
	2.2	The Board's Conclusions	2
3		T APPROACH SHOULD BE USED TO PRE-APPROVE LONG-TERM TRACTS?	2
		Consultation Highlights	
	3.2	The Board's Conclusions	
4	<b>WHA</b> 1 4.1	Consultation Highlights	
	4.2	The Board's Conclusions	
5	NEXT	STEPS	6
APPE		۹	7
	Draft I	Filing Guidelines for Pre-Approval of Long-Term Natural Gas Supply and/ceam Transportation Contracts	
APPE		3	9
		Participants in EB-2008-0280	

# **1** Introduction

This report sets out the Board's draft filing requirements that should be used by a natural gas utility seeking pre-approval for long-term natural gas supply and/or upstream transportation contracts. The draft filing guidelines for long-term contracts ("LTC") are outlined in Appendix A.

## 1.1 Background

In the Natural Gas Forum ("NGF") report, the Board concluded that it will:

- offer natural gas utilities the opportunity to apply for pre-approval of long-term natural gas supply and/or upstream transportation contracts; and
- consult on the development of guidelines that will inform all stakeholders of the principles and issues the Board will consider when evaluating an application for contract pre-approval.

Further to the NGF report, the Board in a letter dated August 22, 2008 outlined the issues to be addressed when developing a pre-approval process for long-term natural gas supply and/or upstream transportation contracts. The Board indicated that it would hold a consultation to discuss the needs, benefits and risks of entering into long-term contracts, the impact on competition and the filing guidelines.

Also, in its letter dated August 22, 2008, the Board stated that it planned to conduct the consultation in two phases. In the first phase, staff would hold stakeholder meetings which would lead to the development of a staff discussion paper. In the second phase, the Board would consider whether it is appropriate to develop filing guidelines for the pre-approval of long-term contracts.

On October 15-17, 2008, staff held a number of meetings with stakeholders, as shown in Appendix B. At these meetings, staff and its technical expert presented material to initiate discussion on whether: (i) it is appropriate for natural gas utilities to enter into long-term natural gas supply and/or upstream transportation contracts; and (ii) the Board should develop guidelines for the pre-approval of long-term contracts, and if so, what should be included in these guidelines.

At these meetings, no substantive issues were raised and stakeholders generally agreed to a pre-approval process for long-term contracts that support the development of new natural gas infrastructure (e.g., new pipeline facilities to access new natural gas supply sources such as Liquefied Natural Gas ("LNG") plants and frontier production).

As a result, a staff discussion paper, as originally contemplated in Phase I of the consultation, is not necessary. The Board has decided to proceed directly to Phase II and release its draft LTC filing guidelines for stakeholder comment.

All materials related to this consultation are on the Board's website.

## **1.2 Structure of the Report**

This report is organized into three sections and each section includes the issues and options raised by stakeholders at the consultation as summarized by staff and the Board's conclusions.

# 2 Are long-term contracts appropriate?

## 2.1 Consultation Highlights

Stakeholders stated that long-term upstream transportation contracts ("long-term transportation contracts") may be justified to support new pipeline facilities and some of these stakeholders suggested that this could also support access to new natural gas sources.

Many stakeholders did not support long-term natural gas supply contracts ("long-term supply contracts") except when these contracts are linked to long-term transportation contracts that access new resources such as LNG, United States Rockies and Canadian frontier production. Others supported long-term supply contracts to increase price stability.

## 2.2 The Board's Conclusions

The Board agrees with stakeholders that long-term supply contracts may be justified in limited circumstances such as supporting the development of new natural gas infrastructure.

With regards to long-term transportation contracts, the Board notes that the natural gas utilities ("utilities") currently have a portfolio of contract lengths. This reflects an upstream transmitter's market requirement to have long-term contracts to support new large infrastructure investments while contracts for existing capacity are generally shorter. Also, the Board is of the view that long-term transportation contracts may help to ensure an adequate natural gas supply in the Ontario market from a diverse portfolio of sources. This may increase supply reliability and reduce price volatility, which would benefit all market participants. Consequently, long-term transportation contracts may be justified.

# **3** What approach should be used to pre-approve longterm contracts?

# 3.1 Consultation Highlights

Stakeholders discussed two approaches to a pre-approval process for long-term contracts. The first approach would be a process in which the cost implications of the long-term contracts would be pre-approved by the Board provided that the long-term contracts met a pre-defined set of criteria. The second approach would be an application reviewed by the Board on a case-by-case basis. Stakeholders supported the second approach which is in essence the status quo.

Also, stakeholders generally agreed to a pre-approval process for long-term contracts (where the utility applies on a case-by-case basis) that support the development of new natural gas infrastructure (e.g., new pipeline facilities to access new natural gas supply sources such as LNG plants and frontier production).

A number of stakeholders wanted the Board to require pre-approval for all long-term contracts that meet certain defined criteria, while others supported having the pre-approval process as an option available to the utility.

# 3.2 The Board's Conclusions

It is recognized that a utility may file an application to the Board at any time. However, in the case of long-term contracts, the Board agrees with stakeholders and concludes that a pre-approval process is appropriate for specific types of long-term contracts. The Board is of the view that filing guidelines need to be developed to assist a utility when it makes an application to the Board for the pre-approval of long-term contracts. The Board believes that these applications should be limited to those that support the development of new natural gas infrastructure (e.g., new transportation facilities to access new natural gas supply sources). The Board does not believe that the pre-approval process for long-term contracts should be used for the utility's normal day-to-day contracting, renewals of existing contracts and other long-term contracts. These contracts should continue to be addressed in the utility's rate application.

The Board also agrees with stakeholders that the process should allow a utility to apply to the Board on a case-by-case basis to pre-approve the cost implications of the long-term contracts (as per section 36(2) of the *Ontario Energy Board Act, 1988*). The utility is to file its application with the Board either prior to contract execution, or after execution (with a condition precedent regarding Board approval), but before it incurs costs under the long-term contracts. The Board will approve the costs associated with these contracts, not the contracts themselves.

In addition, the Board believes that the pre-approval process for long-term contracts can be used at the discretion of the utility.

# 4 What should be included in the filing guidelines?

## 4.1 Consultation Highlights

Several stakeholders thought that it was necessary to examine how the proposed longterm contracts fit into the utility's overall natural gas supply and transportation portfolio. Stakeholders also emphasized the importance of considering affiliate relationships or other related transactions.

In the 2007 rates proceeding (EB-2005-0520) Union Gas Limited ("Union") agreed to prepare an Incremental Transportation Contracting Analysis for each new upstream transportation contract with a term of one year or longer. Enbridge Gas Distribution Ltd ("Enbridge") and Union suggested using this analysis as the basis for the filing guidelines, with the appropriate changes for long-term supply contracts.

In addition, stakeholders stated that the pre-approval process would reduce (but not eliminate) the need for after-the-fact prudence reviews and therefore would decrease the regulatory risk for the utilities. Some of these stakeholders also noted that there are risks, separate and apart from regulatory risk, associated with long-term contracts. For example, large infrastructure projects with long lead times may increase the risk of cost overruns and forecasting errors. Therefore, the risks should be identified in the application.

# 4.2 The Board's Conclusions

Based on stakeholders' comments, the Board believes that the utilities should file the following information:

- Need, costs and benefits a description of the proposed project that includes need, costs, benefits (such as this project improves the security of supply and the diversity of supply sources) and timelines.
- Cost effectiveness in comparison to other alternatives an assessment of the landed costs (supply costs + transportation costs including fuel costs) for the newly contracted capacity and/or gas supply to the landed costs of the possible alternatives.
- Contract term, volume and services diversity an assessment on how this contract fits into the utility's overall transportation and natural gas supply portfolio.
- Risk mitigation plan and risk allocation identification of all the risks (such as forecasting risks, construction and operational risks, and commercial risks<sup>1</sup>) and plans on how these risks are to be minimized and allocated between ratepayers, parties to the contract and/or shareholders.
- All relevant **contract parameters** such as transportation/supply provider, term, conditions of service, price, volume, and receipt and delivery points.
- Affiliate relationships a description of the relationship between parties to the contract and the utility's parent company and/or affiliates.
- Other Considerations retail competition impacts and potential impacts on existing transportation pipeline facilities in the market (in terms of Ontario customers).

<sup>&</sup>lt;sup>1</sup> Forecasting risks include future demand, prices, actual landed costs and performance of basin. Commercial risks include competitive and credit-worthiness of provider/operator. Construction and operational risks include costs escalations, delays or reliability issues pertaining to new construction; and gas interchangeability and quality issues.

The Board recognizes that the pre-approval process needs to allow for timely decision making, especially in the situation where the utility includes the Board's approval as a condition precedent in its long-term contract. The Board notes that the process must also allow for evidence, discovery and argument.

# **5 Next Steps**

The Board concludes that the draft LTC filing guidelines be issued for stakeholder comment. Stakeholders can file submissions within six weeks of the draft LTC filing guidelines being released. After stakeholder submissions are received, it is expected that the Board will issue the final LTC filing guidelines.

# **Appendix A**

# Draft Filing Guidelines for Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts

This form applies to all applicants who are requesting pre-approval of long-term natural gas supply and/or upstream transportation contracts that support the development of new natural gas infrastructure.

All applicants must complete and file the information requested in Part I, II, III, IV and V.

# Part I – Identification of Applicant

Name of Applicant:	File No: (OEB Use Only)
Address of Head Office:	Telephone Number:
	Facsimile Number:
	E-mail Address:
Name of Individual to Contact:	Telephone Number:
	Facsimile Number:
	E-mail Address:

# Part II – Needs, Costs and Benefits

2.1	A description of the proposed project that includes need, costs, benefits (such as this project improves the security of supply and the diversity of supply sources) and timelines.
2.2	An assessment of the landed costs (supply costs + transportation costs including fuel costs) for the newly contracted capacity and/or natural gas supply to the landed costs of the possible alternatives.

# Part III – Contract Diversity

3.1	A description of all the relevant contract parameters such as transportation/supply provider, contract length, conditions of service, price, volume, and receipt and delivery points.
3.2	An assessment on how the contract fits into the applicant's overall transportation and natural gas supply portfolio in terms of contract length, volume and services.

# Part IV - Risk Assessment

4.1	Identification of all the risks (such as forecasting risks, construction and operational risks, and commercial risks) and plans on how these risks are to be minimized and allocated between ratepayers, parties to the contract and/or the applicant's shareholders.
	For example, forecasting risks include future demand, prices, actual landed costs and performance of basin; commercial risks include competitive and credit- worthiness of provider/operator; and construction and operational risks include costs escalations, delays or reliability issues pertaining to new construction; and gas interchangeability and quality issues.

# Part V – Other Considerations

5.1	A description of the relationship between parties to the contract and the applicant's parent company and/or affiliates.
5.2	An assessment of retail competition impacts and potential impacts on existing transportation pipeline facilities in the market (in terms of Ontario customers).

# Appendix **B**

List of Participants in EB-2008-0280
Alliance Pipeline Ltd.
Association of Power Producers of Ontario
BP Canada Energy Company Ltd.
Building Owners and Managers Association of The Greater Toronto Area
Canadian Manufacturers & Exporters
City of Kitchener
Consumers Council of Canada
Direct Energy Marketing Ltd.
ECNG Energy L.P.
Enbridge Gas Distribution Inc.
Federation of Rental-Housing Providers of Ontario
Gazprom Marketing and Trading USA, Inc.
Industrial Gas Users Association
London Property Management Association
Natural Resource Gas Ltd.
Ontario Energy Savings L.P.
Ontario Power Generation
Shell Energy North America (Canada) Inc.
Superior Energy Management
TransAlta Cogeneration L.P. and TransAlta Energy Corp.
TransCanada PipeLines Limited
Union Gas Limited
Vulnerable Energy Consumers Coalition

# Tab 3

Ontario Energy Board P.O. Box 2319 27th. Floor 2300 Yonge Street Toronto ON M4P 1E4 Telephone: 416- 481-1967 Facsimile: 416- 440-7656 Toll free: 1-888-632-6273 Commission de l'énergie de l'Ontario C.P. 2319 27e étage 2300, rue Yonge Toronto ON M4P 1E4 Téléphone; 416-481-1967 Télécopieur: 416-440-7656 Numéro sans frais: 1-888-632-6273



# BY E-MAIL AND WEB POSTING

April 23, 2009

# To: All Participants in EB-2008-0280

# Re: Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts Board File No.: EB-2008-0280

The purpose of this letter is to notify participants of the release of the final filing guidelines for the pre-approval of the cost consequences of long-term natural gas supply and/or upstream transportation contracts ("LTC filing guidelines"), which have been posted on the Board's website at <u>www.oeb.gov.on.ca</u>.

# Background

In the Natural Gas Forum ("NGF") report, the Board concluded that it will:

- offer natural gas utilities the opportunity to apply for pre-approval of long-term natural gas supply and/or upstream transportation contracts; and
- consult on the development of guidelines that will inform all stakeholders of the principles and issues the Board will consider when evaluating an application for contract pre-approval.

In a letter, dated August 22, 2008, the Board outlined the issues to be addressed when developing a pre-approval process for long-term natural gas supply and/or upstream transportation contracts. The Board indicated that it would hold a consultation to discuss the needs, benefits and risks of entering into long-term contracts, the impact on competition and the filing guidelines.

Also, in its letter dated August 22, 2008, the Board stated that it planned to conduct the consultation in two phases. In the first phase, staff would hold stakeholder meetings which would lead to the development of a staff discussion paper. In the second phase, the Board would consider whether it is appropriate to develop filing guidelines for the pre-approval of long-term contracts.

On October 15-17, 2008, staff held a number of meetings with stakeholders. At these meetings, staff and its technical expert presented material to initiate discussion on whether: (i) it is appropriate for natural gas utilities to enter into long-term natural gas supply and/or upstream transportation contracts; and (ii) the Board should develop guidelines for the pre-approval of long-term contracts, and if so, what should be included in these guidelines.

At these meetings, no substantive issues were raised and stakeholders generally agreed to a pre-approval process for long-term contracts that support the development of new natural gas infrastructure (e.g., new pipeline facilities to access new natural gas supply sources such as Liquefied Natural Gas plants and frontier production). As a result, a staff discussion paper, as originally contemplated in Phase I of the consultation, was not necessary. The Board decided to proceed directly to Phase II and release its draft LTC filing guidelines for stakeholder comment. On February 11, 2009, the Board issued the draft LTC filing guidelines for stakeholder comment and the Report of the Board entitled Draft Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts ("the Report").

Ten stakeholders submitted comments on the draft LTC filing guidelines. The majority of these stakeholders supported the draft LTC filing guidelines and commented on the following matters:

- the actual contract itself should be filed as part of this process;
- this process should also include <u>renewals</u> of long-term contracts;
- this process should include any long-term contracts that involve an affiliate of the natural gas utility; and
- the Board should define what is meant by long-term.

One stakeholder, however, submitted that there is no need to determine at this time whether long-term contracts are appropriate since there are no current issues with security of supply or upstream transportation constraints. Therefore, it would be best for the Board to make a determination in the future if and when these concerns arise.

All materials related to these consultations (including stakeholders' comments) are available on the Board's website.

# **Final Filing Guidelines**

The Board has decided to proceed with the finalization of the filing guidelines for the pre-approval of the cost consequences of long-term natural gas supply and/or upstream transportation contracts.

The filing guidelines in Attachment A reflect the comments by stakeholders, as appropriate. In response to the comments raised, the Board reiterates its policy as set out in the Report.

The Board believes that applications for pre-approval of the cost consequences of longterm contracts should be limited to those that support the development of <u>new</u> natural gas infrastructure. The Board does not believe that the pre-approval process should be used for the natural gas utility's ("utility") normal day-to-day contracting, renewals of existing contracts and other long-term contracts that are not related to new natural gas infrastructure. These contracts should continue to be addressed in the utility's rate proceedings.

Further, the Board is of the view that this pre-approval process should be an option available to the utility and not a requirement (even if the long-term contract involves an affiliate). As a consequence, the Board offers utilities the opportunity to apply on a case-by-case basis for pre-approval of these long-term contracts that support new natural gas infrastructure.

In its Report, the Board stated that it would pre-approve the costs associated with these contracts, not the contract itself. However, based on stakeholder comments, the Board believes that the contract should be filed as part of this process to allow for an appropriate review. The Board notes that the utility may request confidential treatment of its contract in accordance with the Ontario Energy Board's *Practice Direction on Confidential Filings*.

For additional clarity, the Board is of the view that defining long-term is not necessary since the pre-approval process is limited to projects that would support the development of new natural gas infrastructure. It is expected that the length of the contract will vary with, amongst other things, the nature and magnitude of the new natural gas infrastructure.

For any questions regarding the final LTC filing guidelines please contact Laurie Klein at <u>laurie.klein@oeb.gov.on.ca</u> or (416) 440-7661. The Board's toll free number is 1-888-632-6273.

Yours truly,

Original signed by

Kirsten Walli Board Secretary

Attachment A

# Attachment A

# Filing Guidelines for Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts

This form applies to all applicants who are requesting pre-approval of the cost consequences of long-term natural gas supply and/or upstream transportation contracts that support the development of new natural gas infrastructure.

"Long-term" has not been defined since this pre-approval process is limited to projects that would support the development of new natural gas infrastructure. It is expected that the length of the contract will vary with, amongst other things, the nature and magnitude of the new natural gas infrastructure.

All applicants must complete and file the information requested in Part I, II, III, IV, V and VI.

Name of Applicant:	File No: (OEB Use Only)
Address of Head Office:	Telephone Number:
	Facsimile Number:
	E-mail Address:
Name of Individual to Contact:	Telephone Number:
	Facsimile Number:
	E-mail Address:

# Part I – Identification of Applicant

# Part II – Needs, Costs and Benefits

	,
2.1	A description of the proposed project that includes need, costs, benefits (such as this project improves the security of supply and the diversity of supply sources) and timelines.
2.2	An assessment of the landed costs (supply costs + transportation costs including fuel costs) for the newly contracted capacity and/or natural gas supply compared to the landed costs of the possible alternatives.

# Part III – Contract Diversity

3.1	A description of all the relevant contract parameters such as transportation/supply provider, contract length, conditions of service, price, volume, and receipt and delivery points.
3.2	An assessment on how the contract fits into the applicant's overall transportation and natural gas supply portfolio in terms of contract length, volume and services.

# Part IV - Risk Assessment

4.1	Identification of all the risks (such as forecasting risks, construction and operational risks, commercial risks and regulatory risks) and plans on how these risks are to be minimized and allocated between ratepayers, parties to the contract and/or the applicant's shareholders.
	For example, forecasting risks include future demand, prices, actual landed costs and performance of basin; commercial risks include competitive and credit- worthiness of provider/operator; construction and operational risks include costs escalations, delays or reliability issues pertaining to new construction, and gas interchangeability and quality issues; and regulatory risks include changes in laws or regulations.

# Part V – Other Considerations

5.1	A description of the relationship and any other conditions, rights or obligations between the parties to the contract and the applicant's parent company and/or affiliates.
5.2	An assessment of retail competition impacts and potential impacts on existing transportation pipeline facilities in the market (in terms of Ontario customers).

# Part VI – Contract

6.1	The contract for which the utility is seeking pre-approval for is filed in this application. The utility may request confidential treatment of its contract in accordance with the Ontario Energy Board's <i>Practice Direction on Confidential Filings</i> .
-----	---

# Tab 4

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.Staff.2 Page 1 of 3

## UNION GAS LIMITED

# Answer to Interrogatory from <u>Board Staff</u>

Reference: Exhibit A / Page 2 / Lines 1-2

Union's evidence states that it intends to enter into a 15 year contract with NEXUS Gas Transmission (NEXUS).

Please briefly summarize the key points of other OEB proceedings in which Union has requested pre-approval of the cost consequences of long term transportation contracts. Please indicate the OEB's decision in terms of its acceptance, or rejection, of the application.

## **Response**:

This is also responsive to Exhibit B.T1.Union.CME.1.

Union requested pre-approval of the cost consequences of long term transportation contracts under the Filing Guidelines issued by the Board in EB-2008-0280, Long Term Contract Guidelines, in two prior applications.

In each of these cases, the Board made no comment on the prudence of the contracts however they determined that pre-approval was not required because specific criteria of the Guidelines were not met.

The first application, in EB-2010-0300, Pre-Approval of 3 Long Term Transportation Contracts, Union applied for pre-approval of the cost consequences of 3 contracts.

1. The Parkway to Eastern Delivery Area (EDA) contract was a minimum ten-year contract for 20,000 GJ/d firm short haul capacity, commencing November 1, 2013. Based upon TransCanada's current rates at the time of that filing, transportation service on this contract was estimated to cost \$2,827,400 CDN/year or \$28 million over the 10 year term of the contract. This contract request was withdrawn January 17, 2011 as no Precedent Agreements ("PA") were negotiated.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.Staff.2 Page 2 of 3

- 2. The Parkway to Northern Delivery Area (NDA) contract was a minimum ten-year contract for 10,000 GJ/d of firm short haul capacity, commencing November 1, 2013. Based upon TransCanada's current rates at the time of that filing, transportation service on this contract was estimated to cost \$1,072,500 CDN/year or \$11 million over the 10 year term of the contract. This contract request was withdrawn January 17, 2011 as no PA's were negotiated.
- 3. The Niagara contract for firm transportation of 21,101 GJ/d on the TransCanada system was a minimum ten-year contract commencing November 1, 2012. The receipt point of the contract is Niagara and the delivery point is Kirkwall. The annual demand commitment of the contract at National Energy Board (NEB)-approved rates in place at the time of filing was \$697,000 CDN per year.

The second application was part of a larger project (EB-2013-0074) which included requests for leave to construct approval of facilities tied to the contracts. This capacity would allow Dawn sourced gas to be delivered to the benefit of Union North sales service and bundled direct purchase customers. The demand charges associated with the contracts over the 10 year term are in excess of \$110 million.

Union applied for approval of 2 contracts:

- 1. Contract with TransCanada for 10,000 GJ/d firm short haul transportation capacity between Parkway Belt and the Union NDA, starting November 1, 2015 for a term of 10 years.
- 2. Contract with TransCanada for 100,000 GJ/d of firm short haul transportation capacity between Parkway Belt and the Union EDA starting November 1, 2015 for a term of 10 years.

The overall project was approved however the Board did not pre approve the cost consequences of the long term contracts because there were no PA's or contracts and the cost impact was unknown. The Board noted costs were tied to TransCanada tolls which are subject to change by the NEB.

As noted, in prior proceedings, the Board did not disagree that the contracts were prudent, but rather that they did not meet the hurdle to require pre-approval as per the Filing Guidelines.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.Staff.2 Page 3 of 3

The following is a list of key requirements of the guidelines where the NEXUS contract differs from prior requests:

	NEXUS	
UNDERPINS SIGNIFICANT GREENFIELD INFRASTRUCTURE	<ul> <li>The required infrastructure is defined.</li> <li>The NEXUS pipeline project includes 250 miles of NPS 36 GREENFIELD pipe as a cost of approximately \$2 Billion to provide 1.5 Bcf/d transport to the market.</li> </ul>	
VOLUME	<ul> <li>NEXUS represents a more significant volume of 158,258 GJ/d which represents approximately one third of Union's overall gas supply portfolio</li> <li>This does not represent typical day to day contracting</li> <li>Prior volumes of 21,101 GJ/d and 110,000 GJ/d</li> </ul>	
COST of CONTRACT	<ul> <li>Tolls are known and are fixed in the contract terms - this mitigates risk of pre-approval</li> <li>In prior applications, tolls on TransCanada would vary as approved by the NEB</li> </ul>	
INFRASTRUCTURE PROJECT	<ul> <li>Project is defined and the cost impact to Union (shipper) is known and capped</li> </ul>	
CONTRACT OR PA	• PA filed in EB-2013-0074, were not yet signed	
MAGNITUDE OF COST COMMITMENT	<ul> <li>Significantly larger commitment in NEXUS proceeding with a financial commitment of greater than \$700 million over the 15 year term of the agreement</li> <li>This compares to prior commitments estimated at \$7 million and \$39 million over the 10 year term of the agreements</li> </ul>	

d) Union is not aware of any cases where the Board has granted pre-approval to any Ontario distributor for the cost consequences of a long term upstream transportation contract or long term supply contract. No significant new upstream transportation infrastructure to Ontario has been added since the issuance of the Board's pre-approval guidelines in 2009.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.Energy Probe.1 Page 1 of 2

# UNION GAS LIMITED

## Answer to Interrogatory from Energy Probe Research Foundation ("Energy Probe")

Reference: EB-2015-0175 Exhibit A, Tab 2, Schedule 1, Appendix A

<u>Preamble</u>: Enbridge Gas Distribution Inc. provides tables at Appendix A showing the information requested in Part I, II, III, IV, V and VI of the Filing Guidelines and the corresponding references in Enbridge's evidence where the information can be found.

Please provide a similar Table for Union.

## **Response**:

Part I – Identification of Applicant	File No. EB-2015-0166
	Application, paragraphs 1-13
Part II – Needs, Costs and Benefits	
2.1 A description of the proposed project that includes needs, costs, benefits (such as this project improves the security of supply and diversity of supply resources and timelines).	<ul><li>2.1 - Exhibit A, Part 4 The Need for the NEXUS Project, pp 18-25.</li><li>Exhibit A, Part 5 Benefits of the NEXUS Project, pp. 26-41.</li></ul>
2.2 An assessment of the landed costs (supply	2.2 - Exhibit A, Part 5, pp. 38-41.
costs and transportation costs including fuel	Exhibit A, Schedule 4 and Schedule 5.
costs) for the newly contracted capacity and/or	
natural gas supply compared to the landed	
costs of the possible alternatives.	
Part III – Contract Diversity	
3.1 A description of all the relevant contract parameters such as transportation/supply provider, contract length, conditions of service, price, volume and receipt and delivery points.	3.1 - Exhibit A, Part 6 The NEXUS Agreement, pp. 42-45.
3.2 An assessment of how the contract fits into the applicant's overall transportation and natural gas supply portfolio in terms of contract length, volume and services.	3.2 - Exhibit A, Part 4 The Need for the NEXUS Project, pp 18-25.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.Energy Probe.1 Page 2 of 2

Part IV – Risk Assessment	
4.1 Identification of all the risks (such as forecasting risks, construction and operational risks, commercial risk and regulatory risk) and plans on how these risks are to be minimized and allocated between ratepayers, parties to the contract and/or the applicant's shareholders.	4.1 - Exhibit A, Part 7 Risk Mitigation of the NEXUS Agreement, pp. 46-52.
Part V – Other Considerations	
5.1 A description of the relationship and other conditions, rights or obligations between the parties to the contract and applicant's parent company and/or affiliates.	5.1 - Exhibit A, Part 6 The NEXUS Agreement, Union Relationship with Project Proponents, p. 45.
5.2 An assessment of retail competition impacts and potential impacts on existing transportation pipeline facilities in the market (in terms of Ontario customers).	<ul><li>5.2 - Exhibit A, Part 4 The Need for the NEXUS Project, pp. 18-25.</li><li>Exhibit A, Part 5 Benefits of the NEXUS Project, pp. 26-41.</li></ul>
Part VI – Contract	
6.1 The contract for which the utility is seeking pre-approval for is filed in this application. The utility may request confidential treatment of its contract in accordance with the Ontario Energy Board's <i>Practice on Confidential Filings</i> .	6.1 - Exhibit A, Schedule 1.

# Tab 5



# ONTARIO ENERGY BOARD

FILE NO.:	EB-2015-0166 EB-2015-0175	Union Gas Limited Enbridge Gas Distribution Inc.
VOLUME:	2	
DATE:	November 16, 2015	
BEFORE:	Cathy Spoel	Presiding Member
	Allison Duff	Member
	Christine Long	Member

I If Union and Enbridge don't get pre-approval and we don't contract on NEXUS, I think it does put NEXUS at risk. I mentioned that on Friday. And I think the same risk of being producer only project on NEXUS would apply to Rover as well.

6 So we don't know with 100 percent assurance that Rover 7 is going ahead. They're doing the best to go down through 8 the business development process, and so is NEXUS. I think 9 NEXUS gets more assurance with having Union and Enbridge a 10 part of it.

MS. ALEXANDER: But strictly speaking, if you just are looking at the Board guidelines, it's not a new supply source, essentially --

14 MR. ISHERWOOD: It is a new supply source. So I mentioned on Friday Marcellus is now at the same size of 15 16 Alberta at its peak and it's growing to twice that in the 17 next 15, 20 years. At the same time Utica, which is really 18 the source of gas -- primary source of gas for the NEXUS 19 pipeline, when we went into the open season in 2012 there 20 was no gas flowing. There is a graph in Sussex evidence, I 21 think on page 30 or thereabouts. It actually shows a 2.2 little sliver of a line on a bar chart in terms of flowing 23 gas out of Utica, so at the same time we were bidding in 24 the open season Utica was just barely off the ground and 25 was near zero in terms of production.

26 So unfortunately it takes some time to go from an 27 open-season bid to a fully developed project. It takes 28 from 2012 to 2017. But when we started the process it was increase. It's the highest basin as far as production
 increase on a percentage basis.

3 MR. BRETT: Well, let me --

MR. SHORTS: A couple of producers that have drilled some wells, EQT and Rice, they have produced recordbreaking wells within their portfolio. These are the -and this was new. Like, they did not know it was going to happen. It's a new area, and they're learning as they go. And so far the results have been well exceeding what their expectations were.

11 MR. BRETT: I take it your gas is coming from both the 12 Marcellus and Utica basis, is it not? My understanding --13 let me, I guess I should finish the question.

My understanding is geographically, while they are not identical profiles, there is a huge amount of overlap, right? And the Utica basin is below -- deeper than the Marcellus basin, for the most part.

MR. SHORTS: Where Kensington is, specifically. So for example, there's three interconnects where NEXUS starts. There's the Kensington processing plant, there's Tennessee gas pipelines, and there's Texas eastern gas pipelines.

Between the three of them, they provide 3 BCF a day,
roughly, of capacity. But the Kensington plant is
predominately there for Utica supply.

26 So what you're finding is that at Kensington itself, 27 that is where you're going to have -- in the in heart of 28 the Utica production area, that's where Kensington is

(613) 564-2727

(416) 861-8720

located. And where NEXUS refined -- started the pipe over
 the first few months of the open season.

After they had the open season, if you'll recall, there was original graphs where they didn't know it was going to start. And in discussions with producers and trying to find the best place to start the pipe that would draw in the most supply, they chose Kensington and it's becoming more and more looking as an attractive place to buy gas at.

10 MR. BRETT: Now, you've contracted, as I understand 11 it, for 20,000 GJs a day of gas, starting November 1st of 12 this year at Dominion south, correct?

MR. SHORTS: That's correct. On a pilot project,
we've got 21,000 GJs a day at the Dominion south point.

MR. BRETT: Dominion south is in the Marcellus shale?MR. SHORTS: It is, yes.

MR. BRETT: So you're taking gas from both the Marcellus shale and the Utica shale?

MR. SHORTS: Oh, absolutely. Even when I was mentioning before -- when you look at the Tennessee gas pipeline interconnect and the Texas eastern, they would have access to Marcellus as well as Utica.

I just want to make the distinction that the Kensington processing plant is in the heart of the Utica production area.

26 MR. BRETT: Now, the maps that you show -- that we 27 looked at yesterday -- and I don't think I need to have you 28 turn them up - but they showed a line going down -- well,

> ASAP Reporting Services Inc. (613) 564-2727 (416) 861-8720

1 MR. LeBLANC: Right, and it's so -- as I understand 2 them, and maybe you can -- if there are specific ones you 3 want to have something on, please feel free.

But as I understand them, the Board saw the need for pre-approval potentially in the case of new assets to develop new gas supply supplies. And I think both those boxes are there, tick, tick; both of those for sure.

8 Like I said earlier, Utica is brand new. I can turn 9 up, if you'd like, just a couple of excerpts from some of 10 the presentations that shows you that at the time we bid 11 into this Utica, they were literally drilling test wells, 12 trying to figure out where the best -- what they call the sweet spot of where they were going to drill. And that's 13 14 ultimately sort of in the area of where Kensington -- the 15 beginning of the pipe was put. So it's definitely new supply and it's definitely new pipe, and I think our 16 17 participation is certainly important to making sure that 18 the NEXUS project goes forward.

So those are at the high level. I'm not sure there are others specific that you were asking about. But I believe this does fall under those guidelines.

MS. LONG: I'll let Mr. Richler continue with his cross-examination. I'm sure this is something we'll discuss further.

25 MR. RICHLER: That was a helpful overview. But just 26 to go back to my question, I think what I was really 27 looking for is an explanation of why Enbridge wouldn't just 28 proceed with this deal, even if it didn't get pre-approval?

# ASAP Reporting Services Inc. (613) 564-2727 (416) 861-8720

112

Filed: 2015-05-28 EB-2015-0166 Exhibit A Schedule 3 Page 1 of 64



# Union Gas Limited and Enbridge Gas Distribution, Inc. NEXUS Gas Transmission – Market Study

May 2015

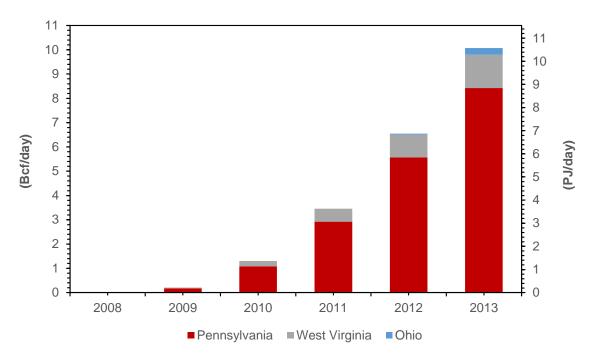
Prepared by Sussex Economic Advisors, LLC

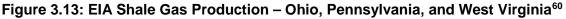
Sussex Economic Advisors, LLC ("Sussex") has relied upon certain public sources of information consistent with standard consulting practices. Sussex makes no warranties or guarantees regarding the accuracy of any estimates, projections or analyses contained herein. Those reviewing the information contained herein waive any claim against Sussex, its partners, employees, and subcontractors. Sussex shall not be liable to any party reviewing this information.

## Marcellus and Utica Production Forecasts

In addition to the natural gas reserves analysis, Sussex also evaluated natural gas production estimates. Estimates of natural gas production are necessary to understand the level of natural gas that will be extracted in a given period. EIA and several third-party natural gas market analysts periodically prepare production forecasts that include the Marcellus and Utica basins.

Figure 3.13 (below) provides a summary of the EIA's natural gas production estimate from 2008 to 2014 in Ohio, Pennsylvania, and West Virginia from its 2014 estimate of U.S. proved reserves. In total, the annual production for the three states increased from approximately 500 PJ (or 1.4 PJ/day) in 2010 to approximately 3,860 PJ (or 10.6 PJ/day) in 2013.59





The EIA also produces a forecast of natural gas production in its AEO. Specifically, the AEO, which covers a 30 to 35 year forecast horizon, includes a forecast of natural gas production in the Northeast region (i.e., Marcellus and Utica shale basins). As illustrated in Figure 3.14, for the 2010 and 2011 AEOs, the production forecast increased substantially in every forecast period. Between 2011 and 2013, the EIA's production forecast was relatively consistent.

60

<sup>59</sup> U.S. Energy Information Administration, U.S. Crude Oil and Natural Gas Proved Reserves, 2012. April 2014, at 38-39. lbid.

# Tab 6

ATTACHMENT 6, Page 1



# NEXUS GAS TRANSMISSION PROJECT

۲

# FERC SECTION 7(c) APPLICATION

**VOLUME I** 

FERC Docket No. CP16-\_\_-000

November 2015

pursuant to the implementing regulations of the Department of Transportation, 49 C.F.R. Part 192, and any other applicable safety standards. NEXUS certifies that it will incorporate all applicable environmental information and NEPA compliance requirements into contract bid documents and, as needed, give appropriate instruction and training to contractors and inspectors in carrying out the Commission's guidelines. In addition to its adoption of all applicable environmental guidelines and its extensive pre-filing consultations, NEXUS will continue to be in contact with appropriate authorities regarding measures to mitigate any adverse environmental impacts along its route to the extent practicable.

#### D. Benefits Associated with the Project Outweigh the Adverse Effects.

When determining whether a proposed project is needed and will serve the public interest, the Commission balances the public benefits to be achieved by the project against the residual adverse effects of the proposed project. The NEXUS Project will provide a seamless path to transport Appalachian Basin shale gas, including Utica and Marcellus shale gas, directly to consuming markets in northern Ohio, southeastern Michigan, and the Dawn Hub. The region to be served by the NEXUS Project is in the midst of a sea change in natural gas supply and demand dynamics. On the supply side, it is anticipated that Marcellus and Utica shale gas production will average approximately 38 billion cubic feet per day ("Bcf/d") by 2025.<sup>14</sup> Additional pipeline capacity is needed to transport gas from this region to market. As one recent report explained, the enormous reserves and strong economics of Marcellus and Utica shale plays remain constrained by insufficient take-away pipeline capacity.<sup>15</sup> The NEXUS Project will provide much needed incremental capacity for producers in the Marcellus and Utica shale plays.

<sup>&</sup>lt;sup>14</sup> ICF International Forecast: Natural Gas-Strategic Q3 Base Case ("ICF International Q3 2015 Forecast").

<sup>&</sup>lt;sup>15</sup> IHS Energy – North American Natural Gas, October 30, 2015 as part of standard advisory service offering.

On the demand side, the NEXUS Project will serve a region that is experiencing significant pressure to invest in natural gas fired electric generation as a result of recent environmental policies.

According to a study conducted by the Analysis Group, the gas demand in Northern Ohio from residential, commercial, and industrial sectors could require an additional 12 billion cubic feet ("Bcf") per year of natural gas.<sup>16</sup> The increase is driven by home heating conversions from oil to gas, industrial growth, and greater usage in these sectors of the low-cost fuel. In addition, the study projects incremental gas demand from the electric power sector in Northern Ohio at approximately 0.5 Bcf/d. According to the study:

Given both resource adequacy needs and the location of known retirements . . . most of the new natural gas-fired resources (i.e., approximately 3,050 MW) are located in Northern Ohio. These Northern Ohio plants are also the farthest along in their respective development and will be in-service before 2018.<sup>17</sup>

There are 16 coal-fired power plants in Ohio that have been announced for retirement with over 4,000 megawatts ("MW") of capacity that will need to be replaced.<sup>18</sup> Some of these generators may be converted to natural gas, which would increase further the demand for natural gas in the region. Plans are also underway to construct at least seven new natural gas-fired generation facilities in Ohio, totaling nearly 4,800 MW in incremental capacity.<sup>19</sup>

Similar to Ohio, Michigan is in the process of undergoing an energy infrastructure transition, driven by environmental policy, fleet modernization efforts, and the low price of

<sup>&</sup>lt;sup>16</sup> Analysis Group, Inc. 2015 Ohio Natural Gas Market Study; Prepared for NEXUS Gas Transmission Project at 22-23 (June 2015) ("Analysis Group Study").

<sup>&</sup>lt;sup>17</sup> Id. at 36.

<sup>&</sup>lt;sup>18</sup> SourceWatch.org website. <u>http://www.sourcewatch.org/index.php/Coal\_plant\_retirements#</u> Table\_2:\_Recent\_and\_upcoming\_coal\_plant\_retirements\_and\_conversions.2C\_including\_probable\_retirements. Accessed on August 29, 2013.

<sup>&</sup>lt;sup>19</sup> Analysis Group Study at 36.

# Tab 7



Suite 3000 79 Wellington St. W. Box 270, TD Centre Toronto, Ontario M5K 1N2 Canada Tel 416.865.0040 Fax 416.865.7380

www.torys.com

Charles Keizer Tel 416.865.7512 ckeizer@torys.com

November 18, 2015

#### **RESS, EMAIL & COURIER**

Ontario Energy Board P.O. Box 2319 27th Floor 2300 Yonge Street Toronto, ON M4P 1E4

Attention: Ms. K. Walli, Board Secretary

Dear Ms. Walli:

### Re: Union Gas Limited – Pre-approval of the Cost Consequences of NEXUS Long Term Contract – EB-2015-0166/EB-2015-0175

We are legal counsel for Union Gas Limited ("Union"), applicant in the above-referenced proceeding. Please find enclosed Union's Argument-in-Chief, which has been filed through RESS and served on all parties in the proceeding.

Yours truly,

[Original Signed By]

**Charles Keizer** 

Tel 416.865.7512 ckeizer@torys.com

> cc: Colin Schuch, Board Staff Mark Kitchen, Union Gas All Intervenors

11229-2124 20491120.1

- 44. The Union South portfolio will benefit from NEXUS capacity as upstream transportation reductions on Alliance/Vector and TransCanada take place. By accessing a portion of the NEXUS capacity, the Union South portfolio will benefit from additional diversity and the potential for cost savings by introducing an abundant, affordably priced source of natural gas in close proximity to Ontario. This increased diversity will result in the reliance on TransCanada WCSB supplies dropping from 21% to 3%, and the portfolio would then source 30% from the Appalachian basin.<sup>69</sup> The diverse Union South portfolio still has 23% sourced from Chicago, as well as 17% from Dawn, both of which would include a level of supplies from the WCSB.<sup>70</sup>
- 45. In relation to the entire Union transportation portfolio (*i.e.* Union North and Union South), the NEXUS capacity will add Appalachian basin supplies and will reduce the overall reliance on WCSB from 53% in January 2015 down to 19% in January 2018.<sup>71</sup>

## E. Risk Assessment

- 46. If pre-approval is granted, ratepayers not only will be provided the benefits stemming from the contract but also will benefit from measures negotiated by Union to mitigate certain key contract risks. Such mitigation measures include:
  - a negotiated toll that is known and defined for the 15 year term, and subject to a capital cost tracker mechanism to cap the toll and realize toll savings where capital costs are less than target;
  - the ability to withdraw from the project and not be subject to any pre-service project costs if the NEXUS project is delayed beyond November 1, 2018 or cancelled;
  - the ability to choose the reservation rate instead of the negotiated toll after the project has been completed; and
  - a MFN clause allowing Union to receive more favourable terms that may be negotiated by a similar shipper.

<sup>&</sup>lt;sup>69</sup> Exhibit A, page 31, Figure 5-2; page 21, Figure 4-2.

<sup>&</sup>lt;sup>70</sup> Exhibit A, page 30.

<sup>&</sup>lt;sup>71</sup> Exhibit A, pages 31-32; page 32, Figures 5-3 and 5-4.

These measures mitigate the risk, limit and define the costs under the contract and represent very favourable commercial terms.

### **Project Capital Costs**

### **Risk Identification**

47. Any major pipeline infrastructure project may experience capital cost variances due to a number of factors. If not considered as part of negotiating a rate, there is risk that these cost overruns will result in a toll that may no longer be economical for the shipper.<sup>72</sup>

#### **Risk Mitigation**

48. Union has negotiated a fixed rate with NEXUS that includes a known capital cost tracker adjustment mechanism. Union's rate of \$0.77 US/Dth will be adjusted to take into account either higher or lower capital costs than anticipated. Union, and other similarly situated shippers, negotiated a limit of +/-15% on the capital cost tracker adjustment that will only be applied to \$0.635 US/Dth of the total rate of \$0.77 US/Dth (*i.e.* the greenfield and expansion portion of the rate). The baseline capital budget used to calculate the tracker is \$2.019 billion. Having a capital cost tracker allows the ratepayer, if pre-approval is granted, to participate in any cost savings realized while limiting any cost overrun potential. This tracker defines the range of final rates of the service and allows for a landed cost analysis to be performed with certainty. For Union, this tracker will limit the final rate to be within the range of \$0.67US/Dth to \$0.87 US/Dth.<sup>73</sup> For the purposes of determining the total transportation costs and related gas cost savings over the term of the NEXUS Contract, Union has used the upper end of this range to provide conservative calculations.

<sup>&</sup>lt;sup>72</sup> Exhibit A, page 46.

<sup>&</sup>lt;sup>73</sup> Exhibit A, page 47.

### **Project Delays or Cancellation**

### **Risk Identification**

49. Any major pipeline infrastructure project may experience delays, or, in extreme cases, cancellation, due to a number of factors. If this were to occur, the shipper would experience a shortfall of transportation capacity in their portfolio.<sup>74</sup>

### **Risk Mitigation**

- 50. Union will mitigate any delays in construction by leveraging the diverse upstream transportation and supply options that exist at Dawn. By entering into short-term transportation and/or supply commitments, Union is able to address any gaps in the portfolio that are due to a delayed in-service date for NEXUS for a short period of time.<sup>75</sup>
- 51. Should the NEXUS project be delayed beyond November 1, 2018 or cancelled, Union can withdraw from the project and will not be liable for any pre-service project costs. Union would analyze its portfolio and replace the anticipated NEXUS transportation capacity with other upstream transportation options that are available at the time.<sup>76</sup>

#### **Demand Risks**

#### **Risk Identification**

52. Entering into a transportation contract requires certain assumptions around the demands that will support the requirements for the contracted capacity. This is especially true of long-term commitments required to support a new infrastructure project such as NEXUS. If forecasted demands do not materialize, the shipper is at risk of holding excess capacity within its portfolio.<sup>77</sup>

<sup>&</sup>lt;sup>74</sup> Exhibit A, page 47.

<sup>&</sup>lt;sup>75</sup> Exhibit A, page 47.

<sup>&</sup>lt;sup>76</sup> Exhibit A, page 47.

<sup>&</sup>lt;sup>77</sup> Exhibit A, page 48.

#### **Risk Mitigation**

- 53. To ensure that any unplanned changes in demands do not jeopardize the decision to support NEXUS, Union has not deviated from its normal gas supply planning practices that have been validated by the Board in past proceedings.<sup>78</sup>
- 54. As such, entering into a long-term contract with NEXUS does not increase Union's exposure to decreases in demand. Union's current Gas Supply Plan has identified the need for upstream transportation capacity in excess of 150,000 Dth/d for November 1, 2017. The contracted capacity on the NEXUS pipeline will address this need, while still leaving appropriate flexibility within Union's upstream portfolio should there be any fluctuations in customer demand. Should natural gas demands decline in the Union franchise area, there are multiple opportunities to leverage existing flexibility embedded within the portfolio to rebalance the upstream transportation and gas supply portfolios.<sup>79</sup> Given that the NEXUS capacity is about one-third of Union's overall systems capability requirement, the remaining two-thirds are uncommitted or short-term commitments. This will allow Union to address any change in demand, including as a result of Demand Side Management or Cap and Trade initiatives.<sup>80</sup>

### Supply Risks

#### **Risk Identification**

55. In order to support an infrastructure build, pipeline projects require customers to contract for capacity for a long period of time. In the case of NEXUS, the requirement for anchor shippers was a 15-year commitment. There is risk that supplies available to be transported through the newly-constructed infrastructure would not be available for the entire length of the term.<sup>81</sup>

<sup>&</sup>lt;sup>78</sup> Exhibit A, page 48.

<sup>&</sup>lt;sup>79</sup> Exhibit A, page 48; Transcript of Oral Hearing, Vol. 1, page 63.

<sup>&</sup>lt;sup>80</sup> Transcript of Oral Hearing, Vol. 2, pages 99-100.

<sup>&</sup>lt;sup>81</sup> Exhibit A, page 49.

#### **Risk Mitigation**

- 56. When evaluating the long-term commitment required to support the NEXUS project, Union also evaluated its ability to access adequate supplies for the duration of the contract. Union has accessed various resources including the Sussex Report to gauge the level of supply available in the Appalachian basin and available to the NEXUS project.<sup>82</sup>
- 57. The production estimates for the Appalachian basin are forecasted to exceed 18 PJ/d in 2015 and will continue to increase steadily for the duration of the 15-year NEXUS Contract period referenced in the Sussex Report. These production levels represent sufficient supply production for the duration of the NEXUS Contract's primary term.<sup>83</sup>
- 58. Union has also been in discussions with these potential suppliers since early 2013 and has conducted numerous supplier meetings and attended relevant industry conferences. Many of these suppliers are new to Union as they are predominantly sourcing their supply from the Appalachian basin.<sup>84</sup>
- 59. Union has also issued an Expression of Interest for a portion of the supply necessary once the NEXUS project is completed and in service. The goal of this Expression of Interest and subsequent RFP is to understand and potentially secure up to 50,000 Dth/d (52,753 GJ/d) of supply at Kensington starting November 1, 2017 (or the date when NEXUS is in service, whichever is later). Union will evaluate each and every bid on its own merits and determine the successful bidders within the prescribed timelines that accompany the RFP.<sup>85</sup>

#### TransCanada Mainline Risk

#### **Risk Identification**

60. As mentioned previously, natural gas transported to Dawn via NEXUS will replace supplies that will no longer be transported using TransCanada long-haul transportation

<sup>&</sup>lt;sup>82</sup> Exhibit A, page 49.

<sup>&</sup>lt;sup>83</sup> Exhibit A, page 49.

<sup>&</sup>lt;sup>84</sup> Exhibit A, page 50.

<sup>&</sup>lt;sup>85</sup> Exhibit A, page 51.

from the WCSB. Historically, the trend of shippers de-contracting TransCanada longhaul transportation resulted in concerns as to the economic viability of the Mainline system, which was the subject of the NEB RH-001-2014 settlement hearing.<sup>86</sup>

#### **Risk Mitigation**

61. All impacts resulting from Union (and the other eastern LDCs) turning back TransCanada long-haul transportation have already been contemplated in the RH-001-2014 settlement agreement that was approved by the NEB in December, 2014. The financial impacts of those decisions have been incorporated into TransCanada's approved tolls. The NEXUS capacity will simply replace these supplies that would have otherwise been purchased at Dawn, and have no incremental impact to the TransCanada Mainline system.<sup>87</sup> The rates established pursuant to the settlement agreement have been in place since 2014, so there is no further impact on mainline tolls for Union Northern customers until 2030.<sup>88</sup>

#### Risk – If No Pre-Approval

62. In a scenario where Union was unable to obtain contract pre-approval and to commit as an anchor shipper under the contract as proposed, there is significant risk that producers, who are also anchor shippers on the NEXUS pipeline, may interpret Union's action as a lack of endorsement of Dawn as an important market hub and an indication of a weak market for their supplies at Dawn.<sup>89</sup> In this regard, it is important to note that the transportation capacity contracted by Union and Enbridge on the NEXUS pipeline to Dawn represents approximately 273 TJ/d out of a total of approximately 800 TJ/d (*i.e.*, one-third). If Union and Enbridge did not contract, the remaining shippers, all or nearly all of whom are expected to be producers or marketers on behalf of producers, would be left to shoulder more of the cost of service of the pipeline, leading to a rise in tolls. This negative economic pressure would create a challenge for the project, the remaining shippers, including anchor shippers, and the markets which the NEXUS pipeline would

<sup>&</sup>lt;sup>86</sup> Exhibit A, page 52.

<sup>&</sup>lt;sup>87</sup> Exhibit A, page 52.

<sup>&</sup>lt;sup>88</sup> Transcript of Oral Hearing, Vol.1, pages 60-61.

<sup>&</sup>lt;sup>89</sup> Exhibit A, page 4.

serve.<sup>90</sup> Producers could reconsider their participation on the project, or their plans to bring supplies to Dawn, creating the risk that the NEXUS project would not proceed as planned.<sup>91</sup>

- 63. The foregoing is against the back drop that many of the Utica producers have options to go into other markets, and are cautious with respect to entering new markets such as Dawn.<sup>92</sup> Many producers without affiliated Canadian entities or significant Canadian business (such as in the WCSB) have also taken a cautious approach to doing business or initiating business in Canada. Union has worked closely with Utica producers (including the NEXUS shippers) to facilitate their understanding of the Dawn market and the requirements of doing business in Canada. If Union did not remain an anchor shipper then this would undoubtedly be viewed as a negative signal and a lack of endorsement.<sup>93</sup> Without pre-approval and the assurance that the NEXUS project will move forward, the Dawn Hub and Ontario consumers would miss an opportunity to gain significant access to Utica production as well as the accompanying benefits of increased choice, market liquidity at Dawn, and diversity and security of supply.<sup>94</sup>
- 64. There is significant market competition for the supply available from the growing Utica Appalachian basin. Numerous projects are already in progress to take these supplies to other markets, including the Gulf Coast, U.S. Midwest, U.S. Northeast, and U.S. Southeast. It is critical for Union and Ontario consumers that contractual commitments to the NEXUS project be made and supported to ensure Ontario and those market participants that access supplies at Dawn are able to gain access to these supplies in a similar fashion to the other markets in the eastern half of North America. This will ensure Ontario and Dawn stay well connected to new affordable and competitively priced North American supplies.<sup>95</sup>

<sup>&</sup>lt;sup>90</sup> Exhibit B.T1.Union.Energy Probe.3, page 2.

<sup>&</sup>lt;sup>91</sup> Exhibit A, page 4.

<sup>&</sup>lt;sup>92</sup> Transcript of Oral Hearing, Vol. 1, page 96.

<sup>&</sup>lt;sup>93</sup> Exhibit B.T1.Union.Energy Probe.3, page 2.

<sup>&</sup>lt;sup>94</sup> Exhibit B.T2.Union.Staff.17, page 4.

<sup>95</sup> Exhibit A, page 17.

## **F.** Other Connections

- 66. It is Union's understanding that with the current commitments, the upstream pipelines that provide supply to Niagara and that are planned for 2015-2016 are largely sold out<sup>96</sup> and significant incremental infrastructure would be required to import any substantial additional gas from the Appalachian basin into Ontario (beyond 2015/2016) at Niagara or Chippawa. Union expects that significant incremental infrastructure would also be required on the TransCanada system to move natural gas from Niagara further into Ontario (beyond the current 2015/2016 volume of 1.4TJ/d).<sup>97</sup> By 2017, Enbridge and Union will have contracted for approximately 273 TJ/d of NEXUS pipeline capacity into Dawn and will combine to bring over 221 TJ/d from Niagara into Ontario. In this regard, both Marcellus volumes through predominantly Utica volumes through Dawn (via Rover and/or NEXUS) are being supported, which will help offset the decreased volumes from WCSB via TransCanada and Alliance/Vector.<sup>98</sup> This will provide further diversity for Ontario and have some balance in its access to Marcellus and Utica production.
- 67. Union first committed to NEXUS in 2012 when it entered the open season, and was in the final stages of negotiations when the Rover pipeline project was announced. At the time Rover discussed their project with Union, the Rover project already had sufficient commitment from suppliers to move forward. Relative to NEXUS, Rover's minimum contract term was longer (20 years)<sup>99</sup> and the MFN threshold was much higher<sup>100</sup>. Whereas NEXUS planned to use existing infrastructure on DTE, Vector and Union, Rover required substantially more greenfield pipeline capacity to be built in order to get

<sup>&</sup>lt;sup>96</sup> Exhibit K2.2 shows total upstream capacity of 1.2 PJ at Niagara. Undertaking J2.2, Attachment 1 shows that nearly all of that capacity is contracted.

<sup>&</sup>lt;sup>97</sup> Exhibit B.T2.Union.Staff.17, page 2.

<sup>&</sup>lt;sup>98</sup> Exhibit B.T2.Union.Staff.17, page 3.

<sup>99</sup> Exhibit B.T1.Union.FRPO.6, page 1.

<sup>&</sup>lt;sup>100</sup> Exhibit B.T1.Union.FRPO.4, page 1.

Filed: 2015-05-28 EB-2015-0166 Exhibit A Schedule 3 Page 1 of 64



## Union Gas Limited and Enbridge Gas Distribution, Inc. NEXUS Gas Transmission – Market Study

May 2015

Prepared by Sussex Economic Advisors, LLC

Sussex Economic Advisors, LLC ("Sussex") has relied upon certain public sources of information consistent with standard consulting practices. Sussex makes no warranties or guarantees regarding the accuracy of any estimates, projections or analyses contained herein. Those reviewing the information contained herein waive any claim against Sussex, its partners, employees, and subcontractors. Sussex shall not be liable to any party reviewing this information.

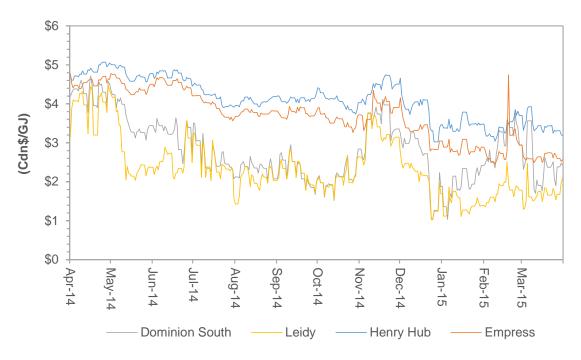


Figure 4.1: Daily Spot Prices (April 2014-March 2015)<sup>69</sup>

## Supply Basin Diversity and Associated Reliability

NEXUS will provide the Ontario LDCs with direct access to the Marcellus and Utica supply basins, which increases gas supply diversity. Currently, the Ontario LDCs do not have direct access to the Marcellus/Utica supply, which, as discussed in Section III, is one of the largest and fastest growing North American natural gas supply basins. This direct access to the Marcellus/Utica production augments the current gas supply basins and market hubs accessed by the Ontario LDCs, which include natural gas production or availability in the WCSB, Chicago Hub, Gulf of Mexico, and U.S. Mid-continent. By diversifying its natural gas supply basins, the Ontario LDCs will increase the overall reliability of their portfolio and, therefore, service to customers. Similarly, natural gas supply basin diversity mitigates the risk to the Ontario LDCs of any individual supply basin being negatively impacted by operational, regulatory, economic, social, or political developments that inhibit or reduce natural gas production.

## Enhanced Dawn Liquidity

As proposed, NEXUS provides a direct pipeline path between the Marcellus and Utica supply basins and the Dawn Hub, allowing more supply to be delivered to the Dawn Hub. NEXUS will

<sup>69</sup> Daily spot prices and currency exchange rates from SNL Financial.

not only increase the physical supply to the Dawn Hub, but also increase the number of counterparties that are active at the Dawn Hub (*e.g.*, the NEXUS capacity holders that are natural gas producers). This increase in natural gas supply and counterparties will increase the overall liquidity of the Dawn Hub. In addition, the transportation capacity on NEXUS that is contracted by the Ontario LDCs will be utilized to deliver physical natural gas supply to the Dawn Hub to meet customer demand. Stated differently, NEXUS capacity contracted by the Ontario LDCs more certainty that Marcellus and Utica natural gas supply will be delivered to the Dawn Hub. This diversification of natural gas supply at the Dawn Hub will benefit the counterparties that may transact certain volumes at the Dawn Hub price index.

## Transportation Path Diversity and Associated Reliability

A contract on NEXUS provides the Ontario LDCs with additional diversity in their transportation portfolio and, therefore, more reliability from a delivery perspective. Currently, the Ontario LDCs receive most of their flowing natural gas supplies via transportation paths that connect the WCSB, U.S. Mid-continent, or Chicago Hub to Ontario. NEXUS will provide an alternative natural gas supply basin and transportation path by directly connecting the Marcellus/Utica basin to the Dawn Hub. By adding a new pipeline path, the Ontario LDCs will increase the reliability of the overall transportation portfolio and, therefore, service to their customers. For example, NEXUS provides an alternative delivery path if one of the existing pipelines utilized by the Ontario LDCs experiences a delivery curtailment. The additional pipeline path diversity may also provide the Ontario LDCs with increased leverage in negotiating with other pipelines with respect to services and associated rates.

## Transportation Cost Stability

One of the benefits provided to the Ontario LDCs from NEXUS is the option to negotiate a fixed rate for the term of the firm transportation agreement or to choose the cost based recourse rate. While the recourse rate may increase subject to review and approval by the FERC, the negotiated rate provides a fixed, known rate for the duration of the firm transportation agreement. Specifically, under the recourse rate, a shipper is exposed to any cost increase (*e.g.*, construction cost overrun) that is approved by the FERC. Under a negotiated rate, the shipper usually caps its exposure to construction cost overruns and shares in certain reductions should the construction cost of the project be lower than expected. In this manner, the shipper has a known rate for the duration of the term of the firm transportation contract. Therefore, under a negotiated rate agreement, the risk of construction cost overrun is shared with the

shipper up to an agreed cap and, thereafter, the risk is borne by the pipeline development entity. The Ontario LDCs have elected to enter into a negotiated rate agreement with NEXUS, thus placing a cap on their exposure to construction cost overruns. Stated differently, by contracting for a negotiated rate, the Ontario LDCs have shifted some of the risk of construction cost from their customers to the NEXUS developers. In addition, by entering into a negotiated rate agreement, the Ontario LDCs have a capped rate for the 15-year term of the contract.

Finally, with respect to total pipeline transport charges in the overall portfolio of the Ontario LDCs, a negotiated rate on NEXUS provides a known and stable rate that may augment certain rate uncertainty on other pipelines.

## Natural Gas Price Index Diversity and Associated Cost Stability

In addition to natural gas supply basin and transportation path diversity, direct access to the Marcellus and Utica supply basins will provide the Ontario LDCs with increased price diversity. Specifically, the Marcellus/Utica gas supply basins will have certain price signals and price indices not previously accessed by the Ontario LDCs, thus increasing overall price diversity and providing more stability with respect to natural gas costs for the Ontario LDCs' customers. By way of example, adding direct access to Marcellus/Utica supplies may provide the Ontario LDCs with the ability to leverage diverse price signals and maximize flow on specific pipelines when warranted by market conditions.

## Service Flexibility

NEXUS will be a FERC regulated pipeline and, as such, will provide certain service flexibility to the portfolio of the Ontario LDCs, which may augment existing contracts on other pipelines (*e.g.*, the TransCanada Canadian Mainline). For example, NEXUS will likely provide various terms and conditions that provide service flexibility, including access to secondary receipt and delivery points, windows for nomination adjustments, and capacity segmentation/release to mitigate demand charges. With respect to capacity release, this service will provide the Ontario LDCs with an opportunity to manage un-utilized capacity and develop revenues to offset capacity demand charges. NEXUS will access various markets in Ohio and Michigan (*i.e.*, within the capacity contract path of the Ontario LDCs), which should provide the Ontario LDCs with various counterparties to structure deals or provide bids for available capacity.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.FRPO.2 Page 1 of 1

## UNION GAS LIMITED

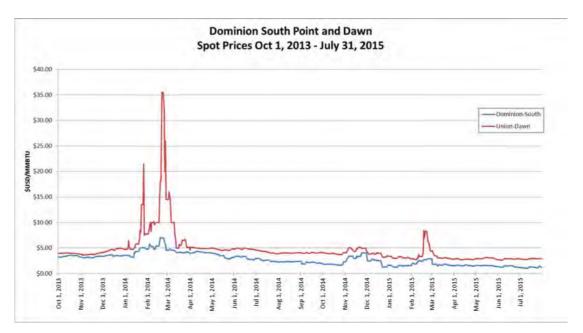
## Answer to Interrogatory from Federation of Rental-housing Providers of Ontario ("FRPO")

Reference:	Exhibit A, page 10, lines 4-6
<u>Preamble</u> :	"Without access to the abundant and affordable supplies in the Utica and Marcellus shale basins, gas prices at Dawn, and therefore energy prices in Ontario, would be disconnected from the continent-wide lower costs resulting from these emerging supplies. In other words, the cost of energy in Ontario would not benefit from the moderating effect of the low-priced natural gas in the Appalachian Basin available to neighbouring areas."

Please provide quantitative evidence that demonstrates that with existing infrastructure, Dawn is disconnected and not currently benefiting from the lower prices available to neighbouring areas.

## **Response:**

In looking at the relative pricing that has been experienced over the period 2013/2014 and 2014/2015 the difference between the Dominion South Point price, and that of Dawn can be seen in the graph below. The Dominion South Point prices, for example, have been much lower and more stable than those at other points including Dawn due to its access to Marcellus/Utica supply. This shows how added connections to this area can only increase Ontario's access to this stable and reasonably priced supply which will only add stability to the prices at Dawn.



## ONTARIO ENERGY BOARD

**IN THE MATTER OF** the Ontario Energy Board Act, 1998, S.O. 1998, c.15 (Schedule B) s.36;

**AND IN THE MATTER OF** an Application by Union Gas Limited for an order or orders preapproving the cost consequences associated with one long-term natural gas transportation contract.

**AND IN THE MATTER OF** an Application by Enbridge Gas Distribution Inc. for an Order or Orders Pre-Approving the Cost Consequences associated with a Long-Term Natural Gas Transportation Contract

Final Submissions

Of

The Association of Power Producers of Ontario

November 26, 2015

Connecting Ontario to growing, affordably priced Appalachian shale gas will help to lower natural gas prices and enhance energy pricing stability in Ontario. Reduced price and reduced long term price volatility is a major benefit to all market participants, including power generation customers who rely on supply arrangements made at the Dawn Hub.<sup>37</sup>

34. Sussex also indicates that other stakeholders will benefit from the new NEXUS supply:

Ontario's direct purchase customers and those relying on the natural gas supply and price signals at the Dawn Hub can expect to benefit from a new competing pipeline and route for providing natural gas to the Dawn Hub and Ontario.<sup>38</sup>

- 35. APPrO acknowledges new supplies to the Dawn may bring certain benefits to other stakeholders at Dawn, including the potential for more supply options, increased liquidity, as well as the potential to have a positive influence on price. However in this case, these potential benefits have to be put in perspective:
  - a. These transportation contracts are first and foremost being entered into to supply Appalachian based gas for the benefit of system sales customers.
  - b. Union indicates that as a result of both NEXUS and Rover pipeline projects being developed that this will only increase the supply at Dawn by 0.3 PJ/d which represents 4.2% of the total Dawn supply.<sup>39</sup> This supply is not in the same scale as the planned full reversal of TransCanada's Niagara line to accommodate Niagara/Chippawa receipts at almost 1.2 PJ/d<sup>40</sup> in 2016, or the capacity offered by Vector when it was first constructed in 2000 (current capacity is 1.6 PJ/d).<sup>41</sup> Furthermore while there may be more capacity made available by Vector to Dawn, there is no evidence indicating the amount of firm capacity that shippers have committed to deliver to Dawn and even if these shippers have capacity to Dawn they will profit maximize and sell gas to

<sup>&</sup>lt;sup>37</sup> EB-2015-0166 page 12

<sup>&</sup>lt;sup>38</sup> EB-2015-0175 Exhibit A Tab 3 Schedule 2 page 40

<sup>&</sup>lt;sup>39</sup> Transcript Volume 1 pages 50-51

<sup>40</sup> EB-2015-0166/EB-2015-0175 Exhibit J2.2 Attachment 1

<sup>&</sup>lt;sup>41</sup> EB-2015-0166 Exhibit B.T1.Union.APPrO.2

the highest valued market between Chicago and Dawn.<sup>42</sup> Counterparties at Dawn seeking gas supplies will have to compete head to head on price with these other markets before supply can be secured.

- c. Union clarified that if the potential benefits to power producers noted above are realized, they actually accrue to end use power customers, not to power producers.<sup>43</sup>
- d. While there may be benefits to increased liquidity at Dawn, as Mr. Isherwood points out Dawn is already "a very, very liquid hub".<sup>44</sup> It is not clear what the tangible benefits the additional liquidity might bring. No party quantified the liquidity benefits that may occur.
- e. Enbridge has already shifted a substantive part of its portfolio to Dawn. In comparing Enbridge's Dawn purchases in 2015 and 2018, they will increase their purchases from 4% to 46%<sup>45</sup> of their total portfolio. Similarly Union's Dawn/Other based purchases will increase from 5% in January 2015 to 22% in January 2018.<sup>46</sup> Union has further indicated that in the event that preapproval of the cost consequences are not provided, some portion of the 150,000 Dth/d may also be acquired at Dawn. The combination of the utilities changing their portfolios to acquire more of their gas at Dawn from Western Canada or other longhaul sources increases the demand for gas at Dawn which will in fact increase prices for all parties and have a detrimental impact to these other stakeholders. Approving the cost consequences of the NEXUS contracts will provide for purchases at source and will not exacerbate this situation any further.

<sup>&</sup>lt;sup>42</sup> Transcript pages 79-80

<sup>&</sup>lt;sup>43</sup> Transcript Volume 1 pages 88-89

 <sup>&</sup>lt;sup>44</sup> Transcript Volume 1 page 38
 <sup>45</sup> EB-2015-0175 Exhibit A Tab 3 Schedule 3 page 17 Figure 10

<sup>&</sup>lt;sup>46</sup> EB-2015-0166 Exhibit A page 32 Figures 5-3 and 5-4



November 18, 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-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

Filed: 2015-11-18 EB-2015-0166/ EB-2015-0175 Exhibit J2.3 Page 56

## 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 m<sup>3</sup> 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)

NEXUS Gas Cost Savings vs Dawn			
Line			
No.	Particulars		
		<b>\$7.2</b> 0	
I	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	

Table 1
NEXUS Gas Cost Savings vs Dawn

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 m<sup>3</sup> per year in the Union North East Zone the total bill is approximately \$940 per year. Please see Attachment 1, page 1, line 23.

Filed: 2015-11-18 EB-2015-0166/ EB-2015-0175 Exhibit J2.3 Page 56

### 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			
Line				
No.	Particulars (\$)			
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)	\$3.501		

Based on the assumptions described above, for an average Rate 01 residential customer consuming 2,200 m<sup>3</sup> 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 m<sup>3</sup> of 2018 Gas Supply Plan Including Capital Pass Through Projects in 2018 and <u>NEXUS Gas Cost Savings for Union North East Zone</u>

Line		Ur	ion North Eas	st
No.	Particulars (\$)	NDA	NCDA	EDA
		(a)	(b)	(c)
	Current Approved (1)			
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
	Proposed in EB-2015-0181 (2)			
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
	Proposed vs Current Approved			
13	Transportation (line 9 - line 3)	(80.27)	(107.14)	(107.14)
13	Storage (line 10 - line 4)	(80.27) 47.70	36.94	36.94
14	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)	20.38	-1.4%	-1.4%
		2.070	111/0	11170
	Including 2018 Projects and NEXUS Gas Cost Savings (4)			
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
	Including 2018 Projects and NEXUS Gas Cost Savings vs Current Approved			
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%
30	Including 2018 Projects and NEXUS Gas Cost Savings vs Proposed in EB-2015-0181 Delivery (line 19 - line 8)	(15.80)	(15.80)	(15.80)
31	Transportation (line 20 - line 9)	6.38	6.38	6.38
31	Storage (line 21 - line 10)	9.04	9.04	9.04
33	Commodity (line 22 - line 11)	(26.23)	(26.23)	(26.23)
33 34	Total Bill Impact (line 23 - line 12)	(26.60)	(26.60)	(26.60)
34	Bill Impact (%) (line 34 / line 12)	-2.8%	-2.8%	-2.8%
- 55		-2.070	-2.070	-2.070

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 10<sup>3</sup>m<sup>3</sup> based on a heat value of 38.55 GJ/10<sup>3</sup>m<sup>3</sup>.

(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/m<sup>3</sup> 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 m<sup>3</sup> Union 2013 sales service volumes.

### UNION GAS LIMITED Rate 01 Residential Bill Impacts at 2,200 m<sup>3</sup> of 2018 Gas Supply Plan Including Capital Pass Through Projects in 2018 and <u>Kirkwall Price for Union North East Zone</u>

Line		Un	ion North Eas	st
No.	Particulars (\$)	NDA	NCDA	EDA
		(a)	(b)	(c)
1	Current Approved (1) Monthly Customer Charge	252.00	252.00	252.00
2	Delivery	195.26	195.26	195.26
2	Transportation	145.57	172.44	195.20
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
	Dranged in ED 2045 0494 (2)			
7	Proposed in EB-2015-0181 (2) Monthly Customer Charge	252.00	252.00	252.00
7	Monthly Customer Charge			
8		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
	Proposed vs Current Approved			
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%
	Including 2018 Projects and Kirkwall Price for Union North East (4)			
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
	Including 2018 Projects and Kirkwall Price vs Current Approved			
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%
	Including 2018 Designts and Kirkwall Drive vs Drangest in ED 2015 0121			
30	Including 2018 Projects and Kirkwall Price vs Proposed in EB-2015-0181 Delivery (line 19 - line 8)	(15.80)	(15.80)	(15.80)
30 31	Transportation (line 20 - line 9)		. ,	
	Storage (line 21 - line 10)	6.38	6.38	6.38
32		9.04	9.04	9.04
33	Commodity (line 22 - line 11)	(20.45)	(20.45)	(20.45)
34 35	Total Bill Impact (line 23 - line 12)	(20.82)	(20.82)	(20.82)
33	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 10 <sup>3</sup> m <sup>3</sup> based on a heat value of 38.55 GJ/10 <sup>3</sup> m <sup>3</sup> .		
	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)	3.5010	

(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.



# ONTARIO ENERGY BOARD

FILE NO.:	EB-2015-0166 EB-2015-0175	Union Gas Limited Enbridge Gas Distribution Inc.
VOLUME:	1	
DATE:	November 13, 2015	
BEFORE:	Cathy Spoel	Presiding Member
	Allison Duff	Member
	Christine Long	Member

1 Spectra Energy Corp.; is that right?

2 MR. ISHERWOOD: That's correct.

3 MR. MILLAR: And when we get to signing the actual 4 agreement, who will be the counter party to that agreement? 5 MR. ISHERWOOD: I would expect that to be a NEXUS 6 counter party.

7 MR. MILLAR: So it will be signed by -- whoever the
8 name is, the title will be president of NEXUS or --

9 MR. ISHERWOOD: Something like that, yes.

10 MR. MILLAR: And currently the expectation is that 11 will be a 50/50 split between LCSA between DTE and Spectra 12 Energy Transmission?

MR. ISHERWOOD: It is currently 50/50, and I don't expect that to change.

MR. MILLAR: Okay, all right. Fair enough. I think the agreement does speak to the possibility of the ownership share shifting, but if I hear you, you're not expecting that to happen?

19 MR. ISHERWOOD: Correct.

20 MR. MILLAR: Spectra, both Energy Transmission and 21 your parent, Spectra Energy Corp, it is fair to say they 22 would like to see this pipeline built?

23 MR. ISHERWOOD: Yes.

24 MR. MILLAR: What say, if any, does Spectra Energy 25 Corporation have in Union's decision as to whether or not 26 it signs the NEXUS agreement?

27 MR. ISHERWOOD: That decision has already been made.28 So the decision has been made that if we do not obtain OEB

(613) 564-2727

(416) 861-8720

approval, pre-approval, then we will not sign the contract. 1 2 MR. MILLAR: You will not sign any contract, or will 3 not sign the contracts set out in the Precedent Agreement? MR. ISHERWOOD: The contract set out in the Precedent 4 5 Agreement. 6 It is conceivable you would sign a MR. MILLAR: 7 different agreement? MR. ISHERWOOD: It is not contemplated, but it is 8 9 conceivable, yes. 10 MR. MILLAR: Who made the decision on Union's behalf 11 to sign the Precedent Agreement?

MR. ISHERWOOD: To sign the Precedent Agreement?MR. MILLAR: Yes.

MR. ISHERWOOD: I signed it, but I obviously had the approval of my boss, the president.

MR. MILLAR: Is it the president, or is it the board of directors that makes that decision? I guess my question is: What input, if any, does Spectra Energy Corp. have in that decision?

20 MR. ISHERWOOD: I am pretty sure it was the president. 21 MR. MILLAR: What, say, does Spectra Energy Corp. have 22 in Union's decision to sign the Precedent Agreement? 23 MR. ISHERWOOD: I think any major decisions are 24 discussed obviously with the senior folks at Spectra

25 Energy. So obviously they have input and are involved in 26 the decision-making.

But Mr. Baker was the one that made the decision onbehalf of Union Gas.

ATTACHMENT 6, Page 1



## **NEXUS GAS TRANSMISSION PROJECT**

۲

## FERC SECTION 7(c) APPLICATION

**VOLUME I** 

FERC Docket No. CP16-\_\_-000

November 2015

- a blanket certificate pursuant to Part 157, Subpart F of the Commission's regulations, authorizing NEXUS to construct, operate, acquire, and abandon certain facilities as described in Part 157, Subpart F;
- a blanket certificate pursuant to Part 284, Subpart G of the Commission's regulations authorizing NEXUS to provide open-access firm and interruptible interstate natural gas transportation services on a self-implementing basis with pregranted abandonment for such services;
- 5) approval of NEXUS' Pro Forma FERC NGA Gas Tariff (the "Tariff"); and
- such other authorizations and waivers as may be necessary from the Commission to allow NEXUS to undertake the activities described in this Application.

NEXUS respectfully requests that the Commission issue these authorizations and waivers by November 1, 2016 so that NEXUS will be able to commence construction on a timely basis and place the Project into service by November 1, 2017, consistent with NEXUS' obligations to its Project shippers. In support hereof, and pursuant to the Commission's regulations, NEXUS respectfully submits the following:

### I. EXECUTIVE SUMMARY

The NEXUS Project is a new interstate pipeline system designed to transport 1.5 million Dth/d of Appalachian Basin shale gas, including Utica and Marcellus shale gas production, directly to consuming markets in northern Ohio and southeastern Michigan, and to the Dawn Hub in Ontario, Canada (the "Dawn Hub"). NEXUS has entered into definitive agreements with seven shippers, which together combine for a commitment of firm capacity of 835,000 Dth/d. The target in-service date for service on the Project facilities is November 1, 2017.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.Staff.5 Page 1 of 1

## **UNION GAS LIMITED**

## Answer to Interrogatory from <u>Board Staff</u>

Reference: Exhibit A / Pages 26-28

Union has said it has "anchor shipper" status on NEXUS meaning its participation is significant in terms of the project being able to proceed.

In the absence of Union and Enbridge committing to the Precedent Agreement volumes and 15 year contract length, would the NEXUS transmission project have the necessary commitment to be able to proceed?

## **Response**:

As outlined in Exhibit A, page 4, "In a scenario where Union was unable to obtain contract preapproval and not commit as an anchor shipper to the contract as proposed, there is significant risk that producers, who are also anchor shippers on the NEXUS project, may interpret Union's action as a lack of endorsement of Dawn as an important market hub and an indication of a weak market for their supplies at Dawn. If these producers were to reconsider their participation on the project, or their plans to bring supplies to Dawn, there is significant risk that the NEXUS project would not proceed as planned."

The NEXUS project includes both demand pull (LDC end users) and supply push (suppliers) entities. Without this balanced support there is a higher risk that the project will not be completed. As is noted in the response at Exhibit B.T1.Union.BOMA.2, the Union and Enbridge committed volumes are a significant portion of the NEXUS capacity contracted to Dawn (35%) and without the participation of the LDCs, the project may not proceed. Please also see the response at Exhibit B.T1.Union.Energy Probe.3.

Please also see the response at Exhibit B.T3.Union.Energy Probe.22 where Union details the Board recognition of a need for a pre-approval process for large, long term contracts to remove the natural disincentive from LDCs supporting demonstrably needed new natural gas infrastructure.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.BOMA.2 Page 1 of 1

## UNION GAS LIMITED

## Answer to Interrogatory from Building Owners and Managers Association Toronto ("BOMA")

Reference: Tab 1

What percentage of the NEXUS pipeline's total planned capacity do Union and EGD initial commitment constitute? Please provide a list of shippers that have signed Precedent Agreements for the project, in each case indicating whether they are an LDC, or producer (agent for producer) the volumes, the receipt and delivery points. If there are confidentiality issues (for non-LDC shippers only), shipper can be identified as A, B, C.

## **Response**:

Please see the responses at Exhibit B.T4.Union.FRPO.21 and Exhibit B.T1.APPrO.5 a) i) for the known information related to other NEXUS shippers.

Union is aware through the NEXUS FERC pre-filing that approximately 760,000 Dth/d will be contracted to Dawn. Therefore, Union and Enbridge's volumes make up approximately 35% of the capacity to Dawn ((Enbridge 110,000 + Union 150,000) divided by 760,000 Dth/d).

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.Energy Probe.3 Page 1 of 2

## UNION GAS LIMITED

### Answer to Interrogatory from Energy Probe Research Foundation ("Energy Probe")

- Reference: Exhibit A, page 4
- <u>Preamble</u>: Union says that if it wasn't able to sign on as an anchor shipper "there is a significant risk that producers, who are also anchor shippers on the NEXUS project, may interpret Union's action as a lack of endorsement of Dawn as an important market hub and an indication of a weak market for their supplies at Dawn." It then says that this might result in NEXUS failing to proceed as planned.
- a) Does Union have any support for this statement? How many other companies are interested in the NEXUS project?
- b) Is Union integral to the project going ahead?

## **Response**:

a) A list of shippers on the NEXUS pipeline is included at Exhibit B.T1.Union.APPrO.5. Three of the listed shippers are producers, or represent producers. They are Chesapeake Energy Marketing Inc., CNX Gas Company LLC and Noble Energy Inc. None of these producers have extensive experience with the Dawn market however all are making significant financial commitments to secure transportation capacity to access the Michigan and/or Dawn markets.

Union has discussed the Ontario and Québec markets with these shippers explaining the shift of natural gas supply and transportation from Western Canada and Empress to Dawn and the significant investment in expansion of the take away capacity from Dawn to growing eastern markets. These shippers are aware of Union's commitments to the NEXUS pipeline as an anchor shipper and Union's belief that these recent market developments create an opportunity for new supply at Dawn from Marcellus and Utica production to meet a portion of Ontario and Québec natural gas demand.

Many of the Marcellus and Utica producers are cautious with respect to entering new markets such as Dawn, despite the fact that Dawn is the second most physically traded hub in North America. Many producers without affiliated Canadian entities or significant Canadian business (such as in the Western Canada Supply Basin) have also taken a cautious approach to doing business or initiating business in Canada. Union has worked closely with Marcellus and

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.Energy Probe.3 Page 2 of 2

Utica producers (including the NEXUS shippers) to facilitate their understanding of the Dawn market and the requirements of doing business in Canada. If Union did not remain an anchor shipper then this would undoubtedly be viewed as a negative signal and a lack of endorsement.

Union also notes that transportation capacity contracted by Union and Enbridge on the NEXUS pipeline to Dawn represents approximately 273 TJ/d out of a total of approximately 800 TJ/d (one-third). Union does not know how many other companies have expressed an interest to the project proponents of the NEXUS pipeline however Union expects that all or nearly all of the remaining transportation capacity to Dawn would be contracted by producers or marketers on behalf of producers. If Union and Enbridge did not contract, the remaining shippers would be left to carry more of the cost of service of the pipeline, which would result in higher tolls, unless other parties contracted for the Union and Enbridge capacity. This negative economic pressure creates a challenge for the NEXUS pipeline, the remaining shippers, including anchor shippers, and the markets to which the NEXUS pipeline would serve. These economic pressures (i.e. higher rates) could have a negative impact on the development of NEXUS.

b) Please see the response at Exhibit B.T1.Union.Staff.5.

### PRIVILEGED AND CONFIDENTIAL PREPARED IN ANTICIPATION OF LITIGATION

### HIGHLY CONFIDENTIAL MEMORANDUM

То:	Mr. Jamie LeBlanc, Director, Energy Supply and Policy, Enbridge Gas Distribution Incorporated & Mr. Joel Denomy, Manager, Gas Supply Strategy, Enbridge Gas Distribution Incorporated
From:	Sussex Economic Advisors, LLC
Subject:	NEXUS Gas Transmission Project
Date:	October 27, 2014
Cc:	Mr. Chris Shorts, Director, Gas Supply, Union Gas Limited

#### **INTRODUCTION & OVERVIEW**

CONOMIC ADVISOR

Sussex Economic Advisors, LLC ("Sussex") has been retained by Union Gas Limited ("Union Gas") and Enbridge Gas Distribution Incorporated ("Enbridge") to prepare a market study regarding potential capacity contracts on the proposed NEXUS Gas Transmission ("NEXUS") project. As part of this engagement, Sussex was requested by Enbridge to develop a memorandum summarizing natural gas supply associated with the Marcellus and Utica shale gas basins. Specifically, the purpose of the memorandum is to review the expected availability of natural gas supplies to support a potential long-term (e.g., 15-20 years) firm transportation agreement on NEXUS.

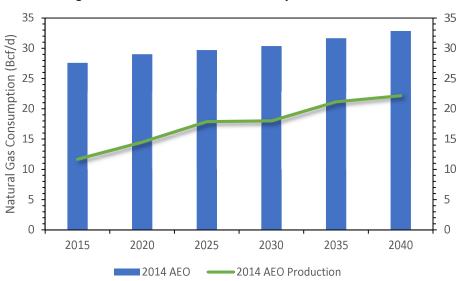
Based on the research and analysis contained herein, Sussex has the following observations and findings:

- Estimates of natural gas reserves and production in the Marcellus and Utica supply basins have trended upward since 2010.
- The most recent third-party forecasts of natural gas production in the Marcellus and Utica supply basins are 20 to 25 Bcf per day by 2020, increasing to 30 to 35 Bcf per day by 2040.
- Many natural gas producers that are active in the Marcellus and Utica regions have experienced rapid production growth since 2010 (e.g., annual growth rates exceeding 100 percent) and are forecasting substantial growth (e.g., annual growth rates in the 25 to 60 percent range) in natural gas production over the next 1-2 years.
- A variety of energy and energy related infrastructure companies are considering significant, (i.e., tens of billions of dollars) long-lived capital investments that primarily depend on continued production in the Marcellus and Utica regions.
- The Sussex research regarding production forecasts, available gas supplies, and infrastructure investment in the Marcellus and Utica supply basins provide strong support for continued growth in natural gas production in both the medium and longer-terms.
- The NEXUS project, as currently envisioned, would not only access certain Marcellus and Utica supplies, but through upstream pipeline interconnections, NEXUS shippers would have access to other natural gas supply basins.
- As a result of the research and analysis described herein, there is sufficient support that Marcellus and Utica natural gas supplies are expected to be available to support long term capacity commitments on NEXUS.

### PRIVILEGED AND CONFIDENTIAL – PREPARED IN ANTICIPATION OF LITIGATION

Finally, EIA provides a projection of the state consumption during the same forecast period. However, the consumption forecast is developed using different geographic regions than the production forecast, and only a high-level comparison between regional production and consumption can be made using the EIA AEO forecast.

Figure 7 compares EIA's Northeast regional production forecast with the consumption for three regions (e.g., Mid-Atlantic, South Atlantic, and East North Central) which most closely align with the Marcellus and Utica production basins.





As shown in Figure 7, although the consumption and production forecast use different geographic regions, EIA is projecting that the production from the Marcellus and Utica supply basins will grow from approximately 42 percent of regional consumption in 2015 to approximately 67 percent by 2040.<sup>32</sup>

In summary, the EIA's expectation of increased Proved Reserves coupled with the projected growth in Marcellus and Utica natural gas production provide an indication of available natural gas supply in the Marcellus and Utica regions and support for continued, long-term natural gas production for this region.

## Potential Gas Committee

PGC is an independent research group affiliated with the Colorado School of Mines, which produces biennial estimates of potential natural gas resources in the U.S. Specifically, PGC estimates the total amount of discovered and undiscovered natural gas that does not qualify as Proved Reserves under the EIA's methodology. The estimates are delineated into three categories as described below:

<sup>&</sup>lt;sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> The region included in the production forecast includes all of the Marcellus and Utica production basins. Natural gas production from other areas in that region is de minimis. In contrast, the three regions included in the consumption forecast include several states outside of the Marcellus and Utica production basins, but with significant natural gas consumption.



# ONTARIO ENERGY BOARD

FILE NO.:	EB-2015-0166 EB-2015-0175	Union Gas Limited Enbridge Gas Distribution Inc.
VOLUME:	1	
DATE:	November 13, 2015	
BEFORE:	Cathy Spoel	Presiding Member
	Allison Duff	Member
	Christine Long	Member

anyways with or without pre-approval, right. Why isn't
 (sic) the market not capable of handling this on its own?
 Why do we need pre-approval --

4 MR. ISHERWOOD: The interesting concept, Union Gas has 5 spent a lot of time in the last couple years talking to 6 individual producers, sometimes at a conference in terms of 7 presentations, but often one on one.

And from a producer point of view, a lot of them are, 8 9 I'm going to say mid-sized companies, and they're mid-sized 10 companies doing business in the U.S. And they have 11 options. They have options to go to southeast U.S., you 12 know, Atlanta type thing, Florida, they have back to the 13 Gulf, to the U.S. northeast, Rex pipeline being reversed to 14 take gas back -- they have lots of options -- back to 15 Chicago -- they have lots of options.

16 So I talk to them about Dawn. I'm introducing things 17 like, you're selling in gJs per day, you're selling 18 Canadian dollars, you have HST to deal with, you have 19 import/export permits. They get really nervous. So NEXUS 20 has attracted, I think, three producers to go on their 21 I think Rex has attracted some as well. But pipeline. 22 there are many, many producers that are reluctant to do 23 business in Canada.

Another example, the type of subsidiary to sell gas in Canada, you have to have a Canadian arm to do that. A lot of hurdles to get across for a producer to do that. MR. YAUCH: Even though Dawn is the second-largest market in North America, they're still nervous. The market

> ASAP Reporting Services Inc. (613) 564-2727 (416) 861-8720

1 itself won't go --

(613) 564-2727

2 MR. ISHERWOOD: They are skittish, absolutely. 3 MR. YAUCH: So you don't think the market is capable 4 of managing the arbitrage that currently exists? 5 MR. ISHERWOOD: I think the other thing they think about is, there is an arbitrage today, but once you build a 6 7 pipeline -- this happens in other pipelines. It happened 8 with Alliance as well. There is this big arbitrage 9 opportunity, then you build a Bcf pipeline and it goes 10 away. 11 MR. YAUCH: Doesn't that then -- it's ratepayers that are paying to close this arbitrage, not suppliers. 12 Isn't 13 that the problem with the pre-approval --14 MR. ISHERWOOD: If you don't build the pipe, you have 15 the arbitrage, so then the ratepayers get the benefit of 16 building the pipe and having the cheaper gas. 17 MR. YAUCH: But suppliers also get the benefit currently in the short-term of selling higher-priced gas 18 There is benefit to them as well. 19 themselves. MR. ISHERWOOD: If they're willing to take the pipe 20 21 risk going into Canada --MR. YAUCH: So right -- under the current -- but under 2.2 23 the current proposal they don't take any risk. The ratepayers take all the risk, correct? 24 25 MR. ISHERWOOD: No. I think for the part of the pipe 26 that they take, so on NEXUS there are three producers that 27 are taking capacity on NEXUS, to Canada. They are taking the full risk of that. And they will sell their gas at 28 ASAP Reporting Services Inc.

(416) 861-8720

97

# **Tab 19**

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T2.Union.Staff.17 Page 1 of 4

### UNION GAS LIMITED

# Answer to Interrogatory from <u>Board Staff</u>

Reference: Exhibit A / Page 14 / Lines 3-6

Union has indicated that the NEXUS project will transport Marcellus and Utica shale gas to customers in Ontario. Union plans to transport the gas to Dawn through St. Clair Pipelines.

As an alternative to NEXUS, could Union import Marcellus and Utica shale gas volumes into Ontario through any existing infrastructure? If yes, please provide the details.

### **Response**:

Existing infrastructure that could move Marcellus and Utica natural gas supply into Ontario would be Panhandle Eastern Pipeline. Without incremental infrastructure the amount of supply available to be transported through <u>existing</u> infrastructure is very limited (35 TJ/d or less). Any incremental supply to Ontario from the Marcellus and Utica production zones through the Dawn Hub or Niagara will require additional pipeline facilities to be constructed as described in more detail below.

With respect to Niagara, it is important to understand how the volumes that now flow into Ontario from the Marcellus evolved. TransCanada, Union and the U.S. upstream pipelines (Tennessee Gas Pipeline, Dominion Transmission and National Fuel Gas) had various open seasons throughout 2009 and 2010 (please see the response at Exhibit B.T4.Union.TCPL.8 for further open season detail) that would allow for the reversal of flow that traditionally TransCanada had moved through Niagara into the U.S. (i.e. exports to the United States). These open seasons were completed during the early stages of Marcellus development and forecasts of its growth and potential were not nearly as robust as they have become over time.

These 2009 and 2010 open seasons resulted in commitments from the Marcellus producing zone to Niagara largely by producers as well as commitments on the Union and TransCanada systems to move gas to Kirkwall and beyond (including Union's contract on the TransCanada system for 21,101 GJ/d from Niagara to Kirkwall). Those commitments supported infrastructure projects in Canada and the United States and the development of new services (such as Union's M12-X transportation service). The facilities at Niagara were able to import and deliver about 0.4 PJ/d from Niagara to Kirkwall starting on November 1, 2012. Union Gas was the first consumer based shipper to purchase gas and ship it from Niagara to Dawn starting in 2012 – and will be the only consumer based purchaser until additional volumes start to flow in 2015.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T2.Union.Staff.17 Page 2 of 4

This capacity stayed steady until further open seasons in 2013 and 2014 (after Union had already entered the NEXUS open season) that would ultimately lead to expansions into Niagara and Chippawa of a further 1 PJ/d (for a total of approximately 1.4 PJ/d) in the 2015/2016 time period (also refer to Exhibit B.T1.Union.FRPO.1). These open seasons on the U.S. pipeline systems to feed Niagara and Chippawa were supported predominantly by producers. A large portion of the TransCanada Niagara to Kirkwall capacity is also supported by producers (including through arrangements with marketers).

The initial capacity provided by the U.S. pipelines to transport gas from the Marcellus to Niagara required modifications to the existing system to reverse flow and relatively limited new facilities. However, as more capacity is added to access Niagara in 2015 and 2016, the facilities required become more complex (including construction from some of the U.S. pipeline systems into the producing areas). TransCanada and Union were in a similar position. In fact, Union was able to repurpose Dawn to Kirkwall turnback and resell Dawn to Parkway capacity through C1 Kirkwall to Parkway transportation services and M12-X transportation services with only modifications to the Kirkwall Custody Transfer Station required.

It is Union's understanding that with the current commitments, the upstream pipelines that provide supply to Niagara are largely sold out and significant incremental infrastructure would be required to import any substantial additional Marcellus and Utica natural gas into Ontario (beyond 2015/2016) at Niagara or Chippawa. Union expects that significant incremental infrastructure would also be required on the TransCanada system to move natural gas from Niagara further into Ontario (beyond the current 2015/2016 volume of 1.4TJ/d).

With respect to Dawn, Union and others entered the November 2012 NEXUS open season to support large scale infrastructure that would diversify the access to Marcellus and Utica production by bringing significant new supply to Dawn from the Utica production zone, which was not readily accessible from Niagara. Like all significant greenfield infrastructure projects, the lead development time can be well in excess of 3 years. Due to this, commitments must be made early by signing firm precedent agreements that will allow project proponents to start to develop the project fully and commit to significant expenditures for the necessary planning, routing, engineering and environmental analyses. Union continued working towards a binding precedent agreement with NEXUS throughout 2013 and into early 2014. A binding Precedent Agreement was executed at a point in time when Union had firm knowledge of its Alliance/Vector de-contracting and the Settlement Agreement between TransCanada and Eastern LDCs was approved. This allowed Union, with a high degree of confidence, to commit the ultimate level of volume it could make on behalf of its Union South and Union North customers on NEXUS. Without the Settlement Agreement specifically, Union could not have been confident on TransCanada being able and willing to build the infrastructure necessary for incremental volumes to flow through Parkway into points east and north, whether from Dawn or points upstream of Dawn.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T2.Union.Staff.17 Page 3 of 4

The construction of the NEXUS pipeline would dramatically increase the accessible paths to Ontario from the Utica and Marcellus production zones. The Kensington processing plant at the commencement of the NEXUS greenfield pipeline provides a different and diverse supply source which is predominantly Utica gas but could have access to other major pipelines in the area (including natural gas from the Marcellus and other producing basins). Given the location of the NEXUS pipeline, the intermediate connections at Kensington and access to other pipelines that are directly connected at the extension of NEXUS at Clarington provide tremendous diversity and security of supply. In addition, the NEXUS pipeline can access multiple supply points between Kensington and Dawn, including those on the DTE system (such as Willow Run).

The NEXUS project has committed capacity to Dawn of approximately 0.8 PJ/d. This is comprised of the Union and Enbridge volumes (273 TJ/d) as well as about 523 TJ/d committed by other shippers (mostly producers). When considering the transportation capacity committed to Niagara, of up to 1.4 PJ/d by 2016, as well as the commitment of approximately 0.8 PJ/d on the Nexus pipeline, over 2 PJ/d of transportation capacity is available to access Marcellus/Utica supply. Rover pipeline transportation capacity into Dawn will increase the level of access to Marcellus and Utica production. This shows that both Marcellus volumes through Niagara and Marcellus/Utica volumes through Dawn (Rover and NEXUS) are being supported and that there is a balance in volumes in both paths. This will help offset the decreased volumes from Western Canada via TransCanada and Alliance/Vector.

While much of the NEXUS project involves greenfield pipeline construction, NEXUS is making efficient use of existing infrastructure to transport natural gas through Michigan and into Dawn. Union has contracted for a transportation service from Kensington, Ohio to the Union St. Clair point at the international border and interconnection between the DTE and Union systems. Nexus has contracted with DTE to utilize existing infrastructure to provide its transportation services from Willow Run, Michigan to Union St. Clair. Union will then use its existing St. Clair to Dawn pipeline to transport gas to the Dawn Hub. NEXUS has also contracted with DTE to utilize existing infrastructure from Willow Run to Vector at Milford, Michigan and has contracted with Vector to provide transportation from Milford to the Dawn Hub. Enbridge has contracted for its transportation service from Kensington, Ohio to Milford and then will use existing Vector capacity to transport gas into Dawn.

As discussed further in Exhibit B.T1.Union.LPMA.8, the NEXUS pipeline is expected to enhance the liquidity of the Dawn Hub. New pipelines connecting new production areas to Dawn increase security of supply and reliability, and create more competition at the Dawn Hub. Facilitated by the Settlement Agreement between TransCanada and the Eastern LDCs, Ontario and Québec customers have supported a significant amount of infrastructure development within Ontario from 2015 through 2017 on the Enbridge, Union and TransCanada systems in order to increase access to the Dawn Hub and to the Niagara/Chippawa receipt points. On Union's system alone over 1.3 PJ/d of incremental pipeline capacity is proposed to be placed into service

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T2.Union.Staff.17 Page 4 of 4

on the Dawn Parkway System by November 2017. In addition, Union, through a settlement agreement, has made a commitment to move the Parkway Delivery Obligation for its infranchise customers (once over 600 TJ/d) to Dawn. Maintaining and growing the liquidity of the Dawn Hub should remain a focus for Ontario customers (and others).

Recently, the importance and value of diversity of supply has been highlighted by an unplanned shutdown of the Alliance Pipeline in August 2015 due to high levels of hydrogen sulfide gas in the natural gas stream (hydrogen sulfide is very poisonous). Alliance Pipeline reduced flows from Western Canada to Chicago from approximately 1.4 Bcf/d to zero from August 7 to August 13, 2015. Having multiple pipeline connections to a variety of production areas and liquid markets, access to approximately 1 Tcf of regional storage, a deep market of over one hundred buyers and sellers of natural gas and price transparency, allows Dawn to continue to provide natural gas supply to Ontario, Québec and northeastern U.S. markets when upstream transportation and supply is disrupted.

Interestingly, by 2017, Enbridge and Union will have contracted for approximately 273 TJ/d of Nexus pipeline capacity into Dawn and will combine to bring over 221 TJ/d from Niagara into Ontario. This will provide further diversity for Ontario and have some balance in its access to Marcellus and Utica production. The opportunity that the NEXUS pipeline provides should not be viewed as development of NEXUS instead of Niagara but development of **NEXUS and Niagara for the benefit of the Ontario market.** 

Finally, without pre-approval and the assurance that the NEXUS project will move forward, the Dawn Hub and Ontario consumers would miss an opportunity to gain significant access to Marcellus and Utica production as well as the accompanying benefits of increased choice, market liquidity at Dawn, and diversity and security of supply.

# **Tab 20**



November 9, 2015

Kimberly Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

RE: Rover Pipeline LLC Docket No. CP15-93-000 Request for Expedited Commission Approval and Schedule Recovery

Dear Ms. Bose,

Rover Pipeline LLC ("Rover") hereby respectfully requests that the Federal Energy Regulatory Commission ("Commission") grant Rover's Natural Gas Act ("NGA") Section 7(c) certificate application in the above referenced docket by no later than the second quarter of 2016 so that Rover may commence construction of the Rover Pipeline Project (the "Rover Pipeline") by no later than June or July 2016. Granting certificate authorization within this timeframe will enable Rover to maximize consideration of environmental and agricultural factors, along with constructing during summer and fall months when conditions are less harsh and more favorable to workers. Furthermore, it will enable Rover to address the take-away transportation capacity needs of its producer shippers, many whose production is currently shut in and significantly bottlenecked, to Defiance, Ohio no later than January 2017, and to the Vector Pipeline by mid-2017.

Rover initiated the Commission's pre-filing process in June 2014, and subsequently submitted an application under NGA Section 7(c) in the above-captioned docket on February 20, 2015 ("Application"). During the pre-filing process, Rover delayed filing its certificate application beyond its intended submittal date of January 20, 2015, based upon the Commission staff's request for additional time for informal review of the draft resource reports under the pre-filing process. Rover accommodated this request, expecting that this additional review time would result in a more predictable and efficient certificate review and approval process. To the best of its knowledge, Rover has provided all necessary information to assist the Commission staff in preparing a robust Draft Environmental Impact Statement ("EIS") and is committed to expediting the issuance of a Final EIS by responding promptly to any new issues raised in comments as well as all recommendations offered in the Draft EIS. While Rover is aware of the staffing constraints within the Commission, Rover respectfully submits that two years is a sufficient period of time for the preparation of an EIS and review of a project that will solve a large portion of the transportation constraints facing the Marcellus and Utica production regions.

Given the sensitivity and difficulty of certificating and constructing projects in the Ohio River Valley Region, Rover had anticipated starting construction as late as May 2016. In balancing

Kimberly Bose November 9, 2015 Page 2

various environmental and agricultural considerations, Rover's construction plan included starting construction in non-forested areas in May or June of 2016, and then starting construction in forested areas in August of 2016. This was specifically designed to avoid construction in the months of June and July, which are the most sensitive nesting season for migratory birds and to protect the various threatened or endangered bat species' most sensitive reproductive period.

As it stands today, the Marcellus and Utica production regions are severely constrained by a lack of take-away pipeline capacity (as evidenced by the numerous pipeline certificate applications seeking authorization to construct facilities in those regions that are currently under Commission review), which is resulting in production curtailments, shut-in production, significant sub-market pricing structures in certain areas and an overall destabilization of the region. The Rover Pipeline, along with certain other proposed pipelines, is an essential and critical debottlenecking solution that producers and domestic consumers are relying upon to move gas from the production region to various markets. In short, Rover's initial start-up service to Defiance, Ohio will move well over 1.6 bcf/d of production and that number will steadily increase up to 3.25 bcf/d as the upstream producers connect their production systems to the Rover Pipeline. To the best of Rover's knowledge, this initial start-up volume is unprecedented in the natural gas marketplace and demonstrates the extreme take-away capacity needs of these producers. It is essential that Rover come on line by January 2017, to meet this market demand. Failure to obtain a certificate in time to meet this schedule will be detrimental not only to Rover, but also will be devastating to the natural gas markets in the region for the 2016/2017 winter and spring/summer 2017 gas markets demands and needs.

Moreover, construction of the Rover Pipeline must commence by June or July of 2016, to maximize consideration of significant environmental factors and take advantage of more favorable working conditions for construction workers and activities during the summer months in West Virginia, Pennsylvania, Ohio and Michigan. For example, one very significant concern of Rover regarding winter construction is the potential adverse impact to agriculture lands – impacts that both Rover and the landowners very much want to avoid. In this regard, when the ground freezes it becomes very difficult to segregate top and sub soil with much accuracy. As a result, top and sub soil mixing occurs, which could result in negative impacts, including reduced crop yields and loss of soil fertility. Additional impacts likely to occur include increased soil compaction and an inability to properly de-compact the soil due to frozen conditions. Finally, right-of-way restoration also will be adversely impacted by winter construction and will require an intermediate winter stabilization step and more extensive spring construction and clean-up.

Potential adverse impacts resulting from winter construction are not limited to impacts to agricultural lands and right-of-way restoration, but rather, include safety factors relating to the construction workforce, the public, and landowners. Construction during very cold, icy, or frozen weather conditions may contribute to an increase in the chance of accidents – both construction accidents and vehicular accidents by construction personnel and landowners and stakeholders in the vicinity of construction activities. These adverse impacts can be greatly minimized by commencing construction in the summer months of June or July of 2016.

Kimberly Bose November 9, 2015 Page 3

In summation, any delay beyond the second quarter of 2016 in receiving a Commission order authorizing the Rover Pipeline Project will jeopardize Rover's ability to complete the work necessary to place its facilities into service in the safest and most environmentally sensitive and timely manner. In this regard, a delay beyond the requested approval date likely will extend Rover's construction timeline for up to an additional year and will similarly strand Marcellus and Utica production for the same period of time. As such, granting authorization for the proposed facilities within the requested timeframe is in the public interest.

For the reasons discussed above, Rover respectfully requests that the Commission grant the requested authorization by no later than the second quarter of 2016.

Respectfully submitted,

/s/ Joey Mahmoud Joey Mahmoud Senior Vice President, Engineering Energy Transfer Partners, L.P.

cc:

Chairman Noman C. Bay Commissioner Cheryl A. LaFleur Commissioner Tony Clark Commissioner Colette D. Honorable Ann Miles Michael McGhee Terry Turpin

#### UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Rover Pipeline LLC Panhandle Eastern Pipe Line Company, LP Trunkline Gas Company, LLC Docket No. CP15-93-000 Docket No. CP15-94-000 Docket No. CP15-96-000

# NOTICE OF SCHEDULE FOR ENVIRONMENTAL REVIEW OF THE ROVER PIPELINE, PANHANDLE BACKHAUL, AND TRUNKLINE BACKHAUL PROJECTS

(November 9, 2015)

On February 20, 2015, Rover Pipeline LLC (Rover) filed an application in Docket No. CP15-93-000 requesting a Certificate of Public Convenience and Necessity pursuant to Section 7(c) of the Natural Gas Act to construct, operate, and maintain certain natural gas pipeline facilities to transport about 3.25 billion cubic feet per day (Bcf/d) of stranded natural gas from Marcellus and Utica production areas in West Virginia, Pennsylvania, and Ohio to markets in the United States. and Canada.

Additionally, on February 23, 2015, Panhandle Eastern Pipe Line Company, LP (Panhandle) and Trunkline Gas Company, LLC (Trunkline) filed applications in Docket Nos. CP15-94-000 and CP15-96-000, respectively, requesting Certificates of Public Convenience and Necessity pursuant to Section 7(c) of the Natural Gas Act. Panhandle is proposing to modify existing facilities and install an interconnection with Rover in Defiance County, Ohio to accommodate 0.75 Bcf/d of east-to-west firm transportation service. Trunkline is proposing to modify existing facilities, including piping at the existing Panhandle-Trunkline Interconnect in Douglas County, Illinois (Trunkline Backhaul Project) to provide 0.75 Bcf/d of north-to-south firm transportation service. Together, these proposals are referred to in this notice as "the Projects."

On March 9, 2015, the Federal Energy Regulatory Commission (FERC or Commission) issued its Notice of Applications for these Projects. Among other things, that notice alerted other agencies issuing federal authorizations of the requirement to complete all necessary reviews and to reach a final decision on the requests for a federal authorization within 90 days of the date of issuance of the Commission staff's final Environmental Impact Statement (EIS) for the Projects. This instant notice identifies the FERC staff's planned schedule for completion of the final EIS for the Projects.

#### **Schedule for Environmental Review**

Issuance of Notice of Availability of the final EIS 90-day Federal Authorization Decision Deadline July 29, 2016 October 27, 2016

If a schedule change becomes necessary, an additional notice will be provided so that the relevant agencies are kept informed of the Projects' progress.

#### **Project Description**

Rover seeks Commission authorization to construct and operate about 713 miles of new 24-inch- to 42-inch-diameter natural gas pipeline in 1 county in Pennsylvania (Washington); 5 counties in West Virginia (Doddridge, Tyler, Wetzel, Marshall, and Hancock); 18 counties in Ohio (Monroe, Noble, Belmont, Harrison, Jefferson, Carroll, Tuscarawas, Stark, Wayne, Ashland, Richland, Crawford, Seneca, Hancock, Wood, Henry, Defiance, and Futon); and 3 counties in Michigan (Lenawee, Washtenaw, and Livingston).

Panhandle and Trunkline are proposing upgrades and modifications to allow for bidirectional flow of natural gas on their existing pipeline systems. Modifications and upgrades along the Panhandle system would occur at existing facilities in Lenawee County, Michigan; Defiance County, Ohio; Allen, Hamilton, Marion, Parke, and Vermillion Counties, Indiana; and Douglas County, Illinois. The Trunkline system would include modifications and upgrades at existing facilities in Douglas, Wayne, and Massac Counties, Illinois; Dyer County, Tennessee; and Tate County, Mississippi.

#### **Background**

On June 27, 2014, the Commission staff granted Rover's request to use the FERC's Prefiling environmental review process and assigned the Rover Pipeline Project Docket No. PF14-14. On November 4, 2014, the Commission issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Rover Pipeline Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (NOI). Additionally, on May 1, 2015, the Commission issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Panhandle Backhaul Project and Trunkline Backhaul Project and Request for Comments on Environmental Issues* (NOI).

The U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Ohio Environmental Protection Agency, and West Virginia Department of Environmental Protection are cooperating agencies in the preparation of the EIS.

#### **Additional Information**

In order to receive notification of the issuance of the EIS and to keep track of all formal issuances and submittals in specific dockets, the Commission offers a free service called eSubscription. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. Go to www.ferc.gov/docs-filing/esubscription.asp.

Additional information about the Projects is available from the Commission's Office of External Affairs at (866) 208-FERC or on the FERC website (www.ferc.gov). Using the "eLibrary" link, select "General Search" from the eLibrary menu, enter the selected date range and "Docket Number" for the project you wish to access excluding the last three digits (i.e., CP15-93, CP15-94, or CP15-96), and follow the instructions. For assistance with access to eLibrary, the helpline can be reached at (866) 208-3676, TTY (202) 502-8659, or at FERCOnlineSupport@ferc.gov. The eLibrary link on the FERC website also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rule makings.

Terry L. Turpin, Director Division of Gas – Environment and Engineering τ.,



# ONTARIO ENERGY BOARD

FILE NO.:	EB-2015-0166 EB-2015-0175	Union Gas Limited Enbridge Gas Distribution Inc.
VOLUME:	3	
DATE:	November 17, 2015	
BEFORE:	Cathy Spoel	Presiding Member
	Allison Duff	Member
	Christine Long	Member

1 So potentially there's as much as 300,000 gJs a day of 2 gas that they could be purchasing at Dawn if this contract 3 isn't approved.

4 And in light of the comment you just -- the discussion 5 you had with Mr. Quinn earlier about a relatively small volume of incremental supply being built to Dawn from NEXUS 6 7 and Rover, the .3 petajoules a day, what I would like you 8 to comment on, what is the impact to these customers in 9 your report, these other customers, in the event that all 10 of the purchases by Union and Enbridge do come to Dawn? 11 What will happen to the price and liquidity at Dawn? MR. J. STEPHENS: So if you have a situation where you 12 13 have additional demand at a certain point, so in your 14 example Dawn Hub, and you have not sufficient supply or the 15 same amount of supply increasing demand, you may have an 16 upward pressure at the Dawn Hub price for all customers. 17 In terms of liquidity, you may have additional 18 transaction with demand side, you may have additional -- on 19 the demand side, but absent additional supply, I think all 20 those being equal, you have a lower -- you have a low 21 liquid point -- your point there would be lower. 22 MR. WOLNIK: So that would be primarily a disbenefit 23 then. 24 MR. J. STEPHENS: It's an interesting point you raise, 25 because when I was preparing for today, I read the Rover 26 CPCN application at the FERC. And in there there was a

27 paragraph regarding that reduction in MDQ, and what it says 28 is that if the pipeline developer doesn't meet certain

# ASAP Reporting Services Inc. (613) 564-2727 (416) 861-8720

89

1 deadlines then -- for the Dawn part of the pipeline then 2 customers can reduce their MDQ on that part of the 3 pipeline.

And so when you think about the commercial implications for different project, that each project goes through a process where it may be developed or it's going to change a bit or it may have certain targets in order to be changed or to go forward as a project.

9 So it's important to know that projects will change in 10 that supply, may or may not come, as you think it may come 11 may not come.

So what I'm trying to say is that in the larger picture that if you assume one project may actually deliver gas to a certain region, that may not actually happen.

MR. WOLNIK: Thank you. Those are my questions, Madam Chair.

17 MS. SPOEL: Thank you.

Just before we proceed with questions from the panel, have I missed anybody else?

20 QUESTIONS BY THE BOARD:

21 MS. LONG: Mr. Stephens, I have a few questions, and 22 I'm going to take this opportunity to learn perhaps from 23 your experience in this field.

One of the things you talk about in your report on page 56 and the next few pages, you talk about other jurisdictions where there has been pre-approval of contracts.

28

And one of the things that you note is, I think, that

# ASAP Reporting Services Inc. (613) 564-2727 (416) 861-8720

#### UNITED STATES OF AMERICA

#### **BEFORE THE**

### FEDERAL ENERGY REGULATORY COMMISSION

\$ \$ \$

In the Matter of

Rover Pipeline LLC

Docket No. CP15-\_\_\_\_-000

## APPLICATION OF ROVER PIPELINE LLC FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

VOLUME I

facilities; and other ancillary facilities (all facilities collectively referred to as the "Rover Pipeline" or "Project"); (b) approval of the *pro forma* FERC NGA Gas Tariff ("Tariff") submitted herewith, which includes the authority to enter into negotiated rate agreements; and (c) approval of the initial recourse rates for service; and

(2) Blanket certificates authorizing Rover to: (a) engage in certain self-implementing routine activities pursuant to blanket certificate authority under Part 157, Subpart F of the Commission's regulations;<sup>5</sup> and (b) transport natural gas on an open-access and self-implementing basis under Part 284, Subpart G of the Commission's regulations.<sup>6</sup>

Rover also requests any waivers that may be necessary for approval of the Application and the services proposed herein, including waiver of the Commission's shipper-must-have-title policy in order for Rover to acquire off-system capacity on third-party pipeline systems consistent with Commission policy.<sup>7</sup>

Rover respectfully requests that the Commission issue a final order approving the authorizations requested herein by no later than November 2015. Granting the requested authorizations by November 2015 will allow Rover to commence construction in a timely manner and place in service certain Supply Laterals and Mainlines A and B to a new market interconnection hub known as the "Midwest Hub" in Defiance County, Ohio, by December 2016 to meet the natural gas production schedules and delivery obligations of Rover's producer-shippers in accordance with the executed precedent agreements. As discussed below, Rover's contractual commitments further require that it construct and place in service by June 2017 the

<sup>&</sup>lt;sup>5</sup> 18 C.F.R. Part 157, Subpart F.

<sup>&</sup>lt;sup>6</sup> *Id.* at Part 284, Subpart G.

<sup>&</sup>lt;sup>7</sup> See Tex. E. Transmission Corp., 93 FERC ¶ 61,273 (2000), reh'g & clarification denied, 95 FERC ¶ 61,056 (2001).

remaining Supply Laterals and the Market Segment facilities commencing at the Midwest Hub and running to the pipeline terminus at an interconnect with Vector.

In support of this Application and pursuant to the Commission's regulations, Rover respectfully submits the following:

#### I. EXECUTIVE SUMMARY

The Rover Pipeline originated as a result of discussions with producers in the Marcellus and Utica Shale supply areas of West Virginia, Pennsylvania and Ohio that were seeking a means to move their stranded natural gas production to markets in the Midwest and Canada as expeditiously as possible. As reflected in this Application, Rover proposes to meet the long-haul transportation needs of these producer-shippers through a combination of new greenfield pipeline construction and the acquisition of existing off-system capacity.

More specifically, Rover proposes to construct, own, and operate a new interstate natural gas pipeline system to include approximately 711 miles of Supply Laterals and Mainlines, and related compression and metering facilities, from the Marcellus and Utica shale supply areas in West Virginia, Pennsylvania, and Ohio to a point of interconnection with the Vector pipeline system in Livingston County, Michigan.

The Rover Pipeline is designed with dual 42-inch pipelines with the capacity to transport up to 3.25 Bcf/day of natural gas from the beginning of Mainlines A and B near the City of Leesville, in Carroll County, Ohio, to the Midwest Hub. Rover will install delivery meters at the Midwest Hub to deliver gas into Panhandle Eastern Pipe Line Company, L.P. ("Panhandle") and ANR Pipeline Company ("ANR"). To facilitate a seamless transportation path for its shippers in its Market Zone South in a cost-effective manner that minimizes duplication of facilities and environmental impacts, Rover has executed precedent agreements with Panhandle and Trunkline

#### 3. Extension Rights

Certain shippers have the unilateral right to extend the term of their FTS agreement beyond its primary term. This right allows for up to four consecutive five-year renewal periods and for a portion or all of its MDQ. The shipper must provide a request to Rover for such extension at least six months prior to the expiration of the primary term or any extended term.

#### 4. Reduction Rights

Certain shippers have the unilateral right to reduce their MDQ if Rover is unable to provide transportation service to the Dawn Hub by a specified date.

#### VII. RATES, COST AND FINANCING

#### A. Recourse Rates

The proposed initial maximum and minimum recourse reservation and usage rates are set forth for Rate Schedules FTS, ITS and GPS, including fuel reimbursement percentages, which include LUAF, in Part IV of the proposed Rover Tariff. The Initial Shippers have elected to pay negotiated rates for transportation on the Rover Pipeline. Under the Commission's Alternative Rate Policy Statement, if a pipeline enters into negotiated rate agreements, the pipeline must provide recourse rates as an alternative.<sup>33</sup> Details of the negotiated rate authority under which the shippers made these elections are contained in Rate Schedule FTS, Section 3.8, and the General Terms and Conditions ("GT&C") Section 16 sets out the discounting provisions applicable to Rover's maximum recourse rates.

Rates for Transportation Service are included under Rate Schedules FTS and ITS. Supply Zone rates include service on all facilities upstream of the Mainline Zone; Supply Zone

<sup>&</sup>lt;sup>33</sup> Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines, 74 FERC ¶ 61,076 (1996), reh'g and clarification denied, 75 FERC ¶ 61,024 (1996).

# **Tab 21**



# ONTARIO ENERGY BOARD

FILE NO.:	EB-2015-0166 EB-2015-0175	Union Gas Limited Enbridge Gas Distribution Inc.
VOLUME:	3	
DATE:	November 17, 2015	
BEFORE:	Cathy Spoel	Presiding Member
	Allison Duff	Member
	Christine Long	Member

1 frame?

2 MR. LeBLANC: I suspect that there will be Utica gas 3 that gets back to Chicago. I mean, I'm not familiar with 4 all the pipes, but I know the REX pipeline has been 5 reversed and is moving gas east to west, whereas it used to 6 move gas west to east, and I think, you know, the 7 connections will allow gas out of the Marcellus to get to 8 Chicago, yes.

9 MR. QUINN: That demonstrates to me you have a pretty 10 good understanding, because I was going to reserve some of 11 these questions for Sussex. But if you can turn up your 12 Kl.1, just the map that's on page 3. It was referred to 13 earlier. This is the overview presentation yourselves and 14 Union did on Monday.

I'm just looking for the pipeline map to situate, if you can help us with where the REX pipe is and how the gas would -- has historically flowed, where it is going to flow, and how that would have an impact on Chicago.

MR. LeBLANC: I think you'll see sort of in -- I guess as a reference point, you'll see in the bottom left-hand corner of the graphic on page 5 of, I guess, the Board's compendium is the one I'm looking at.

I'll maybe wait and let it get up on screen before I go on, just so everyone can follow along. It's page 5 of the Board compendium. I guess in colour it's even better. So on the screen, you'll see -- in the bottom left corner, you'll the words REX east. So what I understand of REX is historically the gas actually came from that --

ASAP Reporting Services Inc.

(613) 564-2727

(416) 861-8720

started sort of in the western part of North America and
 moved gas east to Clarington, which I think we've already
 talked about earlier today.

So my understanding is at this time, even now the pipe has been reversed, and so there is gas moving from Clarington west. And that pipeline obviously interconnects with other pipelines. Just to give you a sense of where because Chicago is not on this map necessarily, but you'll see Joliet, which is sort of at the base of lake -- I am not sure which lake, sorry.

11 But anyway, Joliet is sort of where Chicago --

12 MS. SPOEL: It's Lake Michigan.

13 MR. LeBLANC: Lake Michigan, thanks. So Joliet is 14 approximately where Chicago is, so you can see how REX 15 moves gas west and there are pipelines that interconnect 16 with REX that could get gas to Chicago.

MR. QUINN: Thank you. You would confirm for me REXstands for Rockies Express?

19 MR. LeBLANC: That's correct.

20 MR. QUINN: So the pipeline was built to take gas 21 essentially starting in the Rockies area, all the way 22 through to Ohio to this point, Clarington.

But to summarize, at this juncture the pipeline is in the process of being reversed, and shippers are flowing from Clarington with Marcellus gas now and Utica gas pending, and possibly already in the pipe now, flowing the that gas from Clarington back towards the west, correct? MR. LeBLANC: That's my understanding.

# ASAP Reporting Services Inc.

(613) 564-2727

(416) 861-8720

1 MR. QUINN: So there's a point on that map called 2 Edgar -- we don't have to go through a lot of detail, but 3 basically, there is a pipe that flows northwest to some 4 degree to Joliet. And that Joliet point is at the start of 5 the Vector pipeline?

MR. LeBLANC: Yes, that's true.

б

7 MR. QUINN: So definitely the gas could essentially 8 leave Clarington, but not necessarily get to Kensington, 9 and there would be existing pipelines that would be able to 10 bring the gas back through to Dawn and to Enbridge's 11 storage point at Tecumseh?

MR. LeBLANC: Yes, it's a built of a roundabout path which, I think, involves tolls on a number of pipelines. But yes, it can, I believe, get to Chicago and then from Chicago, certainly it can flow on Vector to Dawn.

DR. QUINN: And the market would work -- from your experience, Mr. LeBlanc, the market would work to arbitrage out so that the gas would seek the market where it gets the best net back to suppliers?

20 MR. LeBLANC: Yes.

21 MR. QUINN: Okay, thank you for the clarity. I'm 22 going to explore some of Mr. Stevens, but that was helpful 23 because that was where I was going.

I think the last question last area of questions here, in this process to re-establish Enbridge's confidence in signing the Nexus agreement, was there any discussion between you and Spectra -- sorry, you and Nexus specifically about aggregating your load with Union's to

# ASAP Reporting Services Inc.

(613) 564-2727

(416) 861-8720

# **Tab 22**

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.APPrO.5 Page 1 of 5

# **UNION GAS LIMITED**

### Answer to Interrogatory from Association of Power Producers of Ontario ("APPrO")

Reference:i) Sussex Economic Advisors Evidence Exhibit A Schedule 3 pages 35-36"As proposed, NEXUS provides a direct pipeline path between the Marcellus and<br/>Utica supply basins and the Dawn Hub, allowing more supply to be delivered to<br/>the Dawn Hub. NEXUS will not only increase the physical supply to the Dawn<br/>Hub, but also increase the number of counterparties that are active at the Dawn<br/>Hub (e.g., the NEXUS capacity holders that are natural gas producers). This<br/>increase in natural gas supply and counterparties will increase the overall<br/>liquidity of the Dawn Hub. In addition, the transportation capacity on NEXUS<br/>that is contracted by the Ontario LDCs will be utilized to deliver physical natural<br/>gas supply to the Dawn Hub to meet customer demand."

Preamble: APPrO would like to better Sussex's understanding of the NEXUS Pipeline.

- a) Sussex's indicates that there will be increased NEXUS producer counterparties that will be active at Dawn. Please have Sussex provide:
  - i. A list of all shippers and their respective capacity commitments that have been made to the NEXUS pipeline. If these are not all commencing as of November 2017, please illustrate how these will be phased in over time. Please also note the sector that they represent (e.g. LDCs, producers, marketers, etc.).
  - ii. Please provide Sussex's understanding of the minimum aggregate transportation commitments necessary for the NEXUS Pipeline to proceed to be developed.
  - iii. Please provide Sussex's understanding of the changes to the net physical pipeline capacity into Dawn as a result of the NEXUS Pipeline.
  - iv. Please provide Sussex's understanding of the net increases to the physical gas supply availability for sale to third parties at Dawn as a result of the NEXUS Pipeline.
- b) Sussex indicates that there will be increased liquidity at Dawn as a result of the NEXUS Pipeline. Please have Sussex provide the following:
  - i. A definition of liquidity
  - ii. A description of how liquidity is quantified and measured.
  - iii. Please provide a quantitative estimate of the level of current liquidity at Dawn and an estimate of the liquidity after the NEXUS Pipeline has been completed. Please show how these were derived.
  - iv. To the extent that number of parties buying their gas at Dawn is a factor that increases liquidity, please confirm that an increase in the volume of gas purchased at Dawn will have a positive effect on liquidity. If not confirmed, please explain.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.APPrO.5 Page 2 of 5

### **Response**:

The following response was prepared by Sussex Economic Advisors, LLC.

a)

i) With respect to project shippers on the NEXUS Gas Transmission Project ("NEXUS"), it is the understanding of Sussex that NEXUS has executed precedent agreements with both "market pull" entities (e.g. local distribution companies ("LDCs")) and "supply push" entities (e.g. natural gas producers). Sussex has summarized the publicly available information regarding the capacity commitments on NEXUS, service commencement dates, and sector description by shipper in the table below.

NEXUS Project Shipper	Sector	Capacity Commitment (Dth/day)	Service Commencement Date	Source
Union Gas Limited	LDC	150,000	November 2017	Union Contract Approval Filing for NEXUS
Enbridge Gas Distribution Inc.	LDC	110,000	November 2017	Enbridge Contract Approval Filing for NEXUS
DTE Gas Company	LDC	75,000	November 2017	DTE Gas Contract Approval Filing, Case No. U-17691
DTE Electric Company	EDC	75,000	November 2017	DTE Electric Contract Approval Filing, Case No. U-17680
Chesapeake Energy Marketing Inc.	Producer	Not available	November 2017	Draft Resource Report 1 filed by NEXUS with the FERC in June 2015
CNX Gas Company LLC	Producer	Not available	November 2017	Draft Resource Report 1 filed by NEXUS with the FERC in June 2015
Noble Energy Inc.	Producer	Not available	November 2017	Draft Resource Report 1 filed by NEXUS with the FERC in June 2015

ii) Sussex is not aware of the minimum aggregate capacity commitment level required for the NEXUS Pipeline to be developed.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.APPrO.5 Page 3 of 5

- iii) It is the understanding of Sussex that NEXUS will utilize certain existing pipeline capacity for delivery to the Dawn Hub. Sussex has not reviewed the facility filings or application of the particular pipelines that will deliver NEXUS volumes to the Dawn Hub, and, as such Sussex does not have the requested information. Please see Union's response to Exhibit B.T1.Union.APPrO.2 c) ii).
- iv) NEXUS will provide direct access to the Marcellus and Utica shale basin, thus diversifying the physical gas supply available to the Dawn Hub. The addition of this gas supply source (i.e. Marcellus and Utica basin) will provide more physical gas supply options for third parties at Dawn. The volume of natural gas available to third parties as a result of the NEXUS Pipeline will depend on the utilization of that gas supply by the shippers, or replacement shippers, on NEXUS. For example, a natural gas producer with a capacity contract on NEXUS may provide that gas supply to third parties.

### b)

- i) In general, liquidity in reference to a natural gas pricing point or location refers to the ability of counterparties to enter into transactions to buy and sell natural gas in a manner that is efficient (i.e. available counterparties) and transparent (i.e. standard transactions with minimal transaction costs).
- ii) While there are different measures for liquidity, certain metrics may include:
  - Trade volume the higher the volume traded the more liquidity
  - Number of counterparties and diversity of parties (e.g. producers, LDCs, marketers and end-users) the more parties available to transact and the diversity of those parties would provide more liquidity
  - Price volatility lower price volatility would suggest more liquidity
  - Percent of days with a transaction a higher number of days when a transaction has occurred would suggest more liquidity
  - Number of transactions per day a great number of daily transactions or deals would suggest more liquidity

Finally, in general, natural gas price locations that are a "hub" may have certain physical facilities or other attributes that provide for a higher level of liquidity. These hub attributes may include:

- Deliveries to/from multiple pipelines
- Access to various gas supply basins
- Access to natural gas storage facilities
- Access to downstream markets

The U.S. Energy Information Administration ("U.S. EIA") has noted that market centers/hubs offer certain key services: 1) transportation between and interconnections with other pipelines, and 2) the physical coverage of short-term receipt/delivery balancing

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.APPrO.5 Page 4 of 5

needs. The U.S. EIA further notes that many market centers "provide unique services that help expedite and improve the natural gas transportation process overall". New sources of gas supply would only enhance the ability of a market center such as the Dawn Hub to provide these services.

- iii) With respect to a quantitative metric for the current liquidity at the Dawn Hub, Sussex provides the following information from Platts. Since 2003, Platts has grouped price point locations in its monthly natural gas price survey into three tiers:
  - Tier 1, points with traded volumes of at least 100,000 MMBtu/day and at least 10 trades;
  - Tier 2, points with traded volumes of 25,000 to 99,999 MMBtu/day and at least five trades; and
  - Tier 3, points with traded volumes below 25,000 MMBtu/day and/or fewer than five trades.

	Dawn			
Split-Year	Avg. Daily Volume	Avg. No. of		
(Nov-Oct)	(000 MMBtu)	Deals	Avg. Tier	
2009/2010	594	110	1	
2010/2011	624	123	1	
2011/2012	509	97	1	
2012/2013	662	105	1	
2013/2014	395	92	1	
2014/2015	420	113	1	

The following table is a summary of the Platts ranking for the Dawn Hub price index.

As illustrated in the table above, the Dawn Hub price index has been, on average, a Tier 1 price index (i.e. the highest category for traded volumes and number of deals) over the time period reviewed by Sussex.

For comparison purposes, a summary of the Platts ranking for Niagara is provided below.

	Niagara			
Split-Year (Nov-Oct)	Avg. Daily Volume (000 MMBtu)	Avg. No. of Deals	Avg. Tier	
2009/2010	103	18	2	
2010/2011	64	11	2	
2011/2012	23	5	2	
2012/2013	1	1	3	
2013/2014	3	2	3	
2014/2015	6	2	3	

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.APPrO.5 Page 5 of 5

As illustrated above, Niagara was, on average, a Tier 2 price index in 2009/2010, 2010/2011, and 2011/2012; and a Tier 3 price index in 2012/2013, 2013/2014, and 2014/2015.

With respect to a forecast estimate of liquidity once the NEXUS project is in service, Sussex has not developed such an analysis. However, the gas supply from NEXUS should provide support for volumes traded and average number of deals, such that the Dawn Hub retains its Tier 1 ranking. Please see the response to Exhibit B.T1.Union.LPMA.8 regarding the benefits of NEXUS to the Dawn Hub.

iv) As discussed in the response to Exhibit B.T1.Union.APPrO.5 b) iii), the level of transaction activity is one metric for assessing the liquidity at a pricing point. Therefore, an increase in the number of transactions at Dawn should have a positive effect on liquidity.

## **Tab 23**



# ONTARIO ENERGY BOARD

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

- VOLUME: Technical Conference
- DATE: September 8, 2015

Enbridge has outlined the challenges that they have had in buying gas at Niagara, which is a transshipment point. It is not a liquid trading hub. It does not possess the key trades to become a liquid trading hub.

5 MR. QUINN: Maybe I should say it differently, and 6 that might help you answer the question I was asking.

You're purchasing gas in Dominion south, 20,000 gJs.
There are suppliers that have different capacity, some of
whom take their gas through to Niagara.

Did you look or did you talk with those producers or were they included in the RFP so you could do your assessment of your 2015 needs?

MR. SHORTS: We did not do a RFP for this 20,000 of capacity, because our goal was to have the purchasing done in Dominion South Point with only those Dominion South Point shippers and providers that would ultimately also be at Kensington.

18 Those shippers may be at Niagara, but we don't know 19 that for sure. We do know the shippers that are 20 transporting from Niagara into Ontario, and those shippers 21 do not want to sell large incremental amounts of gas at 22 either Niagara or Kirkwall.

They want to continue to get to Dawn and make their transactions there. They want to have the benefit of the numerous counterparties that are at Dawn. They do not want to sell gas at Niagara.

27 MR. QUINN: But, sir, if you dealt with a producer who 28 was willing to deal with you, Dominion South, and eventually through Kensington or eventually through
 Niagara, would that not have value to Union in terms of
 having a supplier that could provide to you at multiple
 points?

5 MR. SHORTS: We buy supply at each point separately. 6 So whether or not Supplier A gives us an RFP response for 7 gas supply at Dawn or whether they give it to us at 8 Niagara, we would look at each one of those transactions 9 individually. We wouldn't say, "We're going to have all 10 three with one supplier." That's why we predominantly RFP 11 all of those supplies on an ongoing basis.

MR. QUINN: So in your assessment of who to deal with as a potential new counterparty at Dominion South, you don't look at the diversity of pipelines that they hold? MR. SHORTS: If they were -- if they would execute our

16 NAESB contract, then they would be a supplier that would be 17 part of the RFP process.

18 MR. QUINN: So I guess part of that evaluation 19 process, you don't evaluate the holdings of the producer to 20 determine the flexibility that producer would have for 21 Union to deliver at different points?

22 MR. SHORTS: That would be a point. But we wouldn't 23 necessarily make any decision based upon that. That's why 24 we have over 100 suppliers that we have NAESBs with.

25 MR. QUINN: Mm-hmm.

26 MR. SHORTS: They all have different supply points. 27 They all have different characteristics. They all bring 28 various benefits. Some are active in some basins; some are

(613) 564-2727

(416) 861-8720

1 active in other basins.

2

2	MR. QUINNO I GUESS I Saw IL as rerevant	
3	consideration, but I understand your answer.	
4	Getting back to the specific reference here, it says:	
5	"Upstream pipelines that provide supply to Niagara are	
6	largely sold out."	
7	Does Union know what capacity is remaining?	
8	MR. SHORTS: It is our understanding that we could not	
9	purchase, for example, 150,000 or anything large a large	
10	amount of capacity that, up to that 1.4 PJs, is sold out,	
11	and anything new would require significant infrastructure	
12	on the U.S. side.	
13	MR. QUINN: By 20,000, do you know if 20,000 is	
14	available through those producers?	
15	MR. SHORTS: I don't know if 20,000 is available	
16	through those producers. All I do know is that we have had	
17	continuous challenges in trying to procure that supply at	
18	Niagara.	
19	MR. QUINN: Sorry	
20	MR. SHORTS: We don't have price transparency. We get	
21	quite dramatic price differences from all of our producers	
22	in particular months. And, again, it's not a liquid	
23	trading point that we want to continue to buy large	
24	quantities of gas at.	
25	MR. QUINN: I'm going to ask my original question	
26	first, and then I will come back to your point.	
27	I am talking about producers that could provide you	
28	gas upstream of Niagara, because that's the reference is	

MR. QUINN: I guess I saw it as relevant

50

### ASAP Reporting Services Inc. (613) 564-2727

(416) 861-8720

in that paragraph is upstream pipelines that provide to
 Niagara are largely sold out. So the context for my
 question was getting gas from those suppliers upstream of
 Niagara.

5 MR. SHORTS: Again, we have been purchasing supply 6 from the -- on Niagara. We have been buying it on the 7 Canadian side at Niagara. And that has been a challenge 8 for us.

9 MR. QUINN: That's not the question I am asking, sir. 10 You say upstream. So you can get back to potential 11 locations like Dominion South with some of these suppliers. 12 Would you agree with me that some producers could have --13 because it sounds like you don't have a number -- could 14 have capacity that would bring the gas to Niagara however 15 you would purchase it from them upstream?

16 [Witness panel confers]

17 MR. SHORTS: The 20,000 that we were -- are 18 contracting for is replacing gas that was coming into Dawn. 19 Our whole expectation was to get deliveries at Dawn and to 20 fill that average day need at Dawn. That's what we 21 continue to do. That gas volume that we're purchasing on a monthly basis at Dominion South Point will be delivered to 22 23 Dawn. And that's where we needed the gas to meet our 24 average day needs.

25 MR. QUINN: So you don't know if the 20,000 is 26 available upstream of Niagara? It wasn't considered? 27 MR. SHORTS: It was -- part of our landed cost 28 analysis would have showed what a Niagara purchase would

## **Tab 24**

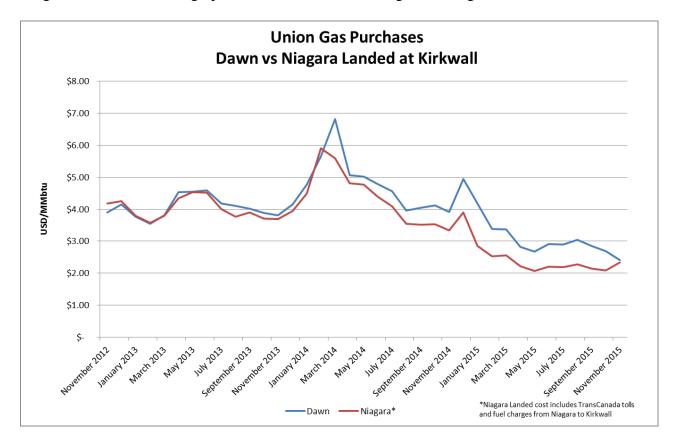
Filed: 2015-11-16 EB-2015-0166/ EB-2015-0175 <u>Exhibit J2.1</u> Page 40

#### **UNION GAS LIMITED**

### Undertaking of Mr. Gillett <u>To Mr. Quinn</u>

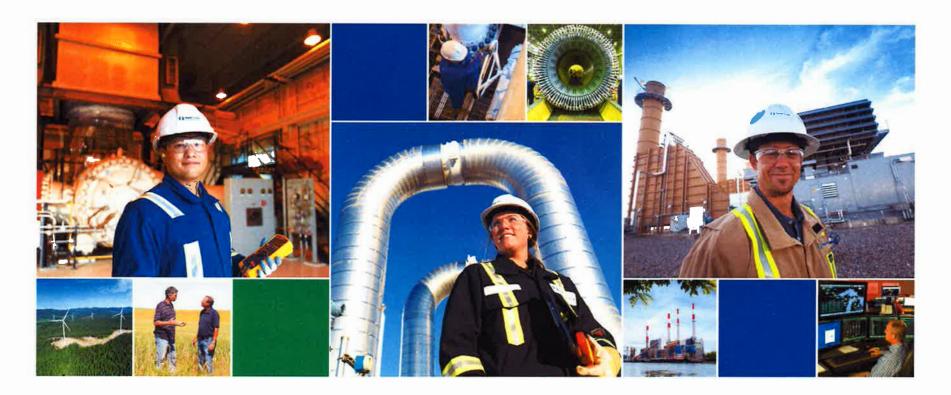
Union to provide data related to purchases at Niagara, purchases at Dawn, and the average monthly price over the last three years.

Union has provided the following graph reflecting the average monthly prices paid by Union for gas purchased at Dawn and gas purchased at Niagara and landed at Kirkwall. This was provided in EB-2014-0182 Burlington Oakville proceeding at Undertaking JT1.3 and has been updated here to include recent prices. The market changes that were discussed in that hearing have started to occur. Due to the illiquid nature of the Niagara market and the infrastructure projects going into service at that point, the price of gas at Niagara has increased and more closely aligns with prices at Dawn. When Union purchased a winter strip (November 1, 2015 to March 31, 2016) at Niagara in September 2015 for approximately one half of its TransCanada Niagara to Kirkwall transportation capacity, the cost of that gas was comparable to the cost of Dawn gas for the same period, less the TransCanada toll between Dawn and Niagara. As well, when Union went to market to fill the remainder of the Niagara transportation capacity for the month of November 2015, that gas was priced higher than the equivalent Dawn price less the TransCanada Niagara to Dawn toll. The graph below reflects this convergence/change.



# **Tab 25**

## K2.2



### **TransCanada Mainline Projects Update**

Alex Harris

LDC Forum, Toronto

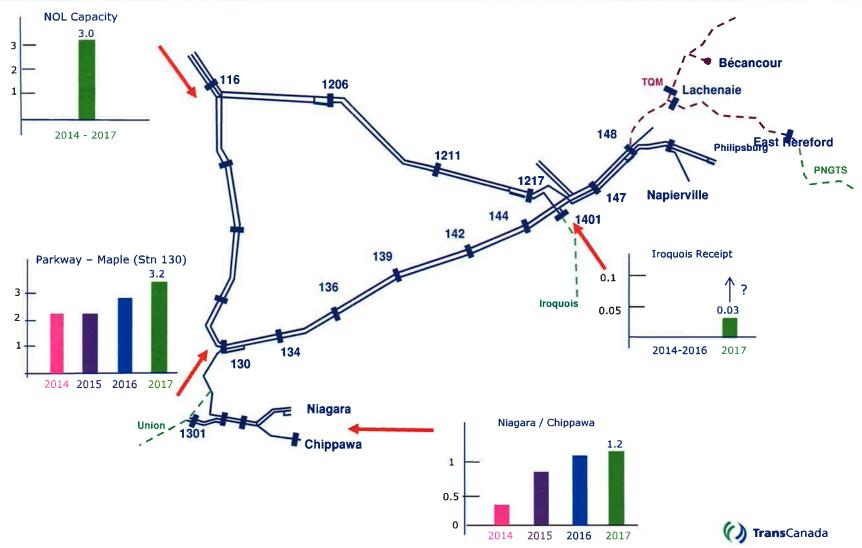
November 11, 2015





### 2014-2017 Capabilities (PJ/d)





Filed: 2015-11-17 EB-2015-0166/ EB-2015-0175 Exhibit J2.2 Page 43

### UNION GAS LIMITED

### Undertaking of Mr.Shorts <u>To Mr. Quinn</u>

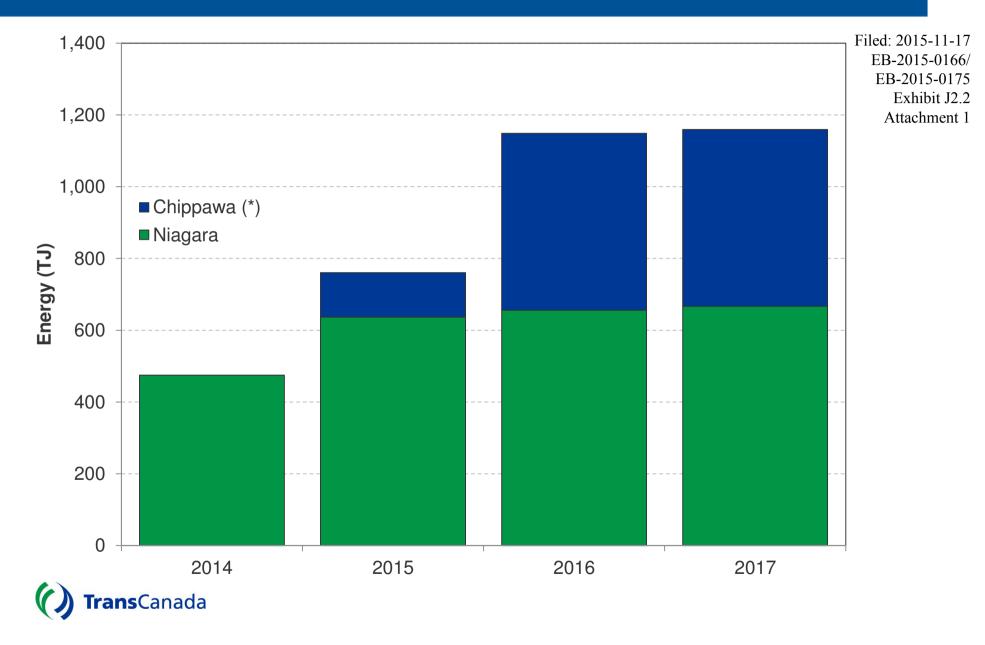
To file the slide from a TCPL presentation.

\_\_\_\_\_

Please see Attachment 1 for a slide from TransCanada reflecting the recent contracting levels of the Niagara and Chippawa receipt points. TransCanada has confirmed that while it was originally part of a confidential presentation, this slide can be provided in this proceeding.

The slide provided by TransCanada during the hearing as Exhibit K2.2 showed total capacity of 1.2 PJ. This graph shows that nearly all of that capacity is contracted.

## Niagara / Chippawa Receipt Contracts



# **Tab 26**

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T2.Union.Staff.17 Page 1 of 4

### UNION GAS LIMITED

## Answer to Interrogatory from <u>Board Staff</u>

Reference: Exhibit A / Page 14 / Lines 3-6

Union has indicated that the NEXUS project will transport Marcellus and Utica shale gas to customers in Ontario. Union plans to transport the gas to Dawn through St. Clair Pipelines.

As an alternative to NEXUS, could Union import Marcellus and Utica shale gas volumes into Ontario through any existing infrastructure? If yes, please provide the details.

### **Response**:

Existing infrastructure that could move Marcellus and Utica natural gas supply into Ontario would be Panhandle Eastern Pipeline. Without incremental infrastructure the amount of supply available to be transported through <u>existing</u> infrastructure is very limited (35 TJ/d or less). Any incremental supply to Ontario from the Marcellus and Utica production zones through the Dawn Hub or Niagara will require additional pipeline facilities to be constructed as described in more detail below.

With respect to Niagara, it is important to understand how the volumes that now flow into Ontario from the Marcellus evolved. TransCanada, Union and the U.S. upstream pipelines (Tennessee Gas Pipeline, Dominion Transmission and National Fuel Gas) had various open seasons throughout 2009 and 2010 (please see the response at Exhibit B.T4.Union.TCPL.8 for further open season detail) that would allow for the reversal of flow that traditionally TransCanada had moved through Niagara into the U.S. (i.e. exports to the United States). These open seasons were completed during the early stages of Marcellus development and forecasts of its growth and potential were not nearly as robust as they have become over time.

These 2009 and 2010 open seasons resulted in commitments from the Marcellus producing zone to Niagara largely by producers as well as commitments on the Union and TransCanada systems to move gas to Kirkwall and beyond (including Union's contract on the TransCanada system for 21,101 GJ/d from Niagara to Kirkwall). Those commitments supported infrastructure projects in Canada and the United States and the development of new services (such as Union's M12-X transportation service). The facilities at Niagara were able to import and deliver about 0.4 PJ/d from Niagara to Kirkwall starting on November 1, 2012. Union Gas was the first consumer based shipper to purchase gas and ship it from Niagara to Dawn starting in 2012 – and will be the only consumer based purchaser until additional volumes start to flow in 2015.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T2.Union.Staff.17 Page 2 of 4

This capacity stayed steady until further open seasons in 2013 and 2014 (after Union had already entered the NEXUS open season) that would ultimately lead to expansions into Niagara and Chippawa of a further 1 PJ/d (for a total of approximately 1.4 PJ/d) in the 2015/2016 time period (also refer to Exhibit B.T1.Union.FRPO.1). These open seasons on the U.S. pipeline systems to feed Niagara and Chippawa were supported predominantly by producers. A large portion of the TransCanada Niagara to Kirkwall capacity is also supported by producers (including through arrangements with marketers).

The initial capacity provided by the U.S. pipelines to transport gas from the Marcellus to Niagara required modifications to the existing system to reverse flow and relatively limited new facilities. However, as more capacity is added to access Niagara in 2015 and 2016, the facilities required become more complex (including construction from some of the U.S. pipeline systems into the producing areas). TransCanada and Union were in a similar position. In fact, Union was able to repurpose Dawn to Kirkwall turnback and resell Dawn to Parkway capacity through C1 Kirkwall to Parkway transportation services and M12-X transportation services with only modifications to the Kirkwall Custody Transfer Station required.

It is Union's understanding that with the current commitments, the upstream pipelines that provide supply to Niagara are largely sold out and significant incremental infrastructure would be required to import any substantial additional Marcellus and Utica natural gas into Ontario (beyond 2015/2016) at Niagara or Chippawa. Union expects that significant incremental infrastructure would also be required on the TransCanada system to move natural gas from Niagara further into Ontario (beyond the current 2015/2016 volume of 1.4TJ/d).

With respect to Dawn, Union and others entered the November 2012 NEXUS open season to support large scale infrastructure that would diversify the access to Marcellus and Utica production by bringing significant new supply to Dawn from the Utica production zone, which was not readily accessible from Niagara. Like all significant greenfield infrastructure projects, the lead development time can be well in excess of 3 years. Due to this, commitments must be made early by signing firm precedent agreements that will allow project proponents to start to develop the project fully and commit to significant expenditures for the necessary planning, routing, engineering and environmental analyses. Union continued working towards a binding precedent agreement with NEXUS throughout 2013 and into early 2014. A binding Precedent Agreement was executed at a point in time when Union had firm knowledge of its Alliance/Vector de-contracting and the Settlement Agreement between TransCanada and Eastern LDCs was approved. This allowed Union, with a high degree of confidence, to commit the ultimate level of volume it could make on behalf of its Union South and Union North customers on NEXUS. Without the Settlement Agreement specifically, Union could not have been confident on TransCanada being able and willing to build the infrastructure necessary for incremental volumes to flow through Parkway into points east and north, whether from Dawn or points upstream of Dawn.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T2.Union.Staff.17 Page 3 of 4

The construction of the NEXUS pipeline would dramatically increase the accessible paths to Ontario from the Utica and Marcellus production zones. The Kensington processing plant at the commencement of the NEXUS greenfield pipeline provides a different and diverse supply source which is predominantly Utica gas but could have access to other major pipelines in the area (including natural gas from the Marcellus and other producing basins). Given the location of the NEXUS pipeline, the intermediate connections at Kensington and access to other pipelines that are directly connected at the extension of NEXUS at Clarington provide tremendous diversity and security of supply. In addition, the NEXUS pipeline can access multiple supply points between Kensington and Dawn, including those on the DTE system (such as Willow Run).

The NEXUS project has committed capacity to Dawn of approximately 0.8 PJ/d. This is comprised of the Union and Enbridge volumes (273 TJ/d) as well as about 523 TJ/d committed by other shippers (mostly producers). When considering the transportation capacity committed to Niagara, of up to 1.4 PJ/d by 2016, as well as the commitment of approximately 0.8 PJ/d on the Nexus pipeline, over 2 PJ/d of transportation capacity is available to access Marcellus/Utica supply. Rover pipeline transportation capacity into Dawn will increase the level of access to Marcellus and Utica production. This shows that both Marcellus volumes through Niagara and Marcellus/Utica volumes through Dawn (Rover and NEXUS) are being supported and that there is a balance in volumes in both paths. This will help offset the decreased volumes from Western Canada via TransCanada and Alliance/Vector.

While much of the NEXUS project involves greenfield pipeline construction, NEXUS is making efficient use of existing infrastructure to transport natural gas through Michigan and into Dawn. Union has contracted for a transportation service from Kensington, Ohio to the Union St. Clair point at the international border and interconnection between the DTE and Union systems. Nexus has contracted with DTE to utilize existing infrastructure to provide its transportation services from Willow Run, Michigan to Union St. Clair. Union will then use its existing St. Clair to Dawn pipeline to transport gas to the Dawn Hub. NEXUS has also contracted with DTE to utilize existing infrastructure from Willow Run to Vector at Milford, Michigan and has contracted with Vector to provide transportation from Milford to the Dawn Hub. Enbridge has contracted for its transportation service from Kensington, Ohio to Milford and then will use existing Vector capacity to transport gas into Dawn.

As discussed further in Exhibit B.T1.Union.LPMA.8, the NEXUS pipeline is expected to enhance the liquidity of the Dawn Hub. New pipelines connecting new production areas to Dawn increase security of supply and reliability, and create more competition at the Dawn Hub. Facilitated by the Settlement Agreement between TransCanada and the Eastern LDCs, Ontario and Québec customers have supported a significant amount of infrastructure development within Ontario from 2015 through 2017 on the Enbridge, Union and TransCanada systems in order to increase access to the Dawn Hub and to the Niagara/Chippawa receipt points. On Union's system alone over 1.3 PJ/d of incremental pipeline capacity is proposed to be placed into service

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T2.Union.Staff.17 Page 4 of 4

on the Dawn Parkway System by November 2017. In addition, Union, through a settlement agreement, has made a commitment to move the Parkway Delivery Obligation for its infranchise customers (once over 600 TJ/d) to Dawn. Maintaining and growing the liquidity of the Dawn Hub should remain a focus for Ontario customers (and others).

Recently, the importance and value of diversity of supply has been highlighted by an unplanned shutdown of the Alliance Pipeline in August 2015 due to high levels of hydrogen sulfide gas in the natural gas stream (hydrogen sulfide is very poisonous). Alliance Pipeline reduced flows from Western Canada to Chicago from approximately 1.4 Bcf/d to zero from August 7 to August 13, 2015. Having multiple pipeline connections to a variety of production areas and liquid markets, access to approximately 1 Tcf of regional storage, a deep market of over one hundred buyers and sellers of natural gas and price transparency, allows Dawn to continue to provide natural gas supply to Ontario, Québec and northeastern U.S. markets when upstream transportation and supply is disrupted.

Interestingly, by 2017, Enbridge and Union will have contracted for approximately 273 TJ/d of Nexus pipeline capacity into Dawn and will combine to bring over 221 TJ/d from Niagara into Ontario. This will provide further diversity for Ontario and have some balance in its access to Marcellus and Utica production. The opportunity that the NEXUS pipeline provides should not be viewed as development of NEXUS instead of Niagara but development of **NEXUS and Niagara for the benefit of the Ontario market.** 

Finally, without pre-approval and the assurance that the NEXUS project will move forward, the Dawn Hub and Ontario consumers would miss an opportunity to gain significant access to Marcellus and Utica production as well as the accompanying benefits of increased choice, market liquidity at Dawn, and diversity and security of supply.

Filed: 2015-08-25 EB-2015-0175 Exhibit I.T1.EGDI.STAFF.9 Page 1 of 2

### STAFF INTERROGATORY #9

### **INTERROGATORY**

Ref: A/3/1 page 24 / para 61 / Table 2

- (a) With regard to the option of "TransCanada from Niagara", please discuss the Company's view of the role of the Niagara and Chippewa supply points for the transportation of Appalachian gas into Enbridge's franchise over the next 10 to 20 years.
- (b) Is there any reason that the proposed NEXUS volumes could not instead be delivered into the franchise via the Niagara and Chippewa import points? Please include a discussion of why NEXUS represents a more attractive option than "TransCanada from Niagara."

### RESPONSE

(a) Enbridge has entered into a 15 year contract with TransCanada to transport 200,000 GJ/d of supply from Niagara/Chippawa receipt points to the Enbridge Parkway CDA effective November 1, 2015. The supply for this transportation capacity will be procured at the Niagara/Chippawa receipt points since Enbridge does not have any transportation capacity in its gas supply portfolio that is upstream of Niagara/Chippawa. Enbridge cannot confirm with certainty that the supplies being received at Niagara/Chippawa are sourced from the Appalachian basin, but it is reasonable to assume this to be the case currently and into the foreseeable future given the proximity and availability of supply of this basin.

Niagara and Chippawa currently do not operate as a liquid supply point. Enbridge has discussed its near term supply arrangements at Niagara/Chippawa in BOMA Interrogatory #15 at Exhibit I.T1.EGDI.BOMA.15. Enbridge has discussed the challenges it faced making these arrangements in FRPO Interrogatory #5 at Exhibit I.T1.EGDI.FRPO.5. Enbridge is anticipating that multi-year supply contracts will be required to fill the TransCanada capacity from Niagara and Chippawa for at least the next several years due to a lack of liquidity at these points.

It is also important to note that contracting for incremental transportation capacity from the Appalachian basin to Niagara and Chippawa and then to the delivery area would require the coordinated construction of new transportation infrastructure in the United States and Canada. This coordinated construction project would require

Witnesses: J. LeBlanc A. Welburn

Filed: 2015-08-25 EB-2015-0175 Exhibit I.T1.EGDI.STAFF.9 Page 2 of 2

sufficient market participants that have the ability make the volumetric and financial commitments required to support such a project. The reason a coordinated build is required is that there is not currently any significant available capacity to transport gas from the Appalachian basin to Niagara/Chippawa. Further, as explained in TransCanada Interrogatory #5 at Exhibit I.T2.EGDI.TransCanada.5, there is also no significant available capacity to transport gas away from Niagara/Chippawa to Dawn or the franchise areas.

(b) Please see response to part (a) above, and Board Staff Interrogatory #7 at Exhibit I.T1.EGDI.STAFF.7.

# **Tab 27**

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.LPMA.2 Page 1 of 2

### UNION GAS LIMITED

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

Reference: Exhibit A, page 3

- a) How much of Union's system gas supply for the southern and northern operation areas does the 158,258 GJ/day represent?
- b) Will the 158,258 GJ/day be used solely to purchase gas for system gas customers in Union's South and/or North operating areas? Please explain fully.
- c) Will the addition of this project require any capital expenditures by Union to:
  - i) increase transportation capacity to Dawn; and/or
  - ii) increase transportation capacity away from Dawn?

If yes, please explain fully and provide the expected capital costs.

d) Will the addition of this project result in the need for any incremental storage related capital expenditures for injections, withdrawals, space, etc? If yes, please explain fully and indicate whether these additional costs would be part of the regulated or unregulated storage assets.

#### **Response**:

- a) The 158,258 GJ/d of NEXUS supply is projected to represent approximately 26% of the Union North upstream transportation portfolio and approximately 30% of the Union South upstream transportation portfolio. More detail can be found in Exhibit A, Figure 5-1 and Figure 5-2, pages 29-31.
- b) Yes, the 158,258 GJ/d of NEXUS supply will be purchased to serve Union's sales service customers only.
- c)
- i) No. Any capital expenditures related to any requirements at Dawn for the receipt of gas as a result of the NEXUS project will be paid for directly by Vector and/or DTE.

Filed: 2015-08-25 EB-2015-0166/ EB-2015-0175 Exhibit B.T1.Union.LPMA.2 Page 2 of 2

ii) No. Union is expanding its system in 2015 and 2016 (approved) and 2017 (proposed) independent of the NEXUS project. In addition to meeting incremental ex-franchise demand, these expansions also facilitate Union's shift to serving Unions North East customers from Dawn rather than Empress. Given NEXUS is upstream of Dawn, NEXUS is not creating additional need for Union to expand the Dawn Parkway System – it is just one of the upstream sources of "Dawn Gas" that will be used to serve the North East.

d) No.

Filed: 2015-09-16 EB-2015-0166/ EB-2015-0175 Exhibit JT2.1 Page 3

### UNION GAS LIMITED

### Undertaking of Union <u>To Mr. Quinn ("FRPO")</u>

Union to confirm whether any of Union's responses in the Dawn Parkway proceeding are not able to be brought into this proceeding by way of reference.

-----

The question listed in the transcripts as JT2.1 is incorrect. No such undertaking was given as the question was answered on the record by Mr. Keizer at NEXUS Technical Conference Transcript ("TR"), September 9, 2015, page 3, line 3 and in response to further related questions on pages 3 through 5.

There was discussion at the Technical Conference regarding responses to two interrogatories (September 8, 2015 TR at pages 19 through 24). Union reserved on whether they would take an undertaking. At the beginning of September 9, 2015, TR page 2, lines 6-13, Union agreed to respond to provide clarification with respect to Exhibit B.T4.Union.FRPO.18 ("FRPO 18") and Exhibit B.T1.Union.FRPO.17 ("FRPO 27"), and clarify any discrepancies between the numbers that exist there.

Union confirms that the 2017 Dawn Parkway proposed facilities are included in the analysis provided for both FRPO 18 and FRPO 27.

Union notes that FRPO 18 and FRPO 27 analyses represent different scenarios, as requested in each of the questions.

In FRPO 18, Union responded to the scenario that an <u>additional or incremental 158,258 GJ/d</u> <u>arrives at Kirkwall and is assumed to be transported to Parkway</u>. All other parameters are kept constant per the question. The question asks how much Dawn to Parkway capacity would be "freed up". In this scenario, Dawn to Parkway transportation capacity is not "freed up", but rather the capacity shortfall of the Dawn Parkway system would increase by approximately 92,000 GJ/d, as an impact of transporting this incremental volume from Kirkwall to Parkway.

In FRPO 27, Union responded to the scenario that <u>158,258 GJ/d of supply is delivered at</u> <u>Kirkwall instead of Dawn, such that the supply is shifted</u>. The question asks if facilities requirements would be less. In this scenario, based on the 2017/18 peak day analysis including the 2017 proposed facilities, 63,954 GJ/d of additional Dawn to Parkway capacity could be transported in addition to the existing Dawn to Parkway system surplus of 30,393 GJ/d. The response to FRPO 27 then reviewed the proposed 2017 facilities and determined the supply shift would not eliminate the need for the proposed facilities. Removal of one of the compressors (Bright C or Lobo D) resulted in a capacity shortfall of approximately 244,000 GJ/d in 2017/18. This large shortfall would not be manageable through contracted services and therefore, in this scenario, all the compression proposed in the 2017 Dawn Parkway Project is required. No changes to required facilities.

## **Tab 28**



# ONTARIO ENERGY BOARD

FILE NO.:	EB-2015-0166 EB-2015-0175	Union Gas Limited Enbridge Gas Distribution Inc.
VOLUME:	2	
DATE:	November 16, 2015	
BEFORE:	Cathy Spoel	Presiding Member
	Allison Duff	Member
	Christine Long	Member

background you had mentioned earlier in your conversation with Mr. -- with Michael from Board Staff that you were going to act -- you were going to act as if, I think were your words, you were going to act as if you were an affiliate, right? You were going to abide by the ARC, effectively?

7 MR. ISHERWOOD: I said we were prepared to act as if 8 it was an affiliate under the ARC, and I think Mr. Millar 9 was questioning whether we needed to or not.

MR. BRETT: Yes, and the ARC -- one of the sections of the ARC has to do with contracting with affiliates, right? MR. ISHERWOOD: I don't have it in front of me, Mr.

13 Brett, but I believe that's true.

MR. BRETT: Okay. Well, basically let me paraphrase something, and if I haven't paraphrased it correctly in my question then somebody can correct me. But basically, as I understand, the ARC says if a utility contracts with an affiliate it has to -- and there is a market for the service it's contracting for, it has to pay the market price. Does that sound reasonable?

21 MR. KEIZER: Well, I think if you want to point to a 22 section and quote the section in the ARC, it would be 23 helpful, I think.

24 MR. BRETT: Okay. It's 2.3.4.

25 MR. KEIZER: Yeah. From a legal perspective I would 26 agree that it does say the utility shall pay no more than 27 the market price when acquiring a service or product, et 28 cetera. 1 MR. BRETT: Yeah. And my -- is not the market price 2 for this service -- first of all, there is a market, is 3 there not? You were facing a market for transportation 4 service, and assuming for the moment that you were, is not 5 the market for that service the Niagara price, or certainly 6 a price, an important price, in the market.

7 MR. ISHERWOOD: I would say the market price is on the 8 same NEXUS path, and it is a comparison to other shippers, 9 what they're paying. The path -- you have to look at the 10 path very specific to what NEXUS is doing, and are we 11 paying less or more than other shippers? We're paying the 12 same as other shippers, essentially --

MR. BRETT: But don't you have to look at the landed cost into your franchise? Doesn't necessarily have to be the exact path, does it?

MR. ISHERWOOD: I think if you're talking in terms of our affiliation with Spectra, it should be on the path.

MR. BRETT: Well, that's an interpretation, but the other piece of it, just for completeness, is -- well, let me ask you this. You do agree there is a market, though. You were looking at a market. There is a market for transportation services there?

23 MR. ISHERWOOD: So essentially the regulated service, 24 we have a negotiated rate within that umbrella of being a 25 regulated service.

26 MR. BRETT: The second part of that test -- and that 27 is set out at 2.3.12 -- is that if you -- if -- if the 28 utility is buying in a situation where there is no market,

### ASAP Reporting Services Inc. (613) 564-2727 (416) 861-8720

it has to ensure that the return on equity of the person
 it's buying from is not any higher than its return on
 equity.

Do you have an -- do you know what the return or
proposed return on equity of the Spectra pipeline is?
MR. KEIZER: Sorry, Mr. Brett, which -- where are you

7 now in the ARC?

8 MR. BRETT: 2.3.12. It's on page 10. Sorry, 2.3.10, 9 my mistake if I said something -- I think I read 10 as one-10 two. I meant 2.3.10. And it's what governs the situation 11 where you don't have a market.

And would you agree with me that it would be -- you may not know this, but would you agree with me that it's likely -- may not -- it's likely that Spectra's return on equity on the NEXUS pipeline is greater than your return on distribution?

MR. ISHERWOOD: I think when dealing with 2.3.10, Mr. Brett, I would say when NEXUS applies to FERC, which they will do this week or next week, they will be asking for a recourse rate as well. That will be part of the outcome of this hearing they have with FERC.

22 MR. BRETT: Right.

23 MR. ISHERWOOD: And our understanding is the 24 negotiated rate will be equal to or less than the recourse 25 rate, and if it's not, we have the choice of taking the 26 recourse rate.

27 MR. BRETT: Right.

28 MR. ISHERWOOD: So in a regulated environment the

ASAP Reporting Services Inc. (613) 564-2727 (416) 861-8720

1 market, I think, is a recourse rate.

2 MR. BRETT: Right.

3 MR. ISHERWOOD: And I believe we will be paying less 4 than the recourse rate.

5 MR. BRETT: That doesn't answer my question about 6 return on capital.

7 MR. ISHERWOOD: I have no idea what --

8 MR. BRETT: The question is what is the return on 9 capital at the recourse --

10 MR. ISHERWOOD: I have no idea.

MR. BRETT: Okay. Well, perhaps -- has NEXUS filed at 12 FERC now?

13 MR. ISHERWOOD: The hearing is a week or so away.

14 It's end of this month.

15 MR. BRETT: I see. All right.

All right. This might be a time to break, if I could.And I have just a few questions after.

MS. SPOEL: Thank you. Okay. That's fine. We'll resume at 1:30. And the panel is able to sit today until five o'clock if that's helpful in terms of getting through more of the evidence.

22 --- Luncheon recess taken at 12:23 p.m.

23 --- On resuming at 1:30 p.m.

24 MS. SPOEL: All right. Mr. Brett?

25 MR. BRETT: Good afternoon, Madam Chair, panel. Over 26 the lunch hour, I looked through my questions and decided 27 that they had been adequately dealt with. So I think those 28 are all my questions.