EVIDENCE IN SUPPORT OF THE APPLICATION FOR PRE-APPROVAL OF THE COST CONSEQUENCES OF THE NEXUS CONTRACT

A. OVERVIEW

1. Enbridge Gas Distribution "Enbridge" or the "Company" seeks preapproval of the cost consequences of a 15 year gas transportation agreement with NEXUS Gas Transmission, LLC on the NEXUS Gas Transmission Project ("NEXUS"). This preapproval is sought under the Ontario Energy Board's ("Board", or "OEB") Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts (the "Guidelines").

2. NEXUS is a proposed pipeline that will provide natural gas markets in Ohio, Michigan, Chicago, and the Dawn Hub in Ontario with a direct link to the vast natural gas resource located within the Appalachian basin. NEXUS requires the construction of approximately 250 miles of new greenfield pipeline and includes the efficient use of existing and expanded transportation capacity along the Texas Eastern Transmission, LP system in Ohio, the DTE Pipeline Company ("DTE") gas transportation system in eastern Michigan, and the Vector Pipeline system in southeastern and eastern Michigan, northern Indiana, eastern Illinois and western Ontario ("Vector").

3. NEXUS provides significant opportunity to further enhance Enbridge's gas supply portfolio. The Appalachian basin, and specifically, the Utica and Marcellus supply basins are expected to account for over half the incremental North America gas production through 2035[1]. These basins have served as a primary catalyst for the changing dynamics within North America's natural gas marketplace. Obtaining assured access to these supplies is a natural evolution

[1] EB-2014-0289 - Future Trends: Assessing Ontario Natural Gas Market Requirements Through 2020 presentation prepared by ICF International, November 25, 2014, page 4.

of Enbridge's gas supply planning and would fundamentally improve gas supply portfolio diversity, reliability, flexibility, and cost effectiveness. Although Enbridge has the potential to access Utica and Marcellus supply through purchases at Niagara, NEXUS provides additional benefits through increased diversity of path and the ability to obtain natural gas directly from the supply basins.

4. There are a significant number of new pipeline projects competing to transport Appalachian basin supplies to various markets across North America. The 2014 Natural Gas Market Review Final Report ("2014 NGMR Final Report") prepared for Board Staff examined the destination for Marcellus natural gas supply and noted "*the relatively small proportion of the Marcellus that is actually destined for the Ontario market*"[2]. If Enbridge does not actively participate now in these new pipeline projects, supplies from the Appalachian basin will continue to be contracted to other markets across North America. This will increase the risk of Appalachian supply bypassing Ontario and potentially limit access to these supplies in the future.

5. Developers of new pipeline facilities typically require shippers to contract for a minimum term ranging from 15 to 20 years. Participation in the NEXUS project requires a minimum contract term of 15 years and is therefore at the lower end of this range. The last time Enbridge entered into similar contract terms for greenfield pipeline capacity was in 2000 for transportation capacity on Alliance Pipeline and Vector Pipeline.

6. Enbridge has entered into a Precedent Agreement ("PA") with the lead developers of NEXUS, DTE and Spectra Energy Transmission, LLC ("Spectra"),

[2] EB-2014-0289 – 2014 Natural Gas Market Review Final Report by Navigant Consulting Inc., dated December 22, 2014, page 37.

for 110,000 Dth per day of firm transportation capacity starting in 2017. Enbridge is one of the shippers underpinning the decision to proceed with the project. Enbridge was able to negotiate favourable terms into the PA which protect Enbridge and its ratepayers from being responsible for pre-service project costs unless appropriate authorizations are received. These favourable terms include the right to terminate the agreement without harm if certain conditions precedent are not achieved to the satisfaction of Enbridge. One such condition precedent is the requirement that Enbridge obtain pre-approval from the OEB for the recovery of the transportation costs associated with the NEXUS transportation capacity.

7. If the requested pre-approval is received from the OEB, and other conditions precedent are satisfied, then Enbridge plans to enter into a gas transportation contract with NEXUS that will reflect the terms of the PA (the "NEXUS contract").

8. In addition to the conditions precedent, the PA includes other favourable terms. Enbridge can elect to increase its contracted volume to 150,000 Dth per day (subject to pipeline capacity being available). If the election is made prior to the NEXUS commencement date, Enbridge will receive the benefit of "Most Favored Nations" status which provides for Enbridge to receive more favourable service provisions if those have already been granted to other anchor shippers. Enbridge has the option to make this election as late as 2020 to receive the preferred reservation rate granted to anchor shippers.

9. Enbridge evaluated the competitiveness of the NEXUS transportation capacity through a landed cost analysis. *Inter alia*, this analysis has been reviewed and supported as part of an independent Market Study conducted by Sussex Economic Advisors ("Sussex Study") which is included in Schedule 2. The reservation rate of $0.70 in United States currency ("US") per Dth will remain

fixed for the 15 year term of the NEXUS contract (subject to maximum adjustment of ±15%). The forecast cost of gas supply via the NEXUS pipeline is competitive with alternative pipeline projects or existing pipeline infrastructure that accesses the Dawn Hub.

10. Enbridge has analyzed the forecasting, construction, operational, commercial, and regulatory risks associated with NEXUS and has found them to be manageable. Enbridge finds that these risks are outweighed by the benefits to Enbridge's gas supply plan that are achieved by adding direct deliveries of Appalachian basin gas to the Dawn Hub. The risks associated with NEXUS have also been reviewed as part of the Sussex Study and found to be largely mitigated through the favourable terms negotiated into the PA, the strength of the lead developers, and current production expectations for the Utica and Marcellus supply basins.

11. This is an appropriate case for pre-approval under the Board's Guidelines. Enbridge's planned contract with NEXUS is an extraordinary contract (15 years in length) that is different from the Company's typical gas transportation arrangements. The costs associated with the NEXUS contract are competitive with other gas supply options, and the risks associated with the arrangement can be managed. The NEXUS contact supports new greenfield infrastructure that will provide for direct access to new natural gas supply from a developing supply basin directly to the Dawn Hub for the benefit of Enbridge's customers and natural gas markets in Ontario. Pre-approval of the cost consequences of the NEXUS contract will allow Enbridge to make the significant long-term commitment that is required to ensure the benefits of the project will be realized by Enbridge's customers.

Witnesses: J. LeBlanc
A. Welburn

12. The balance of this narrative evidence sets out the information required for pre-approval of the cost consequences of the PA in accordance with the Board's Guidelines. Appendix A contains a map of the NEXUS project which shows project routing and required facilities. Appendix B and Appendix C contain details on the landed cost analysis comparing the NEXUS path to possible alternatives. Appendix D contains the Restated PA and associated Exhibits/Attachments. Appendix E contains the First Amendment to Restated PA which includes changes to how the Capital Cost Tracking Adjustment will be performed and the elimination of references to the two phases of NEXUS as the project no longer includes multi-phases. Appendix F contains a blackline showing the amendments to the Restated PA for illustrative purposes and is not an operative agreement. This Appendix is provided to provide readers of the evidence with a clearer means to understand the complete and final terms of the PA. Appendix G contains the Statement of Negotiated Rates and the Rate Breakdown and Final Capital Cost Estimate is included in Appendix H.

13. The Sussex Study (found at Schedule 2) was commissioned by Enbridge and Union Gas to review the expectations for production from the Appalachian basin and specifically expectations regarding production from the Utica and Marcellus shale basins. It discusses the benefits of participation in NEXUS and concludes that it will increase the diversity, reliability, flexibility, and price stability of Enbridge's gas supply portfolio to the benefit of Enbridge's customers and the Ontario market. The Sussex Study also identifies the risks associated with NEXUS and discusses how they are mitigated.

B. ENBRIDGE'S GAS SUPPLY PLANNING APPROACH

14. Enbridge establishes its gas supply plan based on the principles of diversity, reliability, flexibility, and cost. The details of these principles are as follows:

- *Reliability* – Enbridge is the "supplier of last resort" and as a result supplies are sourced from established liquid hubs and transported to the markets served by Enbridge via firm transportation contracts in order to mitigate delivery interruption;
- *Diversity* – Mitigates reliability and cost risks by procuring supplies from multiple procurement points and transporting supplies to market and/or storage through several different transportation paths;
- *Flexibility* – Manages shifting demand requirements through differentiated supply procurement patterns and provides operational flexibility through service attributes and contract parameters; and
- *Landed Cost* – Balances gas supply costs with the other principles and ensures low cost natural gas supply for customers.

15. Further detail about Enbridge's gas supply planning approach is set out within Enbridge's 2014 – 2015 Gas Supply Memorandum which has been filed in the EB-2015-0122 proceeding, at Exhibit D, Tab 4, Schedule 1. A copy of that memorandum is included as Exhibit A, Tab 3, Schedule 3 to this evidence.

16. Expected shifts in natural gas flows resulting from North American shale gas production and new pipeline infrastructure have prompted Enbridge to further diversify its supply portfolio. The changes that have led to Enbridge's decision to further diversify its portfolio are described at length in the Sussex Study, and are also addressed in the Enbridge Gas Supply Memorandum. Failing to react to these changing dynamics would have maintained significant reliance on

traditional sources of supply from the Western Canadian Sedimentary Basin ("WCSB") and the Dawn Hub.

17. Enbridge has recently taken steps to diversify its portfolio, for example through transportation contracts which access additional supply from the Dawn Hub and Niagara. These contracts and market access were made possible through the GTA Project[3] and the Mainline Settlement Agreement[4] between TransCanada PipeLines Limited ("TransCanada"), Enbridge, Gaz Métro Limited Partnership, and Union Gas. Enbridge has also chosen not to renew contracts on the Alliance and Vector systems in order to provide the flexibility to access new supplies in light of expectations for new, cost effective and more proximate supply available to the markets served by Enbridge.

18. The incremental market access to the Dawn Hub has also resulted in a change to how direct purchase customers procure their natural gas supplies. The majority of Enbridge's direct purchase customers have elected to shift from existing services where supplies are delivered to Enbridge in the WCSB or directly in Enbridge's franchise area to a new, Board-approved, Dawn Transportation Service[5] where supplies are delivered to Enbridge at the Dawn Hub. Enbridge has adjusted its transportation portfolio in response to demand for the new Dawn Transportation Service.

19. Enbridge's contracting decisions, including its decision to bid into the NEXUS open season, recognize the changing dynamics in natural gas supply and pricing and the need to support the development of new facilities for Ontario markets to

[3] EB-2012-0451 Leave to Construct Application – GTA Project Application and Evidence filed December 21, 2012.
[4] RH-001-2014 TransCanada PipeLines Limited Application for Approval of Mainline 2013-2030 Settlement application filed December 2013, Attachment 1a.
[5] EB-2014-0323 Application filed 2014-10-27, Exhibit A, Tab 2, Schedule 1

receive assured natural gas supply from the Appalachian basin along new transportation paths.

C. MARCELLUS / UTICA GAS SUPPLY

20. As explained in the Sussex Study, and also discussed in the 2014 NGMR Final Report, the North American natural gas market has been deeply impacted by the "shale revolution" of abundant natural gas resources producible through horizontal drilling and hydraulic fracturing. This has increased the supply of natural gas in North America and has led to abundant and reasonably priced natural gas.

21. In recent years, the production and expected future production from the Marcellus and Utica producing areas in the Appalachian basin have grown immensely. Both basins have been serving demand not only in the U.S. Northeast, but also to the U.S. South, to the Gulf, to the Midwest, and to Eastern Canada.

22. As stated in the Sussex Study, the rise of the Marcellus and Utica shale basins as proximate and competitive sources of natural gas for the Ontario market presents new opportunities to source natural gas from these basins[6]. The production from these basins has increased each year, to the point where it is now at or beyond the production level from the WCSB.

23. The expectation is that production from the Marcellus and Utica basins will continue to increase. The Sussex Study describes the natural gas resource potential from these basins, and notes that the proved and possible resources

[6] Sussex Study page 3 and 33.

from these basins would meet the entire United States demand for natural gas for approximately 30 years[7].

24. To this point, the takeaway options from the Marcellus and Utica basins to provide supply to Ontario, and in particular to the Dawn Hub, have been limited. However, the fact that these are major supply sources that are close to the Ontario market makes this production an attractive option for Enbridge. Access to this supply will enhance Enbridge's gas supply planning principles of diversity, reliability, flexibility, and cost by displacing supplies transported on Vector to the Dawn Hub with supplies directly from the Marcellus and Utica basins.

25. Currently, Enbridge is planning to obtain some of its 2015/2016 gas supply (200,000 GJ/day) through receipts at Niagara. It is expected (though not required) that this gas supply will have been produced in the Marcellus basin. As described in the EB-2014-0276 evidence (Exhibit D1, Tab 2, Schedules 1 and 2), this service will begin in the 2015/2016 winter season, and will involve gas purchases at Niagara and delivery to Enbridge's CDA[8] via TransCanada's Mainline.

26. There is no current means for Enbridge to obtain direct supply of natural gas on a firm basis from the Marcellus and Utica basins to the Company's storage facilities at Dawn, nor to Enbridge's franchise area. This makes NEXUS a valuable new option for Enbridge to meet its gas supply requirements.

[7] Sussex Study page 28.
[8] Receipts from Niagara will be delivered to Enbridge Parkway CDA.

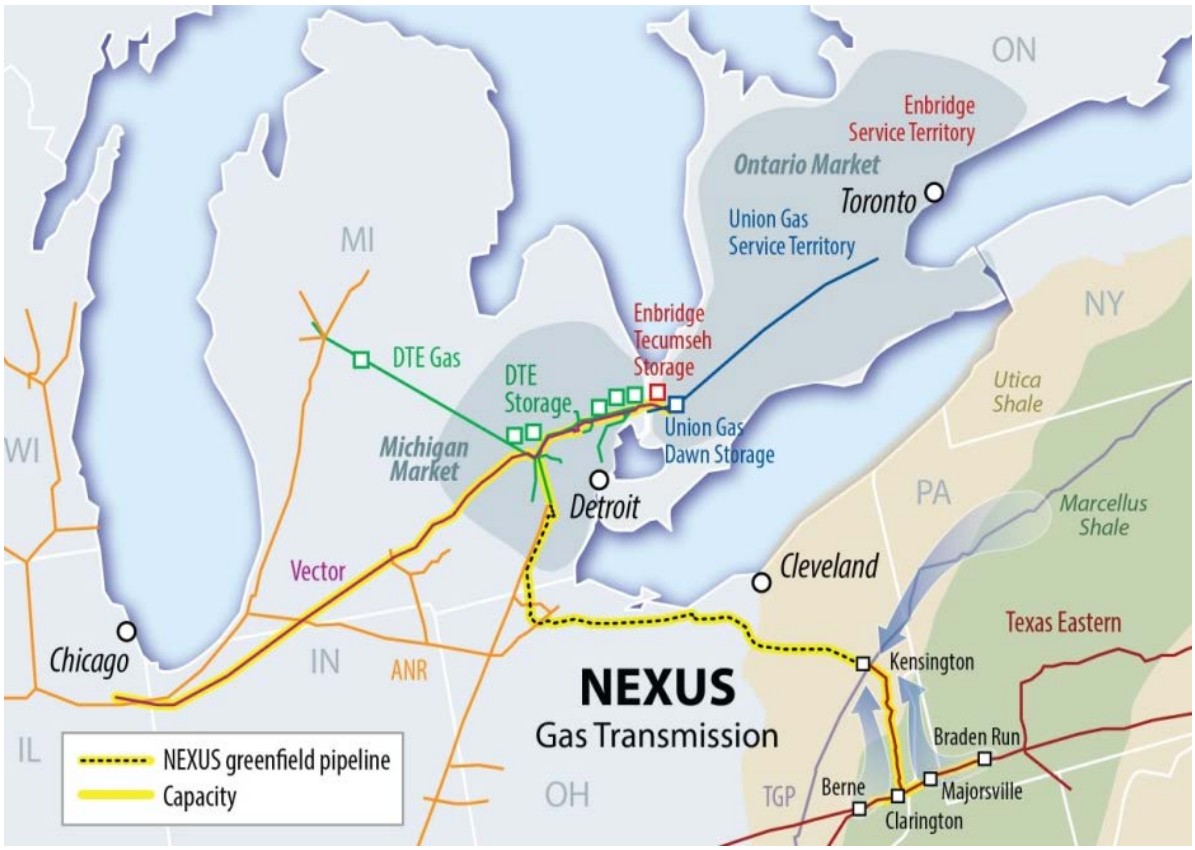
D. THE NEXUS PROJECT

27. NEXUS is a greenfield pipeline project that will transport growing supplies of natural gas from the Appalachian basin, including Marcellus and Utica shale production, to delivery points in Ohio, Michigan, Chicago and the Dawn Hub (including Enbridge's storage facility) in Ontario, Canada. The service commencement date is expected to be November 1, 2017.

28. The new greenfield pipeline will be constructed, owned and operated by NEXUS Gas Transmission, LLC and NEXUS Gas Transmission Canada[9] and will extend from Kensington, Ohio to the DTE gas transportation system west of Detroit in Willow Run, Michigan. Approximately 250 miles of 36-inch[10] diameter natural gas transmission mainline pipeline and associated compression facilities will be constructed in Ohio and Michigan and approximately 1.4 miles of new pipeline will be constructed in order to interconnect with the Texas Eastern and Tennessee Gas Pipeline systems. This smaller interconnect build is contemplated in order to provide additional upstream receipt point access to existing and prospective shippers.

29. A map of the NEXUS pipeline is set out below, and a more detailed map is found at Appendix A. Further detail about the NEXUS pipeline project is set out in the Sussex Study.

[9] NEXUS PA page 3.
[10] NEXUS Gas Transmission Project, Docket No. PF15-10-000 Updated Stakeholder List and Project Update to the Federal Energy Regulatory Commission dated March 20, 2015 indicated that the objectives of NEXUS can be met using a 36-inch diameter pipe for the greenfield portion of NEXUS.



30. As proposed, NEXUS includes both greenfield pipeline construction and, to minimize environmental disruption and optimize project efficiencies, the contracting of firm capacity on existing and expanded pipeline systems. Contracting of firm capacity on existing and expanded pipeline systems will entail the expansion of the Texas Eastern Transmission, LP system in Ohio where NEXUS initiates, the likely expansion of the DTE gas transportation system in eastern Michigan and extending to the U.S./Canada border and the likely expansion of Vector in southern and eastern Michigan, northern Indiana, eastern Illinois and western Ontario.

Witnesses: J. LeBlanc
A. Welburn

31. The NEXUS pipeline will offer direct access for shippers choosing to move natural gas to the Dawn Hub from the Marcellus and Utica basins. This will be effected by contracting on NEXUS for service to eastern Michigan (Willow Run), and then transporting gas from that point on other existing pipelines to the Dawn Hub. This additional transportation may be obtained through DTE and Enbridge's affiliate, Vector. Some reinforcement of those pipelines may be required, but it is not expected that any greenfield construction will be needed. This makes efficient use of existing infrastructure.

32. Lead developers of the project are DTE and Spectra, two of the leading energy service and infrastructure companies in North America. In September 2012, Enbridge Inc. executed a Memorandum of Understanding ("MOU") with DTE and Spectra to jointly develop NEXUS. The MOU has expired. Enbridge Inc., however, remains in discussions with Spectra and DTE regarding the terms of its potential participation in the project.

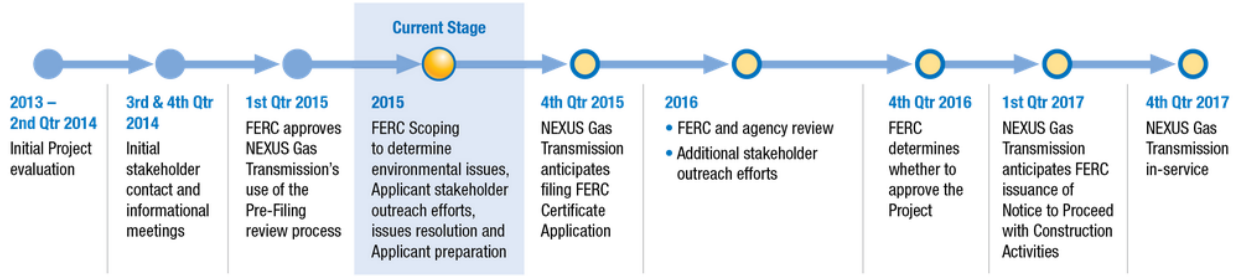
33. As with any major greenfield pipeline project, the NEXUS pipeline will not proceed without sufficient long-term support and commitment from major shippers. These shippers may be producers or consumers (such as utilities). To that end, NEXUS conducted open season processes, starting in late 2012, which resulted in a determination that there was sufficient market demand and commitment to support the project. Interested shippers have indicated that they are prepared to make the necessary long-term (15 year) commitment to obtain transportation service from the NEXUS pipeline.

34. On January 9, 2015 the Director of the Office of Energy Projects at the Federal Energy Regulatory Commission ("FERC") approved a request by NEXUS Gas Transmission, LLC to utilize the FERC's pre-filing process for the NEXUS project.

This process allows for early public consultation and involvement in evaluating the proposed facilities set prior to submitting a formal facilities application to the FERC. NEXUS has been assigned docket number PF15-10-000. NEXUS expects to file a formal FERC certificate application in the 4th quarter of 2015. Construction is expected to begin in the 1st quarter of 2017 and the in-service date of the NEXUS pipeline is expected to be during the 4th quarter of 2017, specifically November 1, 2017.

35. A detailed timeline of the NEXUS development schedule is provided below:

NEXUS Development Schedule[11]



E. ENBRIDGE'S AGREEMENT TO ACQUIRE CAPACITY ON NEXUS

36. From the time that the NEXUS project was announced, it has been a very interesting gas supply opportunity to Enbridge. This greenfield pipeline would provide direct firm transportation access to Marcellus and Utica supply that could be delivered to Enbridge's storage facilities at Dawn, and to the Dawn Hub. This would enhance Enbridge's gas supply planning principles (reliability, diversity, flexibility and cost). The benefits of the NEXUS capacity to Enbridge and its

[11] NEXUS Project Timeline from http://www.nexusgastransmission.com/timeline/ dated March 4, 2015.

customers are set out below, under the heading "*Benefits of the NEXUS Project for Enbridge*".

37. Enbridge participated in the initial open season for firm natural gas transportation capacity on the NEXUS Gas Transmission Project. This open season was held from October 15, 2012 to November 30, 2012. At the conclusion of the open season Enbridge was awarded long term firm transportation capacity on NEXUS. At the time of Enbridge's bid into the open season, NEXUS offered firm transportation service commencing November 2016 or earlier, for receipt points in Eastern Ohio to delivery points in the United States and Ontario for a minimum term of 15 years. Enbridge's bid was non-binding.

38. Pursuant to terms of the open season, any party awarded capacity committed to entering into discussions potentially leading to a binding PA. The PA describes the rights and obligations of the shipper and the lead developers. Enbridge's participation, amongst others, at the outset of the project provided a significant portion of the contractual commitments required to move ahead with the project.

39. NEXUS held two supplemental open seasons which expanded the project to its current scope and size. In its first supplemental open season for firm service NEXUS noted:

> With the commitments to date from a significant number of gas and electric utilities and Appalachian producers, NEXUS has sufficient commitments to advance development of the project[12]

40. The subsequent supplemental open season notice for firm service from NEXUS indicated:

[12] NEXUS Gas Transmission Project, Supplemental Open Season Notice for Firm Service, July 23, 2014 – August 21, 2014.

> NEXUS previously conducted open seasons which resulted in contractual commitments, from local distribution companies and producers, for the majority of the project design capacity. With this necessary market support and the Federal Energy Regulatory Commission's January 2015 approval of our filing request, the project will move forward.[13]

41. At the time of Enbridge's participation in the initial NEXUS open season, it was not certain that NEXUS would advance. Clearly, however, commitments from utilities like Enbridge and others have provided part of the market support necessary for the project lead developers to proceed with NEXUS. Stated differently, without support from major shippers such as Enbridge, the new infrastructure build requiring the construction of approximately 250 miles of greenfield pipeline and associated compression facilities that directly feeds existing transportation to the Dawn Hub would not proceed.

42. Thus, Enbridge's participation in the project supports the development of new natural gas infrastructure that benefits its customers and the broader Ontario market. NEXUS provides direct access to new natural gas supply from the Utica and Marcellus shale formations. These supplies are not currently a component of Enbridge's supply portfolio in that Enbridge does not procure Utica or Marcellus gas from directly within the supply basin. Participation in the project will provide the Enbridge supply portfolio with direct access to new sources of supply.

43. As noted above, after Enbridge's open season bid was accepted, it was then necessary to negotiate a PA. Enbridge insisted that the PA be subject to OEB pre-approval as to cost consequences. Enbridge considered this appropriate because of the different nature of the NEXUS contract (15 years in length to support a greenfield pipeline on a new transportation path) as compared to other

[13] NEXUS Gas Transmission Project, Supplemental Open Season Notice for Firm Service, January 14, 2015-February 12, 2015.

transportation contracts. Over the course of negotiation, it has been clear that the existence of a pre-approval condition precedent has assisted Enbridge in convincing the lead developers to provide fair and balanced terms so that the resulting PA represents a reasonable arrangement for the benefit of Enbridge's gas supply operations and ratepayers.

44. The parties entered into the initial PA on June 5, 2014. The initial PA contemplated two phases for the NEXUS project. The first phase was expected to transport 40,000 Dth per day from eastern Michigan to the Dawn Hub, effective November 1, 2015 for up to 3 years. The second phase was expected to transport 150,000 Dth per day from Kensington, Ohio to the Dawn Hub for 15 years, effective November 1, 2017. As part of the process to attain necessary Company approval, Enbridge negotiated a Restated PA dated December 17, 2014 that eliminated Enbridge's participation in the first phase and reduced the transportation volume of the second phase to 110,000 Dth per day. The Restated PA includes an option to increase capacity. Subsequent negotiations with the lead developers resulted in additional amendments to the Restated PA that are set out in the First Amendment to Restated PA, dated June 3, 2015. The amendments to the Restated PA include the removal of unnecessary references such as the two phases of the project since NEXUS is no longer a multi-phase project, and clarification on the Capital Cost Tracking Adjustment.

45. It is the final version of the PA that is included as Appendices D and E. There are several Exhibits to the executed PA: A Form of Firm Transportation Agreement that will be executed once each party to the PA fulfills its obligations; detail on a Capital Cost Tracking Adjustment (which provides details on the manner in which the actual capital costs for the project are to be reflected in final reservation rates); and a form of Guaranty and a form of Letter of Credit.

Witnesses: J. LeBlanc
A. Welburn

46. The transportation service awarded to Enbridge pursuant to its open season bid and subsequent negotiation and execution of the PA is as follows:

a) 110,000 Dth per day of firm transportation service from a point(s) near Kensington, Ohio to the point of interconnection with Vector's Milford Junction meter station near Highland, Michigan, commencing on November 1, 2017 for a term of 15 years; and

b) The option to increase contracted capacity to as much as 150,000 Dth per day, subject to certain conditions, on or before November 1, 2020.

47. Parameters for the NEXUS transportation agreement are provided below:

- *Transportation Provider*: NEXUS Gas Transmission
- *Service*: Firm Transportation
- *Primary Term*: 15 Years - November 1, 2017 to October 31, 2032
- *Volume:*
  i. 110,000 Dth per day;
  ii. Option to increase up to 150,000 Dth/d on or before November 1, 2020 subject to capacity availability.
- *Receipt Point*: Kensington, Ohio
- *Delivery Point*: Vector Pipeline, Milford Junction, near Highland, Michigan
- *Reservation Rate* (Estimated):
  i. $0.700 US per Dth per day;
  ii. If option to increase capacity is fully exercised then the reservation rate decreases to $0.685 US per Dth per day.
  Note: Final reservation rate subject to a ±15% capital cost tracking adjustment which is applicable to the greenfield portion of the toll.
  iii. If option to increase capacity is fully exercised prior to the in-service date then Enbridge may choose rate provisions (including the reservation rate) negotiated by other shippers ("Most Favored Nation" clause).
- *Fuel Ratio (Estimated)*: 1.6% to 2.6%; and
- *Renewal Rights*: Right of First Refusal ("ROFR").

48. The PA that Enbridge signed contains numerous protections and benefits for Enbridge and its ratepayers. Among these are the following:

a) *Requirement for review of supply* – there is a condition precedent included (section 7(c)(iii)) which requires Enbridge to complete a review of regional supply to support the NEXUS contract no later than 90 days following receipt of the Estimated Commencement Date.

b) *Requirement for OEB approval* – there is a condition precedent included (section 7(c)(v)) which requires Enbridge to obtain pre-approval of the cost consequences of the NEXUS contract from the OEB under the Guidelines, no later than October 1, 2015. Section 7(d) of the PA allows Enbridge to temporarily waive satisfaction of this condition precedent for up to 90 days.

c) *A 15 year term* – other greenfield projects require up to a 20 year commitment.

d) *The right to increase contracted volumes* – Enbridge is permitted to give notice that it wishes to increase its contract from 110,000 to 150,000 Dth per day. This provides flexibility to Enbridge (and would reduce unit costs because the cost for the increased volume is lower, and is protected by a "Most Favoured Nations" clause). More detail about the advantages of this option is described below, in the "Benefits" section of this evidence.

e) *The right to access secondary receipt and delivery points* – as described below in the "Benefits" section, this provides flexibility to Enbridge.

f) *Limits on the reservation rate to be charged* - the reservation rate is set based on the estimate of capital costs that have been provided by the lead developers and accepted by Enbridge. The actual capital costs will be tracked and the final reservation rate will be set based on the actual costs. The protection is that there is a cap of a 15% increase on the reservation

rate, regardless of the amount of increase in capital costs. Further, if the capital costs decrease below the estimate, then the reservation rate will be reduced by up to 15%.

g) *A termination right in the event of delay* – if the NEXUS pipeline is not in service within 1 year of the Estimated Commencement Date, which may be as late as November 1, 2018, then Enbridge can terminate the PA without any cost consequences.

h) *Right of First Refusal* – Enbridge's rights to renew transportation capacity on NEXUS at the end of the contract term.

F. LANDED COST ANALYSIS

49. In order to confirm whether the NEXUS project is cost-effective for Enbridge, the Company has undertaken a review of the forecast costs associated with Marcellus or Utica gas supply via NEXUS, as compared to other supply options.

50. Annual demand charges based on current reservation rate, or toll, estimates provided by NEXUS will be approximately $28.1 million US. Should the option to increase capacity be exercised, the annual demand charges for NEXUS capacity could increase to a maximum of approximately $37.5 million US. Final reservation rates are subject to a ±15% capital cost tracking adjustment which is applicable to capital costs associated with the construction of new facilities, or the greenfield, portion of the reservation rate. The greenfield portion of the $0.700 US per Dth per day reservation rate is $0.650 US per Dth per day.

51. Total cost for NEXUS capacity over the term of the contract is approximately $421.6 million US. If the option to increase capacity is exercised, the total cost for NEXUS capacity over the term of the contract, assuming the capacity option

is exercised for commencement November 1, 2017, would be approximately $562.6 million US.

52. An assessment of the landed costs of the NEXUS path versus possible alternative transportation paths was completed prior to entering into the original PA with NEXUS. The analysis was updated in November 2014 to obtain the necessary Company approvals to proceed with the NEXUS Agreement. The landed cost analysis was updated again in May 2015 for purposes of this Application.

53. The landed cost analyses show, on a per unit basis, the total cost of landing gas at the Dawn Hub for several transportation paths. Costs included in the analysis are:

(a) Commodity costs;
(b) Transportation Tolls;
(c) Fuel charges;
(d) Other charges (FERC Annual Charge Adjustment ("ACA") and / or National Energy Board ("NEB") abandonment surcharge ("AS") as applicable); and
(e) Foreign Exchange (as payments for certain paths are made in US).

54. The landed cost analyses are conducted using forecasted commodity prices for various supply points, estimated or currently approved transportation tolls as the case may be, estimated or forecast fuel charges as the case may be, estimated or currently approved other charges and forecast foreign exchange rates. Transportation tolls are assumed constant over the 15 year term of the analysis as are fuel ratios and other charges.

55. The recent landed cost analyses include four potential scenarios for the NEXUS path. The NEXUS base case assumes there are no adjustments to the reservation rate. There are two variants of the NEXUS base case. The first variant assumes the greenfield portion of the reservation rate is increased by 15% as a result of higher than expected final capital costs. The second variant assumes the greenfield portion of the reservation rate is decreased by 15% as a result of lower than expected final capital costs. The last scenario assumes that Enbridge increases its contracted volume to 150,000 Dth per day prior to November 1, 2017 and receives a reservation rate decrease of $0.015 per Dth per day.

56. The recent landed cost analyses also include the Rover Pipeline LLC pipeline project ("Rover"). The Rover project is a greenfield pipeline that is proposed to transport gas produced in the Marcellus and Utica basins to Ohio, eastern Michigan, and the Dawn Hub. The majority of the Rover pipeline will be utilized by customers on the U.S. segments of the pipeline, including multiple take-off points in Michigan, West Virginia and Ohio.[14] The cost associated with the NEXUS path is comparable to the Rover path.

57. Although the cost associated with Rover is comparable to NEXUS, Enbridge elected not to participate in the Rover open season. When the open season for Rover was announced in June 2014, Enbridge had already concluded initial negotiations with NEXUS and had executed the original PA. The PA included favourable condition precedent terms that Enbridge was able negotiate as a result of its ability to make significant long-term volumetric commitments that would underpin the development of the NEXUS pipeline. These terms were

[14] http://www.roverpipelinefacts.com/about/overview.html

critical for Enbridge to make such long-term commitments to the project. The Rover open season announcement indicated that it had signed long-term agreements with multiple shippers and had received internal approval to proceed with the project. Given that Rover had already received the long-term commitments required to proceed with the project, the ability for Enbridge to negotiate similar conditions precedent as with NEXUS was a risk.

58. Supporting Rover over NEXUS would increase the risk that NEXUS would not be constructed. By maintaining support for NEXUS, the likelihood that both projects would proceed would be higher and the Dawn Hub would benefit more from being linked to the Appalachian basin through both projects rather than just one.

59. Another consideration for not participating in the Rover open season was the minimum term requirement of 20 years to achieve the status of Negotiated Rate Shipper described as part of the open season document. Contracting for a term less than 20 years would subject a shipper to the recourse rate which is based on, *inter alia*, total project costs. The PA negotiated with NEXUS limits the risk of recourse rate adjustments to ±15% with a term commitment of only 15 years.

60. A summary of the November 2014 landed cost analysis is found below in Table 1 and additional information can be found in Appendix B. The Average Landed Cost represents an average cost over the 15 timeframe of the NEXUS contact (from 2017 to 2032).

Table 1: November 2014 Landed Cost Analysis Summary

Path	Average Landed Cost $CDN per GJ
Dawn	4.93
Vector	5.21
Rover	5.30
TransCanada from Niagara	5.39
NEXUS (Base Case -15%)	5.43
NEXUS (Anchor)	5.51
NEXUS (Base Case)	5.53
NEXUS (Base Case +15%)	5.64
ANR East	5.73
Alliance	5.84
TransCanada from Empress	6.24

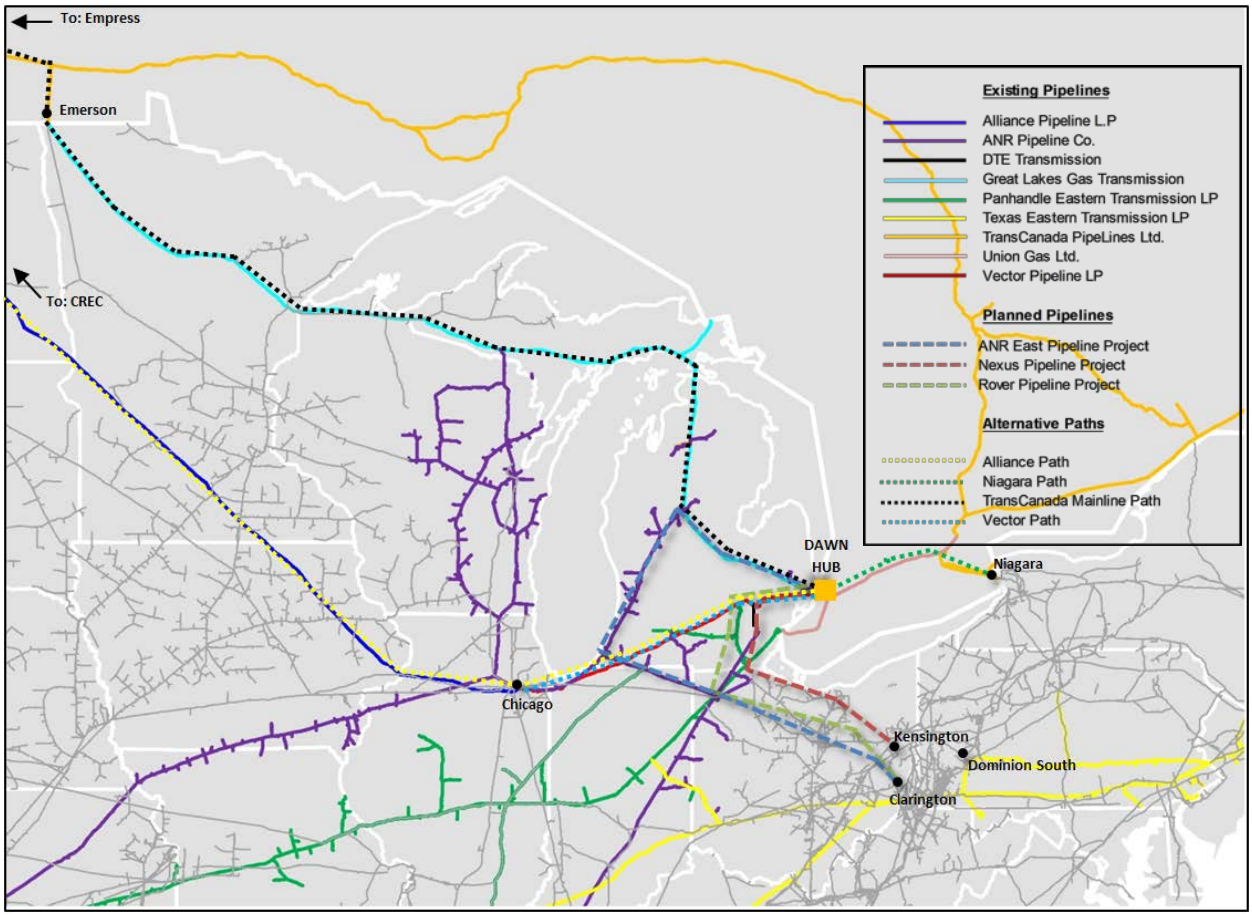
61. The May 2015 landed cost analysis is summarized below in Table 2 and additional information can be found in Appendix C.

Table 2: May 2015 Landed Cost Analysis Summary

Path	Average Landed Cost $CDN per GJ
Dawn	4.62
Vector	4.88
TransCanada from Niagara	4.52
NEXUS (Base Case -15%)	5.04
Rover	5.06
NEXUS (Anchor)	5.14
NEXUS (Base Case)	5.16
NEXUS (Base Case +15%)	5.27
ANR East	5.52
Alliance	5.70
TransCanada from Empress	6.19

/u

62. A map illustrating the pipeline paths that were analysed as part of the landed cost analysis is included in the figure below.



63. The fifteen year average landed cost of NEXUS supply under the November 2014 analysis is projected to be $5.53 Canadian currency ("CDN") per GJ and under the more recent May 2015 analysis is projected to be $5.16 CDN per GJ. The decrease in landed cost can be primarily attributed to a broad decline in expected natural gas prices and change in transportation costs related to Vector transportation. Based on the assumptions contained in both landed cost analyses, the NEXUS path is projected to provide economically competitive supply relative to the other paths to which it was compared.

Witnesses: J. LeBlanc
A. Welburn

64. The Dawn, Vector, and Niagara paths are projected to provide lower landed cost options. However, these paths do not provide the additional benefits of the NEXUS path as discussed below.

G. BENEFITS OF THE NEXUS PROJECT FOR ENBRIDGE

65. As explained, Enbridge establishes its gas supply plan based on the principles of diversity, reliability, flexibility, and cost. The NEXUS contract offers benefits in each of these areas. Direct access to Marcellus and Utica basin gas, with connection to the Dawn Hub (including Enbridge's storage facilities at Dawn) will diversify Enbridge's gas supply portfolio. This will mitigate price differences between different supply points. The new transportation path, including pipelines interconnected to NEXUS, will provide flexibility and improve reliability. The option to increase NEXUS capacity further increases flexibility for Enbridge's future gas supply planning. Through the NEXUS project, liquidity at the Dawn Hub will be increased. Each of these items is discussed below.

66. NEXUS will diversify Enbridge's gas supply portfolio through direct access to the Utica and Marcellus shale supply basins. These two basins are expected to "account for over half of the incremental North America gas production through 2035".[15] Utica and Marcellus natural gas production forecasts are provided by several energy market analysts and government energy agencies. The Sussex Study has reviewed a number of these forecasts. These projections indicate that production levels will be at or near 20 PJ per day by 2020[16] and are expected to continue increasing well beyond the term of the NEXUS Agreement. Access to such prolific supply will enable Enbridge to benefit from market competition within

[15] EB-2014-0289, 2014 Natural Gas Market Review, Future Trends: Assessing Ontario Natural Gas Market Requirements Through 2020 presentation dated November 25, 2014 by ICF International, slide 4.
[16] Sussex Study pages 30 and 31.

these basins and provide the option to procure supply directly from producers at the Kensington processing plant in Ohio.

67. Through NEXUS, Enbridge will benefit from having two different paths to access Appalachian basin gas. The Company currently plans to procure gas supply from the Marcellus basin at Niagara, for transportation into the CDA. This will be done through purchases at that delivery point, and will not be underpinned by firm transportation held by Enbridge into the supply basin. NEXUS offers another option, which will lead to Appalachian basin natural gas being delivered directly from the Utica and Marcellus basins to the Dawn Hub. In the result, the NEXUS contract will promote flexibility and security of supply.

68. The security of supply enhancements from NEXUS are not only realized through the abundant supply forecasts for Utica and Marcellus. The supplemental open season initiated by NEXUS on January 14, 2015 provided access to additional upstream receipt points such as Clarington, Ohio. The additional upstream receipt points will be facilitated by NEXUS through contracted capacity on Texas Eastern Transmission which connects with other basins such as the Gulf Coast through Texas Eastern Transmission LP and northwestern Colorado and Wyoming through the Rockies Express Pipeline LLC ("REX"). Therefore, capacity on NEXUS will expand the supply options to which Enbridge's storage facilities at Dawn will be connected. Access to alternative supply basins through these pipelines ensures security of supply for Enbridge and its customers.

69. NEXUS also increases the benefits of market competition for Enbridge's gas supplies at the Dawn Hub. The NEXUS supplies from the Utica and Marcellus basins will be transported along the greenfield pipeline portion of the NEXUS project to Vector's Milford Junction meter station near Highland, Michigan and

into the Dawn Hub. The Utica and Marcellus supplies will offset a portion of the Chicago supplies that Enbridge currently transports on Vector thereby facilitating competition between the supply hubs while mitigating any localized price volatility that may occur at either of the supply points.

70. NEXUS increases the flexibility of contract terms within Enbridge's gas supply portfolio. The PA provides Enbridge with the opportunity to increase the contracted capacity from 110,000 Dth per day up to 150,000 Dth per day on or before November 1, 2020 subject to existing infrastructure being available. This provides Enbridge with the flexibility to observe how the North American natural gas marketplace has evolved before determining if Enbridge's gas supply portfolio would benefit from incremental Utica and Marcellus supply or supply from other receipt points on NEXUS.

71. Finally, the contracting for NEXUS capacity to deliver Appalachian basin natural gas to the Dawn Hub will increase liquidity at that point. As discussed in the Sussex Study, this will benefit all parties that rely on the Dawn Hub for natural gas supply.[17]

72. Supplies from the Dawn Hub will make up a significantly larger portion of Enbridge's supply portfolio in future years, largely due to its proximity and cost competitiveness. This is discussed in the next section of this evidence (and shown in Tables 3 and 4, below). The shift in demand for supplies at the Dawn Hub is not unique to Enbridge. Incremental market access to the Dawn Hub has enabled similar shifts in markets across Ontario, Quebec, and the northeast region of the United States.

[17] Sussex Study page 40.

73. The increase in demand for supply from the Dawn Hub could impact its liquidity and cost competitiveness absent investment in supporting infrastructure. NEXUS, in conjunction with other projects such as Rover, will diversify the supply basins to which the Dawn Hub has access. However, major consumers such as Enbridge must make sufficient commitments to the new infrastructure to ensure that the infrastructure will serve the Dawn Hub. Absent such commitments, the pipeline developers may opt to focus on other markets closer to the Marcellus/Utica supply basins, or will award capacity to shippers who will make use of interconnecting pipelines to deliver gas to markets other than Ontario. The commitment being made by Enbridge to the NEXUS pipeline helps ensure that significant Appalachian gas supplies will be delivered to the Dawn Hub, for use by Enbridge's customers.

74. The principles behind the benefits of NEXUS are very similar to those explained in the leave to construct applications filed by Enbridge and Union Gas Limited for the GTA Project (EB-2012-0451), the Parkway West Project (EB-2012-0433), and the Brantford-Kirkwall/Parkway D Project (EB-2013-0074) (collectively the "Parkway/GTA Projects"). Although the Parkway/GTA Projects were filed separately, their interdependencies resulted in the Board combining the proceedings and hearing them together. The Board noted in its decision related to these applications that:

> Ontario gas consumers will obtain additional certainty through this project concerning their access to alternative supply sources. The project will provide access to more supply and to more sources of supply while retaining market access to existing WCSB supplies. That is a clear benefit to Ontario consumers, and is a positive element in relation to the economic viability of the project. Supply diversity enhances security and has the tendency to lower gas prices from what they would otherwise be if the market continued to rely on fewer sources of supply.[18]

[18] EB-2012-0433, EB-2013-0074, EB-2012-0451 Decision and Order dated January 30, 2014, page 29.

75. Further in the same Board decision it was noted that:

> Even if the gas cost savings do not materialize, the project is justified on the grounds of enhanced security and diversity of gas supply, and the contribution that the project will make to enhance a competitive natural gas market in Ontario through increased liquidity at Dawn.[19]

H. FIT WITHIN NATURAL GAS SUPPLY PORTFOLIO

76. Enbridge's gas supply acquisition is underpinned by a variety of upstream transportation arrangements. These arrangements are differentiated by procurement point, transportation service provider, transportation path, contracted capacity, term and other service attributes.

77. The NEXUS capacity will fit well with Enbridge's planned supply portfolio, and will provide the diversity, reliability and flexibility benefits described above. Set out below is a discussion of the Company's planned gas supply portfolio, including the NEXUS capacity.

78. Table 3 provides a forecast of the expected gas supply acquisition for Enbridge absent NEXUS. The forecast includes supplies received from direct purchase customers. The annual volumes are based on a gas year that starts on November 1 of the previous year. The forecasts were completed at a point in time and, like any forecasting exercise, contain certain assumptions related to future events. Given the rapidly changing and dynamic nature of the North American natural gas market, actual supply acquisitions may not be exactly as shown.

[19] EB-2012-0433, EB-2013-0074, EB-2012-0451 Decision and Order dated January 30, 2014, page 30.

Table 3: Enbridge Gas Supply Acquisition Absent NEXUS (PJ)

Source	2017	2018	2019	2020	2021	2022	…	2032
WCSB	132.4	96.7	96.7	97.0	96.7	96.7		97.0
Chicago	67.4	67.4	67.4	67.6	67.4	67.4		67.6
Niagara	73.0	73.0	73.0	73.2	73.0	73.0		73.2
Dawn	149.4	187.5	189.4	191.5	192.6	195.4		217.9
Franchise	11.0	11.0	11.0	11.0	11.0	11.0		11.0
Total	433.2	435.6	437.5	440.3	440.7	443.5		466.7

79. Under current contracting arrangements, reliance on Dawn Hub supplies will increase in 2017. The increase is primarily due to decisions to contract for incremental transportation capacity from the Dawn Hub that has been made available through the GTA Project and the TransCanada Mainline Settlement Agreement, and decisions not to renew Enbridge's Alliance contracts and a portion of Enbridge's Vector contracts. These decisions were made, in part, to provide the flexibility to access new supply from basins proximate to the markets served by Enbridge. Subsequent increases in Dawn Hub supply acquisitions are forecasted to account for future increases in demand.

80. Absent NEXUS, Enbridge's only natural gas supply from the Appalachian basin will be procured at Niagara. This supply source is expected to make up approximately 15% of the total gas supply portfolio over the duration of the NEXUS contract.

81. Table 4 is similar to Table 3, except that the forecast of Enbridge's expected gas supply acquisition assumes NEXUS is incorporated into Enbridge's gas supply plan.

Witnesses: J. LeBlanc
A. Welburn

Table 4: Enbridge Gas Supply Acquisition including NEXUS (PJ)

Source	2017	2018	2019	2020	2021	2022	…	2032
WCSB	132.4	96.7	96.7	97.0	96.7	96.7		97.0
Chicago	67.4	25.0	25.0	25.1	25.0	25.0		25.1
Niagara	73.0	73.0	73.0	73.2	73.0	73.0		73.2
Dawn	149.4	187.5	189.4	191.5	192.6	195.4		217.9
NEXUS		42.4	42.4	42.5	42.4	42.4		42.5
Franchise	11.0	11.0	11.0	11.0	11.0	11.0		11.0
Total	433.2	435.6	437.5	440.3	440.7	443.5		466.7

82. The acquisition of gas supply from NEXUS equates to approximately 9% of the portfolio from 2018 to the end of the contract term and will be offset by an equivalent decrease in supplies procured from the Chicago hub from 15% to 6% over the same period.

83. This shift in procurement will diversify the supply being transported to the Dawn Hub along Vector. To facilitate this change, Enbridge expects to restructure its existing Vector capacity that transports 175,000 Dth per day between Joliet, Illinois and Dawn, Ontario. The restructuring will include the segmentation of 110,000 Dth per day by changing the receipt point to the Milford Junction connection with NEXUS. This shorter Vector path will be tolled at a rate of $0.16 US per Dth with a contract term that coincides with Enbridge's NEXUS capacity. The remaining 65,000 Dth per day on Vector will flow between Joliet, Illinois and Dawn, Ontario at a rate of $0.18 US per Dth for a 3 year term that can be renewed for subsequent 3 year increments with 1 year notice.

Witnesses: J. LeBlanc
A. Welburn

84. Should Enbridge elect to increase its transportation capacity on NEXUS, Enbridge will have the option to further segment up to 40,000 Dth per day of the remaining 65,000 Dth per day of Vector capacity by changing the receipt point to the Milford Junction connection with NEXUS at a rate of $0.16 US per Dth with a contract term that will align with the expiry of the NEXUS capacity.

85. The addition of NEXUS to Enbridge's gas supply portfolio will increase the supply being procured from the Appalachian basin to approximately 26% of the total portfolio over the term of the NEXUS contract. NEXUS provides the additional benefit of diversifying the access that Enbridge has to the Appalachian basin from both a supply and transportation path perspective. The NEXUS supplies will be predominately procured from the Utica basin, will contribute 37% of the total Appalachian basin supply and will be transported to the Dawn Hub via NEXUS and Vector. The remaining 63% will be procured at Niagara and likely produced in the Marcellus basin.

86. Enbridge does not intend to completely sever connectivity with WCSB supplies. Enbridge expects WCSB supply to remain an integral part of its supply portfolio for the foreseeable future. NEXUS will not impact the reliance on WCSB supplies which for illustrative purposes was held at approximately 22% of the total portfolio over the duration of the NEXUS contract. After 2020, commitments to the TransCanada Mainline Settlement Agreement will have been fulfilled at which point Enbridge may consider further changes to its gas supply portfolio that will impact its reliance on WCSB supplies. This could include exercising the option to increase NEXUS supply. However, no decisions have been made at this time.

87. While further diversification of the Enbridge supply portfolio made possible through NEXUS will reduce reliance on Chicago supplies, it will increase reliance on and direct access to a robust and growing supply basin. Risks and mitigants related to costs, project development and basin performance, amongst others, are described in a subsequent section below.

88. Enbridge expects to flow the NEXUS contract at a 100% load factor. As such, supply from NEXUS is expected to be baseload supply. Flexibility will come from planned purchases at the Dawn Hub and potentially seasonal supplies from other procurement points. Although the 15 year term for NEXUS will erode some of the transportation flexibility in Enbridge's gas supply portfolio, the direct access to supplies from the Appalachian basin will improve diversity, reliability, supply flexibility, and cost effectiveness of Enbridge's gas supply plan.

I. MITIGATION OF RISKS ASSOCIATED WITH NEXUS CONTRACT

89. Enbridge has identified the following risks associated with the NEXUS contract and project:

(1) Forecasting Risks
  (a) Demand
  (b) Prices/Landed Costs
  (c) Performance of Basin
  (d) Other

(2) Construction and Operational Risks
  (a) Cost escalation
  (b) Delays
  (c) Timing issues for new construction
  (d) Gas interchangeability and quality
  (e) Other

(3) Commercial Risks
  (a) Competitiveness of Service Provider
  (b) Creditworthiness of Service Provider
  (c) Other

(4) Regulatory Risks
  (a) Changes in laws or regulations
  (b) Other

90. Each of the risks identified above is discussed below, along with information about plans and/or actions taken by Enbridge to minimize each risk.

Forecasting Risks

91. There are forecasting risks and uncertainties associated with any long-term contract. In this case, however, these risks are managed by the fact that Enbridge will have access to abundant and competitively-priced natural gas from the Marcellus and Utica basins.

92. In any given year Enbridge must arrange for a level of transportation capacity to meet projected peak day demand. NEXUS capacity will provide added diversity to the transportation component of Enbridge's gas supply portfolio.

93. Enbridge expects to flow the NEXUS transportation capacity at 100% load factor. Flexibility in procurement will be primarily provided by procurement at the Dawn Hub. If projected demand does not materialize, Enbridge will have the flexibility to back off Dawn Hub purchases. If demand exceeds forecast, Enbridge has the option to procure gas seasonally at other supply points including Kensington (i.e. the NEXUS receipt point), the Dawn Hub, Niagara, Chicago and the WCSB.

94. Further, Enbridge will retain flexibility in its transportation capacity term structure such that the Company can opt not to renew other transportation contracts in the event that demand for natural gas declines. The NEXUS contract also provides the option to increase capacity should it be determined that this option is required to either meet increased demand or to displace further procurement at other hubs and/or basins.

95. The landed costs analysis presented in this evidence relies on a forecast of commodity prices which can and will vary from expectations. Natural gas prices can be volatile at times and are largely a function of market demand and supply availability. The winter of 2013/2014 is a testament to this volatility as market demand placed significant pressure on available supply. However, prices at points such as Henry Hub and AECO-C, despite the cold weather, were significantly less volatile than pricing at the Dawn Hub and other points such as Iroquois or Algonquin. By diversifying its supply portfolio, Enbridge effectively reduces pricing exposure to any particular procurement point.

96. The Dominion South point, the proxy point for the cost of Appalachian basin supply assumed in this evidence, is currently one of the lowest cost sources of supply in North America. The Sussex Study provides details on performance to date and expectations regarding the Appalachian basin, and in particular Utica and Marcellus, shale supplies. Enbridge expects that the relative cost of Appalachian basin supply will continue to be competitive or advantageous over the term of the NEXUS contract.

97. Furthermore, NEXUS has offered supplemental open seasons for firm transportation service from alternative receipt points such as Clarington, Ohio. Access to such receipt points provides access to supply alternatives such as the Gulf Coast through Texas Eastern Transmission, LLP and northwestern Colorado and Wyoming through REX. This will help ensure there is competition to moderate potential price increases in the Appalachian basin.

98. As shown in the section above, which sets out the fit of the NEXUS contract in the Enbridge supply portfolio, reliance on Appalachian basin supplies is expected to form a larger portion of the Company's future supply portfolio. However, that

portion is in line with exposure to other procurement points, thereby not excessively exposing ratepayers to any particular basin or hub**.**

99. Further, with NEXUS in service with committed capacity to the Dawn Hub from Enbridge and Union Gas, Enbridge expects the risk of pricing volatility at the Dawn Hub will be reduced due to the increase in supply sources connected to the Dawn Hub. This is a benefit not only to Enbridge and its ratepayers, but to any natural gas markets that rely on the Dawn Hub as discussed in the Sussex Study[20].

100. In terms of tolls, the reservation rate for NEXUS capacity, while subject to a capital cost tracking adjustment, will remain fixed for the fifteen year term of the contract. The increase to the reservation rate due to capital cost overages is capped at 15%, and there is the potential for the reservation rate to be reduced by up to 15% if capital costs are lower than forecast. There is no risk to the ratepayer of an increase in NEXUS reservation rates due to a loss of billing determinants on the NEXUS system.

101. Foreign exchange rates also pose a risk. Diversification of procurement amongst points in both Canada and the U.S. serves to mitigate this risk. However, as supply from NEXUS will be replacing supply that would otherwise be procured at Chicago there is no increase in exposure to foreign exchange risk as Chicago trades in US.

102. Fuel ratios will vary as will other charges such as the ACA charge and AS charge. However, these costs are *de minimis* relative to the costs of procurement and demand charges.

[20] Sussex Study page 36

103. A potential risk exists that there will be insufficient supply available to fill Enbridge's capacity on the NEXUS pipeline. Enbridge does not believe that there is any significant likelihood of this risk materializing. The NEXUS contract will provide direct access to a production basin that has and is expected to continue to grow for the foreseeable future. This is discussed at length in the Sussex Study.

Construction and Operational Risks

104. While there are risks associated with the construction and bringing into operation of a greenfield pipeline, the PA that Enbridge has negotiated places most of these risks on NEXUS, and caps Enbridge's exposure to the consequences of cost overruns.

105. The PA sets out the obligations of the pipeline and the customer throughout the pipeline development process. It also contains certain pre-conditions for the benefit of the pipeline and customer. The PA outlines steps and remedies that are available to NEXUS and Enbridge to monitor costs, deal with disputes, limit cost overrun exposure to Enbridge, provide for cost underrun exposure to Enbridge and, if required, terminate the PA.

106. Development of any new pipeline requires estimates of the costs to construct the pipeline. The reservation rate (toll) for service on the pipeline is largely based upon the capital costs. NEXUS has provided Enbridge with both the draft and final capital cost estimates and associated reservation rates. Enbridge has determined, based on the final reservation rate, that the NEXUS path is economic. This is seen in the landed cost analysis discussed above (May 2015 analysis).

107. Total capital costs pursuant to the final capital cost estimate provided by NEXUS are expected to be $2.019 billion US. Reservation rates for the NEXUS contract are subject to a capital cost tracking adjustment. This adjustment applies to the difference between the actual capital costs for the project and the final capital cost estimate. The adjustment is symmetrical and caps the increase or decrease in final reservation rates to plus or minus 15%. In the event that actual capital costs are greater than the final capital cost estimate, this mechanism allows the project developer to recover cost increases up to a maximum and Enbridge's exposure to cost increases is capped. In the event that actual capital costs are lower than the final capital cost estimate, the project developer must pass on these savings to Enbridge. The project developer is incented to keep actual capital costs in check and in doing so potentially gain a benefit from finding ways to reduce capital spend. Capital cost tracking adjustments such as this are commonplace in the U.S.

108. Enbridge has negotiated protections against unreasonable delays in the completion of the NEXUS pipeline. Under the PA, NEXUS is required to take the necessary steps to have the pipeline in-service for November 1, 2017. NEXUS is also required by the PA to provide Enbridge with quarterly updates on progress and indications as to whether or not the service commencement date will be November 1, 2017 or some other date. By November 1, 2015, NEXUS must provide a formal Estimated Commencement Date, which must be no later than November 1, 2018. NEXUS must provide at least 90 days' notice to Enbridge of the actual in-service date of the pipeline. In the event that the in-service date is delayed, the risk of a supply shortfall can be mitigated by Enbridge procuring the necessary supplies at Chicago or the Dawn Hub. In the event that the actual in-service date is more than 1 year beyond the Estimated Commencement Date,

then Enbridge has the right to terminate the PA without any responsibility to NEXUS, including pre-service costs.

109. Enbridge does not expect any risks related to gas interchangeability or quality. Enbridge's supply contracts stipulate that all supplies provided for transportation on behalf of Enbridge adhere to industry accepted quality and interchangeability standards. Enbridge will continue this practice for all supplies provided to NEXUS for transport. There are no significant gas quality or interchangeability standard differences between Canada and the U.S.

Commercial Risks

110. Enbridge does not foresee significant commercial risks associated with the contracts and arrangements necessary to obtain capacity on the NEXUS pipeline or to obtain supply of Marcellus or Utica basin gas to be transported.

111. The lead developers of NEXUS have extensive experience in the development and operation of large scale pipeline projects including natural gas transmission pipelines. Enbridge does not believe that the NEXUS project lead developers pose any credit or default risks.

112. Enbridge expects to procure natural gas directly from producers or agents acting on behalf of the producers in the Appalachian basin. Enbridge's gas supply procurement policies require that Enbridge purchase supply from parties with whom it has signed a Gas Supply Master Agreement and who have adequate creditworthiness. Based on these requirements Enbridge does not expect counterparties supplying natural gas to pose any credit or default risks. In the event that a counterparty fails to deliver natural gas, Enbridge expects that there will be sufficient supply for alternative supply arrangements based on the

Appalachian basin production forecast analysis (as discussed in the Sussex Study).

Regulatory Risks

113. Regulatory risks are mitigated through provisions in the PA. Failure to obtain the required permits/certificates from the appropriate regulatory and governmental bodies by either NEXUS or Enbridge triggers a right to terminate the PA, subject to certain conditions.

114. Changes in laws and regulations, particularly with respect to the production methods used to extract natural gas in the Appalachian basin, also pose a risk. The vast majority of natural gas produced in the Appalachian basin is natural gas extracted from shale formations using horizontal drilling and hydraulic fracturing techniques. These techniques continue to be the subject of debate and are at risk of being constrained through government intervention. This risk is typically taken into consideration to a degree when determining future levels of natural gas production, and yet forecasting agencies consistently predict that the natural gas production in the Appalachian basin will continue to be robust.

Retail Competition Impacts

115. While not a risk *per se*, the Board's Guidelines require an applicant seeking pre-approval of a long-term contract to indicate whether such approval would have adverse retail competition impacts, or would adversely impact existing pipeline facilities in Ontario. In Enbridge's view, the long-term contract with NEXUS has no such negative impacts.

116. The majority of Enbridge's direct purchase market will be moving gas procurement activity to the Dawn Hub in the coming years. This move will be

facilitated through the outcomes of the recently Board approved Dawn Access Consultative.[21] Enbridge expects that NEXUS will have a positive impact on retail competition. As discussed in the Sussex Study, getting additional gas to the Dawn Hub will have a positive impact on the natural gas market in Ontario. Utilities and gas marketers alike will benefit from the additional liquidity and supply options at the Dawn Hub provided by NEXUS.

117. Enbridge does not expect there will be any significant impacts on existing pipeline facilities that could affect Ontario consumers. As indicated previously, the NEXUS contract will be replacing supply that would have otherwise been procured at Chicago. Enbridge will utilize existing short haul contracts on the Union Gas and TransCanada systems to move NEXUS supplies to market during the winter and will inject NEXUS supply directly into Enbridge's storage facility at Dawn in the summer.

J. PRE-APPROVAL IS APPROPRIATE

118. In the February 2009 Report of the Board regarding the draft Guidelines, the Board indicated that a pre-approval process is appropriate for long-term contracts that support the development of new natural gas infrastructure.[22] The Board offered the option to utilities to seek pre-approval of the cost consequences of a long-term contract(s) and indicated that the application should be made prior to contract execution, or after execution if there is a condition precedent requiring OEB approval. The Board's Report and associated Guidelines set out the information that the utility should file in support of its pre-approval application.

[21] EB-2014-0323 Transcript Volume 1 dated November 20, 2014, page 17.
[22] EB-2008-0280, Report of the Board – Draft Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts, February 11, 2009.

119. In its Decision and Order for EB-2010-0300/EB-2010-0333 dated January 27, 2011, the Board clarified its expectations with respect to the requirements for application of the pre-approval process for long-term contracts. In the same Decision, the Board provided its views on requirements for fulfillment of the Guidelines when applying for pre-approval.

120. The Board noted that the development and adoption of the pre-approval process for the cost consequences of long-term transportation or supply contracts is intended to serve a specific role in the development of natural gas infrastructure in the interests of Ontario consumers. The need for the unusual circumstance of pre-approval stemmed from recognition, by the Board, that developers of natural gas infrastructure in some circumstances require long-term commitments to support large infrastructure development. The Board also recognized that utilities would be a necessary and desirable element in new infrastructure development but would be reluctant to enter into long term commitments for new infrastructure without assurances of cost recovery.

121. In order to qualify for pre-approval the Board indicated that the Guidelines should apply to contacts which: 1) support the development of new natural gas infrastructure, and 2) provide access to new natural gas supply sources.

122. Through this Application, Enbridge is making use of the pre-approval opportunity that has been provided by the Board. Enbridge requests pre-approval of the cost consequences of a long-term contract that supports the development of a new pipeline, which will provide direct access to the most significant source of natural gas production in North America. Pre-approval will allow Enbridge to confidently proceed with this opportunity, and obtain the resulting gas supply benefits for its ratepayers.

Witnesses: J. LeBlanc
A. Welburn

123. Enbridge's evidence addresses all the information items required by the Guidelines. Further relevant information is set out in the Sussex Study.

124. The evidence demonstrates that pre-approval of the cost consequences of the NEXUS contract is appropriate. The key items supporting this conclusion are the following:

a. NEXUS is a greenfield pipeline that will enable the direct transportation of natural gas from the important Appalachian basin to the Dawn Hub;
b. Enbridge's commitment to the NEXUS pipeline helps assure that the project will proceed, and ensures that Appalachian basin natural gas transported on the pipeline is directed to the Dawn Hub, rather than to other markets;
c. Enbridge's 15 year NEXUS contract is different from the Company's normal course contracting. The Company has not entered into any similar contract to support a significant new pipeline project bringing natural gas to Ontario since 2000;
d. The NEXUS contract will bring significant benefits to Enbridge's gas supply portfolio. The Appalachian basin gas supply that will be delivered directly to the Dawn Hub through the NEXUS pipeline will improve the reliability, diversity and flexibility of Enbridge's gas supply plan;
e. The costs of gas supply through the NEXUS pipeline are competitive with other options, and the addition of Appalachian Gas supply at the Dawn Hub will mitigate pricing volatility in future years;
f. The NEXUS contract fits well with the other elements of Enbridge's gas supply plan for future years. The Company has flexibility to make changes to other elements of the gas supply plan if conditions change from what is forecast; and

g. The risks associated with the NEXUS contract are manageable, and are addressed in large part through favourable terms that Enbridge has negotiated in the PA.

125. Under the terms of the PA, Enbridge must satisfy or waive the condition precedent of OEB pre-approval of the cost consequences of the NEXUS contract by October 1, 2015. In order for Enbridge to be able to review and consider the implications of the Board's decision in this Application, the Company requests that a Board decision be issued by September 24, 2015 (one week before the deadline in the PA).