STAFF INTERROGATORY #1

INTERROGATORY

Ref: A/2/1 page 1 / para 3 / para 47

At paragraph 3, Enbridge makes the following statement:

> Enbridge hereby applies to the Board, pursuant to the Guidelines and section 36 of the *Ontario Energy Board Act*, *1998* as amended (the "Act"), for an Order or Orders pre-approving the cost consequences associated with a long-term (15 year) gas transportation contract for service on the NEXUS Gas Transmission ("NEXUS") pipeline, commencing November 1, 2017.

OEB staff seeks clarity on the relief that Enbridge is seeking.

(a) In regards to Enbridge's reference to pre-approval of the "cost consequences", is Enbridge requesting that the OEB grant approval now to **all** future gas transportation-associated costs it may incur over the 15 year term of the NEXUS contract, even in the event that other supply options become more economic or otherwise more attractive during the course of the 15 year contract term?

(b) Would there be any exceptions to the requested pre-approval? If so, please elaborate on what may be an exception.

(c) Enbridge indicates that the delivery point in the NEXUS transportation agreement is Milford Junction in Michigan. Is Enbridge requesting pre-approval of the cost consequences associated with its transportation agreement on DTE in Michigan from Willow Run to Milford Junction?

RESPONSE

a) Yes, Enbridge is requesting pre-approval of the cost consequences of all future gas transportation-associated costs it may incur over the 15 year term of the NEXUS contract for the 110,000 Dth/d capacity commitment.

   As indicated at Exhibit A, Tab 3, Schedule 1, page 6, Enbridge's gas supply portfolio is developed based on the principles of reliability, flexibility, diversity and cost. In the event that another, more economic or otherwise attractive supply option(s) becomes available over the term of the NEXUS contract, Enbridge will evaluate this option(s)

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A. Welburn

based on the aforementioned principles. Enbridge expects to retain sufficient flexibility within its supply portfolio to allow it to pursue a variety of options within its gas supply portfolio over the duration of the NEXUS contract and beyond.

b) At this time Enbridge does not expect there to be any exceptions to the requested pre-approval. As far as Enbridge is aware, the Board's pre-approval guidelines do not contemplate exceptions if pre-approval is granted. At this time Enbridge is not asking for pre-approval of the cost consequences related to the additional 40,000 Dth/d capacity option contained in the NEXUS contract. However, it may do so in the future through a separate application should it choose to exercise this option.

c) Yes, Enbridge is requesting pre-approval of the cost consequences associated with the entire path of the 110,000 Dth/d commitment described in the contract. Enbridge does not have a contract with DTE directly. The NEXUS contract covers the entire path from Kensington, Ohio to the interconnection point with Vector at/near Milford Junction, Michigan. The proportionate costs associated with transportation on the DTE system are included in the reservation rate and the transportation service to be provided by NEXUS covers the full path from Kensington, Ohio to Milford Junction, Michigan.

Witnesses: J. LeBlanc
A. Welburn

STAFF INTERROGATORY #2

INTERROGATORY

Ref: A/3/1 page 3 / para 8

Enbridge states that it has the right under its PA to increase its contracted volume to 150,000 Dth/d.

Is Enbridge seeking OEB pre-approval of the gas consequences of the 110,000 Dth/d amount or the 150,000 Dth/d amount?

RESPONSE

Please see response to Board Staff Interrogatory #1b at Exhibit I.T1.EGDI.STAFF.1.

Witnesses: J. LeBlanc
A. Welburn

STAFF INTERROGATORY #3

INTERROGATORY

Ref: A/2/1 page 2

Enbridge's evidence indicates 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 Enbridge 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

Enbridge has requested pre-approval of the cost consequences of a long term transportation contract on one other occasion. That request for pre-approval, which related to a long-term transportation contract with TCPL, was assigned case number EB-2010-0333 by the Ontario Energy Board. It was heard together with a similar application from Union Gas (EB-2010-0300).

The Board's Decision and Order in EB-2010-0333 was issued on January 27, 2011. The Board denied Enbridge's application for pre-approval as the Board found that the applied-for contract did not qualify for pre-approval under the Board's Long Term Contract Filing Guidelines for the Pre-Approval of Cost Consequences for Long-Term Natural Gas Contracts (the "Guidelines"). The Board found that the contract for which Enbridge was seeking pre-approval did not support the development of new natural gas infrastructure.

The Board also made reference to the Guidelines in its decision in EB-2011-0242/0283 (Enbridge and Union request for approval of setting prices for purchase of biomethane). In its Interim Decision and Order in that case, the Board found that it was appropriate to evaluate the utility requests in light of the Guidelines because the biomethane supply arrangements under consideration in that case were long-term in nature to support the development of biogas conversion infrastructure, and because the utilities would not enter into the supply arrangements without certainty of cost recovery. The Board did not approve the biomethane applications, but provided guidance to the utilities about how updated evidence could be filed that would address some of the Board's concerns

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around items such as quantifying the benefits of biomethane that would justify paying a premium price.

As indicated in the evidence in the current application at Exhibit A, Tab 3, Schedule 1, pages 43 to 46, Enbridge believes the NEXUS contract does qualify for pre-approval under the Board's Guidelines. Enbridge's participation in the NEXUS pipeline project will support the development of new greenfield pipeline infrastructure and will allow for direct access to new sources of natural gas supply from a developing supply basin.

Please see also the response to CME Iinterrogatory #1(c) at Exhibit I.T1.EGDI.CME.1(c).

Witnesses: J. LeBlanc
A. Welburn

STAFF INTERROGATORY #4

INTERROGATORY

Ref: A/3/1 page 3 / para 8

Enbridge has indicated “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/or 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

It is Enbridge’s understanding that the commitments of Union and Enbridge represent an important part of the commitments required for NEXUS to move forward. Enbridge does not know for certain whether the loss of Enbridge and Union’s commitments would stop NEXUS from proceeding, however, Enbridge does expect that losing these commitments could lead NEXUS to reconsider whether to proceed with the project or could have impact on the scope of the project.

Even assuming that the project proceeds, loss of the Union and Enbridge commitments would reduce supply diversity for the Ontario market and, depending on other contractual commitments on NEXUS, limit access for Ontario customers to one of the largest supply basins in North America.

Witnesses: J. LeBlanc
A. Welburn

STAFF INTERROGATORY #5

INTERROGATORY

Ref: A/3/1 page 20 / para 53

In the Landed Cost Analysis, it appears that Enbridge's comparative cost assessment was carried out for gas landed at the Dawn Hub.

(a) Please confirm that this is the correct understanding.

(b) Please explain why the Dawn Hub is the appropriate point of comparison for the Landed Cost Analysis, as opposed to other delivery points such as Enbridge's Central Delivery Area (CDA) or its Eastern Delivery area (EDA)?

(c) Please add a column to Table 2 (the "May 2015 Landed Cost Analysis Summary" table on page 24 para 61) to show the Landed Cost Analysis at Enbridge's Central Delivery Area, as opposed to the Dawn Hub.

(d) Please also add a column to Table 2 (the "May 2015 Landed Cost Analysis Summary" table on page 24 para 61) to show the Landed Cost Analysis at Enbridge's Eastern Delivery Area, as opposed to the Dawn Hub

RESPONSE

(a) Confirmed, the analysis was completed based on landed costs at the Dawn Hub.

(b) The NEXUS path will deliver natural gas supplies to the Dawn Hub replacing supplies from Chicago which are delivered to the Dawn Hub today. As a result the Dawn Hub is the natural comparator.

In addition, the Dawn Hub was used as the point of comparison in the landed cost analysis to ensure that the seasonal management of Enbridge's gas supply portfolio is appropriately taken into consideration. Seasonal management refers to the injection of excess natural gas supplies that are acquired by Enbridge in the summer months into storage (which is predominately located at the Dawn Hub) when demand is low and the withdrawal of stored natural gas supplies in the winter season when demand is high. This consideration is important because transportation paths to the delivery areas that do not pass through the Dawn Hub (such as supply procured at Empress and transported by TransCanada) will incur incremental costs during the summer season to flow supplies from the delivery areas to the Dawn Hub for storage injection. Conversely, transportation paths that pass through the Dawn Hub before reaching the delivery area (such as NEXUS) will not incur incremental costs to inject excess supply into storage during the summer season. Accounting for the different seasonal management scenarios is simplified by doing the comparison at the Dawn Hub rather than at the delivery areas as the costs to transport excess supplies in the summer months to the Dawn Hub for injection into storage are consistently accounted for.

(c) The average landed cost to the Enbridge CDA and Enbridge EDA has been added to Table 2 and is set out below. For purposes of determining landed cost at the Enbridge CDA and Enbridge EDA, all paths upstream of the Dawn Hub are assumed to utilize transport via Union Gas from Dawn to Parkway and from Parkway to the respective delivery area via short haul capacity on TransCanada. As indicated above Enbridge believes the relevant delivery point for a landed cost comparison is Dawn and not the Enbridge CDA or Enbridge EDA.

The average landed cost for the TCPL from Niagara path include commodity price forecasts for Niagara that have been updated from what was filed in the original application- please see the response to TCPL interrogatory #9 at Exhibit I.T4.EGDI.TransCanada.9 and updated evidence filed August 25, 2015.

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Path	May 2015 Average Landed Cost $CDN per GJ		
	Dawn Hub	Enbridge CDA	Enbridge EDA
Dawn	4.62	4.95	5.30
Vector	4.88	5.21	5.55
TCPL from Niagara	4.52	4.53	4.90
NEXUS (Base Case -15%)	5.04	5.37	5.70
Rover	5.06	5.39	5.73
NEXUS (Anchor)	5.14	5.46	5.80
NEXUS (Base Case)	5.16	5.48	5.82
NEXUS (Base Case +15%)	5.27	5.60	5.94
ANR East	5.52	5.85	6.19
Alliance	5.70	6.03	6.37
TCPL	6.19	6.39	6.46

(d) Please see response to (c) above.

Witnesses: J. LeBlanc
A. Welburn

STAFF INTERROGATORY #6

INTERROGATORY

Ref: A/2/1 page 4 / para 8

Union has estimated potential cost savings of over $700 million (see EB-2015-0166). In contrast, Enbridge has not identified any savings of this magnitude (or any savings), saying instead that the costs of NEXUS are "competitive" with other alternatives.

a) Given the large discrepancy between the financial benefits identified by Union and those of Enbridge, can Enbridge identify the main reasons for such a cost savings discrepancy?

b) What portion of any cost savings is expected to materialize for system gas customers versus direct purchase customers?

c) Are there any financial benefits that the NEXUS will provide to Enbridge in terms of both its regulated and unregulated business activities? Please explain and quantify any such benefits.

RESPONSE

a) It is the Company's understanding that the estimated potential cost savings of over $700 million stated by Union is predominately the result of the NEXUS transportation capacity displacing more expensive Alliance/Vector and TransCanada transportation capacity.

   Enbridge has already incorporated changes to its natural gas transportation portfolio similar to the Union Gas change described above which included the de-contracting of capacity originating in western Canada on Alliance and TransCanada, in addition to reducing peaking supplies. The benefits related to these changes have been identified in other proceedings such as the leave to construct application for the Greater Toronto Area Project (EB-2012-0451). The benefits of these changes will begin to accrue to ratepayers in late 2015.

   For Enbridge, the primary benefits of the NEXUS transportation capacity are the improvements of diversity, reliability, flexibility, and direct access to cost effective supplies being transported to the Dawn Hub. These benefits are especially important when taking into consideration the increased demand for supplies at the

Dawn Hub that has been created through regulatory approval of the GTA Project and the Dawn Access Settlement Agreement (EB-2014-0323) along with TransCanada's 2015-2030 Tolls and Settlement Agreement application (RH-001-2014).

b) Enbridge has not quantified any direct or immediate cost savings. The cost benefits that result from NEXUS will be derived from Enbridge's gas supply portfolio and the Dawn Hub gaining direct access Marcellus and Utica supplies in and around the Kensington processing plant in Ohio. Any market participants that procure natural gas in the Dawn Hub directly or indirectly will benefit from the enhanced liquidity that will be driven by increased diversity and security of supply that will be provided by NEXUS.

c) See response to part b). Enbridge is not expecting that the NEXUS capacity will provide financial benefits to its unregulated business activities.

Witnesses: J. LeBlanc
A. Welburn

STAFF INTERROGATORY #7

INTERROGATORY

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

In the May 2015 Landed Cost Analysis Summary table, listed are 3 options that are more financially attractive from a landed cost standpoint than the NEXUS Base Case - 15%. These are Dawn, Vector, and TransCanada from Niagara.

For each of the 3 options, please explain why they were rejected in favour of NEXUS.

RESPONSE

As indicated at Exhibit A, Tab 3, Schedule 1, page 6, Enbridge relies on four principles when establishing its gas supply plan. An estimate of landed costs based on an estimate of future market conditions is but one of these principles which must be balanced against the other principles. NEXUS provides benefits that cannot be achieved by procuring supply directly at Dawn or contracting on Vector and/or TransCanada for supply from Chicago and/or Niagara respectively.

NEXUS will enhance the diversity of Enbridge's gas supply portfolio and in turn will improve supply portfolio reliability and flexibility at comparable costs. To more fully understand the impact that each of the paths will have on Enbridge's gas supply portfolio, and in particular to the natural gas supply that is acquired by Enbridge on behalf of system supply customers, Enbridge has recast the Gas Supply Acquisition table provided at Exhibit A, Tab 3, Schedule 1, page 31, Table 3 as a schematic. This schematic, which is provided as Attachment 1 to this response, shows average daily supply with direct purchase supply netted out. It also illustrates the diversity of natural gas supplies that are acquired on behalf of system supply customers effective November 1, 2017. The annual supply information provided in Table 3 has been converted to a daily averages to differentiate between the acquisition of supply throughout the year (which is relatively consistent under normal weather conditions) vs. load balancing supply for demand requirements which is accomplished predominately through the use of storage injections and withdrawals. The natural gas supplies received on behalf of customers who have elected to procure their own natural gas supply through Ontario Transportation Service ("OTS"), Western Transportation Service ("WTS"), and Dawn Transportation Service ("DTS") arrangements have been netted out to better understand the diversity of supply procurement that Enbridge is responsible for on behalf of its system gas customers.

Witnesses: J. LeBlanc
A. Welburn

When considering the schematic, it is important to note that Enbridge's natural gas portfolio is relatively balanced. Each of the WCSB, Niagara, Dawn, and Chicago supply hubs contribute between 20%-30% of the total supply portfolio. When restricting this view to the specific paths that are referenced in this interrogatory, the range reduces to 20%-26% of the total supply portfolio. Making significant increases to supply purchases at Dawn, Chicago (via Vector), or Niagara (via TransCanada) would not provide any significant benefits to supply diversity for system gas customers. In fact, procuring supply at the three options which are currently more economic could have the opposite effect. For example, if the TransCanada through Niagara path were increased it would erode diversity since that path already constitutes the largest percentage of the three referenced options. On the other hand, NEXUS increases diversity of path by transporting Appalachian basin gas to Ontario on a new path. Enbridge agrees with the Board's assessment of the importance of supply diversity that was set out in the GTA Project decision, and is quoted in Exhibit A, Tab 3, Schedule 1, page 29 and 30.

A second schematic has also been included in Attachment 1 of this response and shows what the daily average supply acquisition will look like when the NEXUS path forms part of the Enbridge system gas supply portfolio.

With the addition of NEXUS to Enbridge's gas supply portfolio, the supply being transported to Dawn is significantly more diversified. This diversification leads to the benefits that are discussed in Enbridge's application.

Direct procurement at Dawn, procurement at Chicago for transport via Vector and procurement at Niagara for transport via TransCanada paths were also not selected because none of these paths provided the benefits of direct access to the Appalachian basin as discussed in the application beginning on page 26 of Exhibit A, Tab 3, Schedule 1.

Additionally, it was not feasible to contract for further procurement at Niagara at the time the NEXUS opportunity was being considered. This is because there was insufficient available capacity to transport a similar volume of gas from that point. Although the path from Niagara via TransCanada could achieve direct access to the Appalachian basin through contracting for additional transportation capacity on pipelines in the United States that connect with TransCanada at Niagara or Chippawa. However, at the time when the NEXUS PA was being negotiated, TransCanada would not commit to construct any incremental transportation capacity from Niagara or Chippawa which made this option infeasible. This situation was not remedied until recently when the Mainline Settlement Agreement was reached. The National Energy Board approved the

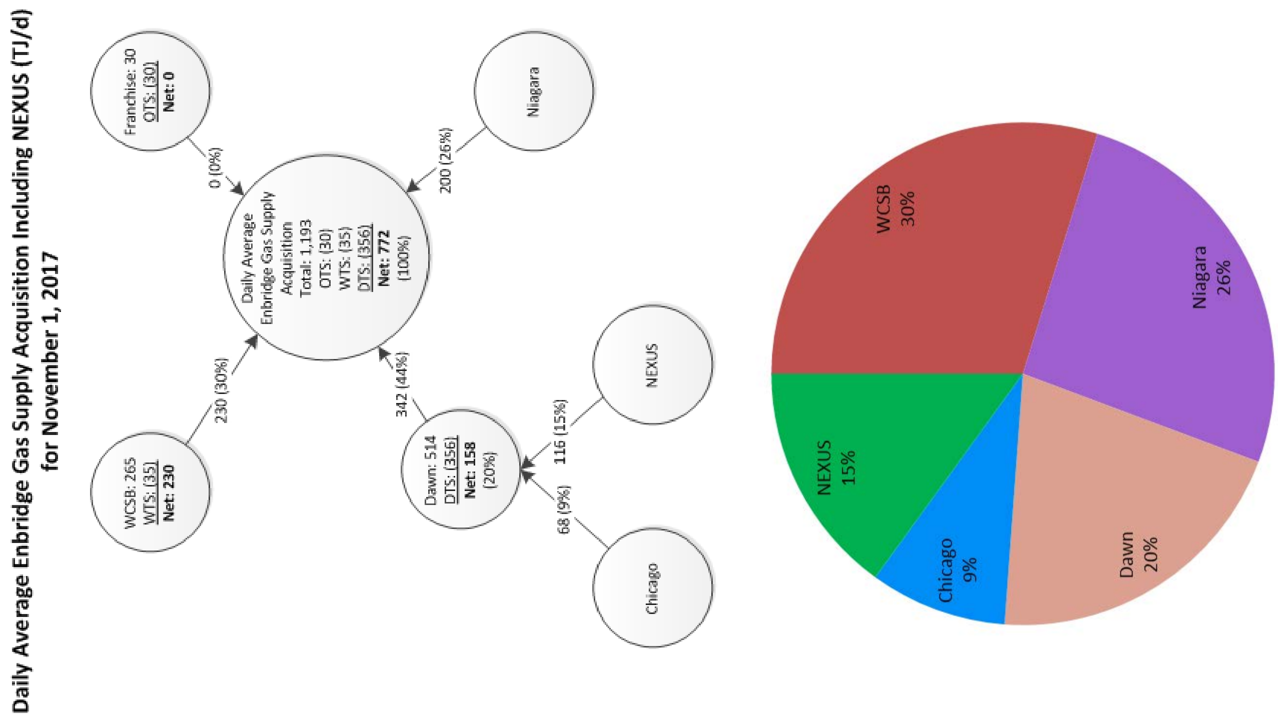
2015-2030 Toll and Tariff application[1] in November 2014, which included the Mainline Settlement Agreement.

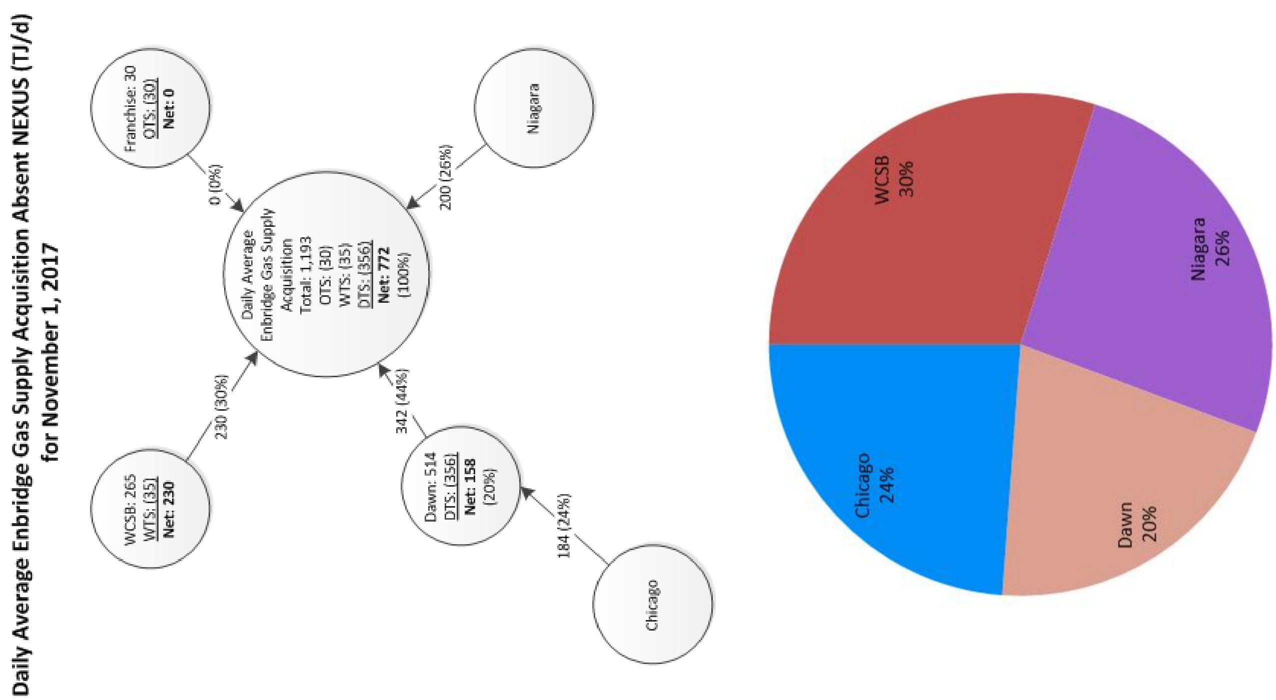
Further discussion of the limitations of procuring additional transportation or supply at or through Niagara/Chippawa is found in response to Board Staff Interrogatory #9 at Exhibit I.T1.EGDI.STAFF.9. See also the response to TransCanada Interrogatories #5 and 7 at Exhibit I.T2.EGDI.TransCanada.5 and Exhibit I.T4.EGDI.TransCanada.7.

[1] National Energy Board letter re: TransCanada PipeLines Limited (TransCanada) Application for Approval of 2015 to 2030 Tolls (application) RH-001-2014 Decision with Reasons to Follow dated November 28, 2014.

Witnesses: J. LeBlanc
A. Welburn

Attachment 1





Witnesses: J. LeBlanc
A. Welburn

STAFF INTERROGATORY #8

INTERROGATORY

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

Table 2 shows the landed cost analysis for varies alternatives to NEXUS. One alternative is simply to purchase gas supply at Dawn (option 1).

Please explain the assumptions Enbridge made for this option in terms of incremental supply to Dawn. For example, did it assume that the Rover project was constructed or did it assume that NEXUS was built, but Enbridge didn't contract for capacity - or did it simply assume the status quo? Please explain the option of purchasing at Dawn fully.

RESPONSE

The landed cost analysis that was conducted by Enbridge was based on existing market prices for transportation tolls, transportation fuel ratios, abandonment charge adjustments, and abandonment surcharges. The commodity prices are based on forward curves provided by independent third parties such as NGX and Kiodex. Enbridge did not make or apply any future market assumptions when conducting the landed cost analysis.

Witnesses: J. LeBlanc
A. Welburn

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

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.

Witnesses: J. LeBlanc
A. Welburn

STAFF INTERROGATORY #10

INTERROGATORY

Ref: A/3/1 page 19 / para 51

The evidence states that the total cost for the NEXUS capacity over the term of the contract is approximately $421.6 million US.

What is the impact on a typical residential customer's bill of incorporating the NEXUS contract volumes into Enbridge's portfolio versus the status quo portfolio – i.e. without NEXUS?

RESPONSE

Enbridge anticipates that a typical residential customer's bill will remain relatively unchanged with or without NEXUS based on the current forecast of future market conditions. The NEXUS capacity will be offset by an equivalent volume reduction of comparable landed gas cost for supplies procured at Chicago and transported on Vector.

Customers will benefit from NEXUS as a result of the protection that it provides from uncertainty of future market conditions. More specifically, one of the benefits of NEXUS is the improved diversity that it provides to Enbridge's gas supply plan. Although this is only one of the benefits that are discussed in detail in Exhibit A, Tab 3, Schedule 1, page 26 through 30, it is consistent with the Board's view that "[s]upply 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". All other things being equal, the tendency to lower gas prices will result in lower gas bills.

Witnesses: J. LeBlanc
A. Welburn

APPrO INTERROGATORY #1

INTERROGATORY

Reference: i) Exhibit A Tab 3 paragraphs 32 – 41

Preamble: In Reference i), Enbridge notes that Enbridge Inc. was an initial party to the MOU and while the MOU has expired, Enbridge Inc. continues in discussions with the parties about potential participation in the project. Enbridge also notes that the commercial reality of greenfield pipeline development requires a minimum contractual commitment

a) Please provide Enbridge's understanding of the minimum level of contractual commitments necessary for the NEXUS Pipeline proponents to proceed with the development.

RESPONSE

Please see response to Board Staff Interrogatory #4 at Exhibit I.T1.EGDI.STAFF.4.

Witnesses: J. LeBlanc
A. Welburn

APPrO INTERROGATORY #2

INTERROGATORY

Reference: i) Exhibit A paragraph 73

Preamble: Enbridge notes that as a result of increased demand at Dawn, liquidity and cost competiveness could be impacted without new infrastructure.

a) Please provide Enbridge's understanding of the amount of net increase in capacity into the Dawn Hub that will result from:

   a) The proposed NEXUS Pipeline as of November 1, 2017
   b) The proposed Rover Pipeline.

RESPONSE

a) Enbridge understands that approximately 500,000 Dth/day is contracted on the NEXUS pipeline for delivery to Dawn. That arrangement includes contracting by NEXUS on DTE and Vector for delivery from the end of the NEXUS pipeline to Dawn.

   Additional supplies of 260,000 Dth/day transported on NEXUS will reach Dawn using transportation capacity from Michigan that is already held by Enbridge and Union on Vector and St. Clair pipeline.

   Enbridge notes that the initial long term contracts on Vector are at or around their expiry dates. Enbridge understands that Vector capacity will be utilized by both NEXUS and Rover to facilitate flows into Dawn. Absent NEXUS and Rover, it may have been that parties would not renew Vector capacity and the net volume into the Dawn hub would reduce. After NEXUS and Rover are in service, Enbridge understands that the pipelines that connect NEXUS to Dawn, including Vector, will be able to increase their transportation capacity to Dawn as a result of the NEXUS and Rover flows.

Witnesses: J. LeBlanc
A. Welburn

b) Enbridge understands, based on publicly available information, that up to 1,100,000 Dth/d of capacity has been contracted to the Market Zone North on Rover. Enbridge understands that Market Zone North refers to a delivery point on Rover which encompasses the delivery points of Dawn, PEPL North and Vector. Therefore a portion of this contracted capacity may not be contracted on a path that can flow all the way to Dawn.

Witnesses: J. LeBlanc
A. Welburn

APPrO INTERROGATORY #3

INTERROGATORY

Reference: i) Exhibit A paragraph 99

Preamble: Enbridge notes that volatility at the Dawn Hub will be reduced due to the increase in supply sources connected to the Dawn Hub. APPrO would like to better understand this benefit.

a) Please explain how volatility is defined and quantitatively measured.
b) Please provide the current quantitative assessment of volatility at the Dawn Hub.
c) Please provide the expected volatility after the NEXUS pipeline comes into service and every other new supply source implied in Reference i).

RESPONSE

a) Standard measures of volatility can include standard deviation of prices, range between maximum and minimum prices, amongst others. Enbridge notes that lower volatility is a characteristic of a liquid hub.

b) Enbridge does not have a current quantitative assessment of volatility at the Dawn hub.

c) The reference to which APPrO is referring to above indicates that Enbridge expects volatility to be reduced at the Dawn hub. Enbridge has not indicated that volatility will be reduced at the Dawn hub. Enbridge has not developed a projection of expected volatility at the Dawn hub after the NEXUS pipeline has come into service.

Witnesses: J. LeBlanc
A. Welburn

APPrO INTERROGATORY #4

INTERROGATORY

Reference: i) Exhibit A

Preamble: Enbridge has noted that it will enter into long term transportation on NEXUS. APPrO would like to understand how Enbridge expects to recover the costs associated with such capacity.

a) Please indicate which customers will be allocated the costs associated with this capacity.

b) Please indicate which customers will be expected to pay for any gas supply purchased for the related transportation capacity on the NEXUS Pipeline

RESPONSE

a) Enbridge plans to provide gas supply and transportation service using the NEXUS contract. The cost of NEXUS capacity will be charged/recovered from customers who receive transportation service from Enbridge (i.e., system gas and Western T-Service customers).

b) The cost of gas supply will be recovered/charged to customers who receive gas supply service from Enbridge (i.e., system gas customers).

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #1

INTERROGATORY

Ref: General

Please provide a list of proceedings since the Guidelines were put in place in which Union and EGD applied for pre-approval of long-term contracts, and for each case, whether the Board approved or did not approve the request.

RESPONSE

Please see the response to CME Interrogatory #1 at Exhibit I.T1.EGDI.CME.1 and Board Staff Interrogatory #3 at Exhibit I.T1.EGDI.STAFF.3.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #2

INTERROGATORY

Ref: 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

Enbridge understands that the total current planned capacity of NEXUS is approximately 1.5 million Dth/d; therefore, Union and Enbridge's combined capacity represents 17.3% of total planned capacity.

Enbridge is aware that the following seven parties have signed Precedent Agreements with NEXUS (where volumes are known, these are noted).

- Enbridge – 110,000 Dth/d
- Union Gas – 150,000 Dth/d
- DTE Gas Company – 75,000 Dth/d
- DTE Electric Company – 75,000 Dth/d
- Chesapeake Energy Marketing Inc.
- CNX Gas Company LLC
- Noble Energy Inc.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #3

INTERROGATORY

Ref: Tab 1

Please provide copies of, or links to, the most recent annual and six-month reports of the publicly listed parent companies of the two lead developers of the NEXUS pipeline, Spectra Inc. and DTE Inc.

RESPONSE

Annual and quarterly financial reports are made publically available through EDGAR on the U.S. Securities and Exchange Commission website.

Spectra Energy Corp.
https://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0001373835&owner=exclude&count=40&hidefilings=0

DTE Energy Co.
https://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0000936340&owner=exclude&count=40&hidefilings=0

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #4

INTERROGATORY

Ref: Tab 1

Please provide the projected annual expenditures on the NEXUS project tolls (assuming equal annual volumes purchased over the fifteen year contract term), and show that as a percentage of the total projected pipeline tariffs paid by each utility over each of the years 2017, 2018, 2019, 2020, 2021.

RESPONSE

Please see the table below.

	2017	2018	2019	2020	2021
NEXUS Cost ($CDN Million)	$ -	$ 35.1	$ 34.9	$ 34.8	$ 34.6
% of Total Transportation Costs	0.0%	5.9%	6.4%	6.4%	6.4%

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #8

INTERROGATORY

Ref: Tab 1

Do Union and EGD agree that Dawn is now a liquid hub, and will remain a liquid hub regardless of whether either company contracts with NEXUS transmission? If not, please explain. Please discuss fully.

RESPONSE

Enbridge agrees that Dawn is currently a liquid hub. As a result of the opening up of access to Dawn from Eastern Canada and the Northeastern US, Enbridge sees that there will be substantial new demands placed on Dawn. Enbridge believes that NEXUS is part of the increased connectivity and supplier diversity needed for Dawn to remain liquid given these new demands. Dawn liquidity is important to Enbridge as both its system gas supply portfolio and a large majority of its direct purchase customers have and/or will rely on Dawn supplies going forward.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #10

INTERROGATORY

Ref: Ibid, Page 42

> "Sussex reviewed the landed cost analysis prepared by the Ontario LDCs to verify that: (1) the approach was reasonable and consistent with typical landed costs approaches; (2) alternative options had been identified and modeled; and (3) the decision process and analysis was documented."

Please confirm that NEXUS did not do its own landed cost analysis of the options available to the two utilities.

RESPONSE

As the question is drafted, Sussex is not aware if NEXUS conducted its own landed cost analysis. Assuming the question meant to refer to Sussex and not NEXUS, Sussex did not complete its own landed cost analysis.

Witness: J. Stephens

BOMA INTERROGATORY #11

INTERROGATORY

Ref: Ibid

You have provided information on pre-approval processes and recent decisions in four states in the United States.

(a) Are these the only four states that make provision for pre-approvals of long-term natural gas?

(b) If not, what other states provide such pre-approval option? For each such state, please provide references for legislation/PUC guidelines/recent decisions.

RESPONSE

a) The four states (i.e., Massachusetts, Connecticut, Florida, and North Carolina) reviewed by Sussex in the Sussex Report were intended to be a representative, and not exhaustive, list of other regulatory jurisdictions that have implemented processes regarding pre-approval of pipeline capacity contracts.

b) As stated in the response to BOMA interrogatory #11a at Exhibit I.T1.EGDI.UNION.BOMA.11, Sussex has not conducted an exhaustive search of the pre-approval options in other states. However, as a result of recent project work Sussex is aware of the pre-approval processes for pipeline capacity in New Hampshire and Maine, which are summarized below.

New Hampshire
On June 26, 2015 in Docket Number DG-14-380, the staff of the New Hampshire Public Utilities Commission and Liberty Utilities (i.e., EnergyNorth Natural Gas) submitted a settlement recommending the approval of a Precedent Agreement between EnergyNorth and Tennessee Gas Pipeline for a capacity contract on the Northeast Energy Direct Project.

To receive approval for the Precedent Agreement between EnergyNorth and Tennessee Gas Pipeline, the New Hampshire Public Utilities will need to determine if the contract for pipeline capacity is prudent and in the public interest.

Witness: J. Stephens

To demonstrate that the Precedent Agreement with Tennessee Gas Pipeline is in the public interest, EnergyNorth filed testimony summarizing the contract and demonstrating EnergyNorth's need for the capacity to replace existing capacity and to meet forecasted long-term demand. In addition, EnergyNorth provided quantitative and qualitative analysis to support the decision to enter into the Precedent Agreement.

Maine
On August 11, 2015 in Docket Number 2015-00063, the Maine Public Utilities Commission approved a settlement between Maine Natural Gas, the Maine Office of the Public Advocate, and Northeast Energy Solutions with respect to a Precedent Agreement between Maine Natural Gas and Algonquin Gas Transmission/Maritimes and Northeast Pipeline for pipeline capacity on the proposed Atlantic Bridge Project. As discussed in the MNG application for approval, the Maine Public Utilities Commission ("ME PUC") is tasked with determining that the decision of MNG to enter into the Atlantic Bridge Precedent Agreement is prudent and "represents efficient operation of the utility and the utilization of sound management practices." To support this requirement, MNG filed testimony and other supporting materials including the following:

- A demonstration of the need to begin holding upstream pipeline capacity,
- A summary of the key terms of the agreement,
- A demonstration of the cost effectiveness of the proposed agreement, and
- A qualitative discussion of the benefits of the project, including its consistency with Maine Energy Policy.

Witness: J. Stephens

BOMA INTERROGATORY #13

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Page 2 of 46

Has EGD decided it will not proceed to sign a contract with NEXUS in the event the Board does not approve its application in this case?

Given the proposed timeline for this case, has EGD requested an extension in the October 15, 2015 date for the condition precedent of Board approval? Has it, or will it waive the condition precedent?

RESPONSE

The deadline in the PA for receiving Ontario Energy Board pre-approval is October 1, 2015. Enbridge has not requested an extension from NEXUS at this time. Enbridge does have the option to give notice of temporary waiver of the condition precedent around Board pre-approval but has not yet taken that step. Enbridge will provide notice of temporary waiver should it become necessary. Please see Board Staff Interrogatory #19 at Exhibit I.T4.EGDI.STAFF.19 for further comments related to the exercise of the temporary waiver on this condition precedent.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #14

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Page 2

Please confirm that EGD has arranged to transport 200,000 GJs of natural gas from Niagara/Chippewa directly to its service area via the TCPL domestic line. What is the term of the contract? What is the current tariff? What is the forecast tariff over the term of the contract?

RESPONSE

Enbridge has contracted for 200,000 GJ/d of transportation capacity from Niagara/Chippawa to the Enbridge Parkway CDA. This delivery point is a direct access point to Enbridge's service area. The contract term is 15 years. The current tariff is $0.2462 per GJ/d inclusive of abandonment charges. Enbridge is not aware of the existence of, nor does it have a forecast of the toll for this path over the term of the contract. Enbridge assumed the toll remains constant at the above level for the entire landed cost evaluation period in the landed cost analysis set out in the pre-filed evidence at Exhibit A, Tab 3, Schedule 1, Appendices B and C.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #15

INTERROGATORY

Ref: Ibid

Please advise whether EGD has or will purchase this natural gas at the border or at an upstream hub in Marcellus/Utica shale region, and if so, which hub, and on which of the three pipeline projects from Marcellus/Utica to the Canadian border will it (or its vendor) transport the gas. What is the term of the commodity contract? Who is the vendor? Is the commodity price fixed for the term, or is it based on an index and, if so, which index?

RESPONSE

Enbridge has contracted for natural gas purchases to fill some of this Niagara/Chippawa capacity and is working to finalize contracts for the remainder of the capacity for the next two winter seasons. All contacts completed and anticipated are for purchases at the Canada/U.S. border. All commodity contracts are expected to begin January 1, 2016 and span 22 months. One contract applies only to the winter periods; no supply will be delivered during the summer months of April through October. Enbridge is dealing with four suppliers. For confidentiality reasons these suppliers cannot be identified. Pricing on contracts executed to date is based on a Dawn index. In securing supply to fill this capacity Enbridge struggled to find suitable counterparties. Most counterparties bringing gas to Niagara/Chippawa have contracted for transportation onward to either Parkway or Dawn.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #16

INTERROGATORY

Ref: Ibid

Does EGD agree that the arrangements allow it to obtain natural gas "directly" from the Marcellus/Utica basins? Please discuss. If not, please explain what material disadvantages and benefits are to it of buying at Niagara versus buying at one of the Marcellus Hubs, such as Leidy or Dominion North, or at some field point.

RESPONSE

Enbridge does not agree that the transportation capacity from Niagara/Chippawa allows it to obtain natural gas "directly" from the Marcellus/Utica basins. For Enbridge, “directly” from Marcellus/Utica would mean holding capacity further upstream into the production areas of the basin and purchasing gas there.

Enbridge buys nearly 300 million GJ of natural gas on behalf of system gas customers annually. Enbridge believes that when purchasing this level of natural gas that diversity of supplier and supply path is important to protect customers from pricing and reliability issues that can and do occur. Part of Enbridge’s strategy has traditionally been to purchase gas from each basin it can access at hubs (Dawn and Chicago) and to purchase the remainder closer to or within the basins themselves. Another part of Enbridge’s strategy also diversifies within basins where possible. Today Enbridge accesses the WCSB from three different points. Some gas is procured on the NOVA system and some at Empress. Both sources of supply are transported to the franchise and/or storage via the TransCanada Mainline. Enbridge also uses Alliance to transport gas procured at CREC to Chicago. These supplies then flow to Dawn via capacity on Vector. The benefit of this strategy is to access a greater variety of suppliers/counterparties and to protect customers from pricing issues that can occur at hubs but not necessarily at the basins supplying those hubs. The strategy employed with NEXUS, in conjunction with the Marcellus/Utica supply sourced at Niagara, is similar to the current strategy of procuring from three points within the WCSB.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #17

INTERROGATORY

Please confirm that in the Dawn Transport Hub proceeding, EGD agreed that if there were sufficient customer demand, it would establish a Niagara Transportation Service (which will give customers the ability to contract for gas supply on a direct purchase basis at Niagara). Has EGD taken any steps to determine the level of customer interest in such a service?

RESPONSE

Not confirmed. In the Dawn Access Consultative Settlement, Enbridge and interveners agreed that Enbridge would remain in communication with customers about the demand for additional bundled transportation services. If demand for such a service, from a liquid market hub, of at least 50,000 GJ/d emerges, Enbridge will respond by consulting with market participants about the potential to implement the service. Provisions in the Dawn Access Consultative Settlement were not specific to the Niagara receipt point on the TransCanada system.

Immediately prior to presentation of the Dawn Access Consultative Settlement to the Board, Enbridge and FRPO reached an agreement specific to the Niagara receipt point. In that agreement Enbridge indicated, *inter alia*, that it would establish a process with market participants to discuss market access to newly emerging direct purchase delivery points with the specific objective of clearly defining the required criteria (in particular, liquidity) that must be met before Enbridge will establish a transportation service from any such points. Enbridge expects to begin this process in 2016.

Enbridge would note that the Dawn Access Consultative Settlement is specific to direct purchase service options whereas the immediate application concerns pre-approval of the cost consequences for transportation services to be used to supply system gas customers.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #18

INTERROGATORY

Ref: Ibid, Page 15

Please provide copies of NEXUS's original, and two supplemental open seasons documentation.

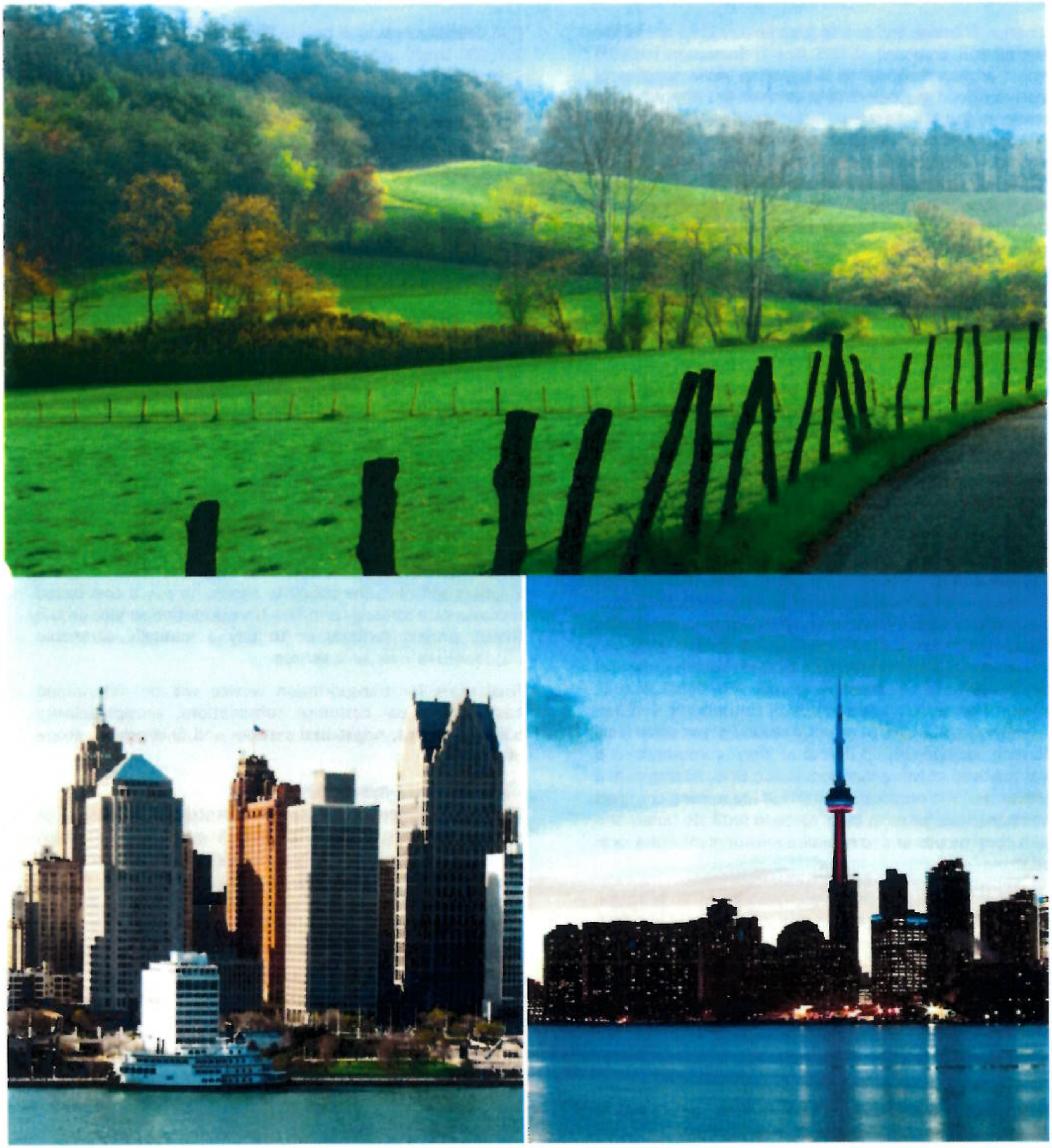
RESPONSE

Attached please find copies of the NEXUS open seasons.

Witnesses: J. LeBlanc
A. Welburn

NEXUS Gas Transmission Project

Providing a seamless transportation path for emerging Utica shale gas supplies from Ohio to Michigan and Dawn, Ontario



Open Season Notice for Firm Service

October 15, 2012 – November 30, 2012

NEXUS GAS TRANSMISSION

NEXUS Gas Transmission Project

Providing a seamless transportation path for emerging Utica shale gas supplies from Ohio to Michigan and Dawn, Ontario

DTE Energy, Enbridge Inc. and Spectra Energy Corp are jointly developing the proposed NEXUS Gas Transmission (NEXUS) project, a project designed to transport growing supplies of Appalachian Basin gas including Utica shale gas production to customers in the U.S. Midwest, including Ohio and Michigan, and to customers in Ontario, Canada including the Dawn Hub. The project will provide these regions with additional access to affordable, clean-burning and abundant natural gas supplies from the Utica shale supply basin and help meet the growing environmental need for cleaner fuels for power generation and for industrial and commercial customers, as well as home heating and domestic use. The project developers are three of the leading energy service and infrastructure companies in North America with more than a century of combined experience in developing infrastructure projects to meet the energy needs of North America.

With this Open Season, which shall run from October 15, 2012 to November 30, 2012 all parties who are interested in subscribing for long-term firm capacity on the NEXUS project are invited to submit a Service Request Form. The service commencement date for this NEXUS project is targeted for November 2016 or earlier.

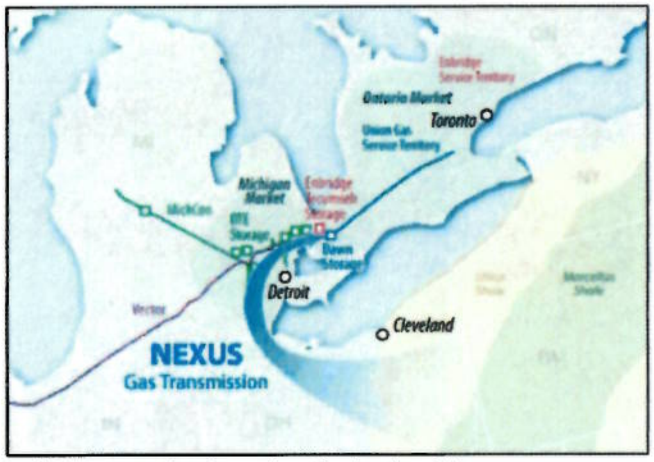
Project Description

The proposed path for the NEXUS project will consist of a newly-constructed, greenfield pipeline that will extend approximately 250 miles from receipt points in eastern Ohio to interconnects with the existing pipeline grid in southeastern Michigan. As proposed, the path will utilize both existing and expansion capacity on the interstate pipeline system owned by Vector Pipeline, L.P. (Vector) to access the Dawn Hub in Ontario. The project will be capable of transporting 1 billion cubic feet per day (Bcf/d) or more of natural gas to serve local distribution companies, industrial energy consumers and natural gas-fired power generators in the Ohio, Michigan and Ontario areas. The proposed path will utilize existing corridors and infrastructure for most of its route to facilitate timely and efficient construction and to minimize environmental and local impacts.

The initial project will include interconnects with Michigan Consolidated Gas Company and Consumers Energy in Michigan and, with the Enbridge Tecumseh storage facility and the Union Gas Dawn Hub in Ontario. Additional delivery points across northern Ohio, southeastern Michigan and southwestern Ontario will be added as necessary to serve those areas.

Project Service

The NEXUS project will provide shippers with an opportunity to obtain firm transportation service from receipt points in northeastern Ohio to multiple delivery points in Ohio, Michigan and Ontario. The NEXUS project is expected to have a capacity of 1 Bcf/d or greater. A bidder in the Open Season can qualify as an "Anchor Shipper" for the NEXUS project by submitting a bid of 150 MDth/d or greater for a term of 15 years or more. Multiple affiliates of a single entity that collectively submit bids in the aggregate totaling at least 150,000 Dth/d will, upon request, all be considered Anchor Shippers. The project developers may offer Anchor Shippers appropriate rate and rate-related incentives, including but not limited to, lower transportation rates than non-anchor shippers. The project developers are also willing to consider



other appropriate incentives for Anchor Shippers.

Project Rates

Shippers will have the ability to choose to pay a cost-based recourse rate for long-term firm transportation service on the NEXUS project facilities or to pay a mutually agreeable negotiated rate for such service.

Final rates for transportation service will be determined based on actual customer subscriptions, receipt/delivery point selections, negotiated services and final project scope of facilities.

Open Season Nomination Process

During the Open Season period interested parties must submit a transportation Service Request Form, which specifies the Maximum Daily Quantity (MDQ), contract term (minimum term of 15 years), and receipt and delivery points. The Service Request Form is included in this package. The completed Service Request Form must be executed by a duly authorized representative and mailed, e-mailed or faxed, to:

5400 Westheimer Court, Houston, TX 77056
Attn: Bobby Huffman, Director, Business Development
rlhuffman@spectraenergy.com
Fax No. (713) 627-4727

The project developers reserve the right to reject any Service Request Form that is not received by November 30, 2012.

Contracting for Service

Upon the close of the Open Season, the project developers will evaluate all valid requests for service as set forth in the Service Request Forms to determine if the proposed project is economically justified. The project developers will also evaluate the availability of necessary materials, equipment and third-party services at the time to confirm that the project can be completed in a manner that will satisfy all valid transportation requests submitted in this Open Season by the timing contemplated. If the project developers elect to roceed with the project, representatives will contact all parties who have submitted valid requests in order to finalize the terms on which service will be provided.

Any party who is awarded capacity must enter into discussions leading to a binding Precedent Agreement. *The project developers reserve the right to reject any party's valid request for service in the event a duly authorized representative of such party has not executed a binding Precedent Agreement on or before 90 days following the end of the Open Season.*

Capacity Allocation Process

In the event that executed binding Precedent Agreements are received for a quantity of project capacity that exceeds the designed project capacity that is economically justified for the of or for certain point or segment capacity, such capacity will be allocated among shippers executing binding Precedent Agreements in a not unduly discriminatory manner; first, to qualifying Anchor Shippers executing binding Precedent Agreements and, next, to other shippers that have executed binding Precedent Agreements. With respect to Anchor Shippers, the project developers will pro rate capacity on a not unduly discriminatory basis, taking into account the quantities subscribed under each such binding Precedent Agreement, the quantities associated with the primary points and primary firm paths under each such agreement, and other factors on a not unduly discriminatory basis. If, after allocating capacity to Anchor Shippers, the developers are able to accommodate some but not all of the pipeline, point or segment capacity nominated by other (non-anchor) shippers, the developers will allocate such capacity on a not unduly discriminatory basis. A shipper's status as an Anchor Shipper, and the Anchor Shipper's attendant rights, will continue to apply even if the shipper's aggregate capacity (including the capacity of its affiliates) falls below the minimum quantity required to qualify as an Anchor Shipper due to any pro rata allocation resulting from the Open Season.

Limitations and Reservations

The project developers reserve the right, in their sole discretion, to decline to proceed with the project or any portion of the project, including all or any portion of the project for which the developers have requested nominations as part of this Open Season. The project developers also reserve the right to proceed with one or more projects that may be defined through the contracting process and to develop alternative projects from the requests received during this Open Season that may be more representative of the timing requested and areas served. The project developers also reserve the right to reject any and all bids that do not satisfy the requirements set forth in this Open Season Notice. Without limiting the foregoing, the project developers may, but are not required to, reject any request for service in which the Service Request Form is incomplete, is inconsistent with the terms and conditions outlined in this Open Season Notice, contains additional or nodified terms, or is otherwise deficient in any respect. The project developers reserve the right to request a nominating party to modify its proposed delivery point(s), to the extent that the developers determine that the nominated point(s) will unduly increase the cost of the overall project or otherwise adversely affect the scope of the project in light of the other nominations received prior to or as part of the Open Season. The project developers also reserve the right to reject requests for service in the event requesting parties are unable to meet applicable creditworthiness requirements. No request for service shall be binding on the project developers unless and until duly authorized representatives of both a requesting party and the project developers have executed binding Precedent Agreements.

Communications

Interested parties may contact Bobby Huffman, Spectra Energy Corp, at (713) 627-5259, Mark Bering, DTE Energy, at (313) 235-6531, or Rene Dartez, Enbridge Inc., at (713) 821-2004 to discuss any questions or to seek additional information about this Open Season.

DTE Energy (NYSE:DTE) is a Detroit-based diversified energy company involved in the development and management of energy-related businesses and services nationwide. Its operating units include Detroit Edison, an electric utility serving 2.1 million customers in Southeastern Michigan, MichCon, a natural gas utility serving 1.2 million customers in Michigan and other non-utility, energy businesses focused on gas storage and pipelines, unconventional gas production, power and industrial projects, and energy trading. Information about DTE Energy is available at www.dteenergy.com.

Enbridge Inc. (NYSE:ENB) is a North American leader in delivering energy and one of the Global 100 Most Sustainable Corporations. As a transporter of energy, Enbridge operates in Canada and the U.S., the world's longest crude oil and liquids transportation system. The Company also has a significant growing investment in natural gas gathering, transmission and midstream businesses, and an increasing involvement in power transmission. As a distributor of energy, Enbridge owns and operates Canada's largest natural gas distribution company, and provides distribution services in Ontario, Quebec, New Brunswick and New York State. As a generator of energy, Enbridge has interests in close to 860 megawatts of renewable and alternative energy generating capacity and is expanding its interests in wind and solar energy, geothermal and hybrid fuel cells. Enbridge is ranked as one of Canada's Greenest Employers and one of the Top 100 Companies to Work for in Canada. For more information, visit www.enbridge.com.

Spectra Energy Corp (NYSE: SE), a FORTUNE 500 company, is one of North America's premier natural gas infrastructure companies serving three key links in the natural gas value chain: gathering and processing, transmission and storage, and distribution. For more than a century, Spectra Energy and its predecessor companies have developed critically important pipelines and related infrastructure connecting natural gas supply sources to premium markets. Based in Houston, Texas, the company's operations in the United States and Canada include more than 19,000 miles of transmission pipeline, approximately 305 billion cubic feet of storage, as well as natural gas gathering and processing, natural gas liquids and local distribution operations. The company also has a 50 percent ownership in DCP Midstream, one of the largest natural gas gatherers and processors in the United States. Spectra Energy is a member of the Dow Jones Sustainability World and North America Indexes and the Carbon Disclosure Project's Global 500 and S&P 500 Carbon Disclosure Leadership Indexes. For more information, visit www.spectraenergy.com.

NEXUS Gas Transmission Project
Open Season for Firm Transportation Capacity
Service Request Form

NEXUS GAS TRANSMISSION

Shipper Information

Company ______________________________

Contact ______________________________

Address ______________________________

Telephone ______________________ Fax ______________________

E-mail ______________________________

Maximum Daily Quantity ______________________

Term (15 year minimum) ______________________

Receipt Point(s)	Quantity (Dth/d)	Delivery Point(s)	Quantity (Dth/d)

Signature of Requestor/Customer:

Name	Title	Date

By completing this Service Request Form, subject to the acceptance of shipper's request for service and shipper's receipt of notification from of the quantities of capacity allocated to shipper, shipper hereby agrees to enter into negotiations with the objective to enter into a binding Precedent Agreement with the project company. If shipper does not enter into a binding Precedent Agreement, the project developers reserve the right to reject shipper's request for service as set forth in this Service Request Form.

If you have any questions, please contact the representative listed below. In addition, please send your completed Service Request Form to:

Bobby Huffman, Director, Business Development
5400 Westheimer Court
Houston, TX 77056

713-627- 4727 *fax*
rlhuffman@spectraenergy.com

Should you have any questions about the NEXUS Gas Transmission Project or the Service Request Form, please contact Bobby Huffman at (713) 627-5259, Mark Bering at (313) 235-6531, or Rene Dartez at (713) 821-2004.

NEXUS Gas Transmission Project

Providing a seamless transportation path for Marcellus & Utica shale gas supplies from Ohio to growing liquid markets in Michigan, Chicago and Dawn, Ontario.

Supplemental Open Season Notice for Firm Service

July 23, 2014 – August 21, 2014

NEXUS Gas Transmission Project

Providing a seamless transportation path for Marcellus & Utica shale gas supplies from Ohio to growing liquid markets in Michigan, Chicago and Dawn, Ontario

DTE Energy and Spectra Energy are lead developers of the proposed NEXUS Gas Transmission (NEXUS) project, a project designed to transport growing supplies of Appalachian Basin gas, including Utica and Marcellus shale gas production, to customers in the U.S. Midwest, including Ohio, Michigan, Chicago, and Dawn Ontario in Canada. The project will help meet the growing environmental need for cleaner and more affordable fuels for power generation and for industrial and commercial customers, as well as home heating and domestic use. DTE Energy and Spectra Energy are two of the leading energy service and infrastructure companies in North America with more than a century of combined experience in developing infrastructure projects to meet the energy needs of North America in a safe, reliable and responsible manner.

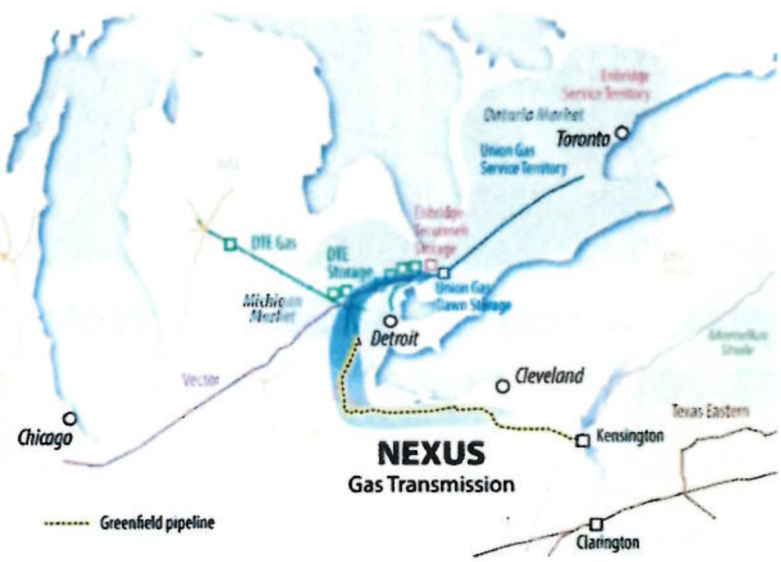
NEXUS conducted an open season from October 15, 2012 through November 30, 2012 ("Original Open Season") which resulted in over 1 billion cubic feet per day ("Bcf/d") of interest in the project. Current NEXUS design capacity is scalable up to 2 Bcf/d. With the commitments to date from a significant number of gas and electric utilities and Appalachian producers, NEXUS has sufficient commitments to advance development of the project.

With this Supplemental Open Season, which shall run from July 23, 2014 through August 21, 2014, all parties who are interested in subscribing for long-term firm capacity on the NEXUS project are invited to submit a transportation Service Request Form. The service commencement date for the NEXUS project is expected to be as early as the fourth quarter of 2017.

Project Description

The NEXUS project is designed to deliver up to 2 Bcf/d of Appalachian supply to Ohio, Michigan, Chicago market centers and the Dawn Hub in Ontario. The proposed path for the NEXUS project will consist of a newly-constructed, greenfield pipeline that will extend approximately 250 miles from receipt points in eastern Ohio to interconnects with the existing pipeline grid in southeastern Michigan. As proposed, the path will utilize both existing and expansion capacity on the DTE Gas transportation system and the Vector Pipeline (Vector) System to access Chicago and the Dawn Hub. Key utilities are committed to the success of NEXUS as shippers, to bring Appalachian supply to serve their native load plus incremental demand growth from gas-fired power generation in both Michigan and Ontario and other Dawn markets.

The proposed transportation path will utilize existing corridors and infrastructure for most of its route to facilitate timely, efficient construction, minimize environmental and local impacts and provide access



to a multitude of existing load center meters. The initial project will include interconnects with Texas Eastern Transmission, LP, and Tennessee Gas Pipeline Company, L.L.C. in the Appalachian Basin, with Michigan Consolidated Gas Company and Consumers Energy in Michigan, and with the Enbridge Tecumseh storage facility and the Union Gas Limited Dawn Hub in Ontario. Additional delivery points across the NEXUS path will be added as necessary based upon shipper interest.

Project Service

The NEXUS project will provide shippers with an opportunity to obtain firm transportation service from receipt points in eastern Ohio, including but not limited to Clarington, OH and Kensington, OH to multiple delivery points in Ohio, Michigan, Chicago and Ontario. The NEXUS transportation service will include flexibility for flowing gas to multiple points within the NEXUS path on a secondary basis. A bidder in the Supplemental Open Season can qualify as a "Foundation Shipper" for the NEXUS project by submitting a bid of 400,000 Dth/d or greater for a term of 15 years or more. Multiple bidders who are affiliated with a single entity, or who are otherwise affiliated through ownership of production acreage or midstream facilities that collectively submit bids in the aggregate totaling at least 400,000 Dth/d will, upon request, all be considered Foundation Shippers. NEXUS may offer Foundation Shippers certain rate and rate-related incentives, including but not limited to, lower transportation rates than other bidders.

A bidder in the Supplemental Open Season can qualify as an Anchor Shipper for the NEXUS project by submitting a bid of 150,000 Dth/d or greater for a term of 15 years or more. Multiple bidders who are affiliated with a single entity, or who are otherwise affiliated through ownership of production acreage or midstream facilities that collectively submit bids in the aggregate totaling at least 150,000 Dth/d will, upon request, all be considered Anchor Shippers. NEXUS may offer Anchor Shippers certain rate and rate-related incentives, not offered to bidders who do not qualify for Foundation Shipper or Anchor Shipper status.

NEXUS is also willing to consider other appropriate incentives for Foundation Shippers and Anchor Shippers.

Project Rates

Bidders may elect to choose to pay cost-based maximum recourse rates for long-term firm transportation service on the NEXUS project or to pay mutually agreeable negotiated rates for such service.

Final rates for transportation service will be determined after the conclusion of the Supplemental Open Season and are dependent upon the final scope of project facilities required to satisfy the firm service requests for bidders who are awarded capacity and who have executed binding Precedent Agreements. In addition to the transportation rates, any bidders who become shippers on NEXUS will be subject to all other applicable tariff charges and surcharges including fuel retainage.

Supplemental Open Season Nomination Process

During the Supplemental Open Season bidding period (beginning at 1:45p.m., CST, July 23, 2014 and ending at 4:00 p.m., CST, August 21, 2014) interested parties must submit a transportation Service Request Form, that is included in this package. The completed Service Request Form must be executed by a duly authorized representative and mailed, e-mailed or faxed, to:

NEXUS Gas Transmission
5400 Westheimer Court, Houston, TX 77056
Attn: Erika Young, Project Director, Business Development
edyoung@spectraenergy.com
Fax No. (713) 627-4654

By submitting a Service Request Form in this Supplemental Open Season bidding period, a bidder is committing to proceed in good faith to negotiate a binding Precedent Agreement with NEXUS within 30 days of the conclusion of the Supplemental Open Season bidding period that incorporates the terms set forth in the bidder's Service Request Form.

NEXUS reserves the right to reject any Service Request Form that is not received by the specified deadline on August 21, 2014.

Contracting for Service

Upon the close of the Supplemental Open Season bidding period, NEXUS will evaluate all valid requests for service as set forth in the Service Request Forms to determine if the proposed project is economically justified. NEXUS will also evaluate the availability of necessary materials, equipment and third-party services at the time to confirm that the project can be completed in a manner that will satisfy all valid transportation requests as set forth in the Service Request Forms submitted in this Supplemental Open Season by the timing contemplated. If NEXUS elects to proceed with the project, representatives will contact all bidders who have submitted valid Service Request Forms in order to finalize the terms on which service will be provided. *NEXUS reserves the right to reject any bidder's valid request for service in the event a duly authorized representative of such bidder has not executed a binding Precedent Agreement on or before 30 days following the end of the Supplemental Open Season bidding period, or such later date as deemed acceptable by NEXUS provided that such Precedent Agreements executed more than 30 days after the end of the Supplemental Open Season bidding period will not subject any bidder with a timely executed Precedent Agreement to any further prorationing of capacity as a result of such later-executed Precedent Agreements.*

Awarding of Capacity

All parties that executed binding precedent agreements as part of the Original Open Season will not be subject to prorationing as a result of bids received in this Supplemental Open Season. In the event that the executed binding Precedent Agreements in the Supplemental Open Season are received timely for a quantity of project capacity that exceeds the quantity of capacity for any portion of the project designed by NEXUS, such capacity will be allocated among bidders timely executing binding Precedent Agreements in a not unduly discriminatory manner, first to qualifying Foundation Shippers that have executed binding Precedent Agreements, second to bidders qualifying as Anchor Shippers in this Supplemental Open Season that have executed binding Precedent Agreements and, finally to other bidders that have executed binding Precedent Agreements.

A bidder's status as a Foundation Shipper or Anchor Shipper, and such bidder's attendant rights, will continue to apply even if the bidder's aggregate capacity (including the capacity of its affiliates) falls below the minimum quantity required to qualify as a Foundation or Anchor Shipper due to any pro rata allocation resulting from the Supplemental Open Season.

Limitations and Reservations

NEXUS reserves the right, in its sole discretion, to decline to proceed with the project or any portion of the project, including all or any portion of the project for which NEXUS has requested bids as part of this Supplemental Open Season. NEXUS also reserves the right: (1) to proceed with one or more projects that may be defined through the contracting process and to develop alternative projects from the requests received during this Supplemental Open Season that may be more representative of the timing requested and areas served; (2) to reject any and all bids that do not satisfy the requirements set forth in this Supplemental Open Season Notice. Without limiting the foregoing, NEXUS may, but is not required to, reject any request for service in which the Service Request Form is incomplete, is inconsistent with the terms and conditions outlined in this Supplemental Open Season Notice, contains additional or modified terms, or is otherwise deficient in any respect; (3) to request a nominating bidder to modify its proposed delivery point(s), to the extent that NEXUS determines that the nominated point(s) will unduly increase the cost of the overall project or otherwise adversely affect the scope of the project in light of the other requests for service received prior to or as part of the Supplemental Open Season; and/or (4) to reject requests for service in the event requesting bidders are unable to meet applicable creditworthiness requirements. No request for service shall be binding on NEXUS unless and until duly authorized representatives of both a requesting bidder and

NEXUS have executed a binding Precedent Agreement.

Communications

Interested parties may contact Anne Moore, Spectra Energy, at (713) 627-4555, Erika Young, Spectra Energy, at (713) 627-4609, David Slater, DTE Energy, at (313) 235-0408, or Paul McLean, DTE Energy, at (313) 235-5273 to discuss any questions or to seek additional information about this Open Season.

DTE Energy (NYSE:DTE) is a Detroit-based diversified energy company involved in the development and management of energy-related businesses and services nationwide.

Its operating units include an electric utility serving 2.1 million customers in Southeastern Michigan and a natural gas utility serving 1.2 million customers in Michigan.

The DTE Energy portfolio also includes non-utility energy businesses focused on power and industrial projects, natural gas pipelines, gathering and storage, and energy marketing and trading.

Information about DTE Energy is available at dteenergy.com, twitter.com/dte_energy and facebook.com/dteenergy.

Spectra Energy Corp (NYSE: SE), a FORTUNE 500 company, is one of North America's leading pipeline and midstream companies. Based in Houston, Texas, the company's operations in the United States and Canada include more than 22,000 miles of natural gas, natural gas liquids, and crude oil pipelines; approximately 305 billion cubic feet (Bcf) of natural gas storage; 4.8 million barrels of crude oil storage; as well as natural gas gathering, processing, and local distribution operations. Spectra Energy is the general partner of Spectra Energy Partners (NYSE: SEP), one of the largest pipeline master limited partnerships in the United States and owner of the natural gas, natural gas liquids, and crude oil assets in Spectra Energy's U.S. portfolio. Spectra Energy also has a 50 percent ownership in DCP Midstream, the largest producer of natural gas liquids and the largest natural gas processor in the United States. Spectra Energy has served North American customers and communities for more than a century. The company's longstanding values are recognized through its inclusion in the Dow Jones Sustainability World and North America Indexes and the CDP Global 500 and S&P 500 Climate Disclosure and Performance Leadership Indexes. For more information, visit www.spectraenergy.com and www.spectraenergypartners.com.

NEXUS Gas Transmission Project
Supplemental Open Season for Firm Transportation Capacity
Service Request Form

Shipper Information

Company ______________________________

Contact ______________________________

Title ______________________________

Address ______________________________

Telephone ______________________ Fax ______________________

E-mail ______________________________

Maximum Daily Quantity ______________ **Term (15 year minimum)** ______________

Receipt Point(s)	Quantity (Dth/d)	Delivery Point(s)	Quantity (Dth/d)

Signature of Requestor/Customer:

Name	Title	Date

By completing this Service Request Form, subject to the acceptance of bidder's request for service and bidder's receipt of notification from NEXUS of the quantities of capacity allocated to bidder, bidder hereby agrees to enter into negotiations with the objective to enter into a binding Precedent Agreement with NEXUS. If bidder does not enter into a binding Precedent Agreement within 30 days of the close of this Supplemental Open Season, NEXUS reserves the right to reject bidder's request for service as set forth in this Service Request Form.

If you have any questions, please contact the representative listed below. In addition, please send your completed Service Request Form to:

Erika Young, Project Director, Business Development
5400 Westheimer Court
Houston, TX 77056

713-627- 4654 *fax*
edyoung@spectraenergy.com

NEXUS Gas Transmission Project

Supplemental Open Season Notice for Firm Service

January 14, 2015 – February 12, 2015

Providing a seamless transportation path for Marcellus & Utica shale gas supplies from Ohio to growing liquid markets in Ohio, Michigan, Chicago and the Dawn Hub

DTE Energy and Spectra Energy, two of the leading energy service and infrastructure companies in North America, are lead developers of the proposed NEXUS Gas Transmission (NEXUS) project, a 1.5 Bcf/d project that will transport growing supplies of Appalachian Basin gas, including Utica and Marcellus shale gas production, to customers in the U.S. Midwest, including Ohio, Michigan, Chicago, and the Dawn Hub in Ontario, Canada. The service commencement date is expected to be November 1, 2017. A full NEXUS project description is available on the NEXUS website (www.nexusgastransmission.com).

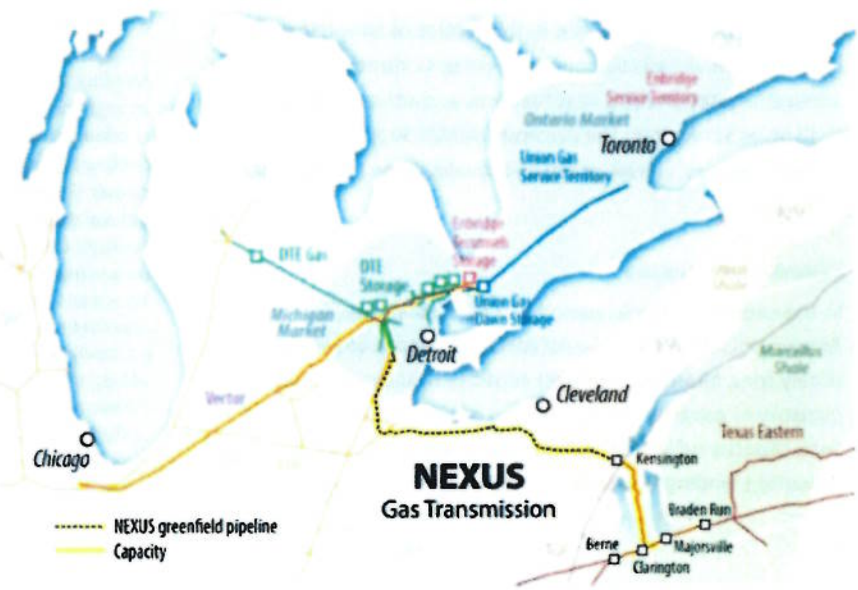
This Supplemental Open Season shall run from January 14, 2015, through February 12, 2015. NEXUS previously conducted open seasons which resulted in contractual commitments, from local distribution companies and producers, for the majority of the project design capacity. With this necessary market support and the Federal Energy Regulatory Commission's January 2015 approval of our pre-filing request, the project will move forward.

The primary purpose of this Supplemental Open Season is to provide additional upstream receipt point access for existing or prospective shippers, while also presenting flexible service offerings and to further provide interested parties the opportunity to submit nominations which could increase the size of the NEXUS project up to 2 Bcf/d. Specifically, NEXUS will contract for capacity on Texas Eastern Transmission and is offering to the market in this Supplemental Open Season NEXUS receipt points in Texas Eastern Transmission's Market Zone 2 ("M2"), as well as Berne, OH, Clarington, OH, Majorsville, WV and Braden Run, PA, and can include any new or existing points near the Braden Run, PA to Berne, OH path.

The Aggregate Maximum Daily Receipt Obligation ("MDRO") capacity for receipt points on Texas Eastern is limited, with MDRO capacity at the particular receipt points to be made available to interested shippers on a non-discriminatory basis in this Supplemental Open Season.

NEXUS will consider requests for new laterals off the greenfield mainline as well as installation of new receipt and/or delivery points. NEXUS will also consider service offerings to accommodate demand from those shippers who may require additional flexibility to match their unique operational profiles. Shippers who are interested in such options should contact a NEXUS representative.

A bidder in the Supplemental Open Season can qualify as an Anchor Shipper for the NEXUS project by submitting a bid of 150,000 Dth/d or greater for a term of 15 years or more. Multiple bidders who are affiliated with a single entity, or who are otherwise affiliated through ownership of production



acreage or midstream facilities that collectively submit bids in the aggregate totaling at least 150,000 Dth/d will, upon request, all be considered Anchor Shippers. NEXUS may offer Anchor Shippers certain rate and rate-related incentives, not offered to bidders who do not qualify for Anchor Shipper status.

Supplemental Open Season Nomination Process

During the Supplemental Open Season bidding period (beginning at 8 AM, CST, January 14, 2015 and ending at 4:00 p.m., CST, February 12, 2015) interested parties must submit a transportation Service Request Form, that is included in this package, unless a party has already executed a Precedent Agreement which sets forth its request for capacity being offered as part of the Supplemental Open Season. The completed Service Request Form must be executed by a duly authorized representative and mailed, e-mailed or faxed, to:

NEXUS Gas Transmission, LLC
5400 Westheimer Court, Houston, TX 77056
Attn: Erika Young, Project Director, Business Development
edyoung@spectraenergy.com
Fax No. (713) 627-4654

By submitting a Service Request Form in this Supplemental Open Season bidding period, a bidder is committing to proceed in good faith to negotiate a binding Precedent Agreement with NEXUS within 30 days of the conclusion of the Supplemental Open Season bidding period that incorporates the terms set forth in the bidder's Service Request Form.

NEXUS reserves the right to reject any Service Request Form that is not received by the specified deadline on February 12, 2015.

Unless specifically addressed in this Notice of Supplemental Open Season, details surrounding Rates, Contracting for Service, Limitations and Reservations, and other process shall be as set forth in the previous NEXUS Supplemental Open Season, which information is available on the NEXUS website.

Awarding of Capacity

In the event that the executed binding Precedent Agreements in this Supplemental Open Season are received timely for a quantity of project capacity that exceeds the quantity of capacity for any portion of the NEXUS project, such capacity will be allocated among bidders timely executing binding Precedent Agreements in a not unduly discriminatory manner, first to bidders qualifying as Anchor Shippers in this Supplemental Open Season who have executed binding Precedent Agreements and, finally to other bidders who have executed binding Precedent Agreements.

A bidder's status as an Anchor Shipper, and such bidder's attendant rights, will continue to apply even if the bidder's aggregate capacity (including the capacity of its affiliates) falls below the minimum quantity required to qualify as an Anchor Shipper due to any pro rata allocation resulting from the Supplemental Open Season.

Communications

Interested parties may contact Anne Moore, Spectra Energy, at (713) 627-4555, Erika Young, Spectra Energy, at (713) 627-4609, David Slater, DTE Energy, at (313) 235-0408, or Paul McLean, DTE Energy, at (313) 235-5273 to discuss any questions or to seek additional information about this Open Season.

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NEXUS Gas Transmission Project
Supplemental Open Season for Firm Transportation Capacity

Service Request Form

Shipper Information

Company ______________________________

Contact ______________________________

Title ______________________________

Address ______________________________

Telephone ______________________ Fax ______________________

E-mail ______________________________

Maximum Daily Quantity ______________________ **Term (15 year minimum)** ______________________

Receipt Point(s)	Quantity (Dth/d)	Delivery Point(s)	Quantity (Dth/d)

Signature of Requestor/Customer:

______________________ ______________________ ______________________

Name Title Date

By completing this Service Request Form, subject to the acceptance of bidder's request for service and bidder's receipt of notification from NEXUS of the quantities of capacity allocated to bidder, bidder hereby agrees to enter into negotiations with the objective to enter into a binding Precedent Agreement with NEXUS. If bidder does not enter into a binding Precedent Agreement within 30 days of the close of this Supplemental Open Season, NEXUS reserves the right to reject bidder's request for service as set forth in this Service Request Form.

If you have any questions, please contact the representative listed below. In addition, please send your completed Service Request Form to:

Erika Young, Project Director, Business Development
5400 Westheimer Court
Houston, TX 77056

713-627- 4654 *fax*
edyoung@spectraenergy.com

BOMA INTERROGATORY #19

INTERROGATORY

Please provide the names of US LDCs that have signed Precedent Agreements with NEXUS. Which, if any, of these LDCs have applied for pre-approval from their respective regulators?

RESPONSE

Enbridge is aware of one U.S. gas LDC, DTE Gas Company, that has signed a Precedent Agreement with NEXUS. Enbridge understands that DTE Gas Company has requested approval from the Michigan Public Service Commission for all the costs and expenses associated with the NEXUS transportation contract.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #20

INTERROGATORY

Ref: Ibid, Page 24, Table 2

EGD states, in its Landed Cost Analysis, that its "TransCanada from Niagara" option is $4.90 CDN/GJ. The figure on Page 25 shows the "Niagara Path" as a path from Niagara to Dawn. Please provide the landed costs for the existing 200,000 GJ pathway from Niagara to Parkdale/EGD, as well as the Niagara to Dawn path shown on the diagram for 2016, 2017 and beyond.

RESPONSE

The landed cost analysis of the Niagara to Dawn path is detailed in Exhibit A, Tab 3, Schedule 1, Appendix C (updated August 25, 2015). This is found in the line titled “TCPL from Niagara”.

The landed cost from Niagara to Union Parkway Belt is equivalent to the landed cost for the Niagara to Enbridge Parkway CDA path. This is because the toll for each of the aforementioned paths is identical as are all other landed cost analysis assumptions for these paths. The landed costs for the Niagara to Union Parkway Belt path is set out in the response to FRPO Interrogatory #13 at Exhibit I.T1.EGDI.FRPO.13.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #21

INTERROGATORY

Ref: March 20, 2015 NEXUS Gas Transmission LL.C. Updated Stakeholder List and Project Update, Page 2 (Exhibit A, Tab 3, Schedule 1, Page 40)

In the update, NEXUS advised FERC that it can meet the objectives of its proposed Project by using thirty-six inch diameter pipe, rather than a forty-two inch pipeline.

What will the impact on the final estimated project cost, and the reservation rate (demand charge) of this change in project scope? Please discuss fully.

RESPONSE

It is Enbridge's understanding that the $2.019 billion US capital estimate provided by NEXUS in its letter dated June 3, 2015 (See Exhibit A, Tab 3, Schedule 1, Appendix H) was based on its most current construction cost estimates. This estimate included scope changes up to that date. The capital cost tracking mechanism adjusts the final reservation rate based on final capital cost variance relative to this estimate. Therefore this scope change in and of itself should have no impact on the final estimated project cost and/or the reservation rate.

Witnesses: J. LeBlanc
A. Welburn

BOMA INTERROGATORY #22

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Appendix C

In the first table, Landed Cost of "TCPL from Niagara" is shown as CDN$4.13/GJ in 2017, increasing to CDN$5.77 in 2032 for an average cost of CDN$4.90. Please provide the basis and the calculation of the escalation of that rate over time.

RESPONSE

Please see the response to TransCanada Interrogatory #9 at Exhibit I.T4.Enbridge.TransCanada.9.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #1

INTERROGATORY

(Ex. A/T2/S1/p. 2)

How did EGD decide what level of capacity to contract for? Please explain in detail how that assessment was made.

RESPONSE

Please see response to FRPO Interrogatory #5 at Exhibit I.T1.EGDI.FRPO.5.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #2

INTERROGATORY

(Ex. A/T3/S1/p. 2)

The evidence states that NEXUS provides additional benefits relative to Niagara through increased diversity of path and the ability to obtain natural gas directly from the supply basins. Please provide all analyses undertaken that compared the Niagara option to the NEXUS option. Please explain the extent to which any arrangements with Union Gas have influenced EGD's decision to contract on NEXUS. Please set out any arrangements EGD has with Union Gas regarding the NEXUS supply.

RESPONSE

Please see Exhibit A, Tab 3, Schedule 1, Appendix B and Appendix C (updated) for a landed cost analysis which compare NEXUS with Niagara as well as a number of other supply options. Enbridge has also conducted subsequent landed costs analysis in response to interrogatories received from Board Staff (Exhibit I.T1.EGDI.STAFF.5c), Exhibit I.T1.EGDI.STAFF.5d), and Exhibit I.T3.EGDI.STAFF.16), TransCanada (Exhibit I.T1.Enbridge.TransCanada.3), and FRPO (Exhibit I.T1.EGDI.FRPO.13).

Diversity of path, diversity of suppliers, direct access to producers and diversity directly within in the basin are why NEXUS makes sense as a compliment to supply accessed through Niagara. The impact of including NEXUS supply in Enbridge's gas supply portfolio is outlined in Tables 3 and 4 found at Exhibit A, Tab 3, Schedule 1, pages 31 and 32. Niagara supply is expected to be approximately 15% of Enbridge's overall gas supply portfolio (26% for the system gas customer supply portfolio). The combination of NEXUS and Niagara will make up 26% of the overall portfolio (41% for the system gas customer supply portfolio) accessing Appalachian basin supply.

Further discussion of the NEXUS option relative to other paths can be found in the response to Board Staff Interrogatory #7 at Exhibit I.T1.EGDI.STAFF.7.

Enbridge does not have any arrangements with Union Gas that influenced the decision to contract on NEXUS. Enbridge does not have any supply arrangements with Union Gas for NEXUS supply. Enbridge has not entered into any new transportation arrangements with Union to support the NEXUS contract.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #3

INTERROGATORY

(Ex. A/T3/S1/p. 3)

To date how much has EGD spent with respect to “pre-service project costs”?

RESPONSE

Enbridge is not the project developer and has spent nothing on pre-service costs.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #4

INTERROGATORY

(Ex. A/T3/S1/p. 3)

How many shippers are underpinning the decision to proceed with the project? When will the decision to proceed be made by NEXUS? What are all of the factors that will determine whether the project will proceed?

RESPONSE

Enbridge is not aware of the total number of shippers underpinning the NEXUS pipeline. Enbridge understands that NEXUS has executed Precedent Agreements with seven shippers and continues to negotiate with other prospective shippers.

Enbridge's current understanding of the NEXUS project timeline has been provided at Exhibit A, Tab 3, Schedule 1, page 13, paragraph 35. Enbridge believes the next critical step for NEXUS would be its FERC application which is expected to be filed in November of this year. Enbridge believes that NEXUS would like to understand the outcome of this proceeding before it makes a final commitment to proceed with the project. There are a number of factors Enbridge expects NEXUS will weigh to determine if the project will proceed. Shipper commitment level is certainly a critical factor along with continuing support from the project proponents and regulatory and government approvals in both the US and Canada (including the receipt of a Certificate of Public Convenience and Necessity).

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #5

INTERROGATORY

(Ex. A/T3/S1/p. 3)

EGD has the ability to increase contracted volumes on the pipeline. Does EGD also have the right to reduce contracted volumes? If not, why not?

RESPONSE

No. Enbridge does not have the right to reduce contracted volumes. In order for new pipelines to proceed, project developers need committed shippers for committed volumes to ensure that the developers build new infrastructure they will have a reasonable chance to recover their investment. Without shippers committing to capacity such infrastructure would never be built.

See also the response to Energy Probe Interrogatory #2 at Exhibit I.T1.EGDI.Energy Probe.2.

Enbridge would also note that it did reduce its volume for reasons discussed in the response to FRPO Interrogatory #5 at Exhibit I.T1.EGDI.FRPO.5. Further, as discussed in the pre-filed evidence at Exhibit A, Tab 3, Schedule 1, page 36, paragraph 94 and in the response to Board Staff Interrogatory #1 at Exhibit I.T1.EGDI.STAFF.1, Enbridge will retain flexibility in its supply portfolio in order to allow for pursuit of other attractive transportation options should they become available.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #6

INTERROGATORY

(Ex. A/T3/S1/p. 4)

EGD states that the risks have been “largely” mitigated through favourable terms negotiated in the Precedent Agreement, the strength of the lead developers and current production expectations for the Utica and Marcellus basins. What risks remain, and how will EGD’s ratepayers be protected against those risks?

RESPONSE

Risks to ratepayers and the mitigants protecting ratepayers against these risks have been discussed in detail in the pre-filed evidence. Please see Exhibit A, Tab 3, Schedule 1, pages 35 to 43.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #7

INTERROGATORY

(Ex. A/T3/S1/p. 5)

Was the Sussex Study subject to an RFP? If not, why not? Please provide the RFP and the Final Terms of Reference for the study. What are the total costs of the study and how will those costs be recovered?

RESPONSE

The Sussex Study was not subject to an RFP. Sussex was chosen by Enbridge after discussions with Union. Both LDCs agreed that it did not make sense from a cost perspective to each hire consultants for what would be the same or very similar work. Union recommended Sussex because of Sussex's familiarity with the Ontario gas supply market. Through discussions with Sussex, the LDCs became aware that Sussex had also assisted other entities in pre-approval applications. The total cost of work by Sussex to date is approximately $192,000 USD. The cost of the Sussex work is being divided 50/50 with Union. These costs will form a part of Enbridge's O&M spending, the level of which has already been fixed for each year of the current IR term.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #8

INTERROGATORY

(Ex. A/T3/S1/p. 6)

EGD has filed its 2014-2015 Gas Supply Memorandum in this case. Please explain the relief EGD is seeking in this case with respect to that Memorandum.

RESPONSE

Enbridge is not seeking any relief related to its 2014-2015 Gas Supply Memorandum in this case. The document is filed for information purposes.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #9

INTERROGATORY

(Ex. A/T3/S1/p. 8)

Given the cost of this contract did EGD retain expert advice regarding the appropriateness of this decision in addition to the Sussex Study? If not, why not? If so, please provide all other expert reports.

RESPONSE

Enbridge did not retain specific expert advice to make this contracting decision other than Sussex. Along with their report filed as part of the pre-filed evidence at Exhibit A, Tab 3, Schedule 2, Sussex also provided an earlier memo discussing gas supply in the Appalachian region. This memo has been filed in response to SEC Interrogatory # 2 at Exhibit I.T1.EGDI.SEC.2.

Enbridge did not retain any other expert assistance, as has the expertise and access to sufficient industry information to evaluate transportation contracting options available to it.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #10

INTERROGATORY

(Ex. A/T3/S1/p. 9)

EGD is planning to obtain 200,000 GJ/day of gas supply in 2015 and 2016 through receipts at Niagara. How long is that contract? How does the capacity compare to that under the NEXUS contract?

RESPONSE

The supply contracts from Niagara for 2015 and 2016 are discussed in response to BOMA Interrogatory #15 at Exhibit I.T1.EGDI.BOMA.15. The transportation contracts from Niagara for 2015 and 2016 are discussed in response to BOMA Interrogatory #14 at Exhibit I.T1.EGDI.BOMA.14. See CCC Interrogatory #2 at Exhibit I.T1.EGDI.CCC.2 for a discussion on how the Niagara and NEXUS capacity compare.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #11

INTERROGATORY

(Ex. A/T3/S1/p. 12)

What is the current status regarding Enbridge Inc.'s potential involvement in the NEXUS pipeline?

RESPONSE

The status of Enbridge Inc.'s potential involvement in the NEXUS pipeline has not changed since Enbridge filed its evidence in this application. Enbridge would point out however that its evaluation of the NEXUS capacity has and will continue to be independent of Enbridge Inc.'s potential involvement in the NEXUS pipeline.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #12

INTERROGATORY

(Ex. A/T3/S1/p. 17)

EGD is contracting for 110,000 Dth per day on the NEXUS pipeline. What is the equivalent commitment in GJ/day?

RESPONSE

110,000 Dth/day is approximately equal to 116,056 GJ/day.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #13

INTERROGATORY

(Ex. A/T3/S1/p. 19)

EGD has indicated that it has undertaken a review of the forecast costs associated with Marcellus or Utica gas supply via NEXUS, as compared to other supply options. Please provide copies of all of that analysis.

RESPONSE

Please see Exhibit A, Tab 3, Schedule 1, Appendix B and Appendix C.

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #14

INTERROGATORY

(Ex. A/T3/S1/p. 36)

Please explain how the variance between the US and Canadian dollar impacts the NEXUS contract.

RESPONSE

An increase in the US exchange rate will increase the tolls under the NEXUS contract, when those costs are expressed in Canadian dollars. The same will hold true for all transportation contracts that originate in the United States.

For the impact of exchange rates on landed costs, please see response to Board Staff Interrogatory #16 at Exhibit I.T3.EGDI.STAFF.16 where Enbridge has compared its original (May 2015) landed cost with the same parameters while adjusting the exchange rate to 1.40 CAD/USD.

Exchange rate risks are discussed at Exhibit A, Tab 3, Schedule 1, at page 38 (paragraph 101).

Witnesses: J. LeBlanc
A. Welburn

CCC INTERROGATORY #15

INTERROGATORY

(Ex. A/T3/S1/p. 39)

Please explain how with respect to the 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 EGD's exposure to the consequences of cost overruns.

RESPONSE

Enbridge discusses this in detail in paragraphs 104 to 109 of the pre-filed evidence. See Exhibit A, Tab 3, Schedule 1, pages 39 to 41.

Witnesses: J. LeBlanc
A. Welburn

CME INTERROGATORY #1

INTERROGATORY

Ref: Exhibit A

CME supports the rational development of new natural gas infrastructure in Ontario. Particularly, CME believes that there is benefit in connecting Ontario to the Appalachian region of the United States Northeast, which is a fast-growing production region of natural gas in North America. That said CME wishes to better understand the need for pre-approval of the cost consequences of the NEXUS long-term contract. In this regard, please answer the following questions:

(a) CME understands that EGD has previously requested pre-approval of long-term natural gas supply and/or upstream transportation contracts from the Ontario Energy Board ("Board"). Please identify all of the previous applications in which EGD has sought pre-approval of the cost consequences associated with a long-term natural gas supply and/or upstream transportation contract.

(b) For each of the previous applications in which pre-approval was sought, please confirm whether the Board granted pre-approval.

(c) Please identify all differences within this application, as compared to previous applications in which pre-approval was denied by the Board, which would justify the Board granting pre-approval in this case.

(d) Is EGD aware of the Board ever providing pre-approval of the cost consequences of a long-term natural gas supply and/or upstream transportation contract to any Ontario distributor? If yes, please identify the applications in which approval was granted.

RESPONSE

a) Please see the response to Board Staff Interrogatory #3 at Exhibit I.T1.EGDI.STAFF.3.

b) Please see response to a) above.

Witnesses: J. LeBlanc
A. Welburn

c) Past applications are not the appropriate test of the appropriateness of pre-approval for this application. While the decisions in such applications provide some guidance as to what prior Board panels have required in order to achieve pre-approval, such decisions are determinative of future cases.

In the Natural Gas Forum report, the Board determined that natural gas utilities should have the opportunity to apply for pre-approval of long-term upstream gas transportation contracts. Following a consultation process (EB-2008-0280), the Board established Long Term Contract Filing Guidelines for the Pre-Approval of Cost Consequences for Long-Term Natural Gas Contracts (the "Guidelines") to be used by natural gas utilities exercising the option for such pre-approval. In the letter that accompanied the issuance of the Guidelines, the Board indicated that a pre-approval process is appropriate for long-term contracts that support the development of new natural gas infrastructure.

Enbridge's evidence addresses the requirements and expectations set out in the Guidelines, and takes account of the findings of the Board in the decisions that have made reference to the Guidelines. Enbridge addresses the appropriateness of pre-approval in its pre-filed evidence at Exhibit A, Tab 3, Schedule 1, pages 43 to 46, paragraphs 118 to 124.

d) Enbridge is not aware of any instance where the Board has granted pre-approval of the cost consequences of a long-term natural gas supply and/or upstream transportation contract.

Witnesses: J. LeBlanc
A. Welburn

CME INTERROGATORY #2

INTERROGATORY

Ref: Exhibit A, Tab 3

If the Board does not provide EGD with pre-approval, will EGD still commit to the NEXUS contract?

RESPONSE

No. In the event that Enbridge does not obtain pre-approval it will let the NEXUS contract terminate.

Witnesses: J. LeBlanc
A. Welburn

ENERGY PROBE INTERROGATORY #1

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Page 2

Preamble: Enbridge states that if the company "does not now actively participate now in these new pipeline projects, supplies from the Appalachian basin will continue to be contracted to other markets across America."

Please provide the total amount of Appalachian supply that is already contracted to other markets.

RESPONSE

Enbridge does not have details of the total amount of Appalachian supply that is already contracted to other markets.

There are various natural gas pipelines currently accessing the Marcellus and Utica shale basin that could provide transportation for volumes contracted to other markets. Those pipelines include:

- Texas Eastern Gas Transmission
- Tennessee Gas Pipeline
- Transcontinental Gas Pipeline
- Dominion Gas Transmission
- National Fuel Gas Supply Pipeline
- Columbia Gas Transmission
- Millennium Gas Pipeline

Witnesses: J. LeBlanc
A. Welburn

ENERGY PROBE INTERROGATORY #2

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Page 3

Enbridge states that it can increase its contracted volume to 150,000 Dth/d.
Is it also possible to decrease its contracted volume in the event that demand for natural gas in the province declines?

RESPONSE

The commitment for 110,000 Dth/d for 15 years cannot be reduced. Supply expected to flow on this capacity commitment represents about 10% of Enbridge's overall annual supply requirement (inclusive of direct purchase supplies). Enbridge does maintain a level of flexibility in its overall gas supply contract portfolio to allow it to respond to variations in customer demand over time. If demand for natural gas in Enbridge's service area declines over the 15 year term of the NEXUS commitment, Enbridge will be able to reduce overall portfolio capacity by not renewing and/or reducing other contracts in its supply portfolio which have shorter terms.

See also the response to CCC Interrogatory #5 at Exhibit I.T1.EGDI.CCC.5.

Witnesses: J. LeBlanc
A. Welburn

ENERGY PROBE INTERROGATORY #3

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 2, Page 3 (Sussex Report)

Preamble: Flows of natural gas from the Western Canadian Sedimentary Basin (WCSB) to Ontario have decreased in recent years for two reasons – a decline in gas production, but also an increase in gas consumption by oil sands and other industrial companies.

Would the recent oil price decline and slashing of capital budgets by a number of oil sands companies have an impact on future flows of gas from the WCSB into Ontario?

RESPONSE

For context, the referenced section of the Sussex Report is provided:

> The Ontario market has been predominantly supplied with natural gas from the Western Canadian Sedimentary Basin ("WCSB"). Since 2006, two market dynamics have contributed to the decrease in natural gas flowing from the WCSB to the Ontario market: (1) increased natural gas consumption within the WCSB for certain market segments (e.g., industrial-oil sands and power generation); and (2) decreased conventional natural gas production from the WCSB.

While the recent decline in oil prices will have an impact on short term capital expenditures and development budgets, the investment in a particular basin will likely be supported by various long-term factors, including: expectations of cost to produce, estimates of reserves, price expectations from markets, and competitive alternatives.

As such, the recent oil price declines may have an impact on short term expenditures and development in the WCSB, but longer term production and flow activity will likely be determined by the long-term factors discussed above.

Witness: J. Stephens

ENERGY PROBE INTERROGATORY #4

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1

The application provides two tables, Table 4 and Table 5, which detail Enbridge's gas supply without and with the NEXUS project, respectively. The NEXUS project allows Enbridge to lower its supply from Chicago from 15% of total supply to 6%.

a) Please detail the rate impact that such a decrease will have?

b) Is the gas supplied from Chicago cheaper than the gas supplied from the NEXUS project,?

c) What is the current toll rate on shipping gas to Dawn, Ontario from Chicago?

RESPONSE

a) Please see response to Board Staff Interrogatory #10 found at Exhibit I.T1.EGDI.Staff.10.

b) As seen in the Average Commodity Prices set out at Appendix C of Exhibit A, Tab 3, Schedule 1 (updated August 25, 2015), the forecast commodity cost for NEXUS supply (indicated as "Dominion South) is lower than the forecast commodity cost for Chicago supply.

c) The current transportation toll from Chicago to Dawn is $0.23 USD per Dth from Chicago to St. Clair and $0.02 Cdn per GJ from St. Clair to Union-Dawn.

Witnesses: J. LeBlanc
A. Welburn
A. Kacicnik

ENERGY PROBE INTERROGATORY #5

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Page 15, Paragraph 41

The evidence states that commitments from utilities like Enbridge and others have provided part of the market support necessary for the project lead developers to proceed with NEXUS.

Please provide details on current commitments.

RESPONSE

Please see response to CCC Interrogatory # 4 at Exhibit I.T1.EGDI.CCC.4 for a discussion of Enbridge's current understanding of commitments on the NEXUS pipeline.

Witnesses: J. LeBlanc
A. Welburn

ENERGY PROBE INTERROGATORY #6

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Page 18, Paragraph 48

a) Please confirm the 15% cap (plus or minus) on capital was negotiated by Enbridge.

b) Please explain how the capital cap amount of 15% was determined.

c) Please confirm the amount and nature of the capital costs in Ontario.

RESPONSE

a) The capital cost tracker mechanism (with the 15% cap) forms part of the NEXUS contract negotiated and signed between Enbridge and NEXUS. The intention of this mechanism it to protect both Enbridge ratepayers and the pipeline and to incent the pipeline. By placing limits on the amount of variation from estimated costs that can impact rates it places bounds on what Enbridge's final rate will be (the costs of which will ultimately be paid by Enbridge ratepayers). The capital cost tracker mechanism incents the pipeline to estimate its costs accurately and to manage the project costs against the cost estimate. It protects the pipeline from a limited amount of cost variation. Enbridge has been advised by Sussex that a capital cost tracker is a common element associated with pipeline development in the U.S. and pipeline developers there often negotiate this type of tracker given the inherent difficulty in estimating the actual costs of such projects in advance of project completion.

b) It was determined through negotiations between Enbridge and NEXUS as part of the overall terms of the agreement.

c) There are no Ontario based capital costs related to the capacity commitment signed by Enbridge. The path of the capacity commitment made by Enbridge runs from Kensington, Ohio to the interconnection point with the Vector Pipeline at/near Milford Junction, Michigan.

Witnesses: J. LeBlanc
A. Welburn

ENERGY PROBE INTERROGATORY #7

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Page 19

Please summarize the types of assumptions that can change over time and impact the landed cost analysis.

RESPONSE

There are four main assumptions included in the landed cost analysis: commodity prices, tolls, fuel ratios, other charges and foreign exchange rates. The assumptions that were used in the landed cost analysis are discussed in the pre-filed evidence at Exhibit A, Tab 3, Schedule 1, paragraph 53 and are detailed in Appendix B and Appendix C (updated August 25, 2015). Forecasting risks associated with the landed cost assumptions are discussed in the pre-filed evidence at Exhibit A, Tab 3, Schedule 1, pages 36 to 39. The landed cost analysis was reviewed by Sussex and the results were included in their Market Study which can be found in Exhibit A, Tab 3, Schedule 2, page 45.

Changes in some of the assumptions, such as foreign exchange rates and commodity prices, can be expected to have equal or similar impact on most or all of the scenarios examined in the landed cost analysis.

Witnesses: J. LeBlanc
A. Welburn

ENERGY PROBE INTERROGATORY #8

INTERROGATORY

Ref: Exhibit A, Tab 3, Schedule 1, Page 3, Paragraph 6

The NEXUS contract is for 110,000 Dth/d.

Please provide the conversion to GJ/d.

RESPONSE

110,000 Dth/d is approximately equal to 116,056 GJ/d.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #1

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 16, para. 44

Preamble: We would like to understand better, the evolution of the Precedent Agreements outlined in this paragraph.

1) Please provide a copy of the original PA signed June 5, 2014.

RESPONSE

Attached please find the original PA which was signed on June 5, 2014.

Witnesses: J. LeBlanc
A. Welburn

David Slater
Executive Vice President
DTE Gas Storage Company
DTE Pipeline Company
One Energy Plaza, 2084 WCB
Detroit, Michigan 48226
313-235-0408
519-564-3292(Cell)
313-235-6450 FAX
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NEXUS
GAS TRANSMISSION

Enbridge Gas Distribution Inc.
2244 – E1
500 Consumers Rd
North York, Ontario Canada M2J 1P8

June 2, 2014

Attention: Jamie LeBlanc
Director, Energy Supply & Policy

Re: Enbridge Gas Distribution ("EGD") NEXUS Precedent Agreement dated June 5, 2014 (the "**Precedent Agreement**")

All capitalized terms used in this Letter Agreement and not otherwise defined in this Letter Agreement shall have the meaning given to them in the Precedent Agreement.

For and in consideration of the execution of the Precedent Agreement by EGD and in connection with EGD contracting for capacity with respect to Phase I of the Project, subject to the terms and conditions set forth in the Precedent Agreement, Pipeline wishes to confirm certain additional agreements made in respect of the calculation of the Reservation Rates that would be applicable to Phase II Service for EGD. Accordingly, Pipeline confirms to EGD the following:

1. Phase I service will be provided by Pipeline from a Primary Point of Receipt at Willow Run in Wayne County, Michigan to a Primary Point of Delivery at Dawn, Ontario (as more fully described in Section 3 of the Precedent Agreement) utilizing subscriptions of firm pipeline capacity on existing pipeline systems, without the need to construct additional facilities. The Reservation Rate to be charged by Pipeline to EGD and other shippers for Phase I service shall be established in accordance with the rates that Pipeline is charged for service provided by the owners of the existing pipeline systems.

2. Phase II service will be provided by Pipeline using a combination of newly constructed pipeline facilities and subscriptions of firm pipeline capacity on existing pipeline systems as follows:

   (a) for the portion of Phase II extending from a receipt point(s) to be located at or near Kensington, Ohio to various interconnection points in the State of Michigan, Phase II service will be provided utilizing newly constructed pipeline facilities (the "**Greenfield Facilities – Kensington to Willow Run**").

   (b) for the portion of Phase II extending from the terminus of the Greenfield Facilities – Kensington to Willow Run to a Primary Point of Delivery at Dawn, Ontario, Phase II service will be provided utilizing a combination of subscriptions of firm pipeline capacity on existing pipeline systems ("**Existing Facilities – Willow Run to Dawn**") and newly constructed pipeline facilities ("**Greenfield Facilities – Willow Run to Dawn**").

   The Reservation Rate to be charged by Pipeline to EGD shall be established based on: (i) a combination of the rates derived from the capital costs associated with the construction of the facilities for service on the Greenfield Facilities – Kensington to Willow Run and the Greenfield

Facilities – Willow Run to Dawn, and (ii) the rates that Pipeline is charged for service provided on the Existing Facilities – Willow Run to Dawn.

3. The portion of the Reservation Rate for service on the Existing Facilities – Willow Run to Dawn will be lower than the rate for comparable service on the Greenfield Facilities – Willow Run to Dawn.

4. For the purpose of calculating EGD's Reservation Rate for Phase II service on the Phase II Facilities, Pipeline confirms that EGD, as a Phase I customer, will be charged a lower effective Reservation Rate for Phase II service, for the portion of its Phase II MDQ equal to its Phase I MDQ, than customers who do not subscribe for Phase I service. The lower effective Reservation Rate for the applicable portion of EGD's Phase II MDQ results from the fact that the portion of the Reservation Rate for service on the Existing Facilities – Willow Run to Dawn will be lower than the rate for comparable service on the Greenfield Facilities – Willow Run to Dawn. The lower Reservation Rate will be deemed to apply to Customers who are anchor shippers as follows: (a) the portion of Customer's Phase II MDQ equal to Customer's Phase I MDQ, plus (b) such additional portion (if any) of Customer's Phase II MDQ deemed to be utilizing any remaining capacity on the Existing Facilities – Willow Run to Dawn in excess of the aggregate of Phase I MDQs (any such remaining capacity to be allocated pro rata amongst Phase II anchor shippers based on the difference between aggregate Phase II MDQs and Phase I MDQs of all anchor shippers for Phase II service on the Phase II Facilities). The higher Reservation Rate will be deemed to apply to any remaining portion of Customer's Phase II MDQ that has not been allocated the lower Reservation Rate following application of the preceding sentence. The calculation for determining the effective Reservation Rate for Phase II service for EGD's and other customers' MDQ(s) will be as set forth in Appendix "A" attached hereto. Appendix "B" sets forth for illustrative purposes only a sample calculation of the Effective Reservation Rate for Phase II service as it would be calculated for EGD and other Phase I customers and for Phase II customers that were not also Phase I customers.

5. To the extent anything in this Letter Agreement conflicts with the rights of either EGD or Pipeline as set forth in the Precedent Agreement, the terms of the Precedent Agreement shall control.

6. Pipeline and EGD acknowledge and agree that they will be bound by the above terms for the purpose of establishing the Reservation Rates for Phase II service. Pipeline and EGD further acknowledge and agree that the material terms of this Letter Agreement will be incorporated into the Phase I Rate Agreements and/or Phase II Rate Agreements, as appropriate, and upon execution, such rate agreements shall replace and supersede this Letter Agreement in its entirety.

If EGD is in agreement with the foregoing, please arrange for an authorized representative to sign and date the acknowledgment below and return to my attention. NEXUS is excited to work with EGD on this opportunity, and should you have any questions regarding this information, please do not hesitate to contact me or anyone on the NEXUS team at your convenience.

Regards,

David Slater
Executive Vice President
DTE Pipeline Company

Acknowledged and agreed to
This 5th day of June, 2014

Enbridge Gas Distribution Inc.

By: ______________________

Name: Glenn Beaumont

Title: President

APPROVED AS TO FORM
ENBRIDGE LAW TP

Enbridge Gas Distribution Inc.

By: ______________________

Name: Malini Giridhar

Title: Vice President, Gas Supply & Business Development

Appendix "A"
Calculation of the Effective Phase II Rate for Anchor Customers

$$\text{Effective Phase II Reservation Rate} = \frac{(\text{K-WR Rate} + \text{Ex. (WR-D) Rate}) \times \text{EFV}}{\text{Customer's Phase II MDQ}} + \frac{(\text{K-WR Rate} + \text{Green. (WR-D) Rate}) \times \text{GFV}}{\text{Customer's Phase II MDQ}}$$

WHERE:

K-WR Rate	-	means the notional reservation rate charged for Phase II service on the Greenfield – Kensington to Willow Run facilities
Ex. (WR-D) Rate	-	means the notional reservation rate charged for Phase II service on the Existing – Willow Run to Dawn facilities
Green.(WR-D) Rate	-	means the notional reservation rate charged for Phase II service on the Greenfield – Willow Run to Dawn facilities
EFV	-	means the amount of a Customer's Phase II MDQ that is deemed to be utilizing capacity on the Existing – Willow Run to Dawn facilities calculated below
GFV	-	means the amount of a Customer's Phase II MDQ that is deemed to be utilizing capacity on the Greenfield – Willow Run to Dawn facilities calculated below

Calculation of Shipper's Existing Facility Volumes

$$\text{EFV} = \text{Customer's Phase I MDQ (if any)} + \text{Customer's Share of Remaining Existing Capacity}$$

Where:

$$\text{Customer's Share of Remaining Existing Capacity} = \frac{\text{Customer's Ph. II MDQ} - \text{Customer's Ph. I MDQ}}{\sum(\text{Phase II MDQ of All Anchor's Customers}) - \sum(\text{Phase I MDQ of All Anchor's Customers})} \times (\text{Existing – Willow Run to Dawn Capacity Available} - \sum(\text{Phase I MDQ of All Anchor's Customers}))$$

Calculation of Shipper's Greenfield Facility Volumes

$$\text{GFV} = \text{Customer's Phase II MDQ} - \text{EFV}$$

Appendix "B"
Sample Calculation

Privileged and Confidential

Illustrative Rate Table - NEXUS Phase I & Phase II Service

	Volume	Estimated Capital ($ in millions)	Rate
Phase I Rates.			
Willow Run to Dawn - Phase I			
DTE Gas	150,000		$0.085 **
Union	150,000		$0.035 ***
			$0.120
Phase II Rates.			
Greenfield - Kensington to Willow Run	1,100,000	$1,625	**$0.600** *
Willow Run to Dawn - Phase II			
DTE Gas	75,000		$0.085 **
Union	75,000		$0.035 ***
			$0.120
Willow Run to Dawn - Phase II			
Vector	725,000	$250	$0.180 *
DTE Gas	725,000	$70	$0.041 *
			$0.221
Effective Phase II Rate for Phase I Shipper	300,000		**$0.766**
Effective Phase II Rate for non-Phase I Shipper	650,000		**$0.812**
Total at Dawn	**950,000**		

*subject to capital cost tracking adjustment
**not subject to capital cost tracking adjustment
***current C1 posted rate

EXECUTION VERSION

PRECEDENT AGREEMENT

This PRECEDENT AGREEMENT ("Precedent Agreement") is made and entered into this 5th day of June, 2014 ("Effective Date"), by and between DTE Pipeline Company, a Michigan corporation ("DTE"), and Spectra Energy Transmission, LLC, a Delaware limited liability company ("Spectra") (DTE and Spectra are collectively referred to herein as "Pipeline"), and Enbridge Gas Distribution Inc., an Ontario corporation ("Customer"). Pipeline and Customer are sometimes referred to individually as a "Party" and collectively as the "Parties."

WITNESSETH:

WHEREAS, Pipeline is proposing a two-phased project that will ultimately provide up to approximately one (1) billion cubic feet per day of firm transportation service for natural gas production from the Appalachian production areas, including but not limited to the Utica Shale and Marcellus Shale production areas in Ohio and Pennsylvania, to the international border between the United States and Canada near St. Clair, Michigan (the "International Border") and continuing from the International Border to Dawn, Ontario ("Dawn"). In Phase I, Pipeline will provide firm transportation service from Willow Run, Michigan ("Willow Run") to Dawn utilizing subscriptions of firm pipeline capacity on existing pipeline systems ("Phase I"). In Phase II, Pipeline will construct an approximately 250-mile greenfield pipeline extending from points expected to be located at or near Kensington, Ohio to various interconnections in the State of Michigan, utilizing subscriptions of firm pipeline capacity on existing U.S. pipeline systems to transport to the International Border, and thereafter from the International Border to point(s) of delivery in or near Dawn, utilizing one or more of: subscriptions of firm pipeline capacity on existing Canadian pipeline systems, an expansion of the existing Vector Canada and/or Union

Canadian pipeline systems, and/or construction of greenfield pipeline facilities ("Phase II") (the services and subscriptions contemplated herein and the facilities that Pipeline intends to construct (or use reasonable efforts to cause others to construct) and/or subscribe to provide such services are collectively referred to herein as the "Project");

WHEREAS, Pipeline is proposing to commence service for the Project in phases, with Phase I to commence on or about November 1, 2015 and Phase II targeted to commence on or about November 1, 2017;

WHEREAS, Customer desires firm natural gas transportation service as part of both Phase I and Phase II of the Project;

WHEREAS Customer, based on its qualifying bid submitted in the Open Season conducted by Pipeline from October 15, 2012 through November 30, 2012 ("Open Season"), qualifies as an Anchor Shipper (as that term is used in the Open Season notice) for the Project, thereby entitling Customer to certain rate and other incentives regarding Customer's transportation service on the Project facilities;

WHEREAS, Pipeline has secured commercial support for the Project evidenced by executed precedent agreements, including this Precedent Agreement with Customer;

WHEREAS, DTE and Spectra contemplate that pipeline companies in the name of NEXUS Gas Transmission, LLC and NEXUS Gas Transmission Canada will be formed and owned by each of DTE and Spectra or by affiliates of each of them to fulfill the responsibilities of Pipeline hereunder and upon such formation, NEXUS Gas Transmission, LLC and NEXUS Gas Transmission Canada will take assignment of the rights and obligations of and be novated as the Pipeline for all purposes of this Precedent Agreement;

WHEREAS, subject to the terms and conditions of this Precedent Agreement, Pipeline is willing to undertake the steps necessary to provide Phase I and Phase II services for Customer and other customers subscribing for capacity as part of the Project, to construct the Project facilities or subscribe for firm pipeline capacity that will extend from eastern Ohio to Dawn in order to provide such services, and, if necessary, to construct, or to use reasonable efforts to cause the construction of facilities on existing pipeline systems to provide service on the Project;

WHEREAS, subject to the terms and conditions of this Precedent Agreement, Pipeline is willing to provide such services to Customer and Customer is willing to pay Pipeline for such services;

NOW, THEREFORE, in consideration of the mutual covenants herein assumed, and intending to be legally bound, Pipeline and Customer agree as follows:

1) Pipeline Obligations.

a) Subject to the terms and conditions of this Precedent Agreement, Pipeline shall proceed with due diligence to file applications for and to obtain from all governmental and regulatory authorities having competent jurisdiction over the Project, including, but not limited to, the Federal Energy Regulatory Commission ("FERC") and the National Energy Board of Canada ("NEB"), the authorizations, approvals, certificates, permits, notices and/or exemptions (collectively, the "Governmental Authorizations") Pipeline determines are necessary: (i) for Pipeline, without the necessity to construct any facilities, to provide firm transportation service (hereafter all references to "firm transportation service", whether in respect of Phase I or Phase II, refers to the firm transportation services for each of Phase I or Phase II as such services are described herein and set forth in the applicable Pipeline tariffs approved by the FERC and NEB, respectively), as part of Phase I of the Project by the Phase I Service Commencement

Date (as determined in accordance with Section 4 of this Precedent Agreement); (ii) for Pipeline to construct, own, operate, and maintain (and, if necessary, to use reasonable efforts to cause others to construct, own, operate, and maintain) the Project facilities necessary to provide the firm transportation service contemplated herein commencing on the Phase II Service Commencement Date (as determined in accordance with Section 4 of this Precedent Agreement); and (iii) for Pipeline to otherwise perform its obligations as contemplated in this Precedent Agreement. Pipeline retains full control and discretion in the filing and prosecution of any and all applications for such Governmental Authorizations and/or any supplements or amendments thereto, and, if necessary, any court review, provided it does so in a manner that is consistent with the terms of this Precedent Agreement and designed to implement the firm transportation service contemplated herein in a timely manner. Pipeline agrees to promptly notify Customer in writing when each of the Governmental Authorizations are received, obtained, rejected or denied. Pipeline shall also promptly notify Customer in writing as to whether each of the Governmental Authorizations received or obtained are acceptable to Pipeline.

b) During the term of this Precedent Agreement, and provided it would be reasonable and prudent for Pipeline to do so, Pipeline agrees to use reasonable efforts to support and cooperate with the efforts of Customer to obtain all Customer's Authorizations and supplements and amendments thereto, to better understand and analyze the markets for the supply of gas at the proposed initial receipt points for the Project and to otherwise perform its obligations as contemplated by this Precedent Agreement.

c) Pipeline shall, no later than October 1, 2014, provide Customer with confirmation of the initial receipt points for Phase II transportation service (collectively, the "Initial Receipt Point Information").

d) The reservation rates payable by Customer for transportation Service for Phase I and for Phase II (as set forth in the applicable Pipeline tariffs approved by the FERC and NEB, respectively the "Reservation Rates") will be set and applied for on a commercially reasonable basis.

2) Customer Obligations.

a) No later than 60 days from the execution of this Precedent Agreement for Phase I and no later than November 1, 2014 for Phase II, Customer will advise Pipeline in writing of: (i) any facilities which Customer must construct, or cause to be constructed, in order for Customer to utilize the firm transportation service contemplated in this Precedent Agreement; and (ii) any necessary or desirable contractual and/or governmental or regulatory authorizations having jurisdiction over the Customer which Customer determines are necessary or desirable for Customer in order to execute and deliver the Phase I Service Agreement and Phase II Service Agreement (as those terms are defined in Section 3 below) and to fulfill its obligations thereunder and to otherwise perform its obligations under this Precedent Agreement ("Customer's Authorizations").

b) Subject to the terms and conditions of this Precedent Agreement, Customer shall proceed with due diligence to obtain the Customer's Authorizations. Customer retains full control and discretion in the filing and prosecution of any and all applications for such Customer's Authorizations and/or any supplements or amendments thereto, and, if necessary, any court review, provided it does so in a manner that is consistent with the terms of this Precedent Agreement and in a manner designed to implement the firm transportation service contemplated herein in a timely manner. Customer agrees to promptly notify Pipeline in writing when each of the Customer's Authorizations, are received, obtained, rejected or denied. Customer shall also promptly notify Pipeline in writing as to whether each of the Customer's Authorizations received or obtained are acceptable to Customer.

c) During the term of this Precedent Agreement, and provided it would be reasonable and prudent for Customer to do so, Customer agrees to use reasonable efforts to support and cooperate with the efforts of Pipeline to obtain all Governmental Authorizations and supplements and amendments thereto necessary for Pipeline to provide the Phase I and Phase II services contemplated hereunder and to construct, own, operate, and maintain (or, if necessary, to use reasonable efforts to cause others to construct, own, operate and maintain) the Project facilities for the Phase II service and to otherwise perform its obligations as contemplated by this Precedent Agreement.

d) As of the Effective Date, Customer agrees that its proposed quantity of firm transportation service that it wishes to contract for in respect of Phase I service as its Maximum Daily Quantity ("MDQ") for the purpose of the Phase I Service Agreements is 40,000 Dth/d ("Customer's Contracted MDQ"). No later than December 1, 2014, Customer shall notify Pipeline in writing of any desired change to such MDQ, which shall be no less than 40,000 Dth/d and no greater than 75,000 Dth/d, and Pipeline shall use reasonable efforts to accommodate any requested increase in Customer's Contracted MDQ up to 75,000 Dth/d. Pipeline shall notify Customer within ten (10) days of receiving written notice from Customer whether Pipeline can accommodate any or all of

Customer's requested increase in MDQ. To the extent Pipeline can accommodate all of Customer's requested increase in MDQ, Customer's requested MDQ shall become Customer's Contracted MDQ; to the extent Pipeline cannot accommodate all of Customer's requested increase in MDQ, the Parties will meet promptly to discuss the matter further and mutually agree upon any changes, provided that, if Pipeline and Customer are unable to reach mutual agreement within ten (10) days after commencing discussions, then Customer's Contracted MDQ shall remain 40,000 Dth/d.

3) Service Agreements.

a) Phase I Firm Service Agreements. To effectuate the firm transportation service contemplated herein for Phase I service, Customer and Pipeline agree that (i) no later than thirty (30) days following the date on which Pipeline provides written notice to Customer that FERC has issued an order granting Pipeline a certificate of public convenience and necessity to provide firm transportation service from Willow Run to the International Border, Pipeline and Customer will execute a firm transportation service agreement for Phase I service covering such transportation path ("Phase I Service Agreement – U.S.") and (ii) no later than thirty (30) days following the date on which Pipeline provides written notice to Customer that the NEB has issued any necessary authorization for Pipeline to provide Phase I firm transportation service from the International Border to Dawn, Pipeline and Customer will execute a firm transportation service agreement for Phase I service covering such transportation path ("Phase I Service Agreement – Canada") (the Phase I Service Agreement – U.S. and the Phase I Service Agreement – Canada shall collectively be referred to herein as the "Phase I Service Agreements"). The Parties agree to consider in good faith executing the Phase I Service

Agreements at a time earlier than contemplated in the first sentence above if required to allow Pipeline to provide service by the Phase I Service Commencement Date. The Phase I Service Agreement – U.S. will specify: (i) a Maximum Daily Quantity ("MDQ") equal to Customer's Contracted MDQ (as determined pursuant to Section 2(d) above), exclusive of fuel requirements, effective on the Phase I Service Commencement Date; (ii) a primary term commencing on the Phase I Service Commencement Date and ending on the earlier of three (3) years thereafter (unless extended by mutual consent of the Parties) or the Phase II Service Commencement Date (as determined in accordance with Section 4 of this Precedent Agreement); (iii) a Primary Point(s) of Receipt (as such term will be defined in the Phase I Service Agreement – U.S.) at Willow Run in Wayne County, Michigan, and access to any other 'MichCon generic point' as that term is commonly understood (Maximum Daily Receipt Obligation ("MDRO") equal to Customer's Contracted MDQ); (iv) a Primary Point of Delivery (as such term will be defined in the Phase I Service Agreement – U.S.) at the International Border (Maximum Daily Delivery Obligation ("MDDO") equal to Customer's Contracted MDQ); and (v) security requirements consistent with the provisions set forth in Section 13 below. The Phase I Service Agreement - Canada will specify (i) an MDQ equal to Customer's Contracted MDQ, exclusive of fuel requirements, effective on the Phase I Service Commencement Date; (ii) a primary term commencing on the Phase I Service Commencement Date and ending on the earlier of three (3) years thereafter (unless extended by mutual consent of the Parties) or the Phase II Service Commencement Date (as determined in accordance with Section 4 of this Precedent Agreement); (iii) a Primary Point of Receipt (as such term will be defined in the Phase I Service Agreement - Canada) at the International

Border with an MDRO equal to Customer's Contracted MDQ); (iv) a Primary Point of Delivery (as such term will be defined in the Phase I Service Agreement - Canada) at Dawn with an MDDO equal to Customer's Contracted MDQ); and (v) security requirements consistent with the provisions set forth in Section 13 below. To the extent Pipeline is authorized to offer access to secondary receipt and delivery points as part of the Phase I service, Customer shall have the right under the Phase I Service Agreement(s) to access secondary receipt and delivery points in accordance with such authorization(s). Notwithstanding the foregoing, neither of the Phase I Service Agreements and the rights and obligations arising thereunder become effective until both Phase I Service Agreements have been executed in accordance with the terms of this Section 3(a). If the Governmental Authorizations for Phase I service are not issued as contemplated by Section 7(f), Pipeline and Customer will negotiate in good faith to develop an acceptable alternative for Phase I service, provided, however, that nothing in this Section 3(a) will restrict or affect the rights of the Parties to terminate this Precedent Agreement in accordance with Section 9.

b) <u>Phase II Firm Service Agreements.</u> To effectuate the firm transportation service contemplated herein for Phase II service, Customer and Pipeline agree that (i) no later than thirty (30) days following the date on which Pipeline provides written notice to Customer that the FERC, the Michigan Public Service Commission, and any other governmental agencies or authorities having jurisdiction over the U.S. portion of the Phase II service have all issued the necessary authorizations to Pipeline or other pipelines to construct the greenfield and expansion facilities necessary to provide the U.S. portion of the Phase II service, Pipeline and Customer will execute a firm transportation service agreement governing the United States portion of the Phase II service ("Phase II Service Agreement – U.S.") and (ii) no later than thirty (30) days following the date on which Pipeline provides written notice to Customer that the NEB, Ontario Energy Board ("OEB") and any other governmental agencies or authorities having jurisdiction over the Canadian portion of the Phase II service have all issued the necessary authorizations to Pipeline or other pipelines for the construction of any facilities necessary to provide the Canadian portion of the Phase II service, Pipeline and Customer will execute a firm transportation service agreement governing the Canadian portion of the Phase II service ("Phase II Service Agreement – Canada") (the Phase II Service Agreement – U.S. and the Phase II Service Agreement – Canada shall collectively be referred to herein as the "Phase II Service Agreements"). The Parties agree to consider in good faith executing the Phase II Service Agreements at a time earlier than contemplated in the first sentence above if required to allow Pipeline to obtain the requisite notice to proceed with Project construction from any governmental agency or authority having jurisdiction. The Phase II Service Agreement – U.S. will specify: (i) an MDQ of 150,000 Dth/d, exclusive of fuel requirements, effective on the Phase II Service Commencement Date; (ii) a primary term of fifteen (15) years commencing on the Phase II Service Commencement Date and continuing from year to year thereafter unless terminated in accordance with the provisions thereof; (iii) a Primary Point of Receipt (as such term will be defined in the Phase II Service Agreement – U.S.) at the head of the Phase II facilities in Ohio (such point to be designated by Pipeline at such time as Pipeline provides notice to Customer in accordance with Section 3(c) below) (MDRO of 150,000 Dth/d); (iv) a Primary Point of Delivery (as such term will be defined in the Phase II Service Agreement – U.S.) at the

International Border (MDDO of 150,000 Dth/d); and (v) security requirements consistent with the provisions set forth in Section 13 below. The Phase II Service Agreement – Canada will specify: (i) an MDQ of 150,000 Dth/d, exclusive of fuel requirements, effective on the Phase II Service Commencement Date; (ii) a primary term of fifteen (15) years commencing on the Phase II Service Commencement Date and continuing from year to year thereafter unless terminated in accordance with the provisions thereof; (iii) a Primary Point of Receipt (as such term will be defined in the Phase II Service Agreement – Canada) at the International Border (an MDRO of 150,000 Dth/d); (iv) a Primary Point of Delivery (as such term will be defined in the Phase II Service Agreement – Canada) at Dawn (an MDDO of 150,000 Dth/d); and (v) security requirements consistent with the provisions set forth in Section 13 below. To the extent Pipeline is authorized to offer access to secondary receipt and delivery points as part of the Phase II service, Customer shall have the right under the Phase II Service Agreement(s) to access secondary receipt and delivery points in accordance with such authorization(s). Notwithstanding the foregoing, neither of the Phase II Service Agreements and the rights and obligations arising thereunder become effective until both Phase II Service Agreements have been executed in accordance with the terms of this Section 3(b). Attached hereto as Exhibits A and B are illustrative forms of transportation service agreements for the Phase I services and the Phase II services, respectively. On or before October 1, 2014, Pipeline will provide to Customer copies of the rate agreements and a summary of the general terms and conditions that will be incorporated by reference into the transportation service agreements to form the applicable FERC and NEB gas tariffs, as well as any changes to the illustrative forms of transportation service agreements in Exhibits A and B (collectively, the "Forms of Commercial Agreements"). Pipeline will seek Customer's review of the Forms of Commercial Agreements and will consider in good faith any comments provided by Customer. Pipeline shall keep Customer informed of any revisions to the Forms of Commercial Agreements including revisions resulting from comments received from other Customers. Pipeline shall apply for and seek the Governmental Authorizations in a manner consistent with the Forms of Commercial Agreements. The Parties acknowledge and agree that these Forms of Commercial Agreements may change, as required, as a result of the terms and conditions of approvals from the FERC and/or NEB, as applicable.

c) Status of Phase II Service Commencement Date. Commencing on September 1, 2014, and continuing on a quarterly basis thereafter, Pipeline will notify Customer regarding Pipeline's progress regarding Phase II, and whether the Phase II Service Commencement Date (as determined in accordance with Section 4 of this Precedent Agreement) is expected to occur on November 1, 2017, or some later date. No later than November 1, 2015, Pipeline shall in good faith have notified Customer of its *bona fide* estimate of the Phase II Service Commencement Date (the "Estimated Phase II Commencement Date"). In the event that Pipeline's *bona fide* estimate of the Estimated Phase II Commencement Date is a date that is after November 1, 2018, then, unless such deadline(s) are extended by mutual consent: (i) Customer shall have no further obligation in respect of contracting for Phase II Service and Customer shall have the right to terminate this Precedent Agreement in respect of Phase II Service without liability between the Parties including in respect of the Customer being required to pay any Pre-Service Costs; and (ii) the Parties shall work together in good faith and with due diligence to execute or obtain, as applicable, all of the firm transportation agreements, contract terminations and regulatory authorizations necessary to transition the Phase I service provided by Pipeline to Customer to similar service that Customer could receive directly from other pipeline companies pursuant to rates, terms and conditions of service commensurate with the rates, terms and conditions of service contemplated hereunder for Phase I service and, if and when such contractual arrangements and Governmental Authorizations are completed in a manner that both Pipeline and Customer, acting reasonably, agree is satisfactory, then each Phase I Service Agreement shall promptly terminate, unless such agreement has terminated already pursuant to its terms. Notwithstanding the foregoing, in no event shall Customer be obligated to continue Phase I service beyond November 1, 2018 unless Pipeline and Customer mutually agree to do so.

d) Rates.

i) The rates that will apply to the Phase I Service Agreements shall be as set forth in the separate rate agreements to be provided by Pipeline to Customer no later than October 1, 2014, and the Parties agree to execute such rate agreements contemporaneously with the execution of the Phase I Service Agreements ("Phase I Rate Agreements"). Pipeline currently estimates that the Reservation Rates to be payable by Customer for Phase I service in the Phase I Rate Agreements will be in the range of $0.09 - $0.14 US per Dth/d for the U.S. service, and in the range of $0.04 - $0.07 CAN per Dth/d for the Canadian service, plus the applicable U.S. and Canadian fuel rates with the total of such fuel rates in the range of 1.0% - 2.0% (the Reservation Rates and applicable fuel rates being hereinafter collectively referred to as the "Estimated Phase I Rate Ranges"). On or before October 1, 2014, Pipeline will provide final Reservation Rates, and fuel rates, for the Phase I Rate Agreements. If the final Reservation Rates and fuel rates for the Phase I Rate Agreements exceed the total Estimated Phase I Rate Ranges then the Parties shall promptly meet and work in good faith in an attempt to agree upon final Reservation Rates and fuel rates that are commercially acceptable to both Parties, each Party in its sole discretion. If, after thirty (30) days, the Parties are unable to agree upon mutually acceptable final Reservation Rates and fuel rates for the Phase I Rate Agreements, either Party shall have the right to terminate this Precedent Agreement and, if executed, the Phase I Service Agreements. Any termination of this Precedent Agreement by a Party pursuant to this Section will be without liability between the Parties including in respect of the Customer being required to pay any Pre-Service Costs.

ii) The rates that will apply to the Phase II Service Agreements shall be as set forth in the rate agreements to be executed in accordance with this Section 3(d), for service under the Phase II Service Agreements. Pipeline and Customer have agreed to the following with regard to the rates for service under the Phase II Service Agreements:

(1) Subject to the terms and conditions set forth herein and in the Phase II Service Agreements and in the Phase II Rate Agreements (as defined below), upon execution of such service and rate agreements, Customer shall be obligated to pay Pipeline the rates specified for service under the Phase II Service Agreements commencing on the Phase II Service Commencement Date and continuing to the end of the primary term (as set forth in the applicable Phase II Service Agreement) thereof.

(2) Pipeline and Customer acknowledge that the scope of the facilities necessary for Pipeline to provide Phase II service for Customer and all other customers subscribing Phase II service (such facilities are collectively referred to herein as the "Phase II Facilities") is not known with precision at this time. For this reason, the estimated capital costs associated with construction of the Phase II Facilities and the estimated Reservation Rates and fuel rates for service under the Phase II Service Agreements will be set forth in the Phase II Rate Agreements provided in accordance with Section 3(d)(ii)(3) below. Pipeline currently estimates that the Reservation Rates for service under the Phase II Service Agreements will be in the range of $0.63 - $0.78 US per Dth/d for the U.S. service, and in the range of $0.04 - $0.06 CAN per Dth/d for the Canadian service (hereinafter collectively referred to as the "Estimated Phase II Rate Ranges"), plus the applicable U.S. and Canadian fuel rates, with the total of such fuel rates in the range of 2.0% - 3.0%. The Estimated Phase II Rate Ranges may be adjusted as more fully set forth in Section 3(d)(ii)(3) and subject to the terms of Section 3(d)(ii)(4) below.

(3) No later than October 1, 2014 Pipeline shall provide Customer with a draft estimate of the capital costs associated with construction of the New Phase II Facilities (as defined below) in each of the U.S. and Canada, the revised Reservation Rates (collectively, the "Revised Phase II Rates"), subject to a fifteen percent (+/- 15%) capital cost tracking adjustment (as more particularly described in Exhibit C (the "Capital Cost Tracking Adjustment") around the revised estimate, and the revised fuel rate estimates, to be set forth in the rate agreements for the Phase II Service Agreements. The capital cost estimate will be provided

substantially in the same form as an Exhibit K - Cost of Facilities (as defined in the Federal Energy Regulatory Commission's Code of Federal Regulations) for the New Phase II Facilities located in the U.S., and substantially in the same form as a "Class III Estimate" (defined as a Class III estimate of the costs of constructing the Phase II Facilities prepared by Pipeline in accordance with the applicable guidelines of the Association for the Advancement of Cost Engineering, having an accuracy level within the range of plus twenty-five (25%) percent and minus fifteen (15%) percent) after the application of a risk dependent contingency for the New Phase II Facilities located in Canada. At such time as Pipeline provides Customer with the Revised Phase II Rates, Pipeline will provide information which sets forth a more detailed breakdown of how the Pipeline has derived such Revised Phase II Rates ("Rate Breakdown"), including a breakdown of such portion of the Reservation Rates for Phase II that are derived from the capital costs associated with the construction of the Phase II Facilities that will be required to be constructed and owned by Pipeline or constructed and owned by a third party on third party owned existing pipeline systems for the provision of transportation service for Phase II in each of the U.S. and Canada (collectively, the "New Phase II Facilities"). No later than sixty (60) days following receipt by Customer of the Revised Phase II Rates, Pipeline shall deliver to Customer a final estimate of capital costs for the New Phase II Facilities for each of the U.S. and Canada, final Reservation Rates (subject to the Capital Cost Tracking Adjustment) (collectively, the "Final Reservation Rates") and final estimated fuel rates to be set forth in the rate agreements for the Phase II Service Agreements and any final revisions to the Rate Breakdown as well as the final rate agreements for the Phase II Service Agreements (the "Phase II Rate Agreements"). Pipeline and Customer shall promptly execute the Phase II Rate Agreements; provided that, if the Final Reservation Rates set forth in the Phase II Rate Agreements are higher than the upper limit of the Estimated Phase II Rate Ranges set forth in Section 3(d)(ii)(2) above, and such higher Reservation Rates have caused the value of the commercial transaction with respect to the natural gas to be transported under the Phase II Service Agreements to be uneconomical to Customer, as determined by Customer in its sole and absolute discretion, Customer shall not be obligated to execute the Phase II Rate Agreements.

(4) In the event that Customer has elected not to execute the Phase II Rate Agreements in accordance with the proviso in the last sentence of Section 3(d)(ii)(3), Pipeline and Customer shall promptly meet and work in good faith in an attempt to agree upon Reservation Rates that are commercially acceptable to both Parties, each Party in its sole discretion. If, after thirty (30) days, the Parties are unable to agree upon mutually acceptable Reservation Rates, either Party shall have the right to terminate this Precedent Agreement and, if executed, the Phase II Service Agreements. Any termination of this Precedent Agreement pursuant to this Section will be without liability to either Party including in respect of the Customer being required to pay any Pre-Service Costs.

e) <u>Most Favored Nations.</u>

i) Except as provided in Section 3(e)(ii) below, in the event that Pipeline enters into firm transportation service and/or recourse, negotiated or discount rate agreements with other similarly situated customers (as to transportation path, quantity and length of term) in respect of this Project containing any rate provisions and other terms of service that are more favorable to such other customers than the negotiated rate provisions set forth in the Phase I Rate Agreements or the Phase II Rate Agreements, Pipeline shall offer Customer, within ten (10) business days of entering into the rate agreements with such other customer, those same rate provisions and other terms of service. If Customer is willing to accept the offer on the exact same terms and conditions as such other customer(s), including provisions regarding transportation path, volume and length of term, then Customer will so notify Pipeline within thirty (30) days of its acceptance, and Pipeline will make the necessary amendments to either the Phase I Rate Agreements or the Phase II Rate Agreements, or both, and to the Phase I Service Agreements and the Phase II Service Agreements, if applicable, and the Parties will enter into amended agreements at the more favorable rate for the remainder of the term of the applicable agreement(s). This section will apply only to contracts Pipeline enters into for service utilizing Project capacity on or before the Phase I Service Commencement Date, or the Phase II Service Commencement Date, as applicable.

ii) *Exclusions*. Pipeline is not required to offer to Customer and Customer is not entitled to, any rate provisions provided to other customers if such rate provisions are contained in long-term firm service agreements for capacity that becomes available as a result of the breach, default or unauthorized termination of a precedent agreement or associated service agreement by a Project customer or the bankruptcy, insolvency, liquidation or other similar action affecting a Project customer. In addition, the most favored nation right set forth in this Section 3(e) will not be available to Customer in respect of any short term (i.e., less than one year) service. Further, the most favored nation right set forth in this section 3 will not apply to credit provisions.

(f) Right of First Refusal. Customer will, in respect of each of the Phase II Service Agreements, be granted a contractual Right of First Refusal ("ROFR") in accordance with the applicable Pipeline tariffs approved by the FERC and NEB. Further, the Phase II Service Agreements will be considered ROFR Agreements in accordance with, and as that term is used in, the applicable tariffs.

4) Commencement of Service.

(a) Phase I. With respect to Phase I transportation service, upon satisfaction or waiver of all the conditions precedent set forth in Sections 7(a) and 7(c) of this Precedent Agreement, Pipeline shall promptly notify Customer of such fact, and that service under the Phase I Service Agreements will commence on a date certain, which date will be the later of: (i) November 1, 2015, or (ii) the date that all of the conditions precedent set forth in Sections 7(a) and 7(c) of this Precedent Agreement are satisfied or waived ("Phase I Service Commencement Date"). On and after the Phase I Service Commencement Date, Pipeline shall provide firm transportation service for Customer pursuant to the terms of the Phase I Service Agreements and Customer will pay Pipeline for all applicable charges required by the Phase I Service Agreements and the Phase I Rate Agreements.

(b) Phase II. With respect to Phase II transportation service, Pipeline shall provide at least ninety (90) days' prior notice (the "In-Service Date Notice") to Customer of the projected service commencement date for service under the Phase II Service Agreements, which date shall be the beginning of a calendar month and cannot be earlier than the date upon which Pipeline has satisfied or waived all the conditions precedent, provided that the actual service commencement date for purposes of the Phase II Service Agreements (the "Phase II Service Commencement Date") shall be the date that is the later of: (i) November 1, 2017; (ii) the date provided in the In-Service Date Notice; (iii) the date that is the first day of the first calendar month following the date on which the Pipeline places the Phase II Facilities into service; or (iv) if, pursuant to Section 7(f), the Pipeline has filed an appeal or is pursuing a rehearing, reconsideration or clarification by the applicable regulatory authority of the Governmental Authorization, then 90 days from the date of receipt of a positive decision addressing Customer's concerns unless such period is waived by Customer. On and after the Phase II Service Commencement Date, Pipeline shall provide firm transportation service for Customer pursuant to the terms of the Phase II Service Agreements and Customer will pay Pipeline for all applicable charges required by the Phase II Service Agreements and the Phase II Rate Agreements.

5) Design and Permitting of Project Facilities. Pipeline will undertake with due diligence, or use reasonable efforts to cause others to undertake, the design of the Phase II Facilities and any other preparatory actions necessary for Pipeline, or Pipeline's designee(s), to complete and file application(s) related to the Phase II Facilities with the FERC, NEB and/or other governmental authorities as appropriate. Prior to satisfaction of the conditions precedent set forth in Section 7(b)(i) through 7(b)(vii) of this Precedent Agreement, Pipeline, or Pipeline's designee(s), shall have the right, but not the obligation, to proceed with the necessary design of facilities, acquisition of materials, supplies, properties, rights-of-way and any other necessary preparations to implement the firm transportation service under the Phase II Service Agreements as contemplated in this Precedent Agreement. Additionally, Pipeline

will use commercially reasonable efforts to keep Customer informed on a regular basis and respond to any of Customer's requests for information concerning Project schedule changes, status of Governmental Authorizations, service commencement dates, and/or changes to any of the rates described herein.

6) Construction of Project. Upon satisfaction of the conditions precedent set forth in Sections 7(a), 7(b)(i) through 7(b)(vii), inclusive and 7(c) of this Precedent Agreement, or waiver of the same by Pipeline or Customer, as applicable, Pipeline shall proceed with due diligence to construct, or to use reasonable efforts to cause others to construct, the authorized Phase II Facilities and to implement the firm transportation service contemplated in this Precedent Agreement for Phase II service on or about November 1, 2017, or such later date as may be designated by Pipeline in accordance with Section 3(c) above. If, notwithstanding Pipeline's due diligence, Pipeline, or Pipeline's designee(s), is unable to commence the Phase II service for Customer on November 1, 2017, or such later date as may be designated by Pipeline in accordance with Section 3(c) above, Pipeline will continue to proceed with due diligence to complete arrangements for such firm transportation service, and commence such service for Customer at the earliest practicable date thereafter. Subject to Section 9(a), Pipeline will neither be liable nor will this Precedent Agreement or the Phase II Service Agreements be subject to cancellation if Pipeline, or Pipeline's designee(s), is unable to complete the construction of such authorized Project facilities and commence the Phase II service for Customer by November 1, 2017 or such later date as may be designated by Pipeline in accordance with Section 3(c) above.

7) Conditions Precedent. Commencement of service under the Phase I Service Agreements and the Phase II Service Agreements, as applicable, and Pipeline's and Customer's rights and

obligations thereunder are expressly made subject to satisfaction or waiver, as applicable, of the following conditions precedent in Sections 7(a) and 7(c), with respect to the Phase I Service Agreements, and Sections 7(a), 7(b) and 7(c), with respect to the Phase II Service Agreements (only Pipeline shall have the right to waive the conditions precedent set forth in Sections 7(a) and 7(b) and only Customer shall have the right to waive the conditions precedent set forth in Section 7(c)):

a) <u>Pipeline's Conditions Precedent for Phase I Service.</u>

   i) Pipeline filing by September 1, 2014 the necessary requests with the FERC and/or NEB for approval to provide Phase I service as contemplated herein and in the Phase I Service Agreements;

   ii) Subject to Section 7(d), Pipeline's receipt and acceptance in accordance with Section 7(f) below by May 1, 2015, of all necessary Governmental Authorizations for Pipeline to provide the Phase I service as contemplated herein and in the Phase I Service Agreements;

   iii) Other pipelines having received and accepted in accordance with Section 7(e) by May 1, 2015, all necessary Governmental Authorizations to provide the subscriptions needed by Pipeline to provide the Phase I service contemplated herein and in the Phase I Service Agreements;

   iv) Pipeline having received approval, no later than thirty (30) days after its acceptance of the certificates and authorizations specified in Section 7(a)(ii), from its Management Committee, or similar governing body, to proceed with taking the steps necessary to commence and provide the Phase I service contemplated herein and in the Phase I Service Agreements, including, without limitation, proceeding with the Project-related firm pipeline transportation arrangements with other pipelines; and

v) Pipeline's receipt, no later than thirty (30) days after its acceptance of the certificates and authorizations specified in Section 7(a)(ii) of all necessary authorizations, other than those specified in Section 7(a)(ii), required to provide Phase I service.

b) <u>Pipeline's Conditions Precedent for Phase II Service.</u>

i) Pipeline filing by April 1, 2015 the necessary requests with the FERC and/or NEB for approval to provide Phase II service as contemplated herein and in the Phase II Service Agreements;

ii) Subject to Section 7(d), Pipeline's receipt and acceptance in accordance with Section 7(f) by May 1, 2017, of all necessary Governmental Authorizations to construct, own, operate and maintain the Project facilities, all as described in Pipeline's applications as they may be amended from time to time, necessary to provide the Phase II service contemplated herein and in the Phase II Service Agreements;

iii) Pipeline (or Pipeline's owners or their respective affiliates) having received on or before May 1, 2017, a binding commitment from a financial institution(s) to provide the necessary financing of the construction of the Phase II facilities;

iv) Other pipelines having received and accepted in accordance with Section 7(f) by May 1, 2017, all necessary Governmental Authorizations to construct, own, operate and maintain the Project facilities, all as described in their applications as they may be amended from time to time, necessary to provide the Phase II service contemplated herein and in the Phase II Service Agreements;

v) Pipeline receiving approval, no later than thirty (30) days after its acceptance of the certificates and authorizations specified in Section 7(b)(i), from its Management Committee, or similar governing body, to expend the capital necessary to construct the Project facilities and to proceed with the Project-related firm pipeline transportation arrangements with other pipelines for service on the Project facilities;

vi) Pipeline's receipt no later than four (4) months prior to the Phase II Service Commencement Date of all necessary authorizations required to construct the Project facilities necessary to provide the Phase II firm transportation service contemplated herein and in the Phase II Service Agreements, other than those specified in Section 7(b)(ii);

vii) Pipeline's procurement, no later than four (4) months prior to the Phase II Service Commencement Date, of all rights-of-way, easements or permits (in form and substance acceptable to Pipeline, acting reasonably) necessary for the construction and operation of the Project facilities;

viii) Pipeline's completion of construction of the Project facilities and all other facilities required to render the Phase II service for Customer and for other customers subscribing Phase II service pursuant to the Phase II Service Agreements and Pipeline being ready, able and authorized to place such facilities into gas service; and

ix) The completion of the construction of the facilities necessary to create the pipeline capacity subscribed to Pipeline as part of Phase II of the Project by other pipelines, as applicable, and each such Party being ready, able and authorized to place such facilities into service.

c) Customer's Conditions Precedent.

i) Customer's receipt, no later than August 29, 2014, of the requisite internal corporate approvals for the performance of Customer's obligations under this Precedent Agreement and other agreements related to the service contemplated hereunder;

ii) Customer's acceptance, no later than 30 days following receipt of Initial Receipt Point Information in accordance with Section 1(c), of the initial receipt points proposed by the Pipeline for Phase II transportation service;

iii) Customer's confirmation to Pipeline, no later than November 1, 2014 for Phase I and no later than 90 days following receipt of the Estimated Phase II Commencement Date for Phase II, that it has completed its review and approval of regional supply necessary to support natural gas supply arrangements associated with Customer's service under the Phase I Service Agreements and the Phase II Service Agreements, respectively;

iv) If, pursuant Section 3(d)(ii), the Final Reservation Rates exceed the upper limit of the Estimated Reservation Rates Ranges, then Customer's receipt, no later than 60 days following receipt of the requisite internal corporate approvals of such Final Reservation Rates for Phase II;

v) Customer's receipt and acceptance of the approvals from the OEB for its application related to Phase II no later than 240 days following receipt of the revised Reservation Rates for Phase II delivered pursuant to Section 3(d)(ii)(3); and

vi) Subject to Section 7(d), Customer's receipt and acceptance no later than 30 days following satisfaction of the condition in Section 7(c)(iii), of any necessary Customer Authorizations identified in accordance with Section 2 of this Precedent Agreement.

d) Temporary Waiver of Conditions Precedent – Governmental Authorizations. Notwithstanding Sections 7(a)(ii), 7(a)(iii), 7(b)(ii), 7(b)(iv), 7(c)(iii) and 7(c)(iv) and subject to Section 24, either Party may, in its sole discretion, temporarily waive satisfaction of its conditions precedent listed above for a period of 90 days. During such a delay, upon reasonable request by the other Party, the Party waiving its condition precedent shall use commercially reasonable efforts to provide timely notices to the other Party in writing regarding the filing of any applications for such Governmental Authorizations or Customer Authorization, as the context requires, and will provide periodic updates regarding the status of such applications, including notice when each of the authorizations are received, obtained, rejected or denied. The Party temporarily waiving it condition precedent shall also promptly notify the other Party in writing as to whether each of the Governmental Authorizations or Customer Authorizations, as the context requires, received or obtained are acceptable to such Party. If the Party temporarily waiving its condition precedent has not satisfied the conditions precedent associated with the receipt of all Governmental Authorizations or Customer Authorizations, as the context requires, within ninety (90) days' time, either Party may terminate this Precedent Agreement on thirty (30) days' written notice and no Pre-Service Costs will be payable by Customer.

e) With respect to each condition precedent set forth in Sections 7(a) and 7(b) of this Precedent Agreement, with the exception of the conditions precedent set forth in clauses (vii) and (viii) of Section 7(b), Pipeline shall provide notice to Customer within five (5) days of the satisfaction of such condition precedent that the condition precedent has been satisfied. With respect to each condition precedent set forth in Section 7(c) of this

Precedent Agreement, Customer shall provide notice to Pipeline within five (5) days of the satisfaction of each such condition precedent that the condition precedent has been satisfied.

f) Unless otherwise provided for herein, the Governmental Authorization(s) contemplated in Section 1 of this Precedent Agreement must be issued in form and substance satisfactory to both Parties, acting reasonably. For purposes of this Precedent Agreement, such Governmental Authorization(s) shall be deemed satisfactory if issued or granted with terms and conditions which are: (i) consistent with this Precedent Agreement and all ancillary agreements and documents to be delivered pursuant to this Precedent Agreement for the applicable service; and (ii) to the extent not contemplated by this Precedent Agreement or any of the ancillary agreements and documents, not materially onerous on Pipeline, as determined by Pipeline, acting reasonably, and will not otherwise have a material adverse effect on Customer. Customer shall notify Pipeline in writing not later than fifteen (15) days after Pipeline notifies Customer of the issuance of the FERC and/or NEB certificate(s), authorization(s) and approval(s), including any order issued as a preliminary determination on non-environmental issues, contemplated in Section 1 of this Precedent Agreement if Customer determines, acting reasonably, that such certificate(s), authorization(s) and approval(s) will have a material adverse effect on Customer. Customer cannot assert that any authorization will have a material adverse effect on Customer unless: (i) the governing provisions of such authorization differ materially and adversely from the provisions requested by Pipeline in its application, unless the provisions requested by Pipeline were inconsistent with the terms of this Precedent Agreement; and (ii) such differences materially and adversely affect the rate to be charged pursuant to the rate agreements contemplated herein, or the terms and conditions of service pursuant to the service agreements contemplated herein, and the Parties cannot mutually agree upon a modification or alternative to such provision which preserves the relative economic positions of the Parties under the operative agreement(s). All other Governmental Authorizations that Pipeline must obtain must be issued in form and substance acceptable to Pipeline, acting reasonably. All Governmental Authorizations that Pipeline is required by this Precedent Agreement to obtain must be duly granted by the FERC, NEB, or other governmental agency or authority having jurisdiction, and must be final and no longer subject to rehearing or appeal; provided, however, Pipeline may waive the requirement that such Governmental Authorizations be final and no longer subject to rehearing or appeal. If any of the Governmental Authorizations are issued on material terms not acceptable to either Party, subject to the foregoing provisions of this Section 7(f), then the non-accepting Party, acting reasonably, shall give notice to the other Party, and the Parties shall promptly meet and work in good faith in an attempt to agree upon a commercially acceptable resolution for both Parties, each Party in its sole discretion, to continue forward with respect to the Project. If, after thirty (30) days, the Parties are unable to agree upon a mutually acceptable resolution, either Party shall have the right to terminate this Precedent Agreement and, if executed, the applicable service agreements and rate agreements. Any termination of this Precedent Agreement by a Party pursuant to this Section will be without liability between the Parties including in respect of the Customer being required to pay any Pre-Service Costs. Notwithstanding the foregoing, if the Parties cannot agree on a modification or alternate provision, Pipeline may, in its sole discretion, appeal or otherwise pursue rehearing, reconsideration or clarification by the applicable regulatory authority of any such provision(s) which Customer alleges will have a material adverse effect on it, and Customer may not terminate this Precedent Agreement until a final order or decision is rendered by such regulatory authority which does not grant relief that is satisfactory to Customer, acting reasonably, to address such material adverse effect, or 180 days from the date that Pipeline makes its application for rehearing, reconsideration or clarification, whichever occurs first.

g) The Customer Authorization(s) contemplated in Section 2 of this Precedent Agreement shall be deemed satisfactory if issued or granted in form and substance substantially as requested, or if issued in a manner acceptable to Customer and such Customer Authorization(s), as issued, will not otherwise have a material adverse effect on Pipeline. Pipeline cannot assert that any authorization will have a material adverse effect on Pipeline unless: (i) the governing provisions of such authorization differ materially and adversely from the provisions requested by Customer in its application, unless the provisions requested by Customer were inconsistent with the terms of this Precedent Agreement; and (ii) such differences materially and adversely affect the rate to be charged pursuant to the rate agreements contemplated herein, or the terms and conditions of service pursuant to the service agreements contemplated herein, and the Parties cannot mutually agree upon a modification or alternative to such provision which preserves the relative economic positions of the Parties under the operative agreement(s). If any of the Customer Authorizations are issued on terms not acceptable to either Party, subject to the foregoing provisions of this Section 7(g), then the non-accepting Party shall give notice to the other Party, and the Parties shall promptly meet and work in good faith in an attempt to agree upon a commercially acceptable resolution for both Parties, each Party in its sole discretion, to continue forward with respect to the Project. If, after thirty (30) days, the Parties are unable to agree upon a mutually acceptable resolution, either Party shall have the right to terminate this Precedent Agreement and, if executed, the applicable service agreements and rate agreements. Any termination of this Precedent Agreement by a Party pursuant to this Section will be without liability between the Parties including in respect of the Customer being required to pay any Pre-Service Costs.

h) In the event the Estimated Phase II Commencement Date is changed to a date later than November 1, 2017 in accordance with Section 3(c), the Parties agree that each of the dates in Sections 3(d)(i)(ii), 7(b)(i) through 7(b)(iii), Sections 7(c)(ii) through 7(c)(iv), and Section 10 will be changed to a later date by the same amount of time as such change to the Estimated Phase II Commencement Date.

8) Pre-Service Costs. If Customer is in material breach of any of its obligations arising pursuant to this Precedent Agreement and such material breach is not cured within 30 days of notice to Customer by Pipeline of such breach, or if such breach is not capable of being cured within 30 days, and Customer is not continuing thereafter in good faith and with diligence to cure such breach, and, as a result thereof, either or both of the Phase I Service Commencement Date or Phase II Service Commencement Date do not occur, then Customer shall, at the option and election of Pipeline, reimburse Pipeline within thirty (30) days of Pipeline's invoice, for its pro-rata share, based on Customer's MDQ for Phase II service to total contracted MDQ for Phase II service by all customers with executed Precedent Agreements, for the Pre-Service Costs incurred or otherwise committed to by Pipeline up to the date of the occurrence of the material breach which resulted in the Phase I Service

Commencement Date or Phase II Service Commencement Date, as applicable, to not occur. If it is only the Phase II Service Commencement Date which is impacted by Customer's material breach, then Customer shall only be liable for the Pre-Service Costs that were incurred by Pipeline in respect of matters which relate only to Phase II Service. In no event shall Customer's exposure to Pre-Service Costs exceed $219 million U.S. dollars. Customer's liability for its share of the Pre-Service Costs in accordance with this Section 8 constitutes a genuine pre-estimation of Pipeline's liquidated damages and not as a penalty, and the payment by Customer of such amount, if such payment is required to be made in accordance with this Section 8 shall constitute Pipeline's sole remedy in such instance, with no right to claim further damages or other remedies from Customer. If this Precedent Agreement is terminated for any reason other than a material breach by Customer, then such termination shall be without any liability on the part of Customer to Pipeline, including in respect of the Customer being required to pay any Pre-Service Costs. The term, "Pre-Service Costs" for all purposes in this Precedent Agreement means only those expenditures and/or costs reasonably and prudently incurred, accrued, allocated to, or for which Pipeline is contractually obligated to pay in furtherance of Pipeline's efforts to develop and construct the Project and to satisfy its obligations under this Precedent Agreement and all other precedent agreements for service on the Project facilities, including such expenditures associated with design, testing, engineering, construction, commissioning, materials and equipment, environmental, regulatory, and/or legal activities, allowance for funds used during construction, negative salvage, internal overhead and administration and any other costs reasonably incurred in furtherance of Pipeline's efforts to develop and construct the Project and to satisfy its obligations under this Precedent Agreement and all other precedent agreements for service on the Project facilities. In the event Customer incurs liability for Pre-Service Costs, Pipeline shall use commercially reasonable efforts to mitigate the amount of Pre-Service Costs. NOTWITHSTANDING THE FOREGOING, THE PARTIES HERETO AGREE THAT NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR ANY PUNITIVE, SPECIAL, EXEMPLARY, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS OR FOR BUSINESS INTERRUPTIONS) ARISING OUT OF OR IN ANY MANNER RELATED TO THIS PRECEDENT AGREEMENT, AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF OR THE SOLE, CONCURRENT OR CONTRIBUTORY NEGLIGENCE (WHETHER ACTIVE OR PASSIVE), STRICT LIABILITY (INCLUDING, WITHOUT LIMITATION, STRICT STATUTORY LIABILITY AND STRICT LIABILITY IN TORT) OR OTHER FAULT OF EITHER PARTY. THE IMMEDIATELY PRECEDING SENTENCE SPECIFICALLY PROTECTS EACH PARTY AGAINST SUCH PUNITIVE, EXEMPLARY, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES EVEN IF WITH RESPECT TO THE NEGLIGENCE, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, STRICT LIABILITY OR OTHER FAULT OR RESPONSIBILITY OF SUCH PARTY; AND ALL RIGHTS TO RECOVER SUCH DAMAGES OR PROFITS ARE HEREBY WAIVED AND RELEASED.

9) <u>Termination of Precedent Agreement for Failure of Conditions Precedent.</u>

   a) If the conditions precedent set forth in Section 7 of this Precedent Agreement have not been fully satisfied or waived by Pipeline or Customer, as applicable, by the earlier of the applicable dates specified therein, or for Phase I service, within one year after the Phase I target service commencement date, or for Phase II service, within one year after the

Estimate Phase II Service Commencement Date, and this Precedent Agreement has not otherwise been terminated pursuant to the other terms of this Precedent Agreement, including in respect of Sections 10 or 11 hereof, then this Precedent Agreement (and any Phase I Service Agreement or Phase II Service Agreement, as applicable) shall terminate effective 30 days after the date such condition precedent was to be satisfied or waived by the applicable Party and such termination shall be without liability including in respect of Customer being required to pay any Pre-Service Costs, except to the extent the failure is as a result of a breach by a Party of its other obligations set forth in this Precedent Agreement.

b) For any termination in accordance with Section 9(a) above, the Parties agree to promptly meet and work diligently and in good faith for a period of 30 days following the date such condition precedent was to be satisfied or waived to attempt to agree upon changes to this Precedent Agreement that would allow the Precedent Agreement to continue, which may include a waiver of and/or change in the deadline for any of the conditions precedent that are the subject of such termination notice, provided that if the Parties are unable to come to an agreement upon changes that would allow the Precedent Agreement to continue, then this Precedent Agreement (and any Phase I Service Agreement or Phase II Service Agreement, as applicable) shall nonetheless terminate effective on the expiry of such 30 day period.

c) Any delay or failure in the performance by either Party hereunder shall be excused if and to the extent caused by the occurrence of a Force Majeure. Notwithstanding the foregoing, if any condition precedent set forth in Section 7 hereof has not been satisfied as a result of an occurrence of Force Majeure, the deadline for satisfying the condition precedent shall be extended for each day that the occurrence of Force Majeure continues up to a maximum of ninety (90) days or as mutually agreed to by the Parties. For purposes of this Precedent Agreement, "Force Majeure" as employed herein shall mean any cause, whether of the kind enumerated herein or otherwise, not within the reasonable control of the Party claiming suspension, and which by the exercise of due diligence, such Party has been unable to prevent or overcome, including without limitations acts of God, the government, or a public enemy; strikes, lockouts, or other industrial disturbances; wars, terrorism, blockades, or civil disturbances of any kind; epidemics, landslides, hurricanes, washouts, tornadoes, storms, fires, explosions, arrests, and restraints of governments or people, freezing of, breakage or accident to, or the necessity for making repairs to machinery or lines of pipe; and the inability of either the claiming Party to acquire, or the delays on the part of either of the claiming Party in acquiring, at reasonable cost and after the exercise of reasonable diligence: (a) any servitudes, rights of way, grants, permits or licenses; (b) any materials or supplies for the construction or maintenance of facilities; or (c) any Governmental Authorizations, permits or permissions form any governmental agency; if such are required to enable the claiming Party to fulfill its obligations hereunder.

d) Notwithstanding any other provision of this Precedent Agreement, in the event that the Phase I Service Commencement Date has occurred and the Phase I firm transportation service can be provided, this Precedent Agreement provides no right for either Party to terminate the Phase I Service Agreements. Any right to terminate the Phase I Service Agreements following the occurrence of the Phase I Service Commencement Date shall be governed solely by the Phase I Service Agreements.

10) Termination for Default. The occurrence and continuation of a material breach by a Party of any of its obligations under this Precedent Agreement, unless caused by a breach by the other Party of its obligations under this Precedent Agreement is referred to herein as a “Default". Upon the occurrence of a Default by a Party hereto, the non-defaulting Party may provide written notice to the defaulting Party, describing the Default in reasonable detail and requiring the defaulting Party to remedy the Default (the "Default Notice"). If the Default is not cured within 30 days of receipt by the defaulting Party of the Default Notice, or if such breach is not capable of being cured within 30 days, and the defaulting Party is not continuing thereafter in good faith and with diligence to cure such Default, the non-defaulting Party may, by termination notice to the defaulting Party, terminate this Precedent Agreement effective on the tenth (10th) day following receipt of the termination notice by the defaulting Party; provided, however, that if during such ten (10) day period the defaulting Party has commenced to remedy the Default and is continuing in good faith its efforts to remedy such Default, the entitlement of the non-defaulting Party to terminate this Precedent Agreement will be suspended until the earlier of the cessation by the defaulting Party of such efforts and the date which is ninety (90) days after the date of the Default Notice.

11) Other Pipeline Termination Rights. In addition to the provisions of Section 9 hereof, Pipeline may terminate this Precedent Agreement at any time upon fifteen (15) days’ prior written notice to Customer, if: (i) Pipeline, in its sole and reasonable discretion, determines for any reason on or before October 1, 2016, that the Project contemplated herein is no longer economically viable, (ii) Pipeline incurs or will incur costs which are twenty-five percent (25%) or more than the cost estimate submitted as part of Pipeline’s application to the FERC for the certificate of public convenience and necessity for the Project related to the Project

construction, or (iii) on or before October 1, 2016, substantially all of the other precedent agreements, service agreements or other contractual arrangements for the firm transportation service to be made available by the Project are terminated, other than by reason of commencement of service. In the event Pipeline terminates this Precedent Agreement in accordance with this Section 10, Customer shall not be liable pursuant to Section 8 above for Pre-Service Costs.

12) Termination Upon Service Commencement Date; Survival. If this Precedent Agreement is not terminated pursuant to Sections 9, 10 or 11 hereof, or otherwise in accordance with the terms of this Precedent Agreement, then, except for those provisions herein that are stated to survive any termination of this Precedent Agreement, this Precedent Agreement will terminate by its express terms on the Phase I Service Commencement Date, with respect to Phase I transportation service, or the Phase II Service Commencement Date, with respect to Phase II transportation service, and thereafter Pipeline's and Customer's rights and obligations related to the transportation service contemplated herein shall be determined pursuant to the terms and conditions of such Phase I Service Agreements and Phase I Rate Agreements and/or Phase II Service Agreements and Phase II Rate Agreements, as applicable, and Pipeline's FERC gas tariff and/or NEB gas tariff, as effective from time to time. Notwithstanding any termination of this Precedent Agreement, each Party shall remain liable to the other Party for all losses or damages suffered, sustained or incurred by the other Party as a result of a breach of any obligations of a Party which breach arose prior to termination of this Precedent Agreement, provided that Customer's liability shall only apply if and to the extent it is to be liable in accordance with Section 8 and, such liability, if any, shall not exceed its share of Pre-Service Costs determined in accordance with Section 8.

Notwithstanding any termination of this Precedent Agreement pursuant to terms of this Precedent Agreement, to the extent that a provision of this Precedent Agreement contemplates that one or both Parties may have further rights and/or obligations hereunder following such termination, the provision shall survive such termination as necessary to give full effect to such rights and/or obligations.

13) Creditworthiness. At all times during the effectiveness of this Precedent Agreement and the related Service Agreement(s), Customer, pursuant to the criteria and terms set forth in this Section 13, shall either maintain a Creditworthy status, as defined below, or furnish sufficient credit support to Pipeline.

a) Creditworthiness Standard. Customer shall at all times during the effectiveness of this Precedent Agreement and the Service Agreement(s) be Creditworthy or provide the Guaranty or the Letter of Credit contemplated herein. For purposes herein, "Creditworthy" means, in respect of the applicable entity, such entity has and maintains: (i) a long-term senior unsecured debt rating from (a) Moody's Investors Service, Inc. ("Moody's") of Baa3 or higher, and (b) Standard & Poor's ("S&P") of BBB- or higher and, with respect to each rating, not on negative credit watch or outlook, and (ii) a sufficient open line of credit as of the Effective Date. Pipeline acknowledges and agrees that, as of the effective date of this Precedent Agreement, Customer has a sufficient open line of credit with Pipeline and Customer shall not at any time hereafter be required to establish any line of credit in connection with this Precedent Agreement. If Customer is rated by only one of the foregoing credit rating agencies, Customer shall be creditworthy if it has the rating described in the foregoing sentence from the agency by which it is rated. If Customer is rated by both of the rating agencies described above but one such agency's rating is lower than the other agency's rating, then Customer's creditworthiness shall be determined based on the lower of the Moody's or S&P rating. Alternatively, Customer may be accepted as Creditworthy by Pipeline if Pipeline determines that, notwithstanding the absence of the rating requirements in this Section 13(a), the financial position of Customer (or an entity that guarantees all of Customer's payment obligations) is and remains acceptable to Pipeline during the term of the Precedent Agreement, the Phase I Service Agreements and the Phase II Service Agreements.

b) Failure to Meet Creditworthiness Standard. In the event Customer fails at any time or from time to time during the term of this Precedent Agreement or the applicable service agreements to meet the Creditworthy standard set forth in Section 13(a) (including if its Guarantor, if applicable is no longer Creditworthy), Customer shall provide credit support to Pipeline in the form of one of the following methods set forth in this Section 13(b):

   i) Guaranty. Customer will provide, or cause to be provided, a guaranty (a "Guaranty") from Customer's parent company or from an affiliate (a "Guarantor"), provided the Guaranty shall serve to satisfy Customer's obligations under this Section 13 only if such Guarantor is Creditworthy, and only for so long as the Guarantor remains Creditworthy and for so long as it guarantees Customer's payment obligations and the Guaranty otherwise satisfies the requirements of this clause (i). The Guaranty shall: (a) guarantee all payment obligations of Customer under this Precedent Agreement, the Phase I Service Agreements and the Phase II Service Agreements , (b) remain in effect until all payment obligations under this Precedent Agreement, the Phase I Service Agreements and the Phase II Service Agreements have been satisfied in full, and (c) be in a form and content substantially similar to Exhibit D hereto. Pipeline may require, at any time and from time to time, Customer to provide, or cause to be provided, an additional guaranty from a Creditworthy guarantor if the original Guarantor is, at any time, no longer Creditworthy. If Customer becomes Creditworthy after providing a Guaranty, Customer may request a discharge and return of such Guaranty, and following such request Pipeline shall promptly provide such discharge and return.

ii) Letter of Credit. If, at any time and from time to time, during the effectiveness of this Precedent Agreement, the Phase I Service Agreements and/or the Phase II Service Agreements Customer fails to meet the requirements of Sections 13(a) and 13(b)(i) above, Customer shall provide, or cause to be provided, at its sole cost, a standby irrevocable letter of credit (a "Letter of Credit") from a Qualified Institution. For purposes herein, a "Qualified Institution" shall mean a major U.S. or Canadian commercial bank, or the U.S. branch offices of a foreign bank, which is not the Customer or Customer's Guarantor (or a subsidiary or affiliate of the Customer or Customer's Guarantor) and which has assets of at least $10 billion dollars and a credit rating of at least "A-" by S&P, or "A3" by Moody's. Pipeline may require Customer at Customer's cost to substitute a Qualified Institution if the Letter of Credit provided is, at any time, from a financial institution which is no longer a Qualified Institution. The Letter of Credit shall: (i) remain in effect until all payment obligations under this Precedent Agreement, the Phase I Service Agreements and the Phase II Service Agreements have been satisfied in full, (ii) be in a form acceptable to Pipeline, which for purposes herein shall mean in form and content substantially similar to Exhibit E hereto, and (iii) be in the amount equal to twenty-four (24) months of reservation rates based on the MDQ and reservation rates under the Service Agreement(s). If Customer becomes Creditworthy after providing a Letter of Credit, Customer may request a discharge and return of such Letter of Credit, and following such request Pipeline shall promptly provide such discharge and return.

c) Demand for Assurances. At any time and from time to time, Pipeline shall have the right to require that Customer demonstrate Customer's, or its Guarantor's, continuing satisfaction of the creditworthiness and credit support requirements in this Section 13. Customer will have a period of five (5) business days to make such demonstration or to furnish credit support acceptable to Pipeline in accordance with this Section 13.

d) Failure to Comply. The failure of Customer to timely satisfy or maintain the requirements set forth in this Section 13 shall in no way relieve Customer of its other obligations under this Precedent Agreement, the Phase I Service Agreements and/or the Phase II Service Agreements, nor shall it affect Pipeline's right to seek damages or performance under this Precedent Agreement and/or the Service Agreement(s). Further, if, prior to the earlier of the Phase I Service Commencement Date or the Phase II Service Commencement Date, Customer fails to timely satisfy or maintain the requirements set forth in this Section 13, then Pipeline may give written notice to Customer of such failure, and, if such failure is has not been cured within five (5) business days following the receipt by Customer of such notice, then Pipeline may elect to suspend or terminate performance under this Precedent Agreement, or to terminate this Precedent Agreement and, if applicable, the Phase I Service Agreements and/or the Phase II Service Agreements.

e) Term of Credit Provisions and Survival. This Section 13 shall survive the termination of this Precedent Agreement and shall remain in effect until all payment obligations under this Precedent Agreement, the Phase I Service Agreements and the Phase II Service Agreements, if applicable, have been satisfied in full.

f) Replacement Customer Creditworthiness. In the event Customer assigns this Precedent Agreement, the Phase I Service Agreements and/or the Phase II Service Agreements in accordance with the applicable assignment provision(s), or in the event Customer permanently releases all or a portion of Customer's capacity under the Phase I Service Agreements and/or Phase II Service Agreements in accordance with Pipeline's FERC Gas tariff and/or NEB Gas tariff, then the assignee and/or the permanent replacement customer, as applicable, shall be required to satisfy the requirements of this Section 13 with respect to all such assigned or replacement agreements, and upon satisfaction of the requirements of this Section 13, Pipeline shall return to Customer any Guaranty or Letter of Credit which had been furnished by Customer pursuant to this Section 13.

14) Amendments. This Precedent Agreement may not be modified or amended unless the Parties execute written agreements to that effect.

15) Successors; Assignments. Any company which succeeds by purchase, merger, or consolidation of title to all or substantially all of the assets of a Party will be entitled to the rights and will be subject to the obligations of such Party in title under this Precedent Agreement, and in such respect, no consent to such an assignment shall be required from the other Party. In addition, this Precedent Agreement is assignable in whole or in part without the prior written consent of the Customer: (a) by Pipeline or either DTE or Spectra to either or both of: (i) NEXUS Gas Transmission, LLC; and (ii) NEXUS Gas Transmission Canada;

(b) by Pipeline to any joint venture or similar collaborative entity created between DTE and Spectra, provided such entity is created for the sole purpose of advancing the Project (it being understood that it is the intention of DTE and Spectra to establish pipeline companies in the name of NEXUS Gas Transmission, LLC and NEXUS Gas Transmission Canada, or another joint venture or similar collaborative, to advance the Project); or (c) between DTE and Spectra, in respect of each Party's interests in the Project. Otherwise, neither Customer nor Pipeline may assign any of its rights or obligations under this Precedent Agreement without the prior written consent of the other Party hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, Pipeline shall have the right, without obtaining Customer's consent, to pledge or assign its rights under this Precedent Agreement, the Phase I Service Agreements, the Phase II Service Agreements, the Phase I Rate Agreements and/or the Phase II Rate Agreements as collateral security for indebtedness incurred by Pipeline (or by an affiliate of Pipeline) for the Project.

16) <u>No Third-Party Rights.</u> Except as expressly provided for in this Precedent Agreement, nothing herein expressed or implied is intended or shall be construed to confer upon or give to any person not a Party hereto any rights, remedies or obligations under or by reason of this Precedent Agreement.

17) <u>Joint Efforts: No Presumptions.</u> Each and every provision of this Precedent Agreement shall be considered as prepared through the joint efforts of the Parties and shall not be construed against either Party as a result of the preparation or drafting thereof. It is expressly agreed that no consideration shall be given or presumption made on the basis of who drafted this Precedent Agreement or any specific provision hereof.

18) Recitals and Representations. The recitals and representations appearing first above are hereby incorporated in and made a part of this Precedent Agreement.

19) Choice of Law. This Precedent Agreement shall be governed by, construed, interpreted, and performed in accordance with the laws of the State of Ohio, without recourse to any laws governing the conflict of laws.

20) Notices. Except as herein otherwise provided, any notice, request, demand, statement, or bill provided for in this Precedent Agreement, or any notice which either Party desires to give to the other, must be in writing and will be considered duly delivered when mailed by registered or certified mail or overnight courier or when provided by personal delivery or electronic mail to the other Party's address set forth below:

Pipeline: Vice President, Business Development
5400 Westheimer Court
Houston, TX 77056
brmckerlie@spectraenergy.com
Phone – (713) 627-4582
Fax – (713) 627-4727

Customer: Director, Energy Supply and Policy
500 Consumers Road
North York, Ontario
M1K 5E3
Jamie.LeBlanc@enbridge.com
Phone - (416) 495-5241
Fax - (416) 495-6072

or at such other address as either Party designates by written notice. Routine communications, including monthly statements, will be considered duly delivered when mailed by registered mail, certified mail, ordinary mail, or overnight courier or when provided by electronic mail to the person and at the addresses noted above or as otherwise designated pursuant to this Section 20.

21) Waivers. The waiver by either Party of a breach or violation of any provision of this Precedent Agreement will not operate as or be construed to be a waiver of any subsequent breach or violation hereof.

22) Counterparts. This Precedent Agreement may be executed in any number of counterparts, each of which will be an original, but such counterparts together will constitute one and the same instrument.

23) Headings. The headings contained in this Precedent Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Precedent Agreement.

24) Governmental Authorizations. Notwithstanding any provision to the contrary, each provision of this Precedent Agreement shall be subject to all applicable laws, statutes, ordinances, regulations, rules, court decisions and Governmental Authorizations.

25) Definitions. Capitalized terms used herein have the meanings ascribed to them in the body of this Precedent Agreement, and for the purposes of reference only are listed in Exhibit F attached hereto.

[signature page follows]

IN WITNESS WHEREOF, the Parties hereto have caused this Precedent Agreement to be duly executed by their duly authorized officers as of the day and year first above written.

DTE PIPELINE COMPANY

By:______________________________

Title:_____________________________

ENBRIDGE GAS DISTRIBUTION INC.

By:______________________________

Title: Glenn Beaumont
President

By: Malini Giridhar

Title: Malini Giridhar
Vice President
Gas Supply & Business Development

SPECTRA ENERGY TRANSMISSION, LLC

By:______________________________

Title:_____________________________

APPROVED AS TO FORM
ENBRIDGE LAW TP

EXHIBIT A

Form of Service Agreement – U.S.

See Attached.

FORM OF FIRM TRANSPORTATION AGREEMENT
TRANSPORTATION AGREEMENT
FOR FIRM TRANSPORTATION (FT-1) OF NATURAL GAS

Firm Transportation Agreement No. ____________

This TRANSPORTATION AGREEMENT FOR FIRM TRANSPORTATION OF NATURAL GAS ("Firm Transportation Agreement" or "Agreement") is made and entered into this ____ day of ____________, ______, between:

("Transporter"),

and

____________, ("Shipper")

WITNESSETH: That in consideration of the mutual covenants contained herein the parties agree as follows:

Section 1. Service to be Rendered

Transporter shall perform and Shipper shall receive service in accordance with the provisions of Transporter's effective Rate Schedule FT-1 and the applicable General Terms and Conditions of Transporter's FERC Gas Tariff on file with the Federal Energy Regulatory Commission ("Commission") as the same may be amended or superseded in accordance with the Rules and Regulations of the Commission.

Section 2. Representations and Warranties

2.1 Representations and Warranties of Transporter: Transporter represents and warrants that: (i) it is duly organized and validly existing under the laws of the State of Delaware and has all requisite legal power and authority to execute this Agreement and carry out the terms, conditions and provisions thereof; (ii) this Agreement constitutes the valid, legal and binding obligation of Transporter, enforceable in accordance with the terms hereof; (iii) there are no actions, suits or proceedings pending or, to Transporter's knowledge, threatened against or affecting Transporter before any court of authorities that might materially adversely affect the ability of Transporter to meet and carry out its obligations under this Agreement; and (iv) the execution and delivery by Transporter of this Agreement has been duly authorized by all requisite partnership action.

2.2 Representations and Warranties of Shipper: Shipper represents and warrants that: (i) it is duly organized and validly existing under the laws of the State/Province of ______________ and has all requisite legal power and authority to execute this Agreement and carry out the terms, conditions and provisions hereof; (ii) there are no actions, suits or proceedings pending, or to Shipper's knowledge, threatened against or affecting Shipper before any court or authorities that might materially adversely affect the ability of Shipper to meet and carry out its obligations under this Agreement; and (iii) the execution and delivery by Shipper of this Agreement has been duly authorized by all requisite corporate action.

Section 3. Term

3.1 This Agreement shall be effective from the date hereof (the "Effective Date"). Transporter's obligation to provide Transportation Services and Shipper's obligation to accept and pay for such services, shall commence on ______________ for a term of ______________, unless otherwise agreed to by mutual agreement of the parties.

3.2 Shippers paying Negotiated Rates may extend the term of this Agreement under terms acceptable to Transporter.

Section 4. Rates

4.1 [Shipper shall pay the Recourse Rates in accordance with Transporter's currently effective Rate Schedule FT-1.]

OR

[Shipper shall pay Negotiated Rates in accordance with Transporter's currently effective Rate Schedule FT-1.]

Section 5. Notices

Unless herein provided to the contrary, any notice called for in this Agreement shall be in writing and shall be considered as having been given if delivered by certified mail or fax with all postage or charges prepaid, to either Transporter or Shipper, at the location designated herein. Written communications shall be considered as duly delivered when received by ordinary mail. Unless otherwise notified in writing, the addresses of the parties are as set forth herein.

Notices to Transporter under this Agreement shall be addressed to

Notices to Shipper under this Agreement shall be addressed to:

____
____
____
____
____

Wire transfer payments to Transporter shall be accompanied with the instructions "to credit the account of " and shall be sent to the following bank and account number:

c/o:____
____
____
____

Remittance detail supporting wire transfer payments to Transporter, and any notice, request or demand regarding statements, bills, or payments shall be mailed to the following address:

Section 6. **Superseded Agreements**

This Agreement supersedes and cancels as of the effective date hereof the following agreements: ______________, ______________.

Section 7. **Miscellaneous**

7.1 This Agreement shall be interpreted according to the laws of the State of

7.2 Performance of this Agreement shall be subject to all valid laws, orders, decisions, rules and regulations of duly constituted governmental authorities having jurisdiction or control of any matter related hereto. Should either of the parties, by force of any such law, order, decision, rule or regulation, at any time during the term of this Agreement be ordered or required to do any act inconsistent with the provisions hereof, then for the period during which the requirements of such law, order, decision, rule or regulation are applicable, this Agreement shall be deemed modified to conform with the requirement of such law, order, decision, rule or regulation; provided, however, nothing in this section 7.2 shall alter, modify or otherwise affect the respective rights of the parties to cancel or terminate this Agreement under the terms and conditions hereof.

7.3 A waiver by either party of any one or more defaults by the other hereunder shall not operate as a waiver of any future default or defaults, whether of a like or of a different character.

7.4 This Agreement may only be amended by an instrument in writing executed by both parties hereto.

7.5 Nothing in this Agreement shall be deemed to create any rights or obligations between the parties hereto after the expiration of the term set forth herein, except that termination of this Agreement shall not relieve either party of the obligation to correct any quantity imbalances or Shipper of the obligation to pay any amounts due hereunder to Transporter.

7.6 Exhibit A attached hereto is incorporated herein by reference and made a part hereof for all purposes.

7.7 The parties hereby agree, subject to the primary jurisdiction of the Commission, that any dispute arising out of or relating to this Agreement, or any breach thereof shall be submitted to final and binding arbitration in __ , , in accordance with the Rules of Commercial Arbitration of the American Arbitration Association (AAA) then in effect. The dispute shall be decided by a panel of three neutral arbitrators, qualified by education, training, and experience to hear the dispute, chosen as follows. The party initiating the arbitration proceeding shall name one arbitrator at the time it notifies the other party of its intention to arbitrate their dispute, and the responding party shall name an arbitrator within fifteen (15) days of receiving the above notification. Within twenty (20) days of the appointment of the second arbitrator, the two arbitrators shall select a third arbitrator to act as chairman of the tribunal. If either party fails to appoint an arbitrator within the allotted time or the two party-appointed, neutral arbitrators fail to appoint a third arbitrator as provided above, the AAA shall appoint the arbitrator(s). Any vacancies will be filled in accordance with the above procedure. The parties expressly agree to the consolidation of separate arbitral proceedings for the resolution in a single proceeding of all disputes that arise from the same factual situation, and the parties further expressly agree that any issue of arbitrability or the existence, validity, and scope of the agreement to arbitrate shall be decided by the arbitrators. The parties further agree that either party may apply to a court of competent jurisdiction, pending arbitration, for injunctive relief to preserve the status quo, to preserve assets, or to protect documents from loss or destruction, and such application will not be deemed inconsistent with or operate as a waiver of the party's right to arbitration. The arbitrators shall apply as the substantive law to the dispute the laws of the State of as specified in section 7.1 of this Agreement.

Section 8. Negotiable Terms

Transporter and Shipper mutually agree to the following terms and conditions of service under this Agreement. Where blank spaces are not filled in, the parties have not reached an agreement on that matter and the referenced provision of the General Terms and Conditions (GT&C) applies.

Pursuant to GT&C section , the following rate discount(s) apply:

____

____.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement in one or more counterparts, which counterparts shall constitute one integrated agreement, by their duly authorized officers effective as of the day first above written.

Date:__________________________ By:__________________________

Title:__________________________

SHIPPER:__________________________

Date:__________________________ By:__________________________

Title:__________________________

Exhibit A
To
Firm Transportation Agreement No. ______
Under Rate Schedule FT-1 Between
and ____________________

Primary Term:	________________
Contracted Capacity:	________________ **Dth/Day**
Primary Receipt Points:	________________
Primary Delivery Points:	________________
Rate Election (Recourse or Negotiated):	________________

EXHIBIT B

Form of Service Agreement – Canada

See Attached.

FORM OF FT-__ FIRM TRANSPORTATION AGREEMENT

TRANSPORTATION AGREEMENT
FOR FT-__ FIRM TRANSPORTATION OF NATURAL GAS

Firm Transportation Agreement No. ____________

This TRANSPORTATION AGREEMENT FOR FT-__ FIRM TRANSPORTATION OF NATURAL GAS ("FT-__ Firm Transportation Agreement" or "Agreement") is made and entered into this __ day of _____, __, between:

("Transporter"),

and

____________, ("Shipper").

Witnesseth: That in consideration of the mutual covenants contained herein the parties agree as follows:

Section 1. Service to be Rendered

Transporter shall perform and Shipper shall receive service in accordance with the provisions of Transporter's effective Toll Schedule FT-__ and the applicable General Terms and Conditions of Transporter's Gas Tariff on file with the National Energy Board ("NEB") as the same may be amended or superseded in accordance with the rules, regulations and legislation of the NEB.

Section 2. Term

2.1 This Agreement shall be effective from the date hereof (the "Effective Date"). Transporter's obligation to provide Transportation Services and Shipper's obligation to accept and pay for such services, shall commence on ______________ for a term of ______________, unless otherwise agreed to by mutual agreement of the parties.

2.2 Shippers paying negotiated tolls may extend the term of this Agreement under terms acceptable to Transporter.

Section 3. Tolls

[Shipper shall pay the maximum toll in accordance with Transporter's currently effective Toll Schedule FT-__.]

OR

[Shipper shall pay negotiated toll in accordance with Transporter's currently effective Toll Schedule FT-__.]

Section 4. Notices

Unless herein provided to the contrary, any notice called for in this Agreement shall be in writing and shall be considered as having been given if delivered by certified mail or fax with all postage or charges prepaid, to either Transporter or Shipper at the location designated herein. Written communications shall be considered as duly delivered when received by ordinary mail. Unless otherwise notified in writing, the addresses of the parties are as set forth herein.

Notices to Transporter under this Agreement shall be addressed to Transporter's Web Site (, or to:

Notices to Shipper under this Agreement shall be addressed to:

Wire transfer payments to Transporter shall be accompanied with the instructions "to credit the account of ." and shall be sent to the following bank and account number:

Remittance detail supporting wire transfer payments to Transporter, and any notice, request or demand regarding statements, bills, or payments shall be mailed to the following address:

<u>Section 5. Superseded Agreements</u>

This FT-__ Firm Transportation Agreement supersedes and cancels as of the effective date hereof the following agreements:

__________, __________

<u>Section 6. Miscellaneous</u>

6.1 This Agreement shall be interpreted according to the laws of the Province of Ontario.

6.2 Performance of this Agreement shall be subject to all valid laws, orders, decisions, rules and regulations of duly constituted governmental authorities having jurisdiction or control of any matter related hereto. Should either of the parties, by force of any such law, order decision, rule or regulation, at any time during the term of this Agreement be ordered or required to do any act inconsistent with the provisions hereof, then for the period during which the requirements of such law, order, decision, rule or regulation are applicable, this Agreement shall be deemed modified to conform with the requirement of such law, order, decision, rule or regulation; provided, however, nothing in this section 6.2 shall alter, modify or otherwise affect the respective rights of the parties to cancel or terminate this Agreement under the terms and conditions hereof.

6.3 A waiver by either party of any one or more defaults by the other hereunder shall not operate as a waiver of any future default or defaults, whether of a like or of a different character.

6.4 This Agreement may only be amended by an instrument in writing executed by both parties hereto.

6.5 Nothing in this Agreement shall be deemed to create any rights or obligations between the parties hereto after the expiration of the term set forth herein, except that termination of this Agreement shall not relieve either party of the obligation to correct any quantity imbalances or Shipper of the obligation to pay any amounts due hereunder to Transporter.

6.6 Exhibit A attached hereto is incorporated herein by reference and made a part hereof for all purposes.

6.7 The parties hereby agree, subject to the primary jurisdiction of the National Energy Board, that any dispute arising out of or relating to this Agreement, or any breach thereof shall be submitted to final and binding arbitration in

in accordance with the Commercial Arbitration Rules and Mediation Procedures of the American Arbitration Association (AAA) then in effect. The dispute shall be decided by a panel of three neutral arbitrators, qualified by education, training, and experience to hear the dispute, chosen as follows. The party initiating the arbitration proceeding shall name one arbitrator at the time it notifies the other party of its intention to arbitrate their dispute, and the responding party shall name an arbitrator within fifteen (15) days of receiving the above notification. Within twenty (20) days of the appointment of the second arbitrator, the two arbitrators shall select a third arbitrator to act as chairman of the tribunal. If either party fails to appoint an arbitrator within the allotted time or the two party-appointed, neutral arbitrators fail to appoint a third arbitrator as provided above, the AAA shall appoint the arbitrator(s). Any vacancies will be filled in accordance with the above procedure. The parties expressly agree to the consolidation of separate arbitral proceedings for the resolution in a single proceeding of all disputes that arise from the same factual situation, and the parties further expressly agree that any issue of arbitrability or the existence, validity, and scope of the agreement to arbitrate shall be decided by the arbitrators. The parties further agree that either party may apply to a court of competent jurisdiction, pending arbitration, for injunctive relief to preserve the status quo, to preserve assets, or to protect documents from loss or destruction, and such application will not be deemed inconsistent with or operate as a waiver of the party's right to arbitration. The arbitrators shall apply as the substantive law to the dispute the laws of , as specified in section 6.1 of this Agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement in one or more counterparts, which counterparts shall constitute one integrated agreement, by their duly authorized officers effective as of the day first above written.

_______________________ By: _______________________

Date

Title: _______________________

(Shipper)

Date

By: ______________________________

Title: ______________________________

Exhibit A
To
FT-__ Firm Transportation Agreement No. _____
Under Toll Schedule FT-__
Between
, and ___________________

Primary Term:	______________
Contracted Capacity:	______________GJ/day
Primary Receipt Points:	______________
Primary Delivery Points:	______________
Toll Election (maximum or negotiated):	______________
Hourly Delivery Period (FT-H only):	______________hours
Hourly Delivery Quantity (FT-H only):	______________GJ/hour

EXHIBIT C

Capital Cost Tracking Adjustment
for
Statement of Negotiated Rates

New US Phase II Facilities

Capital Cost Estimate U.S. Pipeline and Customer acknowledge that the capital costs attributable to the construction of the U.S. portion of the Phase II Facilities that are required to be constructed and owned by Pipeline or constructed and owned by third parties on third party owned existing pipeline systems for the provision of transportation service in Phase II (the "**New US Phase II Facilities**"), which capital costs will underlie a portion of the Reservation Rate for firm transportation service for Phase II are reasonably estimated to be $1,625,000,000.00 (U.S.). In accordance with Section 3(d)(ii)(3) of the Precedent Agreement, Pipeline will deliver to Customer a final capital cost estimate (the "**Final U.S. Capital Cost Estimate**") for the New US Phase II Facilities, which estimate will underlie a portion of the Final Reservation Rate (as defined in Section 3(d)(ii)(3) of the Precedent Agreement) for firm transportation service for Phase II (as further described in the final revised Rate Breakdown to be provided by Pipeline to Customer in accordance with Section 3(d)(ii)(3)). The Final U.S. Capital Cost Estimate will be provided substantially in the same form as an Exhibit K – Cost of Facilities (as defined in the Federal Energy Regulatory Commission's Code of Federal Regulations) ("**Exhibit K**") and will be included with the certificate application filed by Pipeline with the Federal Energy Regulatory Commission ("**Commission**") for the Project.

Negotiated Reservation Rate Adjustment. The Final Reservation Rate will be adjusted, pursuant to the provisions set forth herein, to reflect any differences between the Final U.S. Capital Cost Estimate and the actual amount of capital costs attributable to the New US Phase II Facilities, as reflected by Pipeline in an updated cost report for the New US Phase II Facilities, substantially in the form of an Exhibit K (the "**Actual U.S. Capital Cost**"). Pipeline will file such Actual U.S. Capital Cost report with the Commission at least thirty (30) days, but not more than sixty (60) days, prior to the Phase II Service Commencement Date.

Pipeline will adjust such portion of the Final Reservation Rate attributable to the New US Phase II Facilities (the "**New U.S. Facility Rate Portion**") to reflect the percentage increase or decrease between the Actual U.S. Capital Cost and the Final U.S. Capital Cost Estimate. In the event that the Actual U.S. Capital Cost exceeds the Final U.S. Capital Cost Estimate, the New U.S. Facility Rate Portion of the Final U.S. Reservation Rate will be adjusted upward by multiplying it to the ratio of the Actual U.S. Capital Cost to the Final U.S. Capital Cost Estimate; provided that if the Actual U.S. Capital Cost exceeds the Final U.S. Capital Cost Estimate by more than 15%, then the multiplier to the New U.S. Facility Rate Portion will be 1.15. In the event that the Actual U.S. Capital Cost is less than the Final U.S. Capital Cost Estimate, the New U.S. Facility Rate Portion of the Final Reservation Rate will be adjusted downward by multiplying it to the ratio of the Actual U.S. Capital Cost to the Final U.S. Capital Cost Estimate; provided that if the Actual U.S. Capital Cost is less than the Final U.S. Capital Cost Estimate by more than 15%, then the multiplier to the New U.S. Facility Rate Portion will be .85.

Recourse Reservation Rate Adjustment. In the case of an upward adjustment to the Final Reservation Rate, Pipeline will file the Actual U.S. Capital Cost report, together with an adjusted recourse rate applicable to transportation service for Phase II, with the Commission at least thirty (30) days, but no more than sixty (60) days, prior to the Phase II Service Commencement Date. In the case of a downward adjustment to the Final Reservation Rate, Pipeline has the right, but not any obligation, to prepare and file such Actual U.S. Capital Cost report and/or an adjustment to the recourse rate applicable to transportation service for Phase II with the Commission.

True-Up. No later than 210 days after the Phase II Service Commencement Date, Pipeline will file with the Commission an adjustment to Customer's then-effective adjusted Reservation Rate to reflect any increase or decrease between the Final U.S. Capital Cost Estimate and the final actual U.S. capital costs ("Final Actual U.S. Capital Costs") as set forth in Pipeline's post-construction cost report filed with the Commission pursuant to Part 157.20(c)(3) of Title 18 of the Code of Federal Regulations. In the event that the adjusted Reservation Rate decreases because the Final Actual U.S. Capital Costs are less than the Final U.S. Capital Cost Estimate, Pipeline will refund Customer an amount (including interest at the Commission's approved interest rate pursuant to 18 C.F.R. §154.501, hereafter the "FERC Interest Rate") equal to the difference between such rates for the time period that Customer paid the higher rate. In the event that the adjusted Reservation Rate increases because the Final Actual U.S. Capital Costs are more than the Final U.S. Capital Cost Estimate, Customer will pay Pipeline an amount (including interest at the FERC Interest Rate) equal to the difference between such rates for the time period that Customer paid such lower rate.

Cost Reports. Pipeline will prepare the Actual U.S. Capital Cost report in accordance with Section 157.14(a)(13) of Title 18 of the Code of Federal Regulations. Such report will reflect Pipeline's reasonable good faith estimate at the time of the total capital costs attributable to New US Phase II Facilities as constructed. Pipeline will prepare the Final Actual U.S. Capital Cost report in accordance with Section 157.14(a)(13) of Title 18 of the Code of Federal Regulations. Such report will reflect Pipeline's final actual capital costs attributable to the New US Phase II Facilities as constructed.

New Canadian Phase II Facilities

Capital Cost Estimate Canada. Pipeline and Customer acknowledge that the capital costs attributable to the construction of the Canadian portion of the Phase II Facilities that are required to be constructed and owned by Pipeline or constructed and owned by third parties on third party owned existing pipeline systems for the provision of transportation service in Phase II (the "**New Canadian Phase II Facilities**"), which capital costs will underlie a portion of the Reservation Rate for firm transportation service for Phase II are reasonably estimated to be $0.00 (Cdn.). In accordance with Section 3(d)(ii)(3) of the Precedent Agreement, Pipeline will deliver to Customer a final capital cost estimate (the "**Final Canada Capital Cost Estimate**") for the New Canadian Phase II Facilities, which estimate will underlie a portion of the Final Reservation Rate (as defined in Section 3(d)(ii)(3) of the Precedent Agreement) for firm transportation service for Phase II (as further described in the final revised Rate Breakdown to be provided by Pipeline to

Customer in accordance with Section 3(d)(ii)(3)). The Final Canada Capital Cost Estimate will be provided substantially in the same form as a Class III Estimate and will be included with the certificate application filed by Pipeline with the National Energy Board of Canada ("**NEB**") for the Project.

Reservation Rate Adjustment. The Final Reservation Rate will be adjusted, pursuant to the provisions set forth herein, to reflect any differences between the Final Canada Capital Cost Estimate and the actual amount of capital costs attributable to the New Canadian Phase II Facilities, as reflected by Pipeline in an updated cost report for the New Canadian Phase II Facilities, substantially in the form of a Class III Estimate (the "**Actual Canada Capital Cost**"). If required, Pipeline will file such Actual Canada Capital Cost report with the NEB at least thirty (30) days, but not more than sixty (60) days, prior to the Phase II Service Commencement Date.

Pipeline will adjust such portion of the Final Reservation Rate attributable to the New Canadian Phase II Facilities (the "**New Canada Facility Rate Portion**") to reflect the percentage increase or decrease between the Actual Canada Capital Cost and the Final Canada Capital Cost Estimate. In the event that the Actual Canada Capital Cost exceeds the Final Canada Capital Cost Estimate, the New Canada Facility Rate Portion of the Final Reservation Rate will be adjusted upward by multiplying it to the ratio of the Actual Canada Capital Cost to the Final Canada Capital Cost Estimate; provided that if the Actual Canada Capital Cost exceeds the Final Canada Capital Cost Estimate by more than 15%, then the multiplier to the New Canada Facility Rate Portion will be 1.15. In the event that the Actual Canada Capital Cost is less than the Final Canada Capital Cost Estimate, the New Canada Facility Rate Portion of the Final Reservation Rate will be adjusted downward by multiplying it to the ratio of the Actual Canada Capital Cost to the Final Canada Capital Cost Estimate; provided that if the Actual Canada Capital Cost is less than the Final Canada Capital Cost Estimate by more than 15%, then the multiplier to the New Canada Facility Rate Portion will be .85.

Recourse Reservation Rate Adjustment. In the case of an upward adjustment to the Final Reservation Rate and if required, Pipeline will file the Actual Canada Capital Cost report, together with an adjusted recourse rate applicable to transportation service for Phase II, with the NEB at least thirty (30) days, but no more than sixty (60) days, prior to the Phase II Service Commencement Date. In the case of a downward adjustment to the Final Reservation Rate and if required, Pipeline will file such Actual Canada Capital Cost report and/or an adjustment to the recourse rate applicable to transportation service for Phase II with the NEB.

True-Up. No later than 210 days after the Phase II Service Commencement Date, Pipeline will file with the NEB, if required, an adjustment to Customer's then-effective adjusted Reservation Rate to reflect any increase or decrease between the Final Canada Capital Cost Estimate and the final actual Canada capital costs ("Final Actual Canada Capital Costs"). In the event that the adjusted Reservation Rate decreases because the Final Actual Canada Capital Costs are less than the Final Canada Capital Cost Estimate, Pipeline will refund Customer an amount (including interest at the NEB's approved interest rate, hereafter the "Interest Rate") equal to the difference between such rates for the time period that Customer paid the higher rate. In the event that the adjusted Reservation Rate increases because the Final Actual Canada Capital Costs are more than the Final Canada Capital Cost Estimate, Customer will pay Pipeline an amount (including interest at the NEB Interest Rate) equal to the difference between such rates for the time period that Customer paid such lower rate.

Cost Report. The Actual Canada Capital Cost report will reflect Pipeline's reasonable good faith estimate at the time of the total capital costs attributable to New Canadian Phase II Facilities as constructed. Pipeline will prepare the Final Actual Canada Capital Cost report substantially in the same form as a Class III Estimate included with the certificate application filed by Pipeline with the NEB. Such report will reflect Pipeline's final actual Canada capital costs attributable to the New Canada Phase II Facilities as constructed.

EXHIBIT D

Form of Guarantee

See Attached.

GUARANTY

This Guaranty ("Guaranty"), dated as of _____________, is made by _____________________, a [state and corporate structure] ("Guarantor"), in favor of ___________ a [state & corporate structure] ("Beneficiary").

WHEREAS, from time to time, ________________, a ______________ [state and corporate structure] ("Counterparty"), and Beneficiary may enter into one or more contracts, agreements and commitments for the storage or transportation of natural gas (referred collectively as "Agreement");

WHEREAS, Counterparty is a wholly-owned subsidiary of Guarantor; and Guarantor will directly or indirectly benefit from the Agreement to be entered into between Counterparty and Beneficiary; and

WHEREAS, as an inducement to Beneficiary to enter into the Agreement, Guarantor has agreed to provide this Guaranty; and

WHEREAS, Guarantor has agreed to execute and deliver this Guaranty with respect to Counterparty's payment obligations under the Agreement:

NOW THEREFORE, in consideration of the premises, Guarantor hereby agrees as follows:

1. Guaranty. Guarantor hereby absolutely, irrevocably and unconditionally guarantees the timely payment when due of Counterparty's payment obligations arising under any Agreement, as such Agreement may be amended or modified from time to time, together with any interest thereon and fees and costs of collection (including attorney's fees and court costs) in connection therewith ("Obligation"). In the event Counterparty defaults in the payment of any of the Obligation, within ten (10) days after receiving written notice from Beneficiary, Guarantor shall make such payment or otherwise cause same to be paid. This Guaranty may be enforced by Beneficiary at any time without the necessity of first resorting to or exhausting any other security or collateral. All amounts payable by Guarantor hereunder shall be in freely transferable funds.

2. Effectiveness. This Guaranty is effective as of the date set forth above and is a continuing guaranty which shall remain in full force and effect throughout the term of the Agreement, including any extensions or renewals thereof, until Guarantor has completely fulfilled the Obligation. If at any time during the effectiveness of this Guaranty, Guarantor no longer qualifies as Creditworthy as defined in Paragraph XX of that certain precedent agreement between Counterparty and Beneficiary dated _____ ("Precedent Agreement"), Guarantor shall, or shall cause Counterparty to, immediately provide the collateral specified in Paragraph XX(X) of the Precedent Agreement.

3. Waivers. (a) Guarantor waives any right to require as a condition to its obligations hereunder any of the following should Beneficiary seek to enforce the obligations of Guarantor:

(i) presentment, demand for payment, notice of dishonor or non-payment, protest, notice of protest, or any similar type of notice;

(ii) any suit be brought against, or any other action be brought against, or any notice of default or other similar notice be given to, or any demand be made upon Counterparty or any other person or entity;

(iii) notice of acceptance of this Guaranty, of the creation or existence of the Obligation, and/or any action by Beneficiary in reliance hereon or connection herewith;

(iv) notice of entering into any Agreement between Counterparty and Beneficiary, and/or any amendments, supplements or modifications thereto, or any waiver of consent under any Agreement, including waiver of the payment and performance of the Obligation thereunder; and/or

(v) notice of any increase, reduction or rearrangement of Counterparty's Obligation under any Agreement, or any extension of time for payment of any amounts due Beneficiary under any Agreement.

(b) Guarantor also waives the right to require, substantively or procedurally, that a judgment has been previously rendered against Counterparty or any other person or entity, or that Counterparty or any other person or entity be joined in any action against Guarantor.

4. __Assignment.__ Guarantor shall not assign its duties hereunder without the prior written consent of Beneficiary. Beneficiary shall be entitled to assign its rights hereunder in its sole discretion upon prior written notice to Guarantor. Any assignment without such prior written consent or notice, as applicable, shall be null and void and of no force or effect.

5. __Notice.__ All demands, notices or other communications to be given by any party to another must be in writing and shall be deemed to have been given when delivered personally or otherwise actually received or on the third (3rd) day after being deposited in the United States mail if registered or certified, postage prepaid, or one (1) day after delivery to a nationally recognized overnight courier service, fee prepaid, return receipt requested, and addressed as follows:

__Guarantor's Name & Address__	__Beneficiary's Name & Address__
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________
	____________________

or such other addresses as they may change from time to time by giving prior written notice to the other party.

6. __Applicable Law.__ THIS GUARANTY SHALL IN ALL RESPECTS BE GOVERNED BY, ENFORCED UNDER AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF ____________.

7. __Effect of Certain Events.__ Guarantor agrees that its liability hereunder will not be released, reduced, impaired or affected by the occurrence of any one or more of the following events:
(i) the insolvency, bankruptcy, reorganization, or disability of Counterparty;
(ii) the renewal, consolidation, extension, modification or amendment from time to time of the Agreement;
(iii) the failure, delay, waiver, or refusal by Beneficiary to exercise any right or remedy held by Beneficiary with respect to the Agreement;
(iv) the sale, encumbrance, transfer or other modification of the ownership of Counterparty or the change in the financial condition or management of Counterparty; or
(v) the settlement or compromise of any Obligation.

8. __Representations and Warranties__. Guarantor hereby represents and warrants the following:
(i) Guarantor is duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has full corporate power to execute, deliver and perform this Guaranty;
(ii) the execution, delivery and performance of this Guaranty have been and remain duly authorized by all necessary corporate action and do not contravene Guarantor's constitutional documents or any contractual restriction binding on Guarantor or its assets; and

(iii) this Guaranty constitutes the legal, valid and binding obligation of Guarantor enforceable against Guarantor in accordance with its terms, subject, as to enforcement, to bankruptcy, insolvency, reorganization and other similar laws and to general principles of equity.

9. Subrogation. Until all amounts which may be or become payable under the Agreement have been irrevocably and indefeasibly paid in full, Guarantor shall not by virtue of this Guaranty be subrogated to any rights of Counterparty or claim in competition with Beneficiary against Counterparty in connection with any matter relating to or arising from the Obligation or this Guaranty. If any amount shall be paid to Guarantor on account of such subrogation rights at any time before all of the Obligation has been irrevocably paid in full, such amounts shall be held in trust for the benefit of Beneficiary and shall promptly be paid to Beneficiary to be applied to the Obligation.

10. Amendment. No term or provision of this Guaranty shall be amended, modified, altered, waived, supplemented or terminated unless first agreed to by Guarantor and Beneficiary and then set forth in a written amendment to this Guaranty.

11. Counterparts. This Guaranty may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one document.

12. Entire Agreement. This Guaranty embodies the entire agreement and understanding between Guarantor and Beneficiary regarding payment of the Obligation under the Agreement and supersedes all prior agreements and understandings relating to the subject matter hereof.

IN WITNESS WHEREOF, Guarantor has executed this Guaranty effective as of the date first herein written.

GUARANTOR' S NAME

By:______________________________

Name:____________________________

Title:_____________________________

EXHIBIT E

Form of Letter of Credit

See Attached.

IRREVOCABLE STANDBY LETTER OF CREDIT

Letter of Credit No:__________

Date:________________, 20__

Date of Expiry: __________, 20__

Beneficiary:

Account Party:
(Complete Legal Name)
(Address)
(City, State, Zip)

Attn: Credit Director

[Name of Bank] ("Issuing Bank") hereby establishes this Irrevocable and Transferable Standby Letter of Credit No. _________ in favor of [Spectra entity name] ("Beneficiary") for the account of [Account Party Name] ("Account Party") for the aggregate amount of up to (*dollar amount*) available to Beneficiary by presenting sight draft(s) to Issuing Bank when accompanied by a signed and dated statement by an authorized representative of Beneficiary certifying one or more of the following, as applicable:

1. "The amount drawn herein is to satisfy obligations of Account Party between Beneficiary and Account Party. Wherefore, the undersigned Beneficiary does hereby demand payment of $___________. Beneficiary further certifies that supporting documents when required were presented to Account Party and that Account Party has not satisfied its obligations." And / or

2. "This Letter of Credit will expire in less than thirty (30) days and Beneficiary has not received an extension of said Letter of Credit or other acceptable replacement collateral from Account Party. Wherefore, the undersigned Beneficiary does hereby demand payment of $__________. Upon timely receipt of an amendment extending this Letter of Credit, this drawing is to be considered automatically rescinded." And / or

3. "Issuing Bank 's lowest long-term senior unsecured debt rating no longer meets or exceeds "A-" by Standard & Poor's Rating Group and "A3" by Moody's Investor Services, Inc., and Account Party has not caused a replacement Letter of Credit from an alternate financial institution acceptable to Beneficiary to be issued to Beneficiary. Wherefore, the undersigned Beneficiary does hereby demand payment of $________________."

SPECIAL TERMS AND CONDITIONS

1. Partial and multiple drawings are allowed hereunder. The amount that may be drawn by Beneficiary under this Letter of Credit shall be automatically reduced by the amount of any payments made through Issuing Bank referencing this Letter of Credit.

2. This Letter of Credit shall automatically extend without amendment for periods of one year each from the present or any future expiry date unless Issuing Bank notifies Beneficiary in writing at least sixty (60) days prior to such present or future expiry date, as applicable, that Issuing Bank elects not to further extend this Letter of Credit.

3. This Letter of Credit is transferable without charge any number of times, but only in the amount of the full unutilized balance hereof and not in part and with the approval of Account Party which consent shall not be unreasonably withheld, conditioned or delayed.

4. The term "Beneficiary" includes any successor by operation of law of the named beneficiary to this Letter of Credit, including, without limitation, any liquidator, any rehabilitator, receiver or conservator.

5. Presentations for drawing may be delivered in person, by mail, by express delivery, or by facsimile.

6. All Bank charges are for the account of Account Party.

7. Article 36 under UCP 600 is modified as follows: If the Letter of Credit expires while the place for presentation is closed due to events described in said Article, the expiry date of this Letter of Credit shall be automatically extended without amendment to a date thirty (30) calendar days after the place for presentation reopens for business.

Issuing Bank hereby agrees with Beneficiary that documents presented for drawing in compliance with the terms of this Letter of Credit will be duly honored upon presentation at Issuing Bank's counters if presented on or before the expiry date.

Unless otherwise expressly stated herein, this Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits ("UCP"), 2007 Revision, International Chamber of Commerce Publication No. 600. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the state of New York.

ISSUING BANK SIGNATURE

EXHIBIT F

DEFINITIONS

1) **Definitions**

In the Precedent Agreement,:

a) "**Anchor Shipper**" as such term is defined in the "Open Season notice" for the Project;.

b) "**Capital Cost Tracking Adjustment**" has the meaning ascribed to that term in Section 3(d)(ii)(3).

c) "**Class III Estimate**" has the meaning ascribed to that term in Section 3(d)(ii)(3)

d) "**Creditworthy**" has the meaning ascribed to that term in Section 12(a).

e) "**Customer**" has the meaning ascribed to that term in the recitals.

f) "**Customer's Authorizations**" has the meaning ascribed to that term in Section 2(a).

g) "**Customer's Contracted MDQ**" has the meaning ascribed to that term in Section 2(d).

h) "**Dawn**" has the meaning ascribed to that term in the recitals.

i) "**Default**" has the meaning ascribed to that term in Section 10.

j) "**Default Notice**" has the meaning ascribed to that term in Section 10.

k) "**DTE**" has the meaning ascribed to that term in the recitals.

l) "**Effective Date**" has the meaning ascribed to that term in the recitals.

m) "**Enbridge**" has the meaning ascribed to that term in the recitals.

n) "**Estimate Phase II Commencement Date**" has the meaning ascribed to that term in Section 3(c).

o) "**Estimated Phase I Rate Ranges**" has the meaning ascribed to that term in Section 3(d)(i).

p) "**Estimated Phase II Rate Ranges**" has the meaning ascribed to that term in Section 3(d)(ii)(2).

q) "**FERC**" has the meaning ascribed to that term in Section 1(a).

r) "**Final Reservation Rates**" has the meaning ascribed to that term in Section 3(d)(ii)(3).

s) "**Force Majeure**" has the meaning ascribed to that term in Section 9(c).

t) "**Forms of Commercial Agreements**" has the meaning ascribed to that term in Section 3(b).

u) "**Governmental Authorizations**" has the meaning ascribed to that term in Section 1(a).

v) "**Guarantor**" has the meaning ascribed to that term in Section 13(b)(i).

w) "**Guaranty**" has the meaning ascribed to that term in Section 13(b)(i).

x) "**In-Service Date Notice**" has the meaning ascribed to that term in Section 4(b).

y) "**Initial Receipt Point Information**" has the meaning ascribed to that term in Section 1(c).

z) "**International Border**" has the meaning ascribed to that term in the recitals.

aa) "**Letter of Credit**" has the meaning ascribed to that term in Section 13(b)(ii).

bb) "**MDDO**" has the meaning ascribed to that term in Section 3(a).

cc) "**MDRO**" has the meaning ascribed to that term in Section 3(a).

dd) "**MDQ**" has the meaning ascribed to that term in Section 3(a).

ee) "**Moody's**" has the meaning ascribed to that term in Section 13(a).

ff) "**NEB**" has the meaning ascribed to that term in Section 1(a).

gg) "**New Phase II Facilities**" has the meaning ascribed to that term in Section 3(d)(ii)(2).

hh) "**Open Season**" has the meaning ascribed to that term in the recitals.

ii) "**OEB**" has the meaning ascribed to that term in Section 3(b).

jj) "**Party**" or "**Parties**" has the meaning ascribed to that term in the recitals.

kk) "**Phase I**" has the meaning ascribed to that term in the recitals.

ll) "**Phase I Rate Agreements**" has the meaning ascribed to that term in Section 3(d)(i).

mm) "**Phase I Service Agreement - Canada**" has the meaning ascribed to that term in Section 3(a).

nn) "**Phase I Service Agreement – U.S.**" has the meaning ascribed to that term in Section 3(a).

oo) "**Phase I Service Agreements**" has the meaning ascribed to that term in Section 3(a).

pp) "**Phase I Service Commencement Date**" has the meaning ascribed to that term in Section 4(a).

qq) "**Phase II**" has the meaning ascribed to that term in the recitals.

rr) "**Phase II Facilities**" has the meaning ascribed to that term in Section 3(d)(ii)(2)

ss) "**Phase II Rate Agreements**" has the meaning ascribed to that term in Section 3(d)(ii)(3).

tt) "**Phase II Service Agreement - Canada**" has the meaning ascribed to that term in Section 3(b).

uu) "**Phase II Service Agreement – U.S.**" has the meaning ascribed to that term in Section 3(b).

vv) "**Phase II Service Agreements**" has the meaning ascribed to that term in Section 3(b).

ww) "**Phase II Service Commencement Date**" has the meaning ascribed to that term in Section 4(b).

xx) "**Pipeline**" has the meaning ascribed to that term in the recitals.

yy) "**Precedent Agreement**" has the meaning ascribed to that term in the recitals.

zz) "**Pre-Service Costs**" has the meaning ascribed to that term in Section 8.

aaa) "**Project**" has the meaning ascribed to that term in the recitals.

bbb) "**Qualified Institution**" has the meaning ascribed to that term in Section 13(b)(ii).

ccc) "**Rate Breakdown**" has the meaning ascribed to that term in Section 3(d)(ii)(3)

ddd) "**Reservation Rates**" has the meaning ascribed to that term in Section 3(d)(i).

eee) "**Revised Phase II Rates**" has the meaning ascribed to that term in Section 3(d)(ii)(3).

fff) "**ROFR**" has the meaning ascribed to that term in Section 3(f).

ggg) "**S&P**" has the meaning ascribed to that term in Section 13(a).

hhh) "**Spectra**" has the meaning ascribed to that term in the recitals.

iii) "**Willow Run**" has the meaning ascribed to that term in the recitals.

FRPO INTERROGATORY #2

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 16, para. 44

Preamble: We would like to understand better, the evolution of the Precedent Agreements outlined in this paragraph.

How much capacity was committed to in the original PA?

RESPONSE

As indicated in the paragraph to which the question relates, Enbridge committed to 40,000 Dth/d of capacity for Phase 1 and 150,000 Dth/d of capacity for Phase 2 service in the original PA.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #3

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 16, para. 44

Preamble: We would like to understand better, the evolution of the Precedent Agreements outlined in this paragraph.

Please provide the analysis that supported the original acquisition of capacity and the intent to contract for 150,000 Dth/day.

RESPONSE

Please see Attachments 1 and 2 to this response, which set out analysis to support the decision to bid into the original NEXUS non-binding open season.

Attachment 3 is a slide from a March 11, 2014 presentation to management, setting out an update on NEXUS. Attachment 4 is an April 4, 2014 memorandum setting out analysis that supported the Company's decision to enter in the June 5, 2014 Precedent Agreement.

A copy of the original PA is attached in response to FRPO Interrogatory #1 at Exhibit I.T1.EGDI.FRPO.1.

Witnesses: J. LeBlanc
A. Welburn

Enbridge Gas Distribution Inc.
3000 Fifth Avenue Place
425 – 1st Street S.W.
Calgary, AB T2P 3L8
Canada
www.enbridge.com

ENBRIDGE

Memo

Date: 11/28/2012

To: Malini Giridhar

CC: Hilmi Muhammad, Kent Wirth, Don Small, Joel Denomy, Andrew Welburn

From: Vivian Krauchek

Re: Nexus Open Season Bid - November 30th, 2012 deadline

The Nexus Gas Transmission (Nexus) project, jointly proposed by DTE Energy, Enbridge Inc and Spectra Energy Corp, is aimed at transporting gas production from the Appalachian Basin, including the Utica Shale play, to customers in the Midwest US and Ontario by November 2016. The Nexus non-binding Open Season provides EGD with the opportunity to explore a new transport path offering supply diversity as well as operational flexibility.

Although project details have not been finalized, the pipeline is expected to run approximately 250 miles of new construction from Ohio to connect with existing (and expansion) capacity in Michigan, including the Vector pipeline system. Nexus has defined eastern and northeastern Ohio as general receipt points and interconnects with Michigan Consolidated Gas, Consumers Energy, Enbridge Tecumseh and Union Gas Dawn Hub as initial delivery points (additional delivery points across northern Ohio, southeastern Michigan and southwestern Ontario to be added as needed). Neither tolls nor fuels have been forecast in the Open Season. Nexus is requiring a minimum bid term of 15 years with potential rate incentives for “Anchor Shippers” with bids of 150 MDth or greater. It is my recommendation that EGD submit a non-binding bid with the following terms:

- MDQ of 150,000 Dth/day (provides EGD the leverage of an Anchor Shipper)
- 15 year contract
- Receipt point: Central Receipt Point
- Delivery points: interconnects with Michigan Consolidated Gas Company, Consumers Energy, Enbridge Tecumseh and Union Gas Dawn Hub

In addition, EGD’s bid should outline the pre-condition requiring Regulatory approval prior to the Company entering into any binding Precedent Agreements. It is understood that along with satisfying this pre-condition, EGD will again evaluate the economics of the project, the broader North American gas supply environment and well as the alignment of Nexus with EGD’s Gas Supply Strategy in preparation for and prior to any binding negotiations.

Given the Nexus Open Season is non-binding, EGD is ***not*** exposed to any financial or contractual risks in putting forward a bid. In fact, participation in the Open Season is the only guarantee EGD will be able to explore the opportunities presented by Nexus and to ultimately take advantage of the potential source diversity and the flexibility offered by seamless transport to both Tecumseh and Dawn (critical in storage, short haul and GTA operations). On this basis, it is my recommendation that EGD execute and submit a Service Request Form, including the bid terms and pre-conditions outlined above, prior to the Open Season deadline of November 30th, 2012

Please let me know if you have any questions or concerns.

GS Update
Monthly BD Review
November 22, 2012

ENBRIDGE

Company Confidential

Nexus Open Season Parameters

ENBRIDGE

Open Season Date	November 30, 2012
Receipt Points	Receipt points in eastern and northeastern Ohio
Delivery Points	Initial Interconnects: Michigan Consolidated Gas, Consumers Energy, Enbridge Tecumseh storage, and Union Gas Dawn Hub
Service Type	Firm
Capacity Available	1 Bcf/d or more
Service Date	November 2016 or earlier
Minimum Term	15 years
Additional Considerations	- Bids of 150 MDth/d or greater qualifies as an "Anchor Shipper" - Multiple affiliates of a single entity can request Anchor Shipper status if submitted bids collectively equal or exceed 150 MDth/d - Tolls and fuels are not specified. Anchor Shippers may be offered rate related incentives - Open season does not specify whether it is binding or non-binding. However, by completing Service Request Form shipper agrees to enter into negotiations aimed at entering into a binding Precedent Agreement

Considerations

ENBRIDGE

- Utica less tested than Marcellus
- Connectivity to both basins desirable
- Proposed toll of 90 cents/dth will require netback model
- Pure netback model likely attractive only to small producers
- Large producers looking for diversity of pricing exposure
- TGP has proposed a direct connect to Niagara from Marcellus for 50 cents/dth in a proposal to EGD

NEXUS

ENBRIDGE

Quarter 1

- Complete initial NEXUS analysis and recommendation

Quarter 2

- Negotiate appropriate Conditions Precedent and sign Precedent Agreement
- Internal approvals

Quarter 4

- Application filed with OEB

Enbridge Gas Distribution Inc.
500 Consumers Road
North York, ON
M2J 1P8
Canada

Memo

Date: April 4, 2014

To: Malini Giridhar, Jamie LeBlanc

From: Joel Denomy

CC: Hilmi Muhammad

Re: NEXUS Analysis and Precedent Agreement Recommendation

Introduction

The purpose of this memo is to provide an initial assessment of the NEXUS Gas Transmission Project ("NEXUS") based on information provided by the project developers[1] to date and a recommendation on whether to sign a binding Precedent Agreement for the NEXUS project.

NEXUS Project & History

NEXUS is a gas transmission project designed to transport supplies of Appalachian Basin gas including Utica shale gas to customers in the U.S. Midwest, including Ohio and Michigan, and to customers in Ontario via the Dawn hub. A non-binding open season for the NEXUS project was held from October 15, 2012 to November 30, 2012. Given the changes in the natural gas market that were occurring at the time of the open season and EGD's expectation for these changes continuing into the future, it was recommended that EGD bid into the open season as an anchor shipper. EGD submitted its bid on November 30th 2012.

The open season was non-binding and the bid did not expose EGD to any financial or contractual risks. EGD's open season bid was for an MDQ of 150,000 Dth/day for a 15 year term which qualified EGD as an anchor shipper and provided for potential toll incentives. The open season bid also outlined EGD's pre-condition requirement for Management and Regulatory approval from the Ontario Energy Board ("OEB") with respect to term and capacity. By placing a bid into the open season EGD was subject to the condition that, should it be awarded capacity, it must enter into discussions

[1] The project developers are DTE Energy and Spectra Energy Corporation.

which could ultimately lead to a binding Precedent Agreement for capacity on the NEXUS pipeline. Those discussions are currently ongoing with the project developers.

Overview of the Current Natural Gas Market Dynamics

The natural gas markets in North America have changed drastically since 2008. These changes continued throughout 2012 and 2013 and are expected to continue for the foreseeable future. The Western Canadian Sedimentary Basin (WCSB), historically an important supply source for eastern markets north and south of the boarder, has experienced a decline in conventional natural gas production coupled with an increase in local demand. This has in part affected the exports of WCSB gas to eastern Canada and the northeastern United States (U.S. NE). Current projections show WCSB production increasing with unconventional production. However, where these supplies will flow remains uncertain due to intra-Alberta demand and the potential for export capability on the west coast.

The decline in WCSB flows to the east has coincided with a rapid increase in production in the U.S. NE driven primarily by technological improvements which have allowed the production of shale liquids and gas. The U.S. NE, historically a consumer of high-priced imported natural gas, including Canadian gas from the WCSB, has now become a major supply basin. The influx of shale gas has caused a reduction in the price of gas both in the region and beyond. Production in the U.S. NE is continuing at a fast rate and there are several projects completed, planned or proposed which have the potential to export significant volumes of gas outside the region and even reverse the flow of gas toward the west, south and east.

This new dynamic for gas markets has resulted in the development of and proposals for new pipeline infrastructure, including NEXUS, in the U.S. NE to allow natural gas produced in the region to find consuming markets. The production and pipeline development started less than a decade ago in Marcellus, and is now expected to ramp up in the Utica. This has had the effect of expanding portfolio options, for both supply and transportation, for EGD and other market players. A more detailed overview of the evolution of the U.S. NE market can be found in the internal document entitled “Northeast Basin Analysis, Marcellus & Utica – Supply, Prices & Infrastructure”, recently produced by the Energy Forecasting and Planning Group. An executive summary of this document is attached to this memo as Appendix A. As part of its ongoing evaluation of natural gas markets and its supply portfolio EGD will continue to monitor the U.S. NE market.

NEXUS Evaluation Based on Project Details to Date

In the current environment access to new markets and supply sources generally involves long term commitments on the part of shippers in order for the associated infrastructure to be built. These commitments are generally fifteen year terms. Since EGD’s bid into the NEXUS open season, the project developers have provided further information on the project including an indicative Precedent Agreement, tolls and fuel ratios. With this information an initial assessment of landed costs has been completed as well as an assessment of the potential "fit" of NEXUS within the EGD gas supply portfolio. The paragraphs that follow provide this analysis.

Project Description

NEXUS is now to be completed in two phases. In Phase 1 NEXUS will provide transportation service from Willow Run, Michigan to Dawn, Ontario by utilizing subscriptions of firm pipeline capacity on existing pipeline systems. Phase 2 will involve the construction of approximately 250 miles of greenfield pipeline extending from eastern Ohio to interconnections with existing pipelines and from there to Dawn, Ontario. Phase 2 will also utilize subscriptions of firm pipeline capacity on existing pipeline systems and/or expansions of existing capacity and/or greenfield pipeline as required. Phase 1 is expected to be in service on November 1, 2015 and Phase 2 is expected to be in service on November 1, 2017. Both phases will provide firm transportation service. Tolls will be charged for service in the U.S. from receipt points to the international boarder and in Canada from the international boarder to Dawn. The project is expected to ultimately provide up to 1 billion cubic feet per day of gas transmission capacity. A stylized map showing the NEXUS path is provided below.

Fit Within Gas Supply Portfolio

NEXUS provides for increased supply diversity and flexibility through access to an emerging basin, the Utica shale, and a direct path into storage operations at Tecumseh and Dawn.

EGD's gas supply plan is composed of three general types of supply: Baseload supply, seasonal supply and discretionary purchases. Baseload supplies provide a constant flow of natural gas into the markets served by EGD. Demand requirements during the year dictate whether or not these supplies are diverted into storage for later use or flow directly to the markets served by EGD. Baseload supplies are procured in the WCSB and Chicago and flow on the Alliance, TCPL long haul and Vector transportation contacts held by EGD. Baseload supplies are also provided by Direct Purchase customers who deliver supply to EGD. Direct Purchase supplies have steadily declined over the past decade as more customers have chosen to procure supply directly from

EGD.

Seasonal supplies are utilized to meet demand throughout the winter and in near-peak and peak day demand conditions. Seasonal supplies flow from storage on short haul contracts held with Union and TCPL and are also delivered directly to the markets served by EGD in the case of curtailment and peaking supplies. More recently EGD has also utilized long haul capacity on TCPL to supplement seasonal supplies.

Discretionary purchases provide for a level of flexibility within the supply plan. These supplies are planned to be procured at Dawn. To the extent that demand is higher (lower) than planned, discretionary supplies are increased (decreased) in order to ensure adequate storage balances and adherence to the gas supply plan.

EGD currently holds approximately 644 TJ/d of long haul capacity on the TCPL system. This capacity is utilized for baseload and seasonal supply. EGD also holds 290 TJ/d of capacity on Vector pipeline. Vector provides transport strictly for baseload supply and as such this capacity is utilized fully throughout the year. Approximately 99 TJ/d of this capacity is used to transport WCSB supplies from Alliance into Dawn. The remaining 191 TJ/d of capacity is used to transport supplies procured at Chicago into Dawn. By late 2015 Vector capacity will be reduced to approximately 185 TJ/d. This reduction results from a decision in 2012 not to renew 105 TJ/d of Vector contracts in order to maintain the flexibility to take advantage of emerging supply and transportation options, including potential developments in the Utica and Marcellus basins. The remaining Vector capacity of 185 TJ/d has been renewed for one year to the end of November 2017.

Long term forecasts indicate an increasing reliance on Dawn discretionary supplies. Between 2008 and 2012, annual Dawn discretionary purchases averaged approximately 54 PJs. In 2013, Dawn discretionary purchases exceeded 86 PJs, largely due to weather conditions over the latter part of the year. In years prior to 2008 Dawn discretionary purchases were on average lower than 50 PJs. The rise in discretionary purchases results from the return of direct purchase customers to system gas and the de-contracting of Vector transportation in November of 2010. As discussed above, additional Vector de-contracting will occur in 2015. As a result, Dawn discretionary requirements are expected to grow in the future.

Even with anticipated contracting in place[2], under design conditions Dawn discretionary purchases are expected to grow to approximately 93 PJs by 2016 and to approximately 130 PJs by 2025. Such a high reliance on discretionary supplies can run the risk of experiencing a lack of gas availability in the market when required coupled with high costs when the gas is required. NEXUS provides an alternative to baseload procurement that would otherwise occur at Dawn.

[2] This includes the GTA Project facilities, delivery point shift for Direct Purchase customers, supply from Niagara Falls, additional Vector de-contracting, and incremental short haul capacity on Union and TCPL.

The table below provides projections of average day demand and baseload supply for the next ten years. Note the table assumes continuance of EGD's long haul obligations post 2020 under the Settlement Agreement with TCPL.

Baseload Supply Absent NEXUS (PJ/d)

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Average Day Demand	1.23	1.23	1.24	1.25	1.26	1.27	1.29	1.30	1.32	1.33
Baseload Supply										
WCSB	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Direct Purchase										
Dawn	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Delivered	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Total	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Chicago	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Niagara	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Total Baseload Supply	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Difference	0.25	0.25	0.26	0.27	0.27	0.29	0.31	0.32	0.34	0.35
NEXUS Supply	0.08	0.08	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16

NEXUS capacity will firm up baseload supply and reduce reliance on Dawn discretionary supply to levels more in line with historical experience.

Landed Cost Analysis

The table below shows a landed cost ranking for the NEXUS project versus alternative paths to Dawn. This analysis was completed using forward commodity pricing information, NEXUS indicative tolls, posted recourse rates and TCPL Settlement Agreement tolls. The Dominion South pricing point was used as a proxy for the cost of commodity acquisition for NEXUS Phase 2 as this point is liquid and geographically close to the expected NEXUS initiation point.

NEXUS has provided a range of indicative tolls consequently the landed cost analysis examines the low, midpoint and high end of the indicative toll range. The "High +15%" scenario assumes the high end of the toll range plus an additional 15% on Phase 2 tolls to take into account the impact of the proposed capital tracker. This is an extreme scenario as the capital tracker will encompass capital costs, not total costs and consequently the tolls assumed in this scenario are likely to be higher than would otherwise be the case. Landed costs are evaluated over the November 2015 to October 2032 timeframe in order to capture both Phase 1 and Phase 2 concurrently. This initial landed cost analysis indicates that the NEXUS path is cost effective relative to the other transportation paths examined.

Nexus Project Evaluation			
Landed Cost Ranking, By Supply Option			
Rank	**Supply Option**	**Term**	**Average Landed Cost (C$/GJ)**
1	Nexus: Blended (Low)	Nov. 2015 - Oct. 2032	4.54
2	Nexus: PH1 (Low)	Nov. 2015 - Oct. 2032	4.61
3	Spot: Dawn	Nov. 2015 - Oct. 2032	4.63
4	Nexus: Blended (Mid)	Nov. 2015 - Oct. 2032	4.65
5	Nexus: PH1 (Mid)	Nov. 2015 - Oct. 2032	4.68
6	Nexus: PH1 (High)	Nov. 2015 - Oct. 2032	4.74
7	Nexus: Blended (High)	Nov. 2015 - Oct. 2032	4.74
8	Vector: Chicago → Dawn	Nov. 2015 - Oct. 2032	4.85
9	Nexus: Blended (High +15%)	Nov. 2015 - Oct. 2032	4.88
10	Willow to Dawn via MichCon/ANR/NGTL	Nov. 2015 - Oct. 2032	4.96
11	Willow to Dawn via MichCon/Vector	Nov. 2015 - Oct. 2032	5.06
12	Alliance → Dawn	Nov. 2015 - Oct. 2032	5.40
13	NGTL: Empress → Dawn	Nov. 2015 - Oct. 2032	5.87

NEXUS has not yet provided an estimate of the impact of the capital tracker and the landed cost analysis was completed at a point in time. Once further information is provided the landed cost analysis will be updated utilizing more current commodity price and toll assumptions. NEXUS has indicated that as a result of being part of Phase 1, the toll reduction attributable to Phase 2 is approximately $0.05 /Dth on the volumes from Phase 1 that are rolled into Phase 2 service.

Risks

There are several risks associated with the NEXUS project. Appendix B contains a summary of those risks and the mitigants.

EGD intends to file for approval of the NEXUS project under the OEB's "Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts". EGD also expects a condition precedent for regulatory approval to be part of the Precedent Agreement for capacity on the NEXUS project. Provided a satisfactory Precedent Agreement can be negotiated on terms acceptable to EGD, there is little risk to the Company signing a binding Precedent Agreement for capacity on the NEXUS project, other than pre-service costs in the event of a material breech by EGD of any of its obligations pursuant to the Precedent Agreement. A summary of the Precedent Agreement, in its current form, can be found in Appendix C.

Recommendation

EGD should continue to explore the inclusion of NEXUS in its supply portfolio. NEXUS can provide the following benefits:

- Replacement of existing Vector capacity which expires in October of 2015. Absent this Vector capacity additional spot purchases at Dawn will be required. It is recommended that NEXUS Phase 1 be utilized in the short term to displace baseload supply that would otherwise be procured at Dawn;

- Reducing spot requirements to more prudent and manageable levels. Given the experience this past winter additional diversity into Dawn would be beneficial in terms of gas acquisition and pricing should similar conditions occur again. The recent experience will be amplified under similar conditions absent alternative supplies into Dawn. Over the longer term NEXUS Phase 2 will mitigate the impact of increasing Dawn spot requirements in addition to displacing expired Vector capacity;
- Since NEXUS will land gas close to EGD's storage facilities at Tecumseh and Union storage at Dawn, gas transported via NEXUS would be directly injected into storage in the summer. Existing short haul capacity would be utilized to move gas to the franchise in the winter;
- Increased diversity of supply. By accessing the Utica shale EGD's gas supply portfolio will have access to another low cost supply basin for which production is expected to grow;
- Little reduction to contracting flexibility. While NEXUS requires a long term commitment, many existing contracts come up for renewal on an annual basis;
- NEXUS service will be firm thereby increasing security of supply;
- Participating in development of the NEXUS project provides a free option on another supply source.

Provided a satisfactory Precedent Agreement can be negotiated it is recommended that EGD enter into a binding Precedent Agreement for 75,000 Dth/day of capacity for Phase 1 and 150,000 Dth/d of capacity for Phase 2. In the near term these volumes will displace Vector capacity that is expiring in 2015 and over the longer term these volumes will displace an increasing Dawn requirement. It should be noted that 150,000 Dth/d qualifies EGD as an anchor shipper and consequently toll discounts.

It is further recommended that EGD retain an external consultant to provide a third party view of expectations for the North American natural gas market and the NEXUS project as a preliminary step for the regulatory pre-approval process. As discussions with the project proponents evolve and further information is provided EGD will further develop the case for regulatory pre-approval of capacity on the NEXUS project.

Appendix A – Northeast U.S. Supply Overview Executive Summary

Executive Summary

North America's energy markets have changed drastically since the mid-2000s as economical horizontal drilling and hydraulic fracturing have unlocked vast shale gas resources in the United States, Canada and Mexico.

These advancements in gas extraction technology have imparted positive changes on the North American natural gas market, such as new long-term domestic supply, large-scale capital investment and thousands of high-paying jobs. However, this new era of gas production is affecting traditional gas flow patterns, an outcome which must be understood since this new supply delivered through new infrastructure will have significant implications for the design of EGD's gas supply portfolio.

In recent years, Western Canadian Sedimentary Basin (WCSB) conventional gas production has experienced a marked decline. This decline in WCSB gas has coincided with an increase in unconventional gas production from Western Canada, the US Gulf Coast and the US Northeast. Looking forward, this trend of growing unconventional gas and declining conventional gas is expected to continue.

Traditionally, the US Northeast (US NE) has been a consumer of highly-priced natural gas, but in a role-reversal has now become a major low cost supply basin, driving price dynamics and encouraging capital investment in the immediate region. This new supply basin has the potential to swing the US NE market balance from negative to positive, via gas flow reversals and new infrastructure taking gas towards the Gulf Coast, Midcontinent and into Eastern Canada (i.e. Ontario and Quebec). Furthermore, NE shale gas is potentially destined for LNG export terminals in order to serve the international markets desire for newly-proved low cost supplies.

Naturally, this abundant low-cost gas, which is in close proximity to the EGD franchise, has aroused interest not only by EGD but by other gas consumers such as Union Gas and Gaz Metro.

The development of the gas market in US NE has imparted some far-reaching dynamics. TCPL, one of EGD's traditional long-term supply sources, has seen its Mainline gas flows disrupted, in part, by the shale gas phenomenon. In combination with several other factors, swelling shale gas production has displaced deliveries from the WCSB to Eastern Canada. Ultimately, this reduction in demand for WCSB gas has imparted significant impacts on the TCPL Mainline and the economics of gas sourced in the west.

TCPL's desire to convert Mainline capacity away from natural gas follows from the current and planned infrastructure development integrating US NE shale gas production into the supply chain. Growth in shale gas production has caused a flurry of activity in US NE pipeline infrastructure. The goal of these capital investments is to allow the natural gas produced from the Marcellus and Utica plays in the Appalachia to find consuming markets across the US and Eastern Canada.

The US NE Shale reservoir as a new supply source, and the coinciding infrastructure development which will deliver the new supply, has the potential to create cost-effective options for EGD's future franchise gas needs. As well, access to this vast resource will allow for EGD to reduce its exposure to the less reliable and more costly supply options of peaking services and delivered gas.

The purpose of this document is to provide a substantive overview of the Marcellus and Utica shale plays found in the NE US, the markets that surround them.
This document is organized into several sections. Initially, a broad discussion of US shale gas and its development is presented. Following this general overview, an analysis of selected shale gas formations and the technologies used to extract resources, brings into focus the size and potential for the US NE gas market. The ensuing analysis then drills deeper into the key players found in the US NE shale basins and the challenges and opportunities they are facing, such as price, demand and transportation capacity.

Appendix B – Risks & Mitigants

Risk	Mitigant
Migration back to direct purchase with new delivery point obligation	Depending on the magnitude of migration reduce Dawn discretionary requirements such that flexibility is not impeded and/or Cap allowed Direct Purchase deliveries at Dawn and/or Continue to roll Vector contracts annually and/or Utilize TCPL Niagara capacity on a seasonal basis (as contemplated in in GTA Project LTC)
15 year term required for NEXUS capacity on Phase 2	Continue to roll Vector contracts annually.
Landed Cost Analysis -Toll risk -Basis risk	Precedent Agreement to include provisions allowing for termination if final tolls result in the project not being economic. Basis risk reduced through holding a diversified portfolio. US Northeast gas is a low cost production region.
Nexus Phase 1	Precedent Agreement to allow parties to retain Phase 1 assets if Phase 2 does not go ahead. Landed cost analysis indicates Phase 1 economics are preferable to Chicago supplies.
Supply availability	Precedent Agreement to contain conditions related to initiation point and supply availability.
In-Service Delays	Precedent Agreement to include conditions related to in-service dates. Dawn & Phase 1 can be used as an alternative supply source in the interim.

Appendix C – Summary of Precedent Agreement Based on Negotiations to Date

Project summary

- NEXUS will be developed in 2 Phases with target commencement of Phase 1 as Nov 1, 2015 and Phase 2 as Nov 1, 2017
- Phase 1 will provide firm transport from Willow Run, Michigan to Dawn on existing pipelines
- Phase 1 initial term is 3 years
- Pipeline currently estimates Phase 1 rates will be between $0.13 and $0.21 US per Dth/d
- Phase 2 will connect eastern Ohio to Willow Run, Michigan via 250 miles of greenfield pipeline along with augmentation of existing pipeline from Willow Run to Dawn to handle additional load created by greenfield pipe
- Phase 2 initial term is 15 years
- Pipeline currently estimates Phase 2 rates will be between $0.67 and $0.84 US per Dth/d

Pipeline Obligations

- Seek all necessary authorizations to provide service (FERC, NEB, etc..)

Customer Obligations

- Inform Pipeline of facilities EGD must build to take service and necessary authorizations
- Seek all necessary authorizations (OEB, etc..)
- Support the pipeline in its efforts to seek pipeline required authorizations

Conditions Precedent and other rights of EGD

- If the reservation rates for Phase 2 provided on or before Dec 1, 2014 are higher than first estimate, and they are uneconomical to the EGD then EGD shall not be obligated to sign the Phase 2 rate agreement
- There is a most favoured nations clause to ensure EGD would have rights to take same deal offered to other customers in similar circumstances
- Leading up to communicated service commencement date the Pipeline must provide 90 days prior notice to customer of the in-service date of Phase 2 service. This is to allow customer time to seek alternate supply should the project be late.
- Receipt of internal corporate approvals for performance of customer obligations under the PA within 60 days of signing

- Receipt of internal approvals for final reservation rates for Phase 2 within 60 days of receipt of final Phase 2 reservation rates from pipeline
- Receipt of approvals from the OEB 240 days following receipt of revised reservation rates for Phase 2 service
- If authorizations received by the pipeline could have a material adverse effect on us, acting reasonably, there are provisions for termination if the issues cannot be resolved
- EGD is only required to pay Phase 1 pre-service costs if we commit a material breach of the precedent agreement
- Force Majeure protection on failure to perform

Pipeline Conditions Precedent

- Pipeline will file for Phase 1 authorizations (FERC, NEB, etc..) by September 1, 2014
- Pipeline will receive all Phase 1 authorizations by May 1, 2015
- Pipeline will file for Phase 2 authorizations by April 1, 2015
- Pipeline will receive all Phase 2 authorizations by May 1, 2017
- Pipeline will secure financing for Phase 2 by May 1, 2017
- Pipeline receipt of all necessary other authorizations no later than 4 months before service commencement date

Other Key Dates

- October 1, 2014 – Pipeline to provide summary of expected key terms of transportation service agreements, rate agreements for Phase 1 and 2 services, final reservation rates for Phase 1, revised Class III estimate of capital cost of Phase 2
- December 1, 2014 – Pipeline to provide final capital cost estimate, revised rate agreement and final reservation rates (subject to +-15% capital cost adjustment) for Phase 2 service
- May 31, 2015 – target date for EGD to obtain OEB approval
- November 1, 2015 – initial target service commencement date for Phase 1 service, also last date for pipeline to inform EGD of Phase 2 service commencement date with commencement date not later than November 1 ,2018 unless negotiated otherwise
- November 1, 2017 – initial target service commencement date for Phase 2 service

FRPO INTERROGATORY #4

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 16, para. 44

Preamble: We would like to understand better, the evolution of the Precedent Agreements outlined in this paragraph.

Please provide the analysis that was done to support a reduction to 110,000 Dth/day.

RESPONSE

The original PA was signed on June 5, 2014. The original 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. A copy of the original PA is attached in response to FRPO Interrogatory #1 at Exhibit I.T1.EGDI.FRPO.1.

The original PA contained a number of Conditions Precedent, including section 7(c)(i) which required Enbridge to obtain internal corporate approvals (from the Enbridge Gas Distribution Board of Directors) for proceeding with the NEXUS contract by August 29, 2014.

After the original PA was signed, Enbridge continued investigations and internal review to confirm the appropriateness of the arrangement for the Company and its ratepayers. Among other things, this involved examination of supply options to fill the NEXUS capacity, and review and confirmation of the advantages of NEXUS supply versus other options.

Also, shortly after the original PA was signed, there were some new developments that impacted the Company's perspective.

On June 26, 2014, Enbridge was informed of a binding open season that was to be launched the next day for the ET Rover project. That project would involve the construction of a new greenfield pipeline to deliver Appalachian basin gas supplies to Defiance, Ohio and Dawn. Enbridge understood that approximately 1.3 Bcf per day could flow to Dawn. Enbridge decided not to participate in the ET Rover open season

Witnesses: J. LeBlanc
A. Welburn

for a number of reasons, as discussed at Exhibit A, Tab 3, Schedule 1, pages 21 to 22. Further details around Enbridge's communications with ET Rover, and the reasons why Enbridge did not participate in the open season, are set out in response to TransCanada Interrogatory #6 at Exhibit I.T4.EGDI.TransCanada.6.

Shortly after the ET Rover open season was announced, ANR Pipeline Company launched a non-binding open season on July 3, 2014 to gauge interest for a new 2 Bcf per day project, to deliver Appalachian basin gas supplies to various points, including Dawn. The potential deliveries to Dawn were 350,000 Dth per day.

In light of these developments, Enbridge requested and received a one month extension to the August 29, 2014 Condition Precedent deadline for seeking internal corporate approvals for the original PA.

A July 17, 2014 presentation to Enbridge management that set out an update on NEXUS and these other newly announced pipeline projects is attached to this response as Attachment 1.

Throughout this time period, Enbridge was working on identifying and securing gas supply to fill the 200,000 GJ per day Niagara to Enbridge Parkway CDA capacity that Enbridge had agreed to obtain from TransCanada under the Precedent Agreement that had been signed on May 29, 2014. That capacity is expected to begin to flow January 1, 2016. Through that process, Enbridge identified that it was difficult to secure sufficient gas supply at Niagara. In response to Enbridge's request, TransCanada then agreed to permit Enbridge to take delivery of supply at either Chippawa or Niagara.

The original intention for the Niagara/Chippawa capacity, as indicated in the GTA Project proceeding, was to use it at a lower load factor and to fill it with a combination of seasonal and baseload supply. As Enbridge investigated supply options, it became clear that seasonal Niagara/Chippawa supply was not going to be easy to secure. Most counterparties who did not already have transportation capacity beyond the Canada/US border were only interested in discussing baseload supply deals.

The combination of factors explained above led Enbridge to reconsider the provisional commitment that it had made to NEXUS in the original Precedent Agreement. The Company identified a number of concerns that called into question whether to proceed. Among these concerns were the following:

- Whether there would be sufficient supply available at the Kensington receipt point to fill all the capacity being contracted on the NEXUS pipeline.

Witnesses: J. LeBlanc
A. Welburn

- Whether the increases in liquidity at Dawn would emerge even without the NEXUS pipeline, because of the other announced pipeline projects and because of the delivery of supplies from Niagara/Chippawa to Dawn.

- Whether Enbridge would be able to fully utilize the NEXUS capacity and the Niagara capacity on TransCanada, considering that the Niagara capacity on TransCanada was now likely to be used as baseload capacity.

- Whether there was a risk that Enbridge would be committed for several years to a project that might not be built – that risk had appeared to increase with the emergence of two new pipeline projects to deliver Appalachian basin supplies to Dawn. It was not clear to Enbridge that all three projects would proceed.

Taking all of these factors into account, a recommendation was made to Enbridge management not to approve the initial NEXUS PA. It was noted that Enbridge should continue to look at NEXUS as a supply source, but the determination was that the current parameters of the original PA were not appropriate. A copy of the August 18, 2014 memorandum setting out this recommendation is attached to this response as Attachment #2.

The recommendation not to proceed was discussed with Enbridge management, and a decision was made not to satisfy the Condition Precedent for Company approval of the original PA. A copy of the relevant page from an August 25, 2014 presentation to Enbridge management where the NEXUS PA was discussed is attached to this response as Attachment #3.

Although Enbridge had until September 30, 2014 to satisfy the Condition Precedent for internal approval, this decision was informally communicated (by telephone) to NEXUS in early September 2014. During that call, Enbridge communicated the reasons for its decision (the concerns listed above). Soon after, Enbridge delivered formal notification that it would not satisfy its Condition Precedent for management approval. A copy of Enbridge's September 29, 2014 notification is attached to this response as Attachment #4.

Through September 2014, Enbridge began to consider whether there could be amendments to its commitment to NEXUS that could result in an arrangement that was more attractive to Enbridge. In part this was motivated by ongoing developments, and in part this was driven by the fact that section 9 of the original PA required the parties to continue to negotiate in the event that a Condition Precedent was not met.

Among the developments that influenced Enbridge was the ongoing Dawn Access Consultative process. Through that process, it became apparent that there was significant interest from a large majority of Enbridge's direct purchase customers to move their supply source to Dawn. In Enbridge's view, this would significantly increase future demand for gas supply at Dawn. This raised concerns about continued liquidity and supply availability at that hub. This renewed Enbridge's focus on the importance of increasing supply options to Dawn.

Another factor was Enbridge's ongoing investigation of Niagara supply options. As noted, Enbridge had originally intended to utilize NEXUS capacity to provide baseload supply given the cost of the transportation and the fact that it would be procuring in the Marcellus/Utica basin directly with producers. By this time, realizing that supply at Niagara/Chippawa was going to be more heavily weighted to baseload supply, Enbridge re-evaluated the components of its supply plan and confirmed that it was no longer comfortable with NEXUS capacity equivalent to 150,000 Dth perd. However, Enbridge decided that a reduced volume may be manageable and attractive as a way of diversifying Enbridge's supply being delivered to Dawn. This would allow a significant amount of Chicago supply to be maintained, while also ensuring a direct supply connection to Dawn from the Appalachian basin.

By early October, it was clear that NEXUS was open to renegotiation of some parameters of the PA in order to preserve Enbridge's involvement.

Around that time, Enbridge received the Sussex market study that is attached to the response to SEC Interrogatory #2 at Exhibit I.T1.EGDI.SEC.2. In the market study, Sussex found that there will be abundant supplies of natural gas produced in the Marcellus and Utica supply basis and that continued increases in supply from those basins are expected in the future. Sussex concluded that "there is sufficient support that Marcellus and Utica natural gas supplies are expected to be available to support long term capacity commitments on NEXUS".

Through October, Enbridge engaged in discussions with NEXUS about the terms under which Enbridge could participate in the NEXUS project. A main topic of discussion was whether and how Enbridge could commit for a smaller volume. Another topic of discussion was whether Enbridge could contract for NEXUS to deliver gas to Vector at Milford Junction, so that Enbridge could use existing Vector capacity to deliver the gas to Dawn. This would reduce Enbridge's commitment to NEXUS, and allow Enbridge to maintain its Vector capacity. The second of these advantages is important, because maintaining Vector capacity provides Enbridge with a fallback option for deliveries into Dawn in the event that NEXUS is delayed or does not proceed.

Enbridge and NEXUS were able to agree on updated parameters for Enbridge's participation in the project, including a reduction in committed volume to 110,000 Dth per day and a delivery point of Milford Junction to allow Enbridge to use Vector capacity. NEXUS also agreed that Enbridge could receive an option to increase its capacity to 150,000 Dth per day in the future, and to receive anchor shipper status in that case. These were significant enhancements for Enbridge, in comparison to the terms of the original PA.

The proposed updated parameters were presented to Enbridge management on October 23, 2014. A copy of the presentation is attached to this response as Attachment #5.

Enbridge determined that the revised parameters of the NEXUS commitment were attractive, and sufficiently addressed the concerns that had existed when the decision was made not to confirm the original PA.

As a result, Enbridge management recommended that the Enbridge Gas Distribution Board of Directors provide approval for the Company to enter into a binding restated PA reflecting the revised parameters. A copy of the November 26, 2014 memorandum to the Enbridge Gas Distribution Board of Directors which explained this recommendation is attached in response to SEC Interrogatory #2 at Exhibit I.T1.EGDI.SEC.2.

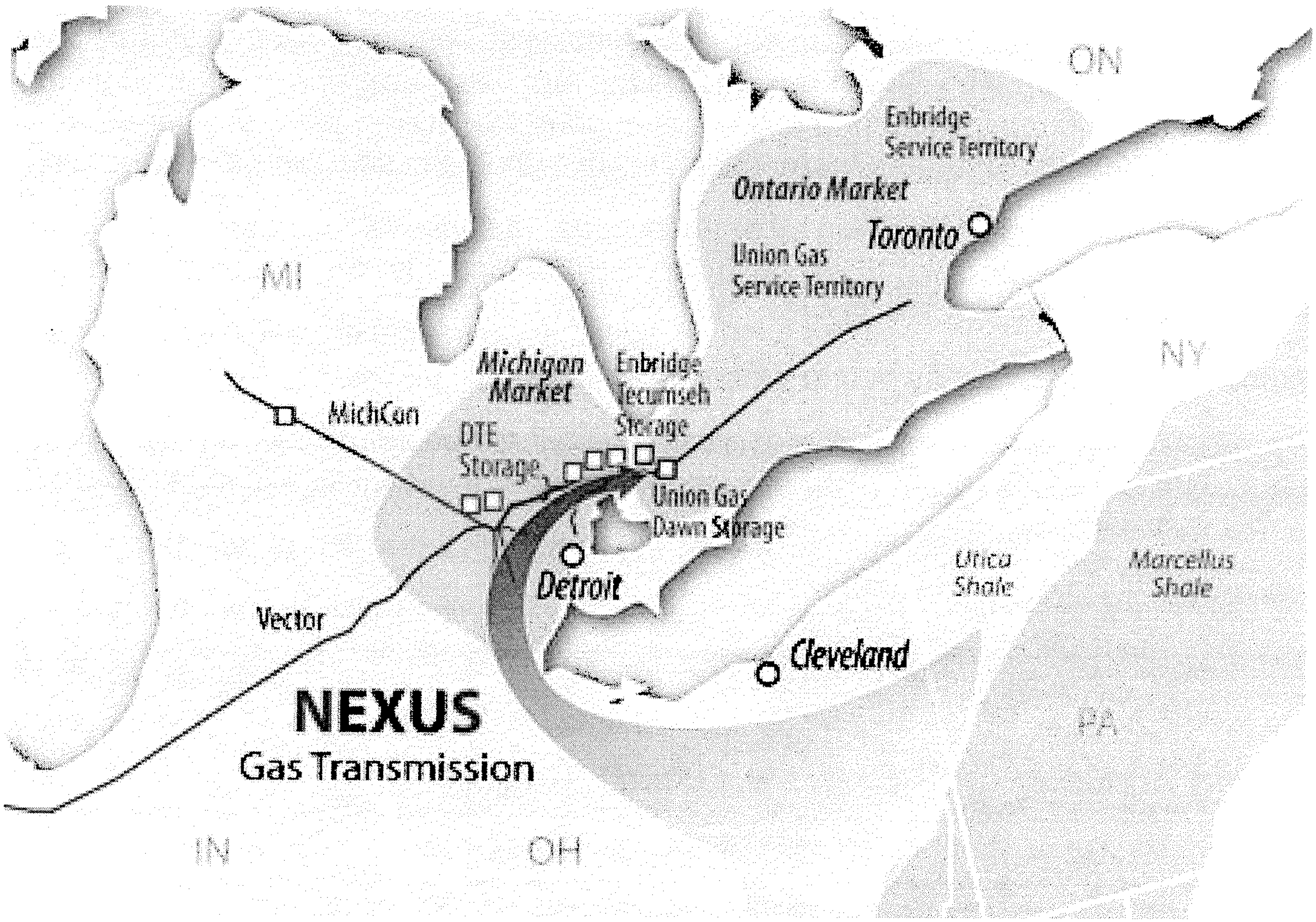
Witnesses: J. LeBlanc
A. Welburn

Pipeline Transportation Capacity Contracting Update

July 17, 2014

ENBRIDGE

NEXUS Map



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Dawn Storage
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Marcellus
Shale
Detroit
Vector
Cleveland
NEXUS
Gas Transmission
PA
IN
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NEXUS Project

ENBRIDGE

Volume: - Phase 1 – 40,000 Dth/day - Phase 2 – 150,000 Dth/day	**Term:** - Phase 1 – up to 3 years or Phase 2 in-service date (starting November 1, 2015) - Phase 2 – 15 years (starting as early as November 1, 2017)
Exposure: - FBA - $219 million (USD) - Rates - $700 million (USD)	**Path:** - Phase 1 – Willow Run Michigan to Dawn Hub - Phase 2 – Western Ohio to Dawn Hub

- PA and FBA executed in June 2014 subject to Enbridge internal approval on or before August 29, 2014:
  - Recent new project announcements in the region and lack of producer commitments to the project led Management to delay seeking EI Board approval
  - A request has been submitted to the project to extend the internal approval deadline to September 30, 2014 (now targeting September EI Board meeting)
  - Recent projects announced include ET Rover Project and ANR Mainline Expansion Project
- Subject to OEB approval in a form acceptable to Enbridge in its sole discretion
- No liability for pre-service costs before OEB approval (except through breach of obligations)
- This capacity will provide EGD direct access to Utica/Marcellus production basins and the project will also increase liquidity at Dawn (to which EGD has significant dependence)

Enbridge Gas Distribution Inc.
500 Consumers Road
North York, ON
M2J 1P8
Canada

Memo

Date: August 18, 2014

To: Malini Giridhar

From: Joel Denomy

CC: Jamie LeBlanc

Re: NEXUS Analysis and Recommendation

Introduction

EGD signed a Precedent Agreement with the proponents of the Nexus Project on June 5, 2014. The PA has a condition precedent on internal approvals that must be waived by September 30, 2014. The purpose of this memo is to provide a recommendation on whether EGD should continue to pursue capacity on the NEXUS Gas Transmission Project ("NEXUS") based on information provided by the project developers[1] to date and an assessment of other pipeline projects seeking to bring Utica and Marcellus gas to market.

Executive Summary

Subsequent to signing the PA, significant new developments with respect to Dawn supply include two new projects proposing to bring natural gas to Dawn from the general supply area accessed by Nexus and discussions with potential suppliers at Niagara Falls and Chippawa about their willingness to bring supply to Dawn. It therefore appears that a long term commitment to the supply basin may not be necessary to meet EGD's supply needs and it is recommended that EGD not contract for capacity on the NEXUS pipeline. EGD should continue to procure natural gas at Dawn and maximize the load factor on its Niagara/Chippawa transport. EGD should continue to monitor NEXUS development as it could provide an alternative to Chicago supplies if additional connectivity to U.S. Northeast supplies is required in the future.

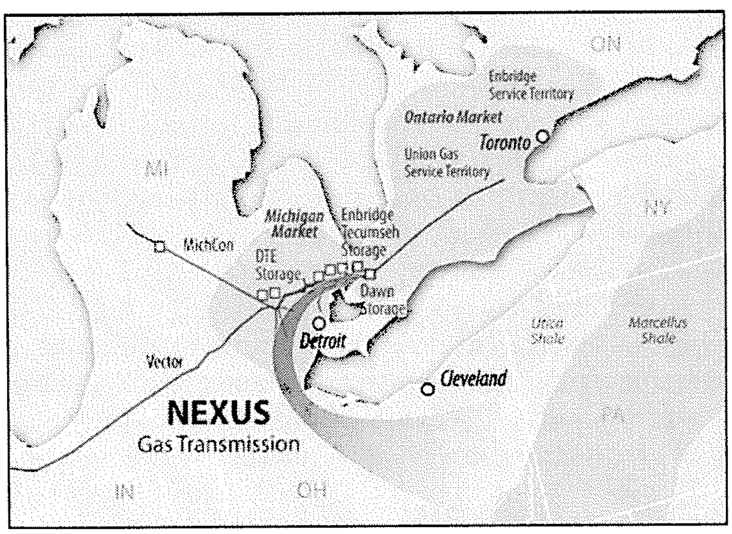
NEXUS Project & History

[1] The project developers are DTE Energy and Spectra Energy Corporation.

NEXUS is a gas transmission project designed to transport supplies of Appalachian Basin gas including Utica shale gas to customers in the U.S. Midwest, including Ohio and Michigan, and to customers in Ontario via the Dawn hub. A non-binding open season for the NEXUS project was held from October 15, 2012 to November 30, 2012. Given the changes in the natural gas market that were occurring at the time of the open season and EGD's expectation for these changes continuing into the future, it was recommended that EGD bid into the open season as an anchor shipper. EGD submitted its bid on November 30th 2012.

The open season was non-binding and the bid did not expose EGD to any financial or contractual risks. EGD's open season bid was for an MDQ of 150,000 Dth/day for a 15 year term which qualified EGD as an anchor shipper and provided for potential toll incentives. The open season bid also outlined EGD's pre-condition requirement for Management and Regulatory approval from the Ontario Energy Board ("OEB") with respect to term and capacity. By placing a bid into the open season EGD was subject to the condition that, should it be awarded capacity, it must enter into discussions which could ultimately lead to a binding Precedent Agreement (PA) for capacity on the NEXUS pipeline.

EGD executed a PA for capacity on the NEXUS project with several conditions precedent. The first of these is management approval to proceed. EGD originally sought Board approval prior to signing the PA. However management recommended that EGD conduct an analysis of supply options and alternative pipeline projects before seeking approval from the Board. As these studies were not complete at the time, and the open seasons for the two new projects not yet posted, EGD sought and was granted a condition precedent by the proponents of NEXUS to seek management approval by September 30, 2014 and therefore signed the PA on that basis.

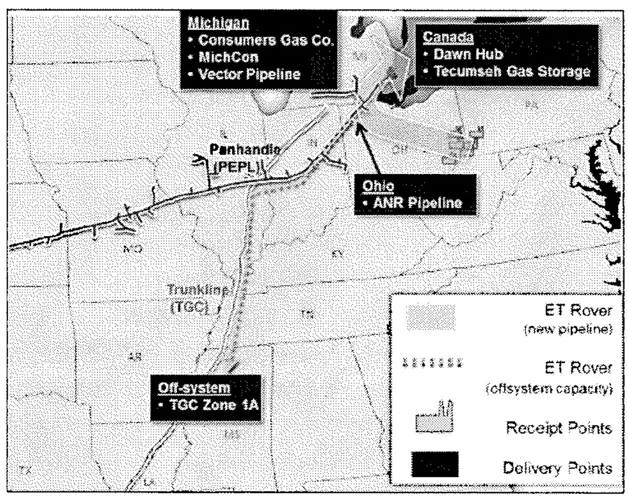


NEXUS is to be completed in two phases. In Phase 1 NEXUS will provide transportation service from Willow Run, Michigan to Dawn, Ontario by utilizing subscriptions of firm pipeline capacity on existing pipeline systems. Phase 2 will involve the construction of approximately 250 miles of greenfield pipeline extending from eastern Ohio to interconnections with existing pipelines and from there to Dawn, Ontario. Phase 2 will also utilize subscriptions of firm pipeline capacity on existing pipeline systems and/or expansions of existing capacity and/or greenfield pipeline as required. Phase 1 is expected to be in service on November 1, 2015 and Phase 2 is expected to be in service on November 1, 2017. Both phases will provide firm transportation service. Tolls will be charged for service in the U.S. from receipt points to the international boarder and in Canada from the international boarder to Dawn. The project is expected to provide up to 1 Bcf/d of gas transmission capacity. We understand that Union Gas has signed on for 150,000 Dth/d for a 15 year term and DTE has signed on for 300,000 Dth/d (comprised of two contracts for 150,000 Dth/d each) for a 15 year term. We also understand that the project has recently secured producer commitments for 500,000 Dth/d.

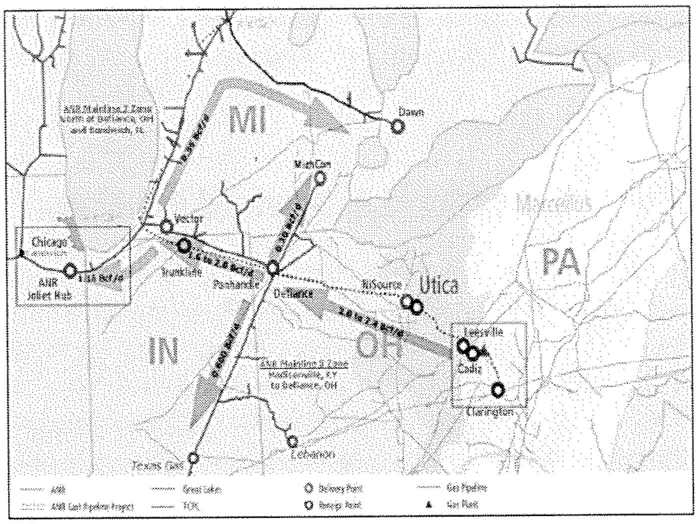
Overview of the Current Natural Gas Market Dynamics and Proposed Projects

The new dynamic for gas markets has resulted in the development of and proposals for new pipeline infrastructure, including NEXUS, in the U.S. NE to allow natural gas produced in the region to find consuming markets. The production and pipeline development started less than a decade ago in Marcellus, and is now expected to ramp up in the Utica. This has had the effect of expanding portfolio options, for both supply and transportation, for EGD and other market players.

Since executing the NEXUS PA in June of 2014, two new projects, which will bring gas to Dawn from the Utica and Marcellus shales, have held open seasons. These two projects are the Energy Transfer Rover Project (ET Rover) and the ANR Pipeline Company East Project (East Project). In addition, EGD is aware of certain producers and marketers who have contracted for capacity to the Ontario boarder and into Ontario through recent open seasons on the TransCanada and Union Gas systems.



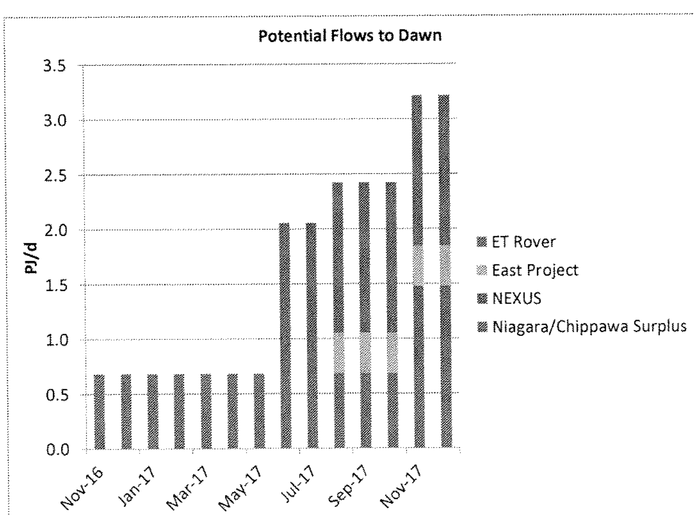
ET Rover is a new interstate gas pipeline designed to transport Marcellus and Utica shale production directly from processing plants to liquid markets. It will consist of new 42-inch pipeline capacity and deliver supplies to points of interconnection with Panhandle Eastern Pipeline Company and ANR Pipeline near Defiance Ohio, to interconnections in Michigan, to the Union Gas Dawn Hub and to points on Trunkline Zone 1A. Total capacity on ET Rover is 3.25Bcf/d of which 1.3 Bcf/d will be available to flow to Dawn. A binding Open Season for capacity on ET Rover was issued on June 30th, 2014 and closed on July 25th, 2014. Energy Transfer is taking on all cost over-run risk on the project. A recent press release from Energy Transfer indicated that approval for construction of ET Rover was granted by management in June of 2014. ET Rover has secured 2.95 Bcf/d of binding, fee-based commitments under predominantly 20 year agreements and additional bids received in the open season are being evaluated. ET Rover capacity to Dawn is fully subscribed. In service dates are expected to be December 2016 and July 2017 for Midwest markets and Dawn respectively.



The East Project will provide Marcellus and Utica gas supplies with export capacity to the Midwest, Gulf Coast and Dawn. It will consist of a new, large diameter 1,440 psig pipeline from Clarington, Ohio to an interconnection with ANR's existing system at Defiance. Through arrangements with Great Lakes Gas Transmission and TransCanada Pipeline the East Project will also be able to provide transportation service to Dawn. Total capacity on the East Project is 2.0 to 2.4 Dth/d of which up to 0.35 Dth/d can accommodate flows into Dawn. A non-binding open season for capacity on the East Project was issued on July 3rd, 2014 and closed on July 28, 2014. The expected in service date is the 3rd quarter of 2017. Shippers who bid for 250,000 Dth/d or greater with a term of 20 years will be granted "foundation shipper" status and qualify for toll discounts. Foundation shippers will not have capacity pro-rated if capacity allocation is necessary. We have not found any information on the open season results for this project.

EGD has contacted several markers and producers to determine quantities available at the Niagara Falls and Chippawa border points that could be utilized to fill recently acquired TransCanada short haul capacity to Parkway. Through these discussions EGD has become aware that there is the potential for oversupply at these boarder points. If this is the case, gas arriving at the Ontario boarder will have to seek a liquid market(s) which could include Dawn.

The table below provides a summary of the incremental supply that could flow to Dawn should all of the above noted projects be approved. A potential supply surplus at Niagara Falls/Chippawa is also included.



ET Rover and East Project supplies are the total amounts that could potentially flow to Dawn pursuant to each respective open season. NEXUS supply is comprised of Union Gas and Producer commitments (i.e. EGD and DTE commitments are netted off the total NEXUS capacity commitments to date).

Niagara/Chippawa Surplus is supply showing up at the border with uncertain (at this point in time) downstream commitments. Results of recent TransCanada and Union Gas open seasons have not been made public and capacity commitments currently flowing to Chippawa are serving U.S. markets. As a result the supply surplus at Niagara/Chippawa could be lower than presented. However, it is possible that some parties have contracted for transportation capacity to Dawn. At a recent Union Gas customer meeting it was indicated that approximately 560 TJ/d of new contracts from Kirkwall to Dawn could begin flowing in 2015-2016.

NEXUS Evaluation

In the current environment access to new markets and supply sources generally involves long term commitments on the part of shippers in order for the associated infrastructure to be built. Knowing this, and having concern about sufficient supply coming to Dawn to which EGD has significant dependence, EGD has worked with NEXUS in order to support infrastructure development. With the advent of the aforementioned projects EGD's commitment to NEXUS has been re-evaluated based on the following considerations:

EGD's commitment on NEXUS can range from approximately \$4.1 million to \$12.3[2] million for Phase 1 and approximately \$602.0 million to \$753.9 million for Phase 2 for a total of approximately \$606.0 million to \$766.2 million over the term of the entire contract[3][4]. This represents a significant financial commitment for EGD and its ratepayers. If EGD is able to source gas directly at Dawn or another established hub this long term commitment is not necessary.

A long term commitment to NEXUS capacity precludes EGD from accessing competitive alternatives for a significant period of time. The PA also contains a clause which allows for NEXUS to extend the commencement date which in turn extends the termination date of the PA. Effectively, EGD could remain party to the PA for a pipe that never gets built and therefore precluded from exploring competitive alternatives to a date as late as November 1, 2019.

With three projects attempting to connect to Dawn there is the likelihood that not all of the projects will ultimately be built. At this stage it appears as though ET Rover has a significant advantage over the other two projects. Commitments have been made on ET Rover[5] greater than those on NEXUS, for a longer term and for less risk to the shipper. There is a risk that supply could flow to one of these other projects and not to NEXUS or bypass these projects completely and flow to other markets. These uncertainties make it unpalatable for EGD to commit ratepayers to such a significant financial obligation.

[2] The low end of this range assumes a Phase 1 contract demand of 40,000 Dth/d. The high end of this range assumes a Phase 1 contract demand of 75,000 Dth/d.
[3] All calculations assumes an exchange rate of 1USD=1.10CAD.
[4] Ranges calculated based on tolls provided by NEXUS. The range is actually wider on both the low and high ends due to the ±15% capital tracker.
[5] Anchor shippers are American Energy Partners, Antero Resources Corporation and Range Resources Corporation.

The current circumstances indicate that there will be incremental supplies flowing into Dawn even if only one of the aforementioned projects is ultimately placed in service. Additional supplies could arrive at Dawn from Niagara/Chippawa depending on other contracting arrangements. EGD already has significant access to Dawn and this access will increase once the GTA Project facilities are in service. Absent NEXUS, EGD's Dawn requirement will increase however, the incremental supply expected to flow into Dawn will provide for additional diversity and liquidity at Dawn. The table below provides an estimate of spot & other requirements with and without NEXUS.

Supply With and Without NEXUS (PJ/d)

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Average Day Demand	1.23	1.23	1.24	1.25	1.25	1.26	1.26	1.27
Supply Without NEXUS								
WCSB	0.45	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Ontario-T Direct Purchase								
Dawn	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Delivered	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Total	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Chicago	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Niagara (200K Baseload)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Total	1.14	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Difference (Spot Requirement & Other Supply)	0.09	0.27	0.28	0.28	0.29	0.29	0.30	0.31
Supply With NEXUS								
WCSB	0.45	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Ontario-T Direct Purchase								
Dawn	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Delivered	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Total	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Chicago	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Niagara (100K Baseload, 100K Winter Seasonal)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
NEXUS	0.04	0.04	0.16	0.16	0.16	0.16	0.16	0.16
Total	1.12	0.95	1.06	1.06	1.06	1.06	1.06	1.06
Difference (Spot Requirement & Other Supply)	0.11	0.29	0.18	0.18	0.19	0.19	0.20	0.21

EGD has contracted with TransCanada for capacity that provides access to 200,000 Gj/d of U.S. NE supplies at Chippawa and/or Niagara Falls. These supplies will begin flowing in November of 2015. This capacity provides additional diversity to EGD's supply portfolio and access to lower cost U.S. NE supply. With a NEXUS commitment it was expected that these supplies would be seasonal. In addition, EGD has recently been offered incremental capacity on Vector Pipeline at a discounted rate for a 12 year term. This offer contemplates the possibility of NEXUS connecting into Vector. Should this option become viable, EGD could supplement Chicago purchases with U.S. NE gas while maintaining a higher load factor on the short haul contract from Niagara Falls or increase Chicago purchases.

Additional supply from NEXUS will reduce supply flexibility by increasing exposure to U.S. NE markets beyond that contemplated in the GTA Project and limiting the ability to access supply from Chicago. The NEXUS Kensington receipt point is not currently an established hub. Unlike Dawn, and to a lesser extent Niagara Falls/Chippawa, there are currently no known supply options at Kensington. In order for EGD to secure supply at Kensington it is expected that a long-term supply arrangement would be required, further adding to the financial commitment and risk associated with NEXUS capacity. When there was greater uncertainty that infrastructure would be built to ensure sufficient new gas would show up at Dawn to the meet increasing demand these were drawbacks which seemed reasonable to ensure the liquidity at Dawn. With the continued development of new projects that bring gas to Dawn it is no longer necessary to accept these drawbacks.

Absent NEXUS it is expected that utilization of the Niagara Falls/Chippawa capacity will increase. This will enhance EGD's ability to secure supply at this point as most counterparties prefer annual to seasonal deals. The table below provides an estimate of the percentage of supply from different sources with and without NEXUS.

Supply Percentages With & Without NEXUS

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Without NEXUS								
WCSB	37%	22%	22%	22%	22%	22%	22%	22%
Ontario-T Direct Purchase	25%	25%	25%	24%	24%	24%	24%	24%
Chicago	15%	15%	15%	15%	15%	15%	15%	15%
U.S. Northeast								
Niagara (Baseload)	16%	16%	16%	16%	16%	16%	16%	16%
Spot Requirement & Other Supply	7%	22%	22%	23%	23%	23%	24%	24%
With NEXUS								
WCSB	37%	22%	22%	22%	22%	22%	22%	22%
Ontario-T Direct Purchase	25%	25%	25%	24%	24%	24%	24%	24%
Chicago	15%	15%	15%	15%	15%	15%	15%	15%
U.S. Northeast								
Niagara (Baseload & Seasonal)	12%	11%	11%	11%	11%	11%	11%	11%
NEXUS	3%	3%	13%	13%	13%	13%	13%	12%
Total	15%	15%	24%	24%	24%	24%	24%	24%
Spot Requirement & Other Supply	9%	23%	14%	15%	15%	15%	16%	16%

The likelihood of OEB pre-approval of the NEXUS contract is low. Given the multitude of projects that have been or will be developed in the U.S. NE, the Board will more than likely view the NEXUS project as a standard build and not one, for example, that is accessing "frontier gas". Pre-approval would also require the Board to satisfy itself that absent NEXUS incremental supplies would not be able to access Dawn. This is unlikely given the number of new projects seeking to connect to Dawn and the possibility of future expansions of existing facilities allowing access to Dawn.

Risks

The PA obligates EGD to pay pre-service costs only in the event of a material breach of its obligations under the PA. EGD has fulfilled our obligations under the PA to date. The ES&P team has reviewed the CP for internal approvals specifically with internal legal counsel to ensure it was broad enough to include internal management's decision not to approve moving forward and it was confirmed that the language is sufficiently broad. We therefore do see any significant risk that the project proponents would be successful arguing that a material breech has occurred. Were they to succeed, it is estimated that EGD's liability for said breech would be less than $5 million U.S. dollars[6].

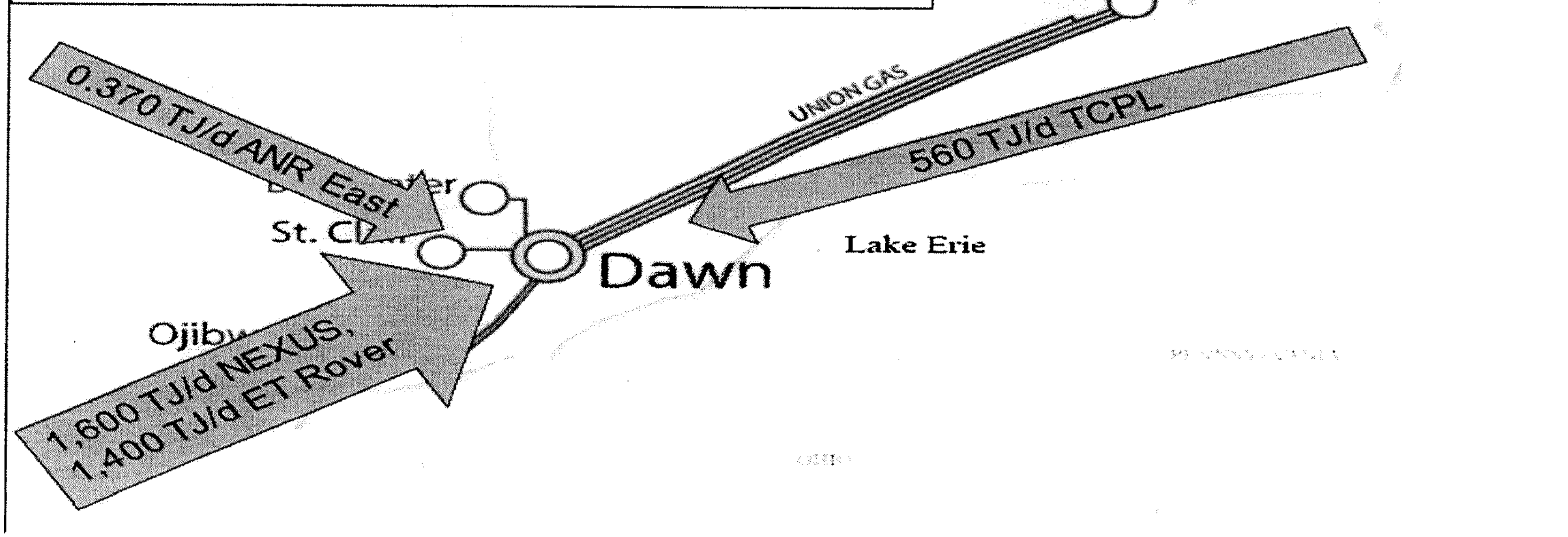
Recommendation

Based on the foregoing it is recommended that EGD not contract for capacity on the NEXUS pipeline. Continuing to procure supply at Dawn provides access to a liquid hub which will continue to maintain and increase its connectivity with various producing basins. Chippawa and/or Niagara supplies will provide added diversity to EGD's gas supply portfolio. It is further recommended that EGD continue discussions with NEXUS in order to keep abreast of the project as it evolves. The Vector offer provides for the possibility of increasing Chicago supplies. NEXUS could be utilized, at perhaps lower contracted levels than contemplated in the current PA, as an alternative to Chicago supplies should further connectivity to U.S. NE supplies be required in the future.

[6] Estimate based on a phone conversation between Jamie LeBlanc and David Slater in which Mr. Slater indicated that EGD's estimated share of pre-service costs would be $5 million as at May 2015.

NEXUS Project

- Signed PA on June 5, 2014
- Management approval by September 30, 2014
- If EGD proceeds will have to request Ontario Energy Board Pre-Approval
- Ontario Energy Board Pre-Approval unlikely



Jamie LeBlanc

From:	Jamie LeBlanc
Sent:	Monday, September 29, 2014 1:25 PM
To:	David Slater (slaterd@dteenergy.com); Brian R. McKerlie (BRMcKerlie@spectraenergy.com)
Cc:	Tania Persad
Subject:	NEXUS Notification

Hi David/Brian,

This email is intended as a status notification on our internal management approval condition precedent (S.7(c)(i)) from our Precedent Agreement regarding our participation as a shipper in the NEXUS pipeline project executed on June 5, 2014 and as further amended July 31, 2014.

We, as yet, have not gained internal approval to proceed with the obligations of the Precedent Agreement. We do not expect to gain that approval by September 30, 2014 which is the revised date set out in the July 31, 2014 amendment mentioned previously. We understand that under section 9 of the Precedent Agreement we are obligated to commit to further discussions on how to move forward once the CP date has passed in advance of any termination of the PA. We look forward to these further discussions.

Can I ask that you confirm receipt of this email by a return email acknowledging it?

Thank-you,

Jamie

Jamie LeBlanc CA
Director, Energy Supply and Policy

ENBRIDGE GAS DISTRIBUTION
TEL: 416-495-5241
500 Consumers Road North York, Ontario M2J 1P8

enbridgegas.com
Integrity. Safety. Respect.

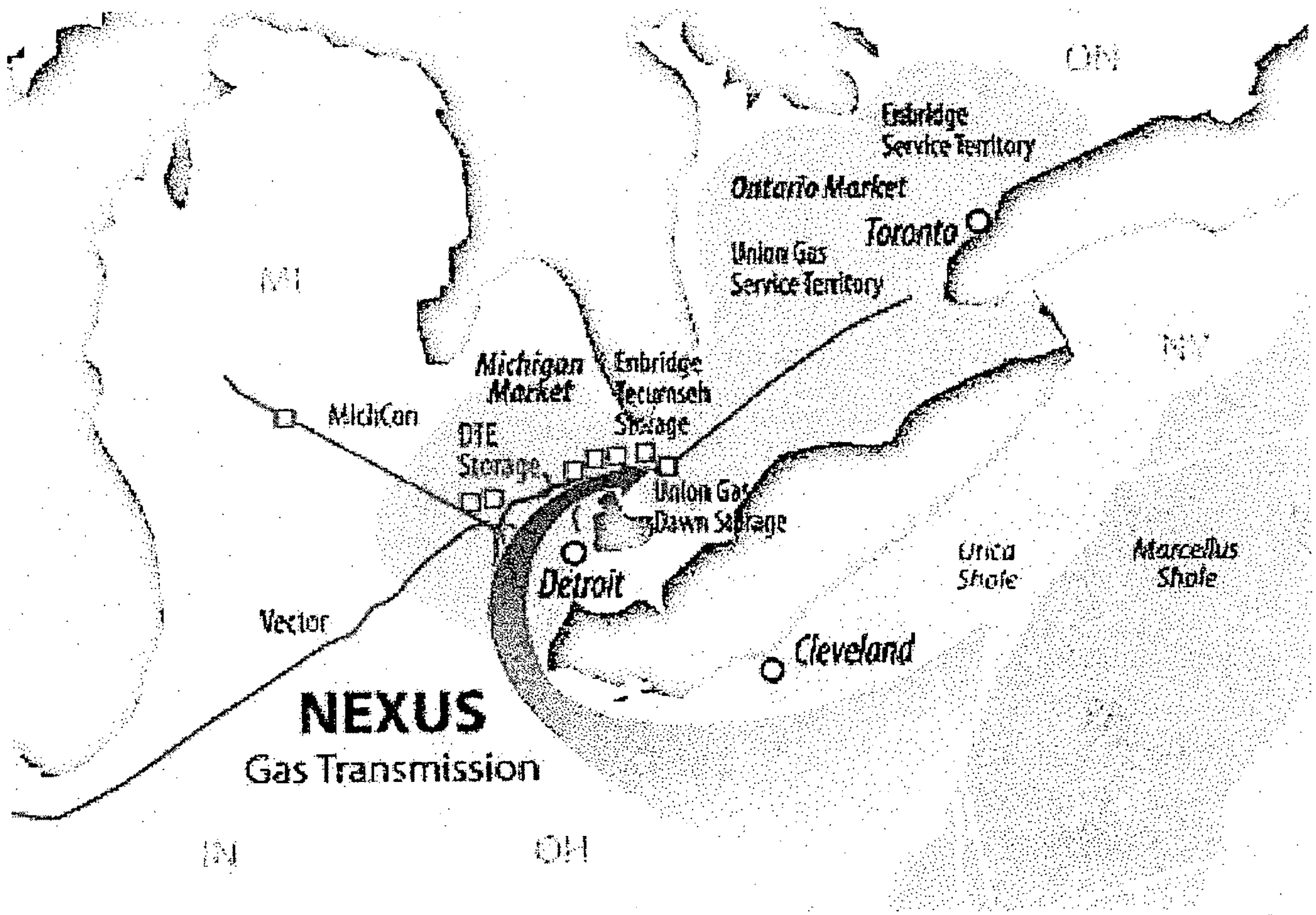
October 23, 2014

NEXUS Update

Jamie LeBlanc
Director
Energy Supply & Policy

ENBRIDGE

Nexus Map



ENBRIDGE

NEXUS Project

- In July an update was provided based on the PA and FBA executed in June 2014 which was subject to Enbridge internal approval on or before September 30, 2014. The terms at the time are summarized in the table below.

Volume: - Phase 1 – 40,000 Dth/day - Phase 2 – 150,000 Dth/day	**Term:** - Phase 1 – up to 3 years or Phase 2 in-service date (starting November 1, 2015) - Phase 2 – 15 years (starting as early as November 1, 2017)
Exposure: - FBA - $219 million (USD) - Rates - $700 million (USD)	**Path:** - Phase 1 – Willow Run Michigan to Dawn Hub - Phase 2 – Western Ohio to Dawn Hub

- In completing supply arrangements related to recently acquired transportation capacity from Niagara/Chippawa it became apparent that the NEXUS capacity contemplated above would leave EGD's overall supply plan with more baseload supply than desired.
- As such management allowed the internal approval conditions precedent deadline to pass while continuing to consider and negotiate with the project for a lower volume.

ENBRIDGE

NEXUS Project

- Terms of a revised NEXUS PA are currently being discussed as follows:

Volume: Phase 1 – none Phase 2 - Commencement to Oct 31, 2020 - 110,000 Dth/day - Beg. Nov, 2020 – <u>option</u> to increase to 150,000 Dth/day	**Term:** Phase 1 – n/a Phase 2 – 15 years
Exposure: - FBA - TBD - Rates - from $422 to $531 million (USD)	**Path:** - Kensington, Ohio to Vector interconnect

- The capacity will feed part of EGD's existing Vector capacity so if the project is delayed or does not get built the EGD can rely on supply from Chicago
- Subject to OEB approval in a form acceptable to Enbridge in its sole discretion without liability for pre-service costs
- This capacity will provide direct access to Utica/Marcellus production basins and the project will also increase liquidity at Dawn (on which EGD has significant dependence)

ENBRIDGE

FRPO INTERROGATORY #5

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 16, para. 44

Preamble: We would like to understand better, the evolution of the Precedent Agreements outlined in this paragraph.

Please provide any additional criteria that contributed to the decision to reduce the contract.

RESPONSE

Please see response to FRPO Interrogatory #4 at Exhibit I.T1.EGDI.FRPO.4.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #6

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 16, para. 44

Preamble: We would like to understand better, the evolution of the Precedent Agreements outlined in this paragraph.

What changed from Enbridge's perspective that drove the desire to decrease the commitment?

RESPONSE

Please see response to FRPO Interrogatory #5 at Exhibit I.T1.EGDI.FRPO.5.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #7

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 16, para. 44

Preamble: We would like to understand better, the evolution of the Precedent Agreements outlined in this paragraph.

Please provide all internal correspondence, presentations and materials that were used in obtaining approval of this reduced level of commitment.

RESPONSE

Please see response to SEC Interrogatory #2 at Exhibit I.T1.EGDI.SEC.2.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #8

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 18, para. 48

In subsection a), please define the review of regional supply

a) What options flow from that review?

RESPONSE

It is not completely clear what is sought by this question. Enbridge has assumed that FRPO is inquiring about the options available to Enbridge once it has completed its review of regional supply. This is discussed in the response to Board Staff interrogatory #18 at Exhibit I.T4.EGDI.STAFF.18.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #9

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 18, para. 48

In subsection b), what happens to the Agreement if no approval has been granted after 90 days post October 1st?

a) What are the commercial consequences?

b) Who bears the risk?

RESPONSE

a) If no Ontario Energy Board pre-approval has been granted within 90 days after October 1, 2015 (which date may be extended by 90 days), then the PA will be terminated pursuant to sections 7(c)(v) and 9 of the PA. If the PA is terminated for that reason, then Enbridge has no liability to NEXUS, unless it is found that Enbridge failed to pursue the required authorizations with due diligence and the inability to obtain pre-approval was a direct result of that failure.

b) See answer to (a), above.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #10

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 21, para. 57

Did Enbridge have exploratory discussions with Rover prior to the announcement in June 2014?

a) When did those discussions start and cease?

b) What prompted Enbridge to end the discussions?

RESPONSE

Enbridge did not have exploratory discussions with Rover prior to June 2014 and was unaware of the project before the Rover open season which was announced in late June 2014.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #11

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 23, Table 1, Appendices B and C and EB-2015-0166 Schedule 4

What is the delivery of the landed costs in Table 1?

RESPONSE

Enbridge has assumed the interrogatory is asking for the final delivery point assumed in the landed cost analysis presented at Tables 1 and 2 of the pre-filed evidence. The final delivery point is Dawn hub. For a discussion of why this is the appropriate delivery point please see the response to Board Staff Interrogatory #5b) at Exhibit I.T1.EGDI.STAFF.5.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #12

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 23, Table 1, Appendicies B and C and EB-2015-0166 Schedule 4

Please provide all of the assumptions that support escalation of gas cost at Niagara between 2020 and 2021.

a) Please provide any supporting documentation or calculation to arrive at this forecast.

b) The forecasted gas cost of Niagara is greater than Dawn for the remaining period of evaluation. However, in the Union Contracting analysis, Niagara prices are a relatively constant discount to Dawn for the entire period. Can Sussex reconcile these two views?

c) Please provide the contributing factors that led to the reversal of the basis differential between Dawn and Niagara between the analysis in Appendix B and Appendix C.

RESPONSE

a) Please refer to the response to TransCanada Interrogatory #9 at Exhibit I.T4.Enbridge.TransCanada.9.

b) Please refer to the response to a) above.

c) Please refer to the response to a) above.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #13

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 23, Table 1, Appendicies B and C and EB-2015-0166 Schedule 4

Using the format in Appendix C for May 2015, please provide the landed costs at for the different pipelines for receipt at Parkway.

RESPONSE

Enbridge does not believe that Parkway would be an appropriate comparator for NEXUS for the reasons that are discussed in response to Board Staff Interrogatory #5 at Exhibit I.T1.EGDI.STAFF.5 which relates to a landed cost analysis at the Enbridge CDA and Enbridge EDA.

Although Enbridge does not believe that Parkway is an appropriate comparator, Enbridge has provided the requested analysis below.

Witnesses: J. LeBlanc
A. Welburn

May 2015 - NEXUS Landed Cost Analysis for Parkway ($CAD/GJ)

Pipeline	Pricing Point	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average (Landed @ Parkway)
TCPL from Niagara	Niagara	4.10	3.84	3.87	3.97	4.15	4.24	4.34	4.43	4.51	4.61	4.72	4.82	4.92	5.02	5.12	5.18	4.49
Dawn	Dawn	4.38	4.16	4.21	4.31	4.38	4.47	4.57	4.66	4.75	4.85	4.96	5.06	5.16	5.27	5.36	5.43	4.75
Vector	Chicago	4.57	4.43	4.47	4.55	4.63	4.72	4.82	4.91	5.00	5.10	5.21	5.32	5.43	5.53	5.63	5.70	5.00
NEXUS (-15%)	Dominion South	4.55	4.45	4.62	4.71	4.81	4.90	5.00	5.10	5.19	5.29	5.40	5.51	5.62	5.72	5.82	5.89	5.16
Rover	Dominion South	4.58	4.47	4.65	4.74	4.83	4.93	5.02	5.12	5.21	5.31	5.43	5.53	5.64	5.74	5.84	5.91	5.19
NEXUS (Anchor)	Dominion South	4.64	4.54	4.72	4.81	4.91	5.00	5.10	5.19	5.29	5.39	5.50	5.61	5.72	5.82	5.92	5.99	5.26
NEXUS (Base Case)	Dominion South	4.66	4.56	4.74	4.83	4.92	5.02	5.11	5.21	5.30	5.41	5.52	5.63	5.74	5.84	5.94	6.01	5.28
NEXUS (+15%)	Dominion South	4.78	4.68	4.85	4.94	5.04	5.13	5.23	5.33	5.42	5.52	5.64	5.74	5.85	5.96	6.06	6.13	5.39
ANR East	Dominion South	5.04	4.93	5.10	5.19	5.28	5.38	5.48	5.57	5.67	5.77	5.89	6.00	6.11	6.21	6.31	6.38	5.64
Alliance	CREC	5.07	5.14	5.20	5.38	5.46	5.56	5.66	5.76	5.86	5.96	6.08	6.19	6.31	6.42	6.52	6.60	5.82
TCPL	Empress	5.61	5.66	5.73	5.90	5.98	6.07	6.17	6.26	6.35	6.45	6.56	6.67	6.77	6.88	6.98	7.04	6.32

May 2015 - Average Commodity Prices ($CAD/GJ)

Pricing Point	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
Dawn	4.24	4.04	4.09	4.19	4.26	4.35	4.44	4.54	4.62	4.72	4.83	4.93	5.04	5.14	5.23	5.30	4.64
Chicago	4.20	4.05	4.09	4.17	4.25	4.34	4.43	4.52	4.61	4.71	4.82	4.92	5.02	5.13	5.22	5.29	4.63
Dominion South	3.43	3.34	3.51	3.60	3.70	3.79	3.89	3.97	4.06	4.16	4.26	4.36	4.46	4.56	4.66	4.73	4.06
CREC	3.43	3.49	3.55	3.72	3.79	3.88	3.98	4.07	4.15	4.25	4.35	4.46	4.56	4.66	4.75	4.82	4.15
Empress	3.53	3.59	3.65	3.82	3.89	3.98	4.07	4.16	4.25	4.35	4.45	4.55	4.65	4.76	4.85	4.92	4.25
Niagara	3.84	3.59	3.62	3.72	3.91	3.99	4.09	4.18	4.27	4.36	4.47	4.57	4.67	4.77	4.87	4.94	4.25

May 2015 - Average Foreign Exchange

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
CAD/USD	1.255	1.249	1.241	1.235	1.232	1.231	1.234	1.238	1.243	1.248	1.254	1.258	1.262	1.266	1.267	1.257	1.248

May 2015 - Fuel Ratio

Pipeline	Path	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
ANR East	Leesville-to-Dawn	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%
Rover	Leesville-to-Dawn	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%
Vector	Milford-to-Dawn	0.27%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%	0.52%	0.47%
Vector	Chicago-to-Dawn	0.57%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.23%	1.09%
NEXUS (-15%)	Kensington-to-Milford	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (Base Case)	Kensington-to-Milford	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (+15%)	Kensington-to-Milford	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (Anchor)	Kensington-to-Milford	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
Alliance	CREC-to-Border	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%
Alliance	Border-to-Chicago	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
TCPL	Empress-to-Enbridge CDA	3.99%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.87%	3.85%	3.88%
TCPL	Niagara-to-Kirkwall	0.37%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.17%	0.13%	0.18%
Union	Dawn-to-Parkway (M12)	0.93%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.71%	0.76%

May 2015 - Transportation Toll ($CAD/GJ)

Pipeline	Path	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
ANR East	Leesville-to-Dawn	1.391	1.385	1.376	1.370	1.366	1.365	1.369	1.373	1.378	1.384	1.390	1.395	1.400	1.404	1.405	1.406	1.385
Rover	Leesville-to-Dawn	0.951	0.947	0.941	0.936	0.934	0.934	0.936	0.939	0.942	0.947	0.951	0.954	0.957	0.960	0.960	0.961	0.947
Vector	Milford-to-Dawn	0.190	0.189	0.188	0.187	0.187	0.187	0.187	0.188	0.188	0.189	0.190	0.191	0.191	0.192	0.192	0.192	0.189
Vector	Chicago-to-Dawn	0.214	0.213	0.212	0.211	0.210	0.210	0.211	0.211	0.212	0.213	0.214	0.215	0.215	0.216	0.216	0.216	0.213
NEXUS (-15%)	Kensington-to-Milford	0.717	0.713	0.709	0.705	0.703	0.703	0.705	0.707	0.710	0.713	0.716	0.718	0.721	0.723	0.723	0.724	0.713
NEXUS (Base Case)	Kensington-to-Milford	0.832	0.829	0.823	0.819	0.817	0.817	0.819	0.822	0.825	0.828	0.832	0.835	0.838	0.840	0.840	0.841	0.829
NEXUS (+15%)	Kensington-to-Milford	0.948	0.944	0.938	0.934	0.931	0.931	0.933	0.936	0.940	0.944	0.948	0.951	0.954	0.957	0.957	0.958	0.944
NEXUS (Anchor)	Kensington-to-Milford	0.815	0.811	0.806	0.802	0.800	0.799	0.801	0.804	0.807	0.811	0.814	0.817	0.820	0.822	0.822	0.823	0.811
Alliance	CREC-to-Border	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560
Alliance	Border-to-Chicago	0.464	0.462	0.459	0.457	0.456	0.456	0.457	0.458	0.460	0.462	0.464	0.465	0.467	0.468	0.469	0.469	0.462
TCPL	Empress-to-Union Parkway Belt	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818
TCPL	Niagara-to-Union Parkway Belt	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818	1.818
Union	Dawn-to-Parkway (M12)	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091

May 2015 - ACA ($CAD/GJ)

Pipeline	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
Rover	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
NEXUS	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
ANR East	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

May 2015 - Abandonment Surcharge ($CAD/GJ)

Pipeline	Path	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
Alliance	CREC-to-Border	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211
Vector	Michigan Border-to-Dawn	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
TCPL	Empress-to-Union Parkway Belt	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441	0.1441
TCPL	Niagara-to-Union Parkway Belt	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078	0.0078

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #14

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, page 23, Table 1, Appendices B and C and EB-2015-0166 Schedule 4

Using the format in Appendix C for May 2015, please provide the landed costs at for the different pipelines for receipt at Iroquois (assuming ability to access gas via Wright on the Iroquois pipeline flowing north)

a) If TCPL were to make a commitment to provide service from Waddington to Iroquois, would Enbridge consider accessing some of its portfolio for the Ottawa service territory at Iroquois? If not, why not?

b) Would 40 TJ/day be greater or less than the base load for the Ottawa service territory in the summer?

RESPONSE

Enbridge does not believe that Iroquois would be an appropriate comparator for NEXUS for the same reasons that are discussed in response to Board Staff 5 at Exhibit I.T1.EGDI.STAFF.5 which relate to a landed cost analysis at the Enbridge CDA and Enbridge EDA.

Enbridge does not have the required data to conduct the requested landed cost analysis that includes a path from Wright to Iroquois and is unable to provide the requested analysis.

a) Enbridge is aware of the possibility of Iroquois becoming an import point in the future, and will continue to monitor and evaluate this option.

b) 40 TJ/day is less than the current base load for the Ottawa service territory in the summer.

Witnesses: J. LeBlanc
A. Welburn

FRPO INTERROGATORY #15

INTERROGATORY

REF: Exhibit A, Tab 3, Schedule 1, Appendix D, page 22, subsection d)

Given Enbridge's date of filing and the time frames provided in PO 1 has Enbridge communicated risk that approval may not be received by Oct. 1st in request of the waiver?

RESPONSE

NEXUS is aware of the status of this pre-approval application and the associated risk that the Board's pre-approval decision may not be received by October 1, 2015. Enbridge has not yet provided notice of temporary waiver to NEXUS pursuant to condition precedent 7) d).

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #1

INTERROGATORY

Reference: A/T3/S1/pg 1

Preamble: "NEXUS provides significant opportunity to further enhance Enbridge's gas supply portfolio"

a) Please explain why such an enhancement is needed in the light of the government intent to phase out the use of natural gas.

RESPONSE

The Company is not aware of any intent by the government to phase out the use of natural gas. The Ontario Government is expected to implement a Cap and Trade program however, natural gas is a foundational fuel and when integrated with other energy sources it is one of the least cost ways of achieving the required emissions reductions.

The Company has a statutory obligation to provide safe, reliable, and cost effective natural gas distribution services to customers within the proximity of its distribution system. In order to fulfill this obligation, Enbridge establishes its gas supply plan based on the principles of diversity, reliability, flexibility, and cost. NEXUS provides for increased diversity of supply and transportation path which in turn increases reliability at a comparable cost to other natural gas supply alternatives. Enbridge has also maintained the flexibility to manage changes in demand through existing contractual arrangements and the terms that have been negotiated into the NEXUS precedent agreement. The NEXUS capacity is a substitution for existing Chicago supply; it is not incremental supply.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #2

INTERROGATORY

Reference: A/T3/S1/pg1

Preamble: "the Utica and Marcellus supply basins are expected to account for over half the incremental North American gas production through 2035"

a) What will the annual loss of natural gas during the fracking process amount to for the gas used by Ontario?

RESPONSE

Enbridge does not have information about the annual loss of natural gas during the fracking process for the gas used by Ontario.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #3

INTERROGATORY

Reference: A/T3/S1/pg1

Preamble: "the Utica and Marcellus supply basins are expected to account for over half the incremental North American gas production through 2035"

a) How much natural gas will be freed from the shale but not recovered; how much of that will reach the surface; and when will it reach the surface?

RESPONSE

Please refer to the response for Ron Tolmie Interrogatory #2 at Exhibit I.T1.EGDI.Ron Tolmie.2.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #4

INTERROGATORY

Reference: A/T3/S1/pg 2

Preamble: "This will increase the risk of Appalachian supply bypassing Ontario and potentially limit access to these supplies in the future. "

a) Is this the primary benefit to be gained by Ontario from this project?

RESPONSE

The primary benefit of NEXUS is the improvement to the diversity, reliability, flexibility, and cost effectiveness of Enbridge's gas supply plan. The benefits of the NEXUS contract are described at length in Enbridge's pre-filed evidence, for example at Exhibit A, Tab 3, Schedule 1, pages 26 to 30.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #5

INTERROGATORY

Reference: A/T3/S1/pg 2

Preamble: "There are a significant number of new pipeline projects competing"

a) There are also other technologies that are competing for the Ontario markets for both heating and power generation. If those technologies provide cheaper energy without emitting GHG why should we continue to use natural gas, especially shale gas?

RESPONSE

Enbridge expects that there will continue to be demand for natural gas throughout the term of the NEXUS contract and beyond. The Company has set out its forecast of demand for those years in response to Energy Probe Interrogatory #12 at Exhibit I.T3.EGDI.EnergyProbe.12. As set out in that response, there are some factors, including changes in technology, that could result in changes to Enbridge's forecast of demand. However, as set out in response to Energy Probe Interrogatory #2 at Exhibit I.T1.EGDI.EnergyProbe.2, Enbridge maintains a level of flexibility in its overall gas supply contract portfolio to allow it to respond to variations in customer demand over time. If demand for natural gas in Enbridge's service area declines over the 15 year term of the NEXUS commitment, Enbridge will be able to reduce overall portfolio capacity by not renewing and/or reducing other contracts in its supply portfolio which have shorter terms.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #6

INTERROGATORY

Reference: A/T3/S1/pg 2

Preamble: "There are a significant number of new pipeline projects competing"

a) Local natural thermal sources are free and they do not require transportation so in what year are they likely to replace natural gas, and what is the phase-out schedule?

b) Some of the natural energy supply systems (like exergy stores) can also meet the needs for peaking power and for handling power demand fluctuations. If they displace the use of natural gas what are the remaining markets for natural gas?

RESPONSE

Enbridge does not believe that it is likely that the energy sources and supply systems noted above will replace natural gas on a widespread basis in the near or medium term.

As explained in response to Ron Tolmie Interrogatory #5 at Exhibit I.T1.EGDI.RonTomie.5, and the other interrogatory responses referred to therein, in the event that natural gas demand from Enbridge's customers declines from what is forecast, Enbridge has flexibility in its gas supply plan to accommodate such changes.
.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #7

INTERROGATORY

Reference: A/T3/S1/pg 3

Preamble: "Enbridge can elect to increase its contracted volume to 150,000 Dth per day"

a) Ontario plans to reduce its GHG emissions by 37% by 2035. How can it do that if the imports of natural gas continue to rise?

RESPONSE

Enbridge's NEXUS contract does not increase imports of natural gas. The 110,000 Dth per day of transportation capacity that has been contracted with NEXUS will be offset by an equivalent decrease in natural gas supplies that would be transported on Vector from the Chicago hub. Should Enbridge elect to increase its transportation capacity on NEXUS up to an amount of 150,000 Dth per day, the incremental transportation capacity will be offset by a decrease in other natural gas purchases or will be used to meet incremental demand required by Enbridge's customers.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #8

INTERROGATORY

Reference: A/T3/S1/pg 3

Preamble: "Enbridge evaluated the competitiveness of the NEXUS transportation capacity through a landed cost analysis"

a) There does not appear to be any comparative cost analysis for competing energy supply technologies, even though such technologies will certainly replace fossil fuels in the future, and probably well within the time frame under consideration.

RESPONSE

As explained in response to Ron Tolmie Interrogatories 1 and 6 at Exhibits I.T1.EGDI.RonTolmie.1 and 6, the Company does not believe that new technologies and legislation will lead to natural gas being replaced on a wholesale basis in the near or medium term.

Enbridge has an obligation to meet the gas supply demand of its customers, as explained in response to Ron Tolmie Interrogatory #1 at Exhibit I.T1.EGDI.RonTolmie.1. The landed cost analysis is done to evaluate options to meet Enbridge's forecasts of its gas supply demand in future years. Those forecasts are set out and explained in response to Energy Probe Interrogatory #12 at Exhibit I.T3.EGDI.EnergyProbe.12.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #9

INTERROGATORY

Reference: A/T3/S1/pg 4

Preamble: "Enbridge has analyzed the forecasting, construction, operational, commercial, and regulatory risks associated with NEXUS and has found them to be manageable."

a) Please provide the parts of this analysis that show how natural gas will compete with renewable energy sources and how it will survive the regulatory hurdles.

RESPONSE

Please see response to Ron Tolmie Interrogatory #5 at Exhibit I.T1.EGDI.RonTolmie.5.

Witnesses: J. LeBlanc
A. Welburn

RON TOLMIE INTERROGATORY #10

INTERROGATORY

Reference: A/T3/S1/pg 4

Preamble: "This is an appropriate case for pre-approval under the Board’s Guidelines."

a) If it is billions of dollars per year cheaper to employ alternatives like exergy storage for both heat and power, and such alternatives produce no greenhouse gases, then why should the Board find that this is "an appropriate case for pre-approval"?

RESPONSE

Please refer to the response to Ron Tolmie Interrogatories #5 and 6 at Exhibits I.T1.EGD.Ron Tolmie.5 and 6.

Witnesses: J. LeBlanc
A. Welburn

SEC INTERROGATORY #1

INTERROGATORY

[Ex.A-3-1, p.14]

Please explain the delay in the in-service date of NEXUS from November 2016 to the newly proposed November 2017.

RESPONSE

November 2016 or earlier was the target date indicated in the non-binding open season held by NEXUS in the fall of 2012. Enbridge is not aware of the specific considerations that went into NEXUS pipeline's decision to delay its target in-service date to November 2017.

Witnesses: J. LeBlanc
A. Welburn

SEC INTERROGATORY #2

INTERROGATORY

[Ex.A-3-1, p.20]

Please provide a copy of all materials that were provided to those who provided the "Company approvals" to proceed with the NEXUS Agreement.

RESPONSE

The Company approvals to proceed with the NEXUS Agreement were obtained from the Enbridge Gas Distribution Board of Directors.

In Enbridge's view, what is relevant for review in an Ontario Energy Board proceeding are the decisions that are made by the Company, rather than the deliberations leading up to those decisions. The materials that may have been prepared and presented to the Board of Directors in connection with a decision are not relevant to the Ontario Energy Board's review.

Moreover, the Company considers that materials that are provided to its Board of Directors are confidential, and not properly produced in a public forum. This is necessary to ensure that Board of Directors materials are candid and comprehensive, and include any and all relevant information (some of which may be commercially sensitive or otherwise confidential).

However, in order to advance this time-sensitive pre-approval proceeding, the Company is prepared to produce the materials that were provided to its Board of Directors in considering the decision to proceed with the NEXUS Agreement. This disclosure is made without conceding the relevance or non-confidential nature of similar documents in future proceedings.

Attached is the memorandum that was provided to the Enbridge Gas Distribution Board of Directors. Also attached is a memorandum that was prepared by Sussex Economic Advisors ("Sussex"), which was appended to the Board of Directors memorandum. A limited amount of confidential information has been redacted from the Sussex memorandum, at the request of Sussex.

Witnesses: J. LeBlanc
A. Welburn

November 26, 2014

CONFIDENTIAL

ENBRIDGE GAS DISTRIBUTION INC.
BOARD OF DIRECTORS

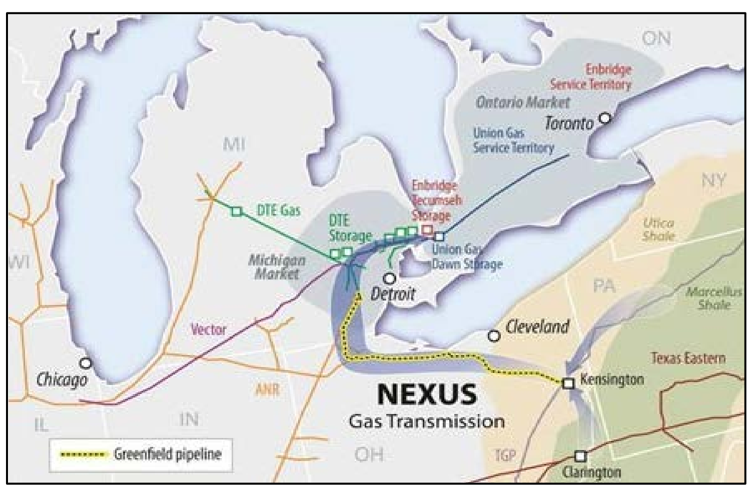
Re: Binding Precedent Agreement Leading to Gas Transportation Agreements – Estimated up to $612 Million Over 15 Years

As has been previously discussed with the Board, Enbridge Gas Distribution ("EGD") is in the process of reassessing its gas supply portfolio and related transportation solutions in light of changing market dynamics driven by the development of the Marcellus and Utica shale basins located in the Northeast U.S. EGD has traditionally relied heavily on Western Canadian Sedimentary Basin ("WCSB") supply however the development of cost effective and prolific natural gas supply closer to the franchise compels EGD to look at rebalancing its portfolio. These new supplies currently follow two paths into the franchise, either through the Niagara area or through Southwestern Ontario (near the Dawn trading hub and to where EGD owns and operates its storage assets). These paths are being further developed to bring more of these developing natural gas supplies to Eastern Canadian markets.

Effective June 5, 2014, EGD entered into a non-binding Precedent Agreement ("PA") for long term natural gas transportation capacity on the NEXUS Gas Transmission Project ("NEXUS") with the project Proponents (DTE Pipeline Company and Spectra Energy Transmission LLC) for EGD to become an "anchor shipper". Further market developments and EGD commitments already made to supply through Niagara subsequently led EGD to renegotiate its commitment for a more conservative transportation arrangement on NEXUS. Management is therefore recommending and seeking approval to enter into a binding restated PA for NEXUS capacity ("RPA").

Proposed NEXUS Transportation Service

NEXUS will be completed in two phases. Phase 1 will provide transportation service from Willow Run, Michigan to Dawn, Ontario by utilizing firm capacity on existing pipeline systems. Phase 2, in which EGD would be contracting for transportation capacity, involves the construction of approximately 250 miles of greenfield pipeline extending from Kensington, Ohio to existing interconnections at or near Willow



Run and from there to Dawn. Phase 2 will also make use of firm capacity on existing pipeline systems, including the downstream portion of Vector pipeline, and/or expansions of existing capacity and greenfield pipeline as required.

EGD's requested capacity in the RPA would lead to a firm transportation service agreement ("TSA") for 110,000 Dth/d commencing as early as November 1, 2017 for fifteen years from Kensington, Ohio to Vector's Milford Junction meter station near Highland, Michigan. EGD would have an option to increase its capacity up to 150,000 Dth/d effective November 1, 2020 which would effectively reinstate EGD as an anchor shipper from a tolling perspective and result in a toll discount of approximately $0.02/Dth/d. The table below outlines the range of estimated EGD demand charge payments[1] on NEXUS under the RPA based on indicative tolls provided by the Proponents.

EGD would use its existing transportation capacity on Vector to move gas to Dawn. EGD may seek to extend the term of some or all of its existing Vector capacity to partially or entirely match the term of the TSA.

Demand Charge Payments ($ Millions (CAD))	1st Year (2 Months)	Next 14 Years	16th Year (10 Months)	Total
110,000 Dth/d (15 yrs)	$5.3	$450.3	$27.1	$482.7
110,000 Dth/d - (first 3 yrs), 150,000 Dth/d (remaining 12 yrs)	$5.3	$570.6	$36.1	$612.0

Strategic Rational

EGD's gas supply plan considers four fundamental elements: reliability, diversity, flexibility and cost. Nexus capacity would represent approximately 10% of total EGD supply and favourably addresses all four elements, adding benefits to EGD's portfolio particularly in diversity and flexibility. The attached Sussex Economic Advisors ("Sussex") report discusses huge current and planned infrastructure investment and production forecasts which predict annual production in the Marcellus/Utica region of up to 25 Bcf/day by 2020 with continuing growth thereafter. EGD's traditional heavy reliance on WCSB supply (due to the historical lack of reasonable alternatives) must change to reflect the development of these prolific and cost effective supplies located closer to the franchise in the Northeast U.S. EGD has already taken steps to gain access to some new supply through the Niagara region (commitments for which were approved by the Board in February of this year). The NEXUS transportation capacity would constitute a further element of EGD's evolving gas supply strategy by enabling direct access to supplies from the Utica and Marcellus shale production areas.

The table below provides a landed cost ranking for NEXUS versus alternative paths into Dawn. Based on indicative tolls provided by the Proponents and forward natural gas prices,

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[1] Assumes an average exchange rate of 1 USD = 1.14 CAD over the 15 year term of the TSA. A capital tracker of ±15% also applies to the final reservation toll. The capital tracker has not been included in the calculations presented in the table.

the NEXUS path is cost effective relative to available alternative paths into Dawn. NEXUS provides the benefits of increased supply diversity through direct access to natural gas supplies from the Northeast U.S. and increased supply flexibility through the option to increase capacity and displace higher cost elements of EGD's supply portfolio. EGD's commitment will support a project that will bring additional volumes to Dawn and will assist the markets served by EGD which have expressed a desire to source gas at Dawn. The ET Rover project (the closest alternative greenfield build), which will also bring Utica supply into Dawn, is fully subscribed. Timing and parameters of that project led EGD to not bid on Rover capacity.

NEXUS Landed Cost Analysis ($CAD/GJ)

Pipeline	Pricing Point	Path	Average Annual Landed Cost 2017-2032
Dawn	Dawn	Dawn	4.93
Vector	Chicago	Vector - Chicago to Dawn	5.21
ET Rover	Dominion South	Rover - Leesville to Dawn	5.30
NEXUS	Dominion South	NEXUS - Kensington to Highland / Vector - Highland to Dawn	5.51
ANR East	Dominion South	ANR - Leesville to Dawn	5.73
Alliance	CREC	Alliance - Zone 1 to Chicago / Vector - Chicago to Dawn	5.84
TCPL	Empress	TCPL - Empress to Enbridge SWDA	6.24

Risks and Mitigants

Supply Risk

There is a risk that the transportation capacity may not be utilized if insufficient supply exists to meet the demand placed on the region through the build out of pipeline takeaway capacity. EGD has mitigated this risk to some extent through a condition precedent in the RPA which permits EGD to terminate without liability if EGD does not expect the availability of regional supply to support the TSA within 90 days of receiving the estimated Phase 2 in-service date. EGD, along with Union Gas, has also hired Sussex to conduct a market study on NEXUS. As part of that engagement EGD requested that Sussex develop a memorandum for the purpose of reviewing the expected availability of natural gas supplies to support a potential long-term firm transportation agreement on NEXUS. The Sussex memorandum concludes that there is sufficient support that Marcellus and Utica natural gas supplies are expected to be available to support long-term capacity commitments on NEXUS.

Regulatory Risk

There is a risk that the Ontario Energy Board ("OEB") will disallow the cost of transportation capacity. This risk has been eliminated as the RPA permits EGD to terminate the RPA in the event that EGD does not obtain acceptable pre-approval from the OEB. EGD intends to file its OEB application in early 2015 under the OEB's *Filing Guidelines for Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts*. EGD will have no liability for NEXUS pre-service costs (projected to be up to $10 million USD by the time of an OEB Decision) provided that EGD proceeds with due diligence to seek such approval.

Capital Cost Risk

EGD is exposed to higher tolls if the cost of constructing NEXUS is higher than forecast. Under the RPA, final reservation rates for Phase 2 must be provided by November 30, 2014 and will be subject to a ±15% capital cost tracking adjustment. If the final reservation rates for Phase 2 service are uneconomic, as determined by EGD in its sole discretion, EGD is not obligated to sign the TSA and will incur no liabilities under the RPA. The actual cost of transportation will be passed through to customers through gas costs. EGD expects supply sourced from the Appalachian basin to be priced relative to Dawn or another liquid pricing point in the Northeast U.S. Current forward pricing indicates a significant discount for Appalachian gas relative to Dawn.

Schedule and/or Cancellation Risk

As with any similar project numerous issues including loss of adequate commercial support, constructability, right-of-way access, social acceptance, regulatory process, political acceptance and others could delay the in-service date or cause the project to be cancelled outright. EGD has mitigated this risk by negotiating certain conditions within the RPA. If the in-service date is delayed beyond November 1, 2018 (assuming a planned in service date of November 1, 2017), EGD has no obligation to contract for service and no liability for pre-service costs (except in the event of a material breach by EGD). Once November 1, 2018 has passed EGD can continue to source supply at Chicago via its Vector capacity or look for other sources. For a delay between November 1, 2017 to November 1, 2018, supply risk is mitigated as EGD can continue to source gas at Chicago. Also, the Proponents must provide 90 days prior notice of the Phase 2 in-service date to provide time for EGD to seek alternative supply for any period of delay.

Volume Risk

Based on current demand forecasts NEXUS will provide approximately 10% of total annual supply. Annual demand and therefore required volume can shift over long periods such as is contemplated in EGD’s proposed commitment to NEXUS. EGD’s gas supply portfolio will retain sufficient flexibility elsewhere to mitigate volume risk by having the ability to de-contract capacity on the TransCanada and/or Vector pipeline over the term of the contract commitment, or reducing other supplies from the U.S. Northeast.

Recommendation

Management recommends that the Board of Directors authorize the Corporation to enter into the RPA and related TSA on terms substantially consistent with those described above.

SUSSEX ECONOMIC ADVISORS

PRIVILEGED AND CONFIDENTIAL
PREPARED IN ANTICIPATION OF LITIGATION

HIGHLY CONFIDENTIAL MEMORANDUM

To:	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

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.

The remainder of this memorandum is organized into the following six sections as outlined below.

I. Overview of the NEXUS Gas Transmission Project
II. Analysis of Marcellus and Utica shale supply and production
III. Review of projections from natural gas suppliers active in the Marcellus/Utica basins
IV. Analysis of Marcellus and Utica infrastructure investments
V. Risk considerations
VI. Conclusions

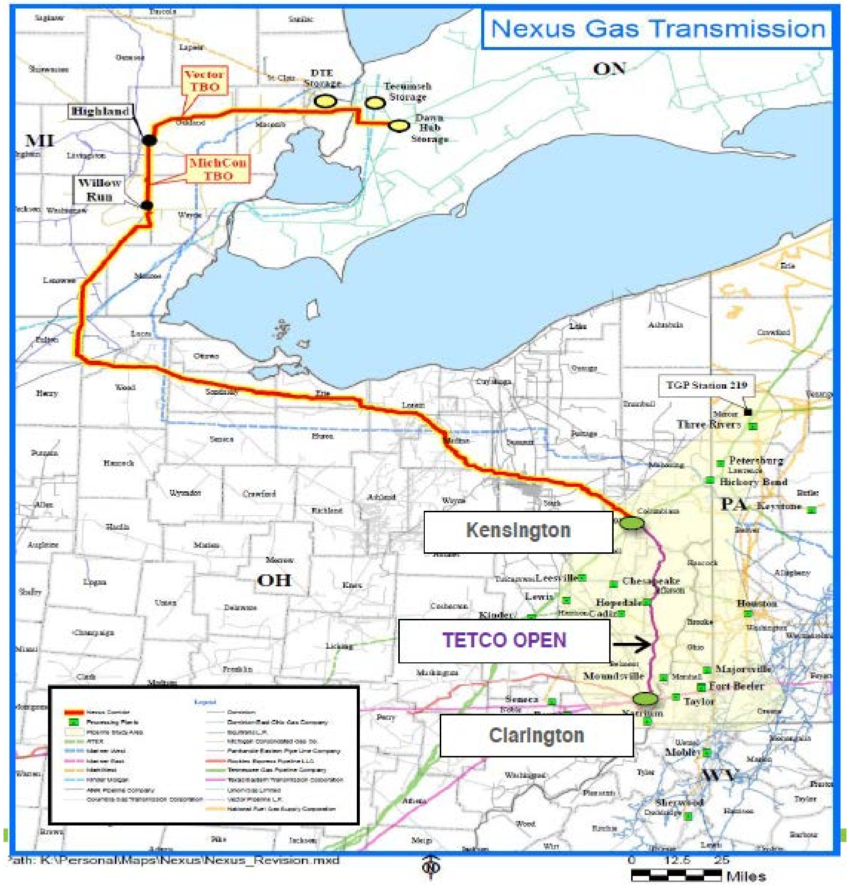
I. OVERVIEW OF THE NEXUS GAS TRANSMISSION PROJECT

The proposed NEXUS project was announced in the fall of 2012 as an approximately 250 mile greenfield natural gas transmission project that will be capable of transporting up to approximately 2 Bcf per day of natural gas from the Marcellus and Utica shale gas basins to interconnects with existing pipelines in southeastern Michigan and southwestern Ontario.[1,2] As currently proposed, the project is estimated to cost between $1.2 billion and $1.5 billion,[3] and commercial operations are expected to begin in November 2017.[4]

As shown in Figure 1 (below), NEXUS will originate at the Kensington Gas Processing Plant ("Kensington") in eastern Ohio. From Kensington, the NEXUS project will traverse northern Ohio and southeastern Michigan, before connecting to the existing DTE Gas pipeline system west of Detroit, Michigan. The DTE Gas pipeline system provides existing connections to the Vector Pipeline LP ("Vector") system to access the Dawn gas supply hub ("Dawn Hub") and Chicago.[5] Kensington (i.e., the origination point of the NEXUS project) is a greenfield natural gas processing facility that is part of the $1.1 billion Utica East Ohio Processing project sponsored by Access Midstream Partners, LP, M3 Midstream LLC, and EnerVest, Ltd.[6] Once fully completed Kensington will have gas processing capacity of 1.1 Bcf per day.[7] The Kensington plant has received firm commitments from natural gas producers including affiliates of Chesapeake Energy Corporation ("Chesapeake"), Total Gas & Power North America, and American Energy Partners.[8] [redacted]

1 NEXUS Gas Transmission Project, *Open Season Notice for Firm Service,* July 23, 2014, at 2.
2 Affiliates of DTE Energy Corporation and Spectra Energy Corporation are leading the development of the NEXUS project. Source: NEXUS Gas Transmission Project, *Open Season Notice for Firm Service,* July 23, 2014, at 1.
3 NEXUS Gas Transmission Project, *Open Season Notice for Firm Service,* October 15, 2012 – November 30, 2012.
4 NEXUS Gas Transmission Project, *Open Season Notice for Firm Service,* July 23, 2014, P. 2.
5 Ibid
6 *Kensington Gas Processing Plant Begins Operations*, The Business Journal Daily, July 30, 2013.
7 *Utica East Ohio Announces Major Expansion*, Access Midstream Partners, May 12, 2014.
8 Ibid.

Figure 1: Proposed NEXUS Route[9]



Given the proposed NEXUS origination point (i.e., Kensington), the sources of supply are the Marcellus and Utica supply basins, which are located primarily in Ohio, Pennsylvania and West Virginia. As such, the remainder of this memorandum addresses natural gas supplies within that region. Nonetheless, a separate pipeline project, (i.e., Texas Eastern Transmission Company ("TETCO") Ohio Pipeline Energy Network ("OPEN")), will connect Kensington to the TETCO system at Clarington, Ohio. The TETCO OPEN project will provide NEXUS shippers not only increased access to Marcellus and Utica shale supplies along the TETCO system, but to other natural gas production basins including the U.S. Gulf Coast. In addition, NEXUS will connect to the Tennessee Gas Pipeline Company, LLC system in the Appalachian basin, the Michigan Consolidated Gas Company and Consumers Energy systems in Michigan, and the Enbridge Tecumseh storage facility and Union Dawn Hub in Ontario.[10]

II. ANALYSIS OF INDEPENDENT PROJECTIONS OF MARCELLUS AND UTICA SHALE SUPPLY AND PRODUCTION

To analyze the likely long-term availability of natural gas in the Marcellus and Utica supply basins, Sussex relied on several sources of independent reserve assessments and production forecasts including information from the U.S. Department of Energy's ("U.S. DOE") Energy Information Administration ("EIA"); the Potential Gas Committee ("PGC"), an independent research entity affiliated with the Colorado School of Mines; and citations from several other third-party forecasts. Because natural gas pipelines generally

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9 Ibid.

10 NEXUS Gas Transmission Project, *Open Season Notice for Firm Service,* July 23, 2014, at 3.

require 15 to 20 year contract terms to support the construction of new infrastructure, Sussex reviewed natural gas production estimates through 2035 (i.e., the likely termination date of the primary term of a contract starting in the 2018 to 2020 time period). As described below, the forecast and analyses by the EIA, the PGC and the other third-parties provide support for the long-term availability of natural gas in the Marcellus and Utica basins.

Energy Information Administration

The EIA is the data and analysis division of the U.S. DOE, and, as such, the EIA: (i) accumulates and publishes data from energy consumers and suppliers; and (ii) produces annual forecasts of long-term trends in energy supply and consumption. For this memorandum, Sussex relied on two sources of information published by the EIA:

- EIA's U.S. Oil and Natural Gas Proved Reserves ("Proved Reserves") – An annual estimate of regional and U.S. wide Proved Reserves of oil and natural gas.
- EIA's Annual Energy Outlook ("AEO") – An annual forecast of energy production, which includes natural gas production for the Marcellus and Utica supply basins; the AEO also includes a forecast of consumption in the U.S.

The EIA considers Proved Reserves the most certain resource category. Proved Reserves are defined as the natural gas reserves that are demonstrated with reasonable certainty (i.e., 90 percent probability or greater) to be recoverable from known reservoirs under existing economic and operation conditions.[11] To determine the economic recoverability of the reserves, the EIA relies on a monthly spot market prices.[12] The EIA Proved Reserves and AEO use reserve data from two calendar years prior to the date of the estimate.[13] For example, the EIA's most recent Proved Reserves estimate was prepared in 2014 using 2012 data.[14]

The 2014 EIA's Proved Reserves estimate depicts an overall decline in U.S. Proved Reserves in 2012 of 7.5 percent (to 323 Tcf) due to a 34 percent decrease in natural gas prices as compared to 2011.[15] Notably, this is the first year since 1998 that natural gas Proved Reserves for the U.S. has declined year-over-year.[16] However, the EIA states that it anticipates that natural gas proven reserves will increase for 2013 due to a recovery in natural gas prices since 2012.[17] Although the EIA estimate of U.S. Proved Reserves have experienced a year-over-year decline, the EIA estimate of Proved Reserves in the Marcellus Shale gas play continue to increase and have surpassed those of the Barnett Shale in Texas to become the largest shale gas play in the U.S.[18]

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11 U.S. Energy Information Administration, *Oil and natural gas resources categories reflect varying degrees of certainty,* Today in Energy, July 17, 2014, at 2.

12 U.S. Energy Information Administration, *U.S. Crude Oil and Natural Gas Proved Reserves, 2012*, April 2014, at 6.

13 Ibid., at 1.

14 Ibid.

15 Ibid.

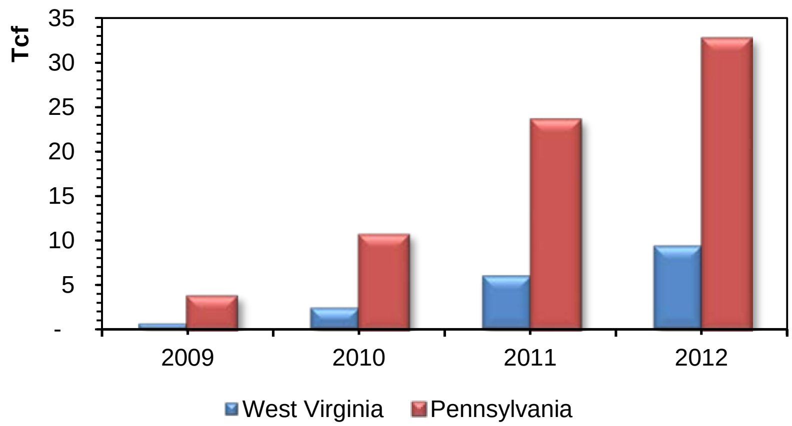
16 Ibid., at 12.

17 Ibid., at 1. Proved Reserves are determined, in part, by the economic feasibility of exploiting the reserves. An increase in the wholesale price of natural gas increases the economic viability of natural gas production, and thus leads to an increase in Proved Reserves.

18 Ibid., at 16.

Figure 2 (below) illustrates the EIA's estimate of Proved Reserves in the Marcellus and Utica regions, specifically, Pennsylvania and West Virginia. As shown in Figure 2, Pennsylvania holds the greatest volume of Proved Reserves and has experienced substantial growth in Proved Reserves each year since 2009. Although West Virginia has also experienced similar growth since 2009, the total volume of Proved Reserves in West Virginia is less than 30 percent of Pennsylvania's total. Since shale gas exploration and production in Ohio and Kentucky commenced in 2012, the EIA's estimate of Proved Reserves are minimal at this time.[19]

Figure 2: EIA Proved Reserves – Shale Gas[20]

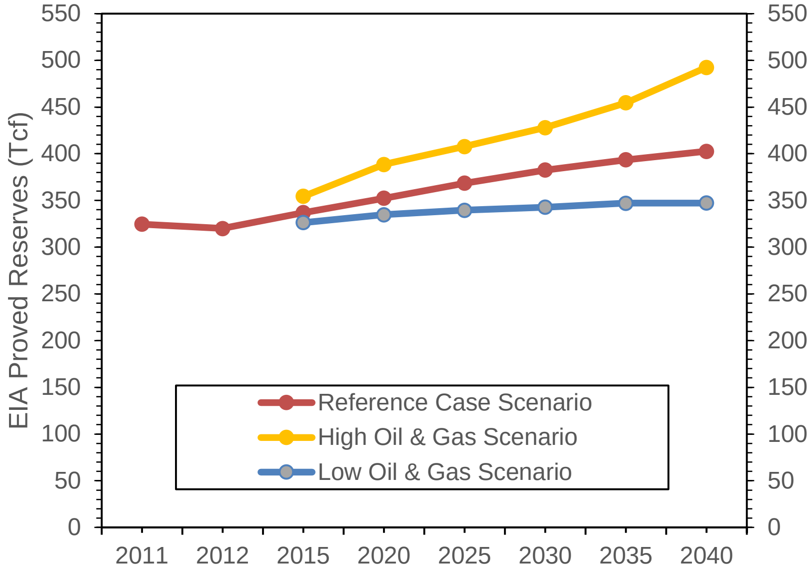


As illustrated by Figure 2, the 2012 Proved Reserves estimate for Pennsylvania and West Virginia is approximately 45 Tcf compared to the 2009 estimate of 5 Tcf. Stated differently, there has been an 800 percent increase in the Proved Reserves for Pennsylvania and West Virginia between 2009 and 2012.

In addition to the state specific natural gas reserves data utilized in Figure 2, the EIA also develops a projection of Proved Reserves across all of the natural gas supply basins. Figure 3 (below) provides a summary of these projections for the Reference Case and the High and Low Oil and Natural Gas Resource Scenarios over the 2011 through 2040 time period. In the High Oil and Natural Gas Resource Scenario, the EIA considers the implications of greater recoveries from natural gas shale wells and a larger overall resource base. Conversely, in the Low Oil and Natural Gas Resource Scenario the EIA decreases the recoveries from natural gas wells.

19 Ibid., at 38.
20 Ibid.

Figure 3: EIA Annual Energy Outlook Proved Reserves Forecast (2011-2040)[21]



As shown in Figure 3, the EIA Reference Case indicates an increase in Proved Reserves from approximately 330 Tcf in 2013 to approximately 400 Tcf in 2040 (i.e., an increase of over 20 percent). The High Oil & Gas Scenario suggests an even greater increase from approximately 335 Tcf to nearly 500 Tcf (i.e., an increase of almost 50 percent), while the Low Oil & Gas Scenario forecasts a smaller increase from 320 Tcf to approximately 345 Tcf in 2040 (i.e., an approximately 8 percent increase).

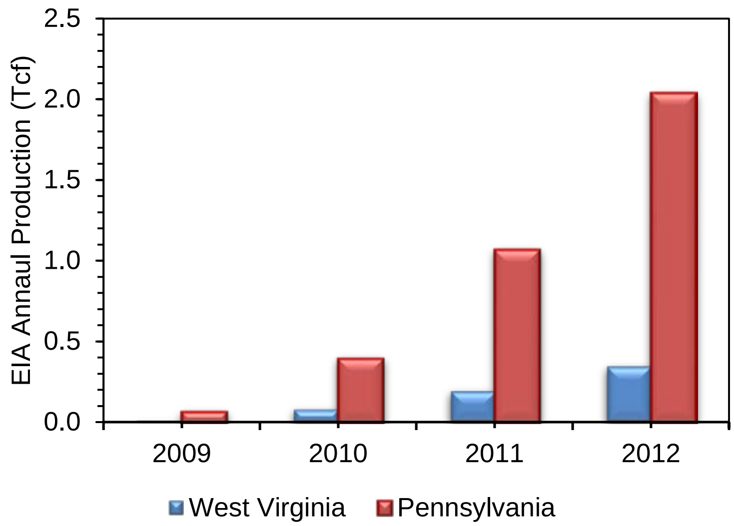
In addition to the Potential Reserve estimates, EIA also tracks natural gas production information. Figure 4 (below) provides a summary of annual production trends from 2009 to 2012 in Pennsylvania and West Virginia. Similar to the growth in Pennsylvania and West Virginia Proved Reserves, significant annual natural gas production growth was experienced in Pennsylvania and West Virginia during this time period. In total, the annual production for the two states increased by 2.3 Tcf over the 2009 to 2012 time period and represented approximately 6.8 Bcf per day in 2012.[22] In 2014, the natural gas production in the Marcellus region is approximately 14 Bcf per day, more than double the 2012 level.[23]

21 Energy Information Administration, *Annual Energy Outlook 2014 with Projections to 2040*, May 2014, at IF-10.

22 Ibid., at 16.

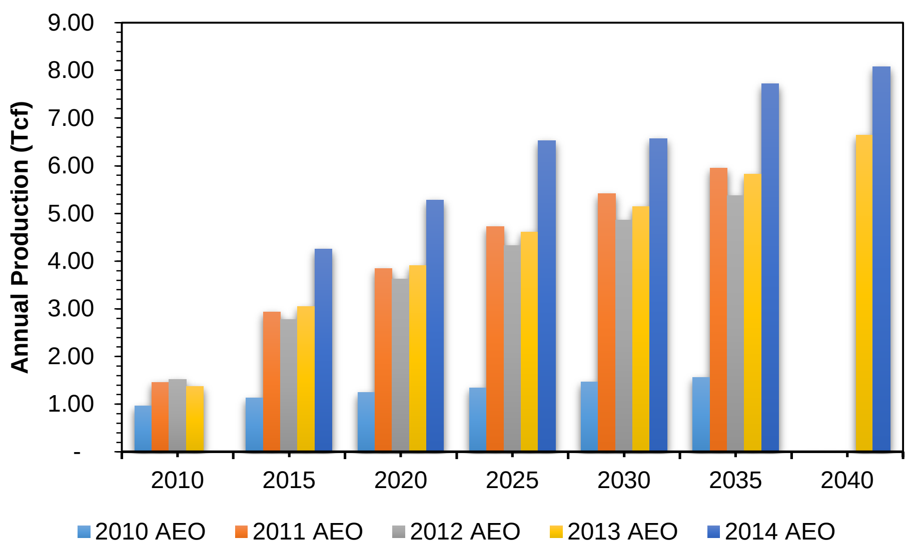
23 Energy Information Administration, *Drilling Productivity Report*, May 2014, at 6.

Figure 4: EIA Annual Production – Shale Gas[24]



As noted previously, the EIA produces a forecast of annual 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 5, the AEO Projections of Northeast Gas production have continued to increase.

Figure 5: EIA Northeast Annual Natural Gas Production Forecast 2010-2014



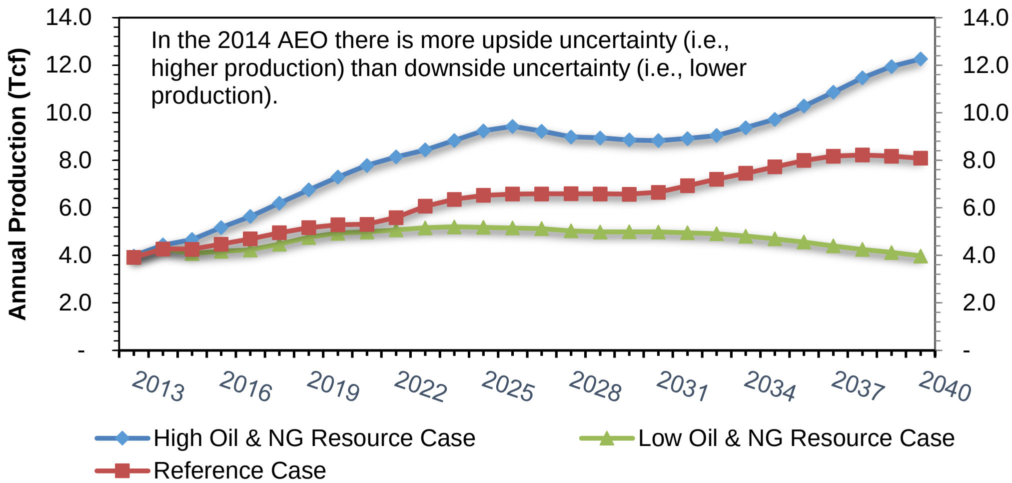
Specifically, based on an assumed in-service date of 2017 for the NEXUS project, and a 15 to 20-year capacity commitment, Sussex focused on the changes in natural gas production in 2020 and 2035 across several AEO forecasts. As illustrated by Figure 5, by 2020 the difference in Northeast Gas Production between the 2010 AEO and 2014 AEO is approximately 4 Tcf, or a 325 percent increase in forecasted

24 Energy Information Administration, *U.S. Crude Oil and Natural Gas Proved Reserves, 2012*, April 2014, Oil and Gas End-of-Year Reserves and Annual Reserve Additions Table. http://www.eia.gov/oiaf/aeo/tablebrowser/, Accessed October 23, 2014.

production.[25] By 2035, the difference between the two AEO forecasts is 6.20 Tcf, or a nearly 400 percent increase in production.[26] The EIA attributes this increase to greater optimism in the total amount of natural gas recovered from each well and the size of the production basins.[27] The EIA further elaborated that the optimism was spurred by additional production history in the region and a modeling change that permitted the EIA to apply its assumptions regarding natural gas recoveries on a more granular level.[28]

As shown in Figure 6 (below) and discussed above, the 2014 AEO included High and Low Oil and Gas Resource Scenarios, which provide alternative forecast estimates.

Figure 6: EIA 2014 AEO – High, Reference and Low Oil and Natural Resource Annual Production Forecasts[29]



As shown by Figure 6, for the first fifteen years of the forecast, the annual natural gas production in the High and Low Oil and Natural Gas Resource Scenarios are asymmetric around the reference case, which further demonstrates the EIA's uncertainty surrounding additional production. Specifically, the High Oil and Gas Resource Scenario begins to rapidly outpace the Reference Case as early as 2020, resulting in annual production that is approximately 2.0 Tcf or nearly 38 percent higher than the Reference Case. Whereas the Low Oil and Natural Gas Scenario more closely follows the Reference Case in the near term, resulting in production in 2020 that is (0.36) Tcf or less than 7 percent below the Reference Case.

By 2040, both the High and Low Oil and Natural Gas Resource Scenarios are symmetric to the Reference Case with the High Oil and Natural Gas Resource Scenario 52 percent higher than the Reference Case and the Low Oil and Natural Gas Resource Scenario 51 percent lower than the Reference Case.[30] Stated differently, in the 2014 AEO there is more upside uncertainty (i.e., higher natural gas production) than downside uncertainty (i.e., lower gas production).

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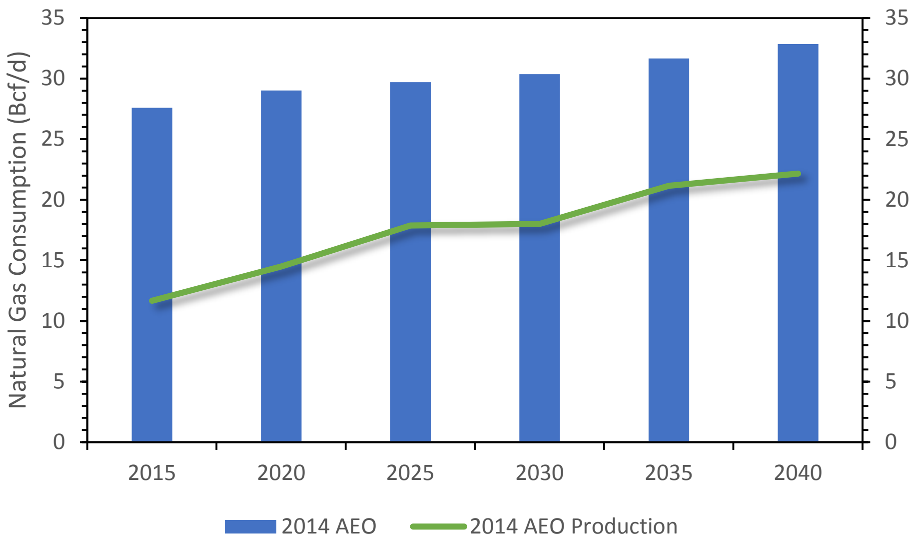
25 Ibid.
26 Ibid.
27 Energy Information Administration, *Annual Energy Outlook 2014 with projections to 2040*, May 2014, at IF-10.
28 Ibid.
29 Energy Information Administration, *Annual Energy Outlook 2014 with Projections to 2040*, May 2014.
30 Ibid.

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.

Figure 7: EIA Natural Gas Consumption Forecast[31]



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.[32]

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.

<u>Potential Gas Committee</u>

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:

31 Ibid.

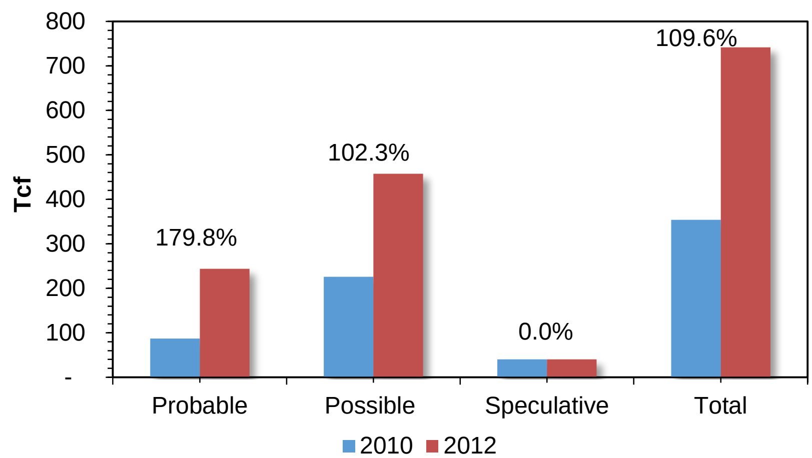
32 The region included in the production forecast includes all of the Marcellus and Utica production basins. Natural gas production from other areas in that region is de minimis. In contrast, the three regions included in the consumption forecast include several states outside of the Marcellus and Utica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

1. Probable resources are discovered but unconfirmed resources associated with known fields and field extensions, and undiscovered resources in new pools in both productive and nonproductive areas of known fields.
2. Possible resources are undiscovered resources associated with new field and pool discoveries in known productive formations in known productive areas.
3. Speculative resources are undiscovered resources associated with new field and pool discoveries in as-yet nonproductive areas.[33]

For the purposes of the Sussex analysis, the resources assessed by PGC are considered additive to the Proved Reserves assed by the EIA. As discussed below, a total potential natural gas resource assessment is developed by summing the EIA's Proved Reserves with PGC's potential resources.[34]

PGC's most recent estimate of potential natural gas resources was completed in spring 2013 based on data from 2012,[35] while the prior PGC estimate of potential natural gas resources was completed in 2011 utilizing data from 2010. The 2013 PGC estimate of potential natural gas resources shows significant gains for the U.S. overall and even greater gains for the Atlantic Region, which encompasses the Marcellus and Utica supply basins and is the region that would directly connect to NEXUS. As illustrated in Figure 8, the 2013 PGC estimate for Total Projected Gas Resources in the Atlantic Region is over 700 Tcf compared to 350 Tcf in the 2011 PGC estimate.

Figure 8: Atlantic Region Projected Gas Resources (2010 – 2012)[36]



Additionally, PGC provided a separate shale gas assessment in 2013, which is one component of the resource assessment. Although individual shale plays are not delineated in the shale gas assessment, the PGC provided a regional (i.e., Marcellus and Utica basin) estimate of potential shale gas resources. Figure 9 (below) illustrates that shale gas in the Atlantic region accounts for nearly all of the Atlantic region's growth in potential resources between the 2011 and 2013 PGC forecasts.[37]

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33 http://potentialgas.org/what-we-do-2.

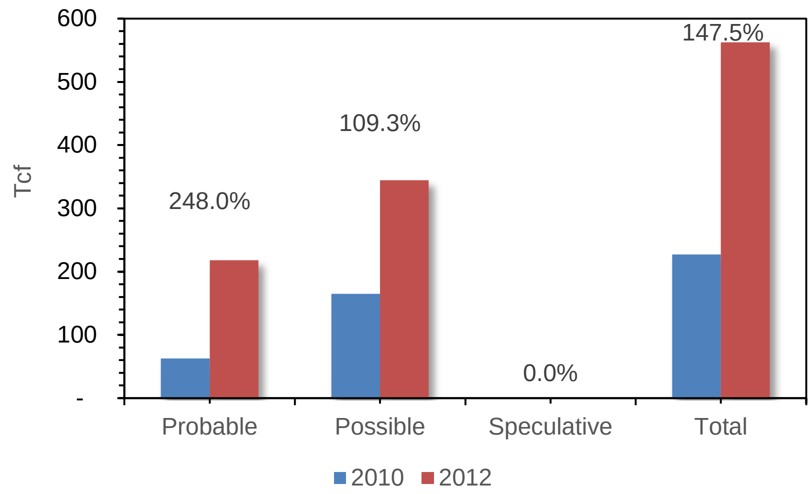
34 Potential Gas Agency – Colorado School of Mines, *Potential Supply of Natural Gas in the United States*, April 2013 at 88.

35 Ibid.

36 Ibid.

37 Ibid.

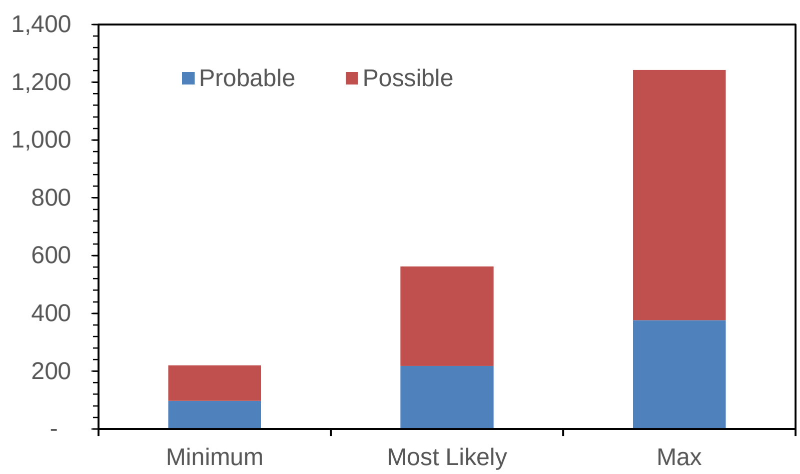
Figure 9: Atlantic Region Shale Gas Resources (2010 – 2012)[38]



As illustrated in Figure 9, the 2013 PGC forecast of Atlantic region shale is more than double the 2011 PGC forecast.

In addition to the Most Likely Case, the results of which were depicted in Figures 7 through 9 (above), the PGC also developed Minimum and Maximum Resource Cases.[39] Figure 10 (below) presents the three PGC scenarios (i.e., Most Likely, Minimum, and Maximum) for the shale gas assessment of the Atlantic Region.

Figure 10: PGC Atlantic Region Shale Gas Assessment[40]



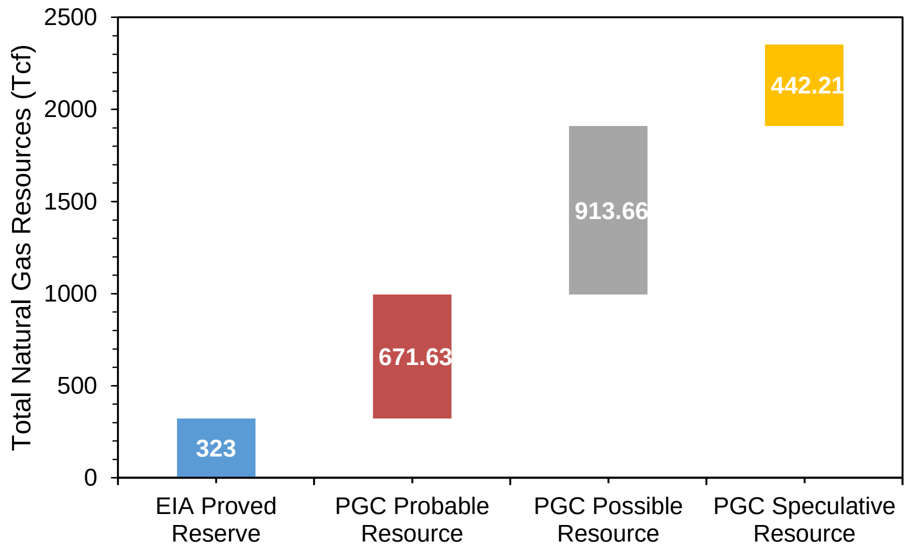
As illustrated in Figure 10, PGC has forecast the Atlantic Region Shale gas potential to range from 200 Tcf to 1,200 Tcf.

Lastly, Sussex estimated a total future natural gas resource value by summing the EIA's proved reserve estimates (i.e., Reference Case) discussed earlier with PGC's potential resource assessment (i.e., Most

38 Ibid.
39 Ibid.
40 Ibid., at 66-67

Likely Case) for similar time periods. Figure 11 (below) illustrates the total future natural gas resources estimate by the source and type of resource.

Figure 11: Total Future Natural Gas Resource Assessment



As depicted above, the EIA Proved Reserves constitute 13 percent of the total natural gas resource estimate of approximately 2,350 Tcf. Of the remaining resources, approximately 29 percent is probable resources, 39 percent is possible resources, and 19 percent is speculative resources. To provide context, and assuming a U.S. natural gas consumption level of 25 Tcf, the EIA Proved Reserves provide nearly 13 years of natural gas supply.[41] The remaining potential resources are subject to economic conditions (i.e., natural gas prices) and the natural gas that can be extracted from yet to be developed natural gas production fields. PGC's Probable Resources represent the second most likely category of available natural gas production and could supply U.S. demand (i.e., approximately 25 Tcf per year) for an additional 27 years. In aggregate the combined EIA Proved Reserves and PGC Potential Resources provide sufficient supply for more than 90 years.

Third-Party Studies of Marcellus and Utica Natural Gas Production

In addition to the EIA and PGC estimates, Sussex considered the results of certain third-party studies, which are publicly available.

The first of these analyses is published by BENTEK Energy ("BENTEK"), which provides forecasts of future natural gas production and prices in North America. In its recent market report, BENTEK expects production in the Marcellus and Utica supply basins to grow by approximately 9 Bcf per day over the next ten years. BENTEK also noted that 5.2 Bcf per day of natural gas processing capacity is being planned for the Marcellus and Utica regions, and that approximately 40 pipeline projects are proposed in the Northeast U.S. with a combined takeaway capacity of 9 Bcf per day.[42]

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41 The 2014 EIA AEO provides an average annual consumption of approximately 30 Tcf per year between 2010 and 2040. Source: Energy Information Administration, *Annual Energy Outlook 2014 with Projections to 2040*, May 2014.

42 BENTEK Energy, *Son of a Beast: Utica Triggers Regional Role Reversal*, October 2013, at 5.

Finally, BENTEK expects the combined Marcellus and Utica production will exceed the demand in the Northeast region, thus creating a surplus of available gas by 2019. Specifically, the BENTEK forecast has Marcellus and Utica production increasing by 7.7 Bcf per day by 2019, while demand in the Northeast U.S. was expected to increase by only 2.5 Bcf per day over the same period. Based on the BENTEK forecast, the Northeast region will need "to push 5.2 Bcf per day out of the region to continue this production growth."[43] In addition, BENTEK has estimated approximately 2,000 wells have been drilled in the Marcellus/Utica region, but are not producing.[44] As a result of the excess gas production and potential supply from wells that are drilled but not active, BENTEK expects natural gas prices to remain low in the regions receiving the excess gas.[45]

Wood Mackenzie, another firm specializing in natural gas forecasting, expects production in the Marcellus and Utica regions to rise to approximately 20 Bcf per day by 2018. In addition, Wood Mackenzie stated that approximately 1 Bcf per day of natural gas is being withheld from the market due to a lack of pipeline capacity to transport the gas to market.[46] Wood Mackenzie also noted that Utica production as of 2014 was approximately 1 Bcf per day, with estimated production reaching 5 Bcf per day by 2018. To accommodate this growth in production, Wood Mackenzie estimated that approximately $8 billion in new capital expenditures would be required in 2014.[47] In a recent forecast prepared for the Societe en commandite Gaz Métro and Gazifere Inc., Wood Mackenzie increased its forecast of Northeast production to 28.2 Bcf per day by 2020.[48]

Lastly, a projection from ICF International ("ICF") indicates substantially increased production from the Marcellus and Utica regions between 2015 and 2035. In total, ICF expects daily production to increase to 20 Bcf per day by 2016, 30 Bcf per day by 2025 and 34 Bcf per day by 2035. These projections of Marcellus and Utica production represent 80 percent of the total ICF estimate of incremental natural gas production in North America.[49]

Summary

Overall, the Sussex research regarding production forecasts and available gas supplies for the Marcellus and Utica supply basins (i.e., EIA, PGC, and third-party studies) provide strong support for continued growth in natural gas production in both the medium and longer-terms. Specifically, the material reviewed

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43 SNL Financial, LLC, *'Rolling Tsunami' of cheap Northeast gas to swamp other regions, analyst says*, June 5, 2014.

44 BENTEK Energy, *Welcome Back Volatility*, June 18, 2014.

45 SNL Financial, LLC, *'Rolling Tsunami' of cheap Northeast gas to swamp other regions, analyst says,* June 5, 2014.

46 SNL Financial, LLC, *Marcellus gas production could surpass 20 Bcf/d by 2018,* June 5, 2014.

47 SNL Financial, LLC, *Utica may not be a liquids bonanza after all, analyst says,* June 9, 2014.

48 Wood Mackenzie, *Proposed Energy East Pipeline Project White Paper,* September 2, 2014, at 5. This projection explicitly excludes any proposed effects of the Nexus or ET Rover projects. "Not included in Wood Mackenzie's infrastructure assumptions are projects upstream of Dawn, i.e. Nexus or ETP Rover. These projects will compete with other pipeline reversal options that would take Marcellus and Utica supplies to the US South and Midwest. Rover's recently announced (after our base case was complete) customer agreements, totaling more than 2.5 bcfd, make it look increasingly viable, although it is not clear whether this capacity will be built just into the US Midwest or all the way to Dawn. When constructed, these projects would further enhance eastern Canada's ability to access booming US Northeast supplies." Ibid., at 22.

49 Brock, Frank, *Outlook for the North American and Ontario Gas Markets*, ICF International, June 5, 2014, at 6. The updated ICF forecast acknowledges the NEXUS, ET Rover and ANR East pipeline projects, but only considers the effects of NEXUS in-service in 2016 at a total capacity of 1 Bcf per day. Ibid., at 34.

by Sussex indicates a general consensus that natural gas production in the Marcellus and Utica region will continue to increase to approximately 20 to 25 Bcf per day before the end of the current decade. These production and reserve productions suggest that sufficient natural gas supplies should be available in the region to support shipments on NEXUS and other competing pipeline projects.

III. REVIEW OF SELECTED PROJECTIONS FROM NATURAL GAS SUPPLIERS ACTIVE IN THE MARCELLUS/UTICA BASINS

As detailed in Appendix A, Sussex has identified 62 natural gas producers that are active in Pennsylvania, Ohio, and/or West Virginia. [redacted]

For purposes of this memorandum, Sussex profiled a subset of the natural gas producers and operators listed in Appendix A. These producers and operators provide a cross-section of the companies investing in the Marcellus and Utica regions, and thus an indication of the production growth expected in the region. Sussex reviewed short-term natural gas production forecasts developed by natural gas producers active in the Marcellus and Utica basins (e.g., 1-3 years).[50] These projections and the associated capital investment indicate that significant growth in natural gas production is forecasted in the Northeast region and provide support for the longer-term production forecasts discussed above. An additional discussion of investors considering other infrastructure investments related to the region is provided later in this memorandum.

American Energy Partners, LP

American Energy Partners, LP ("American Energy") is a privately controlled natural gas producer that has raised $3 billion in equity commitments to pursue development in the Utica shale basin. The firm is controlled by Aubrey McClendon, former CEO of Chesapeake Energy Inc, and is backed by affiliates of First Reserve Corporation, GSO Capital Partners, and Blackstone Group, amongst others.[51] Since its founding in 2013, the company has acquired approximately 280,000 net leasehold acres in the Utica shale basin and approximately 48,000 net leasehold acres in the Marcellus shale basin.[52] American Energy plans to drill 1,560 net wells in the Utica region and 355 net wells in the Marcellus region.[53]

[redacted]

Antero Resources Corporation

Antero Resources Corporation ("Antero") describes itself as a "pure play" producer in the Utica and Marcellus basins. The company is headquartered in Denver, Colorado and completed an initial public offering in Q1 2013. In total, Antero holds approximately 450,000 net acres of rich and dry gas leases in

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50 The short-term producer relied upon by Sussex reflect the most current information available from the producers. Longer-term forecasts were generally not provided by the producers.

51 Ibid., at 39.

52 American Energy Partners, *American Energy – Utica, LLC and American Energy – Marcellus, LLC Agree to Acquire 75,000 Net Acres and 175 MMcfe per day of Net Production in the Southern Utica and Southern Marcellus Shale Plays from Eastern Resources, Inc and An Unnamed Private Company for $1.75 Billion,"* June 9, 2014.

53 Ibid., at 1.

[redacted]

the Appalachian basin in West Virginia, Ohio and Pennsylvania. These leases represent approximately 7.6 Tcf of proven reserves.[55]

Although Antero recently downgraded its production estimates in two areas of the Utica basin by approximately 30 percent, Antero reported a 105 percent growth in production from Q1 2013 to Q1 2014 in its recent earnings presentation.[56,57] The company further stated that it anticipated 45-50 percent annual growth in its daily production in 2015 and 2016.[58] This follows a period in which its proven reserves increased at a compound annual growth rate of 33 percent since 2010 and average daily production is forecast to increase at a 58 percent compound annual growth rate between 2010 and 2016.[59] This growth results from substantial new well development in both the Utica and Marcellus basins.

To support this production growth, Antero is undertaking approximately $1.5 billion in capital investments to increase its takeaway capacity.[60] Those investments include new gathering lines, compressor stations and fresh water distribution systems. Additionally, Antero has entered into a binding commitment to purchase firm transportation capacity on the Rover Pipeline Project (“Rover”), and to obtain an option to purchase a non-operating equity interest in the project.[61] [redacted] [redacted]

Chesapeake Energy Corporation

Chesapeake is the second largest producer of natural gas in the United Sates and the tenth largest producer of natural gas liquids.[63] In 2013, Chesapeake’s Northern Operating Division, which included Marcellus, Utica and Rocky Mountain production produced approximately 401.7 Bcf of natural gas. In a recent investor presentation, Chesapeake noted that during 2012 and 2013 its average daily production for the Utica supply basin increased by more than 400 percent, by greater than 300 percent from 2013 to 2014 and was forecasted to increase a further 30 to 60 percent between 2014 and 2015.[64] Chesapeake estimated its 2014 Utica natural gas production at 360 MMcf per day,[65] and the combined Utica and Marcellus 2014 production was estimated to be approximately 1.2 Bcf/d.[66,67]

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55 Antero Resources Corporation, SEC Form 10-K for the year ending 12/31/2013, at 1 and 2.

56 Knox, Tom, *Antero Resources says Utica shale production failing to live up to expectations*, April 14, 2014.

57 Antero Resources Corporation, *Company Overview*, June 2014, at 2.

58 Ibid., at 7.

59 Ibid.

60 Ibid., at 5.

61 Energy Transfer Partners, *Energy Transfer Partners Announces Pipeline Project Connecting Marcellus and Utica Shale Supplies to Multiple Markets, Significant long-term shipper commitments secured to support the pipeline, Open Season Launched to Finalize Project Scope.* 26 June 2014. Rover is an approximately 2.2 Bcf per day (expansion potential up to 3.25 Bcf per day) natural gas pipeline project to connect the Marcellus and Utica production areas with market areas in Ohio, Michigan and Ontario (including Dawn). The project is expected begin service in late 2016 with full operations in Q2 2017.

[redacted] [redacted]

63 Chesapeake Energy Corporation, SEC Form 10-K, December 31, 2013, at 4.

64 Chesapeake Energy Corporation, *Focused on Value, Delivering Growth,* May 16, 2014, at 86.

65 Ibid. Mboe per day converted to MMcf per at rate of 6 MMcf for every mboe.

66 Ibid., at 99, 104. Mboe per day converted to MMcf per at rate of 6 MMcf for every mboe.

67 Please note that the Chesapeake volumes are subject to change given a recent news release. Specifically, on October 16, 2014, Chesapeake announced an agreement to sell 413,000 net acres, including nearly 1,500 active wells, in the Marcellus and Utica shale basins to affiliates of

Chesapeake holds a precedent agreement with the Kensington plant (i.e., the origination point of the NEXUS project) and recently increased its commitments for additional processing capacity as part of a further expansion.[68] Chesapeake and NEXUS have entered into a precedent agreement for the NEXUS Pipeline.[69]

CONSOL Energy Incorporated

CONSOL Energy Incorporated ("CONSOL") is a producer of natural gas and coal based in Pittsburgh, PA. Its natural gas production activities are centered in the Appalachian basin, which includes the Marcellus and Utica shale regions. As of December 31, 2013, CONSOL's assets included 5.7 Tcfe of Proved Reserves that were 97.5 percent natural gas and 43.9 percent developed.[70]

In a recent presentation, CONSOL forecasted 30 percent production growth through 2016. Its estimate of production in the Marcellus region for 2014 was an increase of approximately 87 percent relative to fiscal year 2013. In its most recent annual report, CONSOL noted that its natural gas business produced approximately 172.4 Bcfe in 2013, which is an increase of approximately 290 percent over the past ten years. CONSOL further noted that its annual production was expected to be between 215-235 Bcfe in 2014 in order to achieve its 30 percent annual production growth target in 2015 and 2016.[71] To meet its forecasted growth, CONSOL is focusing on 11,000 acres in Monroe County, PA from which it can access both the Marcellus and Utica shale basins from a single pad location, which enables the company to share infrastructure and lower drilling and production costs.[72]

CONSOL and NEXUS have entered into a precedent agreement for the NEXUS Pipeline.[73]

MarkWest Energy Partners LP

MarkWest Energy Partners LP ("MarkWest") is a master limited partnership that is engaged in the gathering, processing and transportation of natural gas, natural gas liquids and crude oil. In a recent investor presentation, MarkWest noted that it had invested over $6 billion in the Marcellus and Utica shale regions since 2008.[74] It currently maintains 585 MMcf per day of natural gas processing capacity in Utica and plans to grow that capacity to 1.1 Bcf per day by 2015.[75] Similarly, MarkWest currently holds 2.5 Bcf per day of natural gas processing capacity in the Marcellus region and plans to increase that capacity to 4.1 Bcf per day by 2015.[76] In total, this represents approximately 60 percent of the existing and announced processing capacity in the Northeast.[77] In the same presentation, MarkWest noted that it was

Southwestern Energy Company for net proceeds of $5.375 billion. The transacted assets included daily production of 56,000 barrels of oil equivalent, 184,000 Mcf of natural gas, 20,000 barrels of natural gas liquids and 5,000 barrels of condensate. Source: Chesapeake Energy Corporation, *Chesapeake Energy Corporation Announces Sale of Southern Marcellus and Utica Shale Assets for Proceeds of $5.375 Billion,* October 16, 2014.

68 Access Midstream Partners, *Utica East Ohio Announces Major Expansion*, May 12, 2014.
69 Spectra Energy, Inc., "Spectra Energy Reports Third Quarter 2014 Results," November 5, 2014.
70 CONSOL Energy, SEC Form 10-K for the year ending December 31, 2013, at 5.
71 CONSOL Energy, SEC Form 10-K for the year ending 12/31/2013, at 5.
72 CONSOL Energy, *Howard Weil 42nd Annual Energy Conference Presentation*, March 25, 2014, at 8 and 17.
73 Spectra Energy, Inc., "Spectra Energy Reports Third Quarter 2014 Results," November 5, 2014.
74 MarkWest Energy Partners, LP, *2014 Investor & Analyst Conference*, June 6, 2014, at 6.
75 Ibid., at 7.
76 Ibid.
77 Ibid., at 19.

expecting an increase of over 450 percent in processed volumes of natural gas in Utica between 2013 and 2014.[78]

Noble Energy Incorporated

Noble Energy Incorporated ("Noble") is an international oil and gas producer. In 2014, Noble saw its Marcellus production increase by greater than 230 percent over the first quarter of 2012 due to increase well performance.[79] Noble also notes that it currently holds 250 MMcf per day of firm transportation capacity and expects to expand that commitment to 500 MMcf per day by 2017.[80] Noble provides natural gas supplies to various pipelines including the TETCO, Dominion Transmission, and Transco systems.[81]

Noble and NEXUS have entered into a precedent agreement for the NEXUS Pipeline.[82]

Range Resources Corporation

Range Resources Corporation ("Range Resources") is a producer of natural gas and oil with a primary focus on the Appalachian and Southwestern regions of the U.S.[83] In 2013, Range Resources produced 264.5 Bcf of natural gas (approximately 724 MMcf per day), an increase of over 20 percent from 2012.[84] Range Resources' total Proved Reserves were 8.2 Tcfe, of which 69 percent was natural gas.[85]

In its May 12, 2014 Investor Presentation, Range Resources noted that its production was expected to grow by 20-25 percent in 2014 with a substantial portion of its growth tied to the Utica and Marcellus shale regions. Specifically, Range Resources highlighted its ability to access both regions from single pad sites in the area, as well as the quality of the acreage it has acquired in the region, both of which were expected to enhance the economics of its drilling program.[86]

Similar to Antero, Range Resources recently entered into a binding commitment with the Rover project for firm transportation capacity. [redacted]

Rice Energy Incorporated

Rice Energy Incorporated ("Rice Energy") is an independent exploration and production company focused exclusively on the Marcellus and Utica supply basins. Between 2012 and the first quarter of 2014, Rice Energy increased its daily production by approximately 135 percent to 209 MMcf per day in the Marcellus basin.[88]

In addition to its exploration and production activities, Rice Energy is investing in midstream gathering assets to move its production from the wellhead to market and anticipates it will have approximately 4 Bcf

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78 Ibid., at 18.
79 Noble Energy Inc., *First Quarter 2014 Supplemental Information,* at 5.
80 Ibid., at 10.
81 Ibid.
82 Spectra Energy, Inc., "Spectra Energy Reports Third Quarter 2014 Results," November 5, 2014..
83 Range Resources Corporation, SEC Form 10-K for year ending December 31, 2013, at 2.
84 Ibid., at 2.
85 Ibid.
86 Range Resources Corporation, *Company Presentation*, May 12, 2014, at 4 and 12.
[redacted]
88 Rice Energy, *RBC Global Energy & Power Conference,* June 2-3, 2014, at 5.

per day of gathering capacity.[89] Consistent with this goal, Rice Energy recently entered into an agreement to purchase a 1 Bcf per day gathering system development project in southeastern PA for $110 million from M3 Midstream, LLC.[90] Once completed this header system will interconnect with TETCO in southeastern Pennsylvania. In total, Rice Energy expects to spend $375 million on midstream infrastructure in 2014.[91]

Rice Energy's midstream assets are in addition to its planned firm transportation commitments. By 2016, the firm anticipates holding approximately 900 MMcf per day of firm capacity on Rocky Mountain Express, Dominion Transmission, Transco and TETCO.[92] [redacted]

Summary of Producers' Forecasts

As can be seen from the above production and capital deployment forecasts, producers that are active in the Marcellus and Utica regions have experienced significant production growth in 2013 and are expecting to continue their substantial production growth in the medium-term. Even though the forecast horizons are not for the longer-term, it is noteworthy that the producers are committing substantial investments in the region to develop their production and processing capacity. These investments are in long-lived infrastructure that will likely support Marcellus and Utica shale development for the longer term.

IV. ANALYSIS OF MARCELLUS AND UTICA INFRASTRUCTURE INVESTMENTS

In reviewing the prospects for the Marcellus and Utica basins, Sussex also considered other long-term infrastructure investments in either the region or which are dependent on natural gas production in the region to support their economic viability. The types of projects considered included pipeline projects that provide incremental takeaway capacity; other complementary projects (e.g., processing); and petrochemical projects that depend on Marcellus and Utica production. As discussed below, multiple projects were identified for each category of investment. In total, these projects represent tens of billions of dollars of investment and provide a further endorsement of the Marcellus and Utica production basins. Appendices B through E provide further details on the natural gas transportation, gathering and processing, and petrochemical investments described below.

Table 1: Marcellus and Utica Related Infrastructure Investments

Project Type	Number of Projects	Description
Natural Gas Transportation	Numerous	Appendix B lists U.S. natural gas transportation projects generally related to Marcellus and Utica production. The total publicly announced planned investment is approximately $16 billion, but several pipeline projects have not announced detailed cost estimates. These projects would more than double the planned investment.

89 Ibid., at 2.
90 Oil & Gas Financial Journal, *Rice Energy Acquires Marcellus Acreage from Chesapeake for $336M,* July 7, 2014.
91 Rice Energy, *RBC Global Energy & Power Conference,* June 2-3, 2014, at 21.
92 Rice Energy, *RBC Global Energy & Power Conference,* June 2-3, 2014, at 22.
[redacted]

Project Type	Number of Projects	Description
Gathering & Processing Systems	Numerous	Appendix C list natural gas gathering and processing projects related to Marcellus and Utica production. Project sponsors, including affiliates of MarkWest, DTE and Access Midstream Partners LP ("Access"), are undertaking major projects to increase natural gas gathering and processing capacity in the Marcellus and Utica basins. For example, MarkWest has completed 26 projects and has 14 additional projects under construction in the Utica and Marcellus region.[94] DTE Energy has announced development of the 44 mile Bluestone Gathering System in Pennsylvania and New York to transport approximately 975 MMcf per day to the Millennium or Tennessee Gas Pipelines.[95]
Petrochemical Projects		
Production Area	3	Three 'World class' ethane cracking projects are proposed by Royal Dutch Shell, Odebrecht, and Marubeni/PTTGlobal Chemical.[96,97,98] Shell has entered into agreements to complete 1-2 years of front-end engineering and design, and completed 10 agreements for ethane supply.[99] If Shell elects to proceed with construction, the project will require at least 5 years to complete. Odebrecht has yet to make a final investment decision, but has entered into an agreement with Antero Resources for the supply of 40,000 bbls per day of ethane to supply the facility, and is conducting a feasibility study to evaluate the viability of moving forward with the project.[100] These projects represent large fixed investments that will require proximate, low cost natural

94 MarkWest Energy Partners, L.P., *2014 Investor & Analyst Conference*, June 6, 2014, P. 54.

95 DTE Energy, Inc, *About Bluestone Gathering System*, www.dtepipeline.com/bluestone/aboutbluestone.html.

96 Platts, *Feature: Shell's proposed Pennsylvania ethane cracker faces logistical hurdles*, August 30, 2013. Shell states that a 'world-class' ethane cracker will consume approximately 80,000 barrels ("bbls") of ethane per day.

97 Fibre2Fashion, *Brazilian Odebrecht mulls ethane cracker in West Virginia*, November 15, 2013.

98 Marcellus Drilling News, *Thailand & Japan Partner to Build 3rd Big Marcellus Ethane Cracker,* accessed October 23, 2014.

99 Greenwood, Al, *Shell picks Linde for FEED on proposed cracker in Pennsylvania*, 18 April 2014.

100 Editors, OGJ, *Ethane supply secured for proposed W.VA ethylene cracker*, Oil & Gas Journal, March 28, 2014.

Project Type	Number of Projects	Description
		gas supplies to remain economically competitive.
Natural Gas Liquids ("NGL") Transportation	5	Appendix D provides a list of NGL transportation projects from Marcellus to the Gulf and Atlantic Coasts. First project completed was the Appalachia-to-Texas.[101] Other projects are proposed by The Williams Companies and Boardwalk Partners LP, Kinder Morgan Energy Partners LP and MarkWest, and Sunoco.[102,103,104] Given the lack of alternative supplies, these projects are highly reliant on Marcellus and Utica production to remain economically feasible.
Gulf Coast	10 new facilities, 10 expansions of existing facilities	Appendix E lists the 10 new ethane cracking facilities that have been announced in in the U.S. Gulf Coast region to take advantage of the Marcellus and Utica basins. Additionally, 10 facilities have announced significant expansions to leverage the additional Marcellus and Utica supply.[105] While these projects are not solely reliant on Marcellus and Utica production to remain economically feasible, the projects are reliant on low cost natural gas.

Although not all of these projects are expected to complete construction and reach their full capacities, it is clear that multiple entities are investigating, and in some cases making substantial investments related to natural gas production in the Marcellus and Utica basins. To that point, a recent estimate of oil and gas related investment in Ohio alone was worth approximately $22 billion including transportation facilities, manufacturing facilities and support facilities such as hotels.[106] In the case of the natural gas transportation projects, these investments are expected to require significant supplies of natural gas in order to be economic although they may be able to access alternative production basins if necessary. The remaining projects for natural gas gathering and processing facilities, production area ethane cracking facilities, and natural gas liquids pipelines are dependent on Marcellus and Utica production. In addition, both the production area and Gulf Coast region ethane cracking facilities compete on a global basis and require access to low cost natural gas supplies to remain competitive. Thus, it is reasonable to conclude, based on the level of interest and investments, that natural gas production is expected to grow substantially in the Marcellus and Utica regions. In addition, it is reasonable to conclude that these

[101] Sunoco Logistics, *NGL Projects*, http://www.sunocologistics.com/Customers/Business-Lines/Natural-Gas-Liquids-NGLs/NGL-Projects/208/, accessed June 10, 2014.
[102] ICIS, *Shell picks Linde for FEED on proposed cracker in Pennsylvania*, April 18, 2014.
[103] Oil & Gas Journal, *Williams, Boardwalk suspend Bluegrass NGL pipeline spending*, April 29, 2014.
[104] Sunoco Logistics, *NGL Projects*, http://www.sunocologistics.com/Customers/Business-Lines/Natural-Gas-Liquids-NGLs/NGL-Projects/208/, accessed June 10, 2014.
[105] ICIS, *Shell picks Linde for FEED on proposed cracker in Pennsylvania*, April 18, 2014.
[106] SNL Financial, LLC, *Utica infrastructure demand continues to drive investment, law firm finds,* October 17, 2014.

entities anticipate that production will be maintained for a period of time given the long-term horizons of the investments.

V. RISK CONSIDERATIONS

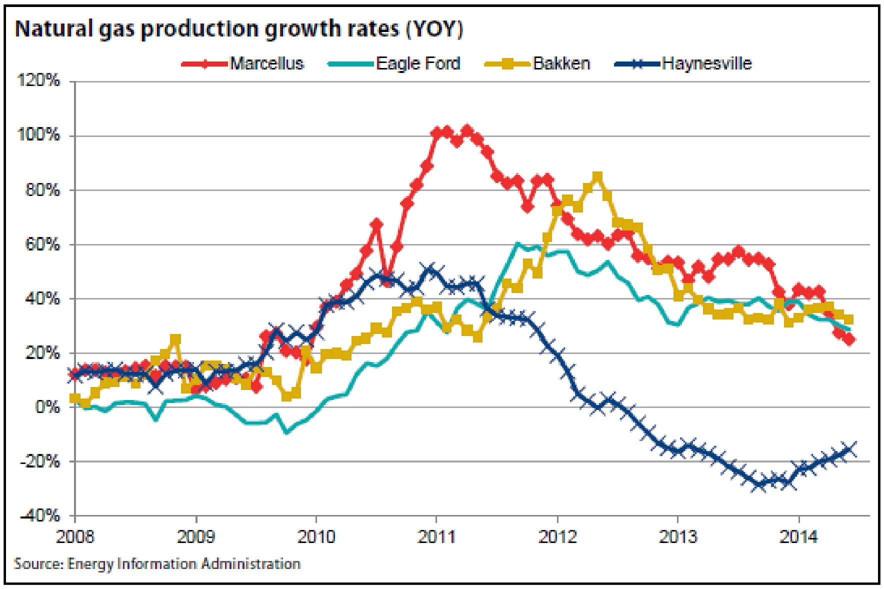
The Sussex analysis necessarily relies on forecasts of future natural gas production, proved reserves, and potential resources in the Marcellus and Utica natural gas basins. All forecasts inherently contain uncertainty and should be viewed as projections of what may happen given certain assumptions and events. As such, should these estimates and forecast materially change, our analysis and conclusions are likely to change as well.

By way of example, Royal Dutch Shell recently announced plans to restructure or divest its drilling leases in the Marcellus region due to slow production and less than expected results.[107] As such, it is possible that greater experience over a larger breadth of the production basins may result in revisions to current production forecasts.

Nevertheless, the EIA currently notes that the risk to their estimates of natural gas production is to the upside. Such a statement indicates that EIA believes there is potential for natural gas production to be above their current Reference Case projection. In addition, the EIA conducts modeling with Low and High Oil & Natural Gas Resources assumptions. These forecasts provide results in the near term that are asymmetric to reflect the risk that additional production will be realized and there is less risk that production will fall below the Reference Case forecast.

Further, while the growth rate of natural gas production in the Marcellus region has been slowing since 2011, production growth continues to be positive and greater than 20 percent as shown in Figure 12 (below).

Figure 12: Natural Gas Production Growth Rates[108]



[107] Pittsburgh Gazette, *Shell to restructure shale assets in U.S., Future of Beaver ethane plant unclear,* March 13, 2014.

[108] Ibid.

A portion of the reduction in production growth is likely attributable to producers' attempts to maximize the total gas extracted from each of their wells at the expense of near-term production. The additional recoveries are achieved by increasing the number of lateral segments and shortening the length of each segment in order to more effectively remove gas from the surrounding shale formations. This technique requires additional time to complete each well, but it is expected to result in greater overall gas recoveries for each well.[109] Additionally, the slowdown in production likely reflects the lower natural gas prices experienced in 2012 and 2013, and a desire by producers to better match their drilling investments to market price signals.[110]

Finally, it is important to note that alternative production basins may also be available to supply natural gas on the NEXUS pipeline in the event that the Marcellus and Utica basins do not perform as currently expected. For example, the TETCO OPEN project is expected to provide up to 1 Bcf per day of capacity from the TETCO system at Clarington, Ohio to NEXUS at Kensington. This interconnection will provide NEXUS shippers with not only more access to Marcellus and Utica production, but to additional supply from the traditional Gulf Coast regions. Although a shipper would be expected to incur additional transportation charges to ship gas via the TETCO system, this alternative presents a potential option and risk mitigation for underutilized NEXUS capacity in the event that the current forecasts do not materialize.

VI. CONCLUSION

Sussex produced this memorandum to review the availability of natural gas supplies in the Marcellus and Utica supply basins that could support a long-term (e.g., 15-20 years) firm transportation agreement on NEXUS. As described herein, multiple data sources (i.e., the U.S. EIA, the PGC, and third party studies), have provided indications of growing natural gas production in the Marcellus and Utica plays between 2015 and 2035 due to expanding estimates of natural gas resources in the region and improved drilling and natural gas recovery techniques Similarly, multiple parties are choosing to make substantial, long-lived investments which are dependent on the long-term availability of natural gas and natural gas liquids in the Marcellus and Utica supply regions in order to be economically viable. Based on this information, sufficient natural gas supplies are expected to be available in the Marcellus and Utica regions for the duration of the estimated length of a firm capacity commitment on NEXUS.

As with any estimates, uncertainties do exist in the production estimates contained herein. These estimates are based on underlying assumptions about what could happen in a future time period. Nevertheless, recent revisions to natural gas production forecast issued between 2010 and 2014 indicate an upward trend in the forecasted production from the Marcellus and Utica supply regions by 2035. That is to say, each successive production forecast of the Marcellus and Utica supply regions appears to increase the forecasted production. Further, EIA noted in its 2014 AEO that it believes the Reference Case production estimate contains greater upside uncertainty than downside uncertainty. Lastly, it is important to recognize that NEXUS will provide access to other sources of supply through interconnections with the TETCO system at Clarington, Ohio and the Tennessee Gas Pipeline system at Kensington, Ohio. These additional sources of supply will come at an additional cost, but do provide mitigation to the risk that the Marcellus and Utica supply basins do not meet current production forecasts for the regions.

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[109] SNL Financial, LLC, *Slowdown in Northeast gas production growth not evident across all producers,* May 19, 2014.

[110] SNL Financial, LLC, *Forward Gas Markets are 'delusional and grossly naïve,' analyst says,* April 9, 2014.

PRIVILEGED AND CONFIDENTIAL – PREPARED IN ANTICIPATION OF LITIGATION

Appendix A – Natural Gas Producer List

Operator Name	PA	OH	WV	[redacted]
ALPHA SHALE RES LP	X			
AMERICAN ENERGY UTICA LLC		X		
ANADARKO E&P ONSHORE LLC	X	X		
ANTERO RESOURCES		X	X	
ATLAS NOBLE LLC		X		
BEUSA ENERGY LLC		X		
BP AMERICA PRODUCTION COMPANY		X		
BRAMMER ENGINEERING INC		X		
CABOT OIL & GAS CORP	X			
CAMERON ENERGY CO	X			
CAMPBELL OIL & GAS INC	X			
CARRIZO OIL & GAS INC	X	X		
CHESAPEAKE ENERGY CORP	X	X	X	
CHEVRON APPALACHIA LLC	X	X		
CHIEF OIL & GAS LLC	X			
CITRUS ENERGY CORP	X			
CNX GAS CO LLC	X	X		
CONSOL Energy				
CONTINENTAL PETROLEUM CO.			X	
DEVON ENERGY PRODUCTION CO		X		
EAST RESOURCES/SHELL				
ECLIPSE RESOURCES I LP		X		
EDGEMARK / EM ENERGY	X	X		
ENERGY CORP OF AMER	X			
ENERVEST OPERATING L		X		
EOG RESOURCES INC	X			
EQT PRODUCTION CO	X	X		
EXCO RESOURCES PA LLC	X			
GULFPORT ENERGY CORPORATION		X		
HALCON OPR CO INC	X	X		
HALL DRILLING LLC (OIL & GAS)		X		
HESS OHIO		X		
HG ENERGY LLC		X		
HILCORP ENERGY CO	X	X		
INFLECTION ENERGY LLC	X			
JAY-BEE OIL & GAS CO.			X	
MDS ENERGY DEV LLC	X			
MOUNTAINEER KEYSTONE LLC		X		
NOBLE ENERGY INC	X			
NORTHEAST NATURAL ENERGY LLC	X			
PA GEN ENERGY CO LLC	X			
PDC ENERGY INC		X		
PENNENERGY RESOURCES LLC	X			
PHILLIPS EXPLORATION INC		X		

PRIVILEGED AND CONFIDENTIAL – PREPARED IN ANTICIPATION OF LITIGATION

Operator Name	PA	OH	WV	[redacted]
PROTEGE ENERGY II LLC		X		
RANGE RESOURCES APPALACHIA LLC	X			
RE GAS DEV LLC	X	X		
REDMILL DRILLING	X			
RICE DRILLING	X	X		
SENECA RESOURCES CORP	X			
SIERRA RESOURCES LLC		X		
SNYDER BROS INC	X			
SOUTHWESTERN ENERGY PROD CO	X			
STATOIL USA ONSHORE PROP INC		X		
STONE ENERGY				
SWEPI LP	X	X		
TALISMAN ENERGY USA INC	X			
TOTAL				
TRIAD HUNTER LLC		X		
VANTAGE ENERGY APPALACHIA LLC	X			
WPX ENERGY APPALACHIA LLC	X			
XTO ENERGY INC	X	X		
TOTAL NUMBER OF ACTIVE PRODUCERS	**36**	**33**	**4**	

Appendix B – EIA Marcellus & Utica Area Transportation Projects[111]

Project Name	Pipeline Operator Name	Type	Status	Year In Service Date	Region(s)	Cost (millions)	Miles	(MMcf/d)
Virginia Power Power Link	Columbia Gas Transmission	Lateral	Applied	na	Northeast	34	2	224
Windsor Project	Self-Gen	Expansion	Announced	na	Northeast			
ANR East Pipeline Project	ANR Pipeline	Pipeline	Announced		Northeast,Midwest		320	2,000
Access Northeast	Algonquin Gas Transmission	Expansion	Announced	2018	Northeast	3,000		1,000
Western Marcellus Pipeline Project	Pipeline	Expansion	Announced	2018	Northeast,Norhteast			2,000
Diamond East Project	Pipeline	Expansion	Announced	2018	Northeast	800	50	1,000
Atlantic Coast Pipeline	Atlantic Coast Pipeline	Pipeline	Announced	2018	Northeast,Southeast	5,000	550	1,500
Northeast Energy Direct	Tennessee Gas Pipeline	Pipeline	Pre-file	2018	Northeast		346	2,200
Mountain Valley Pipeline	Mountain Valley Pipeline	Pipeline	Announced	2018	Northeast,Southeast		330	2,000
Project (MXP)	Columbia Gas Transmission	Expansion	Announced	2017	Northeast			2,500
PennEast Pipeline Co	PennEast Pipeline Co	Pipeline	Announced	2017	Northeast	1,000	105	1,000
Leach XPress project	Columbia Pipeline	Pipeline	Announced	2017	Northeast	1,400	160	1,500
Rover Pipeline Project	ET Rover Pipeline	Pipeline	Pre-filed	2017	Northeast,Canada		800	3,250
Access South Project	Texas Eastern Transmission co	Reversal	Announced	2017	Northeast,Midwest			320
directional)	Texas Eastern Transmission co	Reversal	Announced	2017	Northeast,Central			350
Adair Southwest Project	Texas Eastern Transmission co	Reversal	Announced	2017	Northeast,Southeast			200
directional)	Transcontinental Gas Pipeline	Reversal	Pre-filed	2017	Northeast,Central		180	1,700
Lebanon lateral project phase 3	ANR Pipeline	reversal	Announced	2017	Northeast			
Atlantic Bridge project	Algonquin Gas Transmission	Expansion	Announced	2017	Northeast	-	-	100
Ohio-Louisiana Access project	Texas Gas Transmission	Reversal	Applied	2016	Northeast,Midwest	52		
Northern Access 2016 Project	National Fuel Gas Supply Corp	Expansion	Pre-filed	2016	Northeast		97	350
Garden State Expansion	Transcontinental Gas	Expansion	Announced	2016	Northeast			180
Ohio Valley Connector	Equitrans	Expansion	Pre-filed	2016	Northeast	300	50	900
Clarington Project	Dominion Transmission	Pipeline	Filed	2016	Northeast	77	-	250
New market project	Dominion Transmission	Pipeline	Filed	2016	Northeast	159	-	112
Rock Springs Expansion	Transcontinental Gas Pipelne	Lateral	Pre-filed	2016	Northeast		11	192
Clarington West Project	Rockies Express Pipeline	Reversal	Announced	2016	Northeast,Central			2,500
South to North project	Iroquois gas pipeline	Reversal	Announced	2016	Northeast,Canada	-	-	300
Connecticut Expansion Project	Tennessee Gas Pipeline	Expansion	Announced	2016	Northeast	81	13	72
ND to MN	MDU Resources Group	Pipeline	Announced	2016	Central,Midwest	700	400	400

111 http://www.eia.gov/naturalgas/pipelines/EIA-NaturalGasPipelineProjects.xls, accessed October 23, 2014.

Project Name	Pipeline Operator Name	Type	Status	Year In Service Date	Region(s)	Cost (millions)	Miles	(MMcf/d)
Upstate Pipeline Project	Millennium Pipeline Co	Expansion	Announced	2016	Northeast	-	60	-
Continent to Coast Expansion Project	Transmission System	Expansion	Announced	2016	Canada,Northeast	-	-	132
NEXUS Gas Transmission	Spectra Energy	Pipeline	Announced	2016	Midwest,Canada	-	250	2,000
Algonquin Incremental Market (AIM)	Algonquin Gas Transmission	Expansion	Announced	2016	Northeast	-	-	342
Broad Run Flexibility Project	Tennessee Gas Pipeline	Expansion	Announced	2015	Northeast	782		590
Woodbridge lateral	Co	Lateral	Approved	2015	Northeast	32	2	264
Project (U2GC) (bi-directional)	Texas Eastern Transmission co	Reversal	Approved	2015	Northeast,Midwest	56		425
Utica Ohio River Project	/American Energy	Expansion	Announced	2015	Northeast	500	52	2,100
Niagara Expansion Project	Tennessee Gas Pipeline	Expansion	Filed	2015	Northeast,Canada	28	3	158
Northern Access 2015 Project	National Fuel Gas Supply Corp	Expansion	Filed	2015	Northeast	66		140
Salem Lateral Project	Algonquin Gas Transmission	Lateral	Applied	2015	Northeast		1	115
SEML reversal	ANR Pipeline	reversal	Announced	2015	Northeast,Southwest	100		1,000
Tuscarora Lateral Project	Empire Pipeline	Lateral	Filed	2015	Northeast	44	17	54
Modernization Project	Storage	Expansion	Filed	2015	Northeast		23	175
Lebanon lateral project phase 2	ANR Pipeline	reversal	Announced	2015	Northeast			290
Utica Backhaul Transportation	Tennessee Gas Pipeline	Reversal	Announced	2015	Northeast,Southeast	121	-	352
Virginia Southside Expansion	Transcontinental Gas Pipeline	Expansion	Approved	2015	Northeast	300	100	270
WRIGHT INTERCONNECT PROJECT	Iroquois gas pipeline	Expansion	Announced	2015	Northeast	-	-	650
East Side Expansion Project	Storage	Expansion	Filed	2015	Northeast	-	19	310
Leidy Southeast Expansion	Transcontinental Gas Pipeline	Expansion	Applied	2015	Northeast	610	30	525
Constitution Pipeline	Constitution Pipeline Co	Pipeline	Filed	2015	Northeast	683	121	650
Transco Rockaway Delivery Project	Transcontinental Gas Pipeline	Pipeline	Construction	2014	Northeast	12	3	647
Lebanon lateral project	ANR Pipeline	reversal	Announced	2014	Northeast			350
TETCO TEAM 2014 Expansion	Texas Eastern Transmission	Expansion	Approved	2014	Northeast	500	34	600
Line MB extension project	Columbia Gas Transmission	Expansion	Construction	2014	Northeast	132	21	
Mid-Atlantic Connector Expansion	Transcontinental Gas Pipeline	Expansion	Construction	2014	Northeast	55	1	142
White Oak Lateral Project	Eastern Shore Natural Gas	Lateral	Construction	2014	Northeast		6	55
Rose Lake Expansion Project	Tennessee Gas Pipeline	Expansion	Construction	2014	Northeast	92	-	230
Northeast Connector	Transcontinental Gas Pipeline	Expansion	Construction	2014	Northeast			100
Natrium to Market Project	Dominion Transmission Inc	Expansion	Construction	2014	Northeast	42	-	185
Texas Eastern Natrium Lateral Project	Texas Eastern Transmission	Lateral	Announced	2014	Northeast		10	400

Appendix B – SNL Financial Marcellus & Utica Area Transportation Projects

Project Name	Pipeline	Project Type	Fuel Type	Year in Service	Capacity (Dth)	Development Status	Estimated Construction Cost ($000)
Pennstar Pipeline	UGI Energy Services Inc., Columbia Pipeline Group	Pipeline	Natural Gas	2014	500,000	Announced	-
Susquehanna to Lackawanna Gathering System	Boardwalk Field Services	Pipeline	Natural Gas	2014	292,113	Announced	$ 90,000
Constitution Pipeline Project	Cabot Oil & Gas Corp., Williams Partners LP	Pipeline	Natural Gas	2015	650,000	Early Development	$ 683,000
Laurel Mountain Midstream Pipeline Project	Williams Cos. Inc., Atlas Energy LP	Pipeline	Natural Gas	2015	876,339	Construction Begun	-
Leidy Southeast Expansion Pipeline	Transcontinental Gas Pipe Line	Pipeline	Natural Gas	2015	469,000	Early Development	$ 600,000
Tioga County Extension Phase 2 Project (TCE2)	Empire Pipeline Inc	Pipeline	Natural Gas	2015	260,000	Announced	$ 135,000
Tuscarora Lateral	National Fuel Gas Supply Corp, Empire Pipeline Inc	Pipeline	Natural Gas	2015	53,554	Early Development	$ 45,000
West to East – Overbeck to Leidy Project (Phase I)	National Fuel Gas Supply Corp	Pipeline	Natural Gas	2015	200,000	Announced	-
West to East – Overbeck to Leidy Project (Phase II)	National Fuel Gas Supply Corp	Pipeline	Natural Gas	2015	225,000	Announced	-
Westside Expansion	National Fuel Gas Supply Corp	Pipeline	Natural Gas	2015	175,000	Announced	-
Atlantic Sunrise Expansion/Central Penn North	Transcontinental Gas Pipe Line	Pipeline	Natural Gas	2017	850,000	Announced	-
Atlantic Sunrise Expansion/Central Penn South	Transcontinental Gas Pipe Line	Pipeline	Natural Gas	2017	850,000	Announced	-
Commonwealth Pipeline	WGL Holdings Inc., UGI Energy Services Inc., Crestwood LP	Pipeline	Natural Gas	-	800,000	Postponed	$ 1,000,000
Dominion Keystone Project	Dominion Transmission Inc	Pipeline	Natural Gas	-	973,710	Announced	-
Lycoming East Gathering Pipeline	PVR Partners LP	Pipeline	Natural Gas	-	370,010	Early Development	$ 80,000
Trunkline Phase III	PVR Partners LP	Pipeline	Natural Gas	-	836,417	Construction Begun	-
Ohio Pipeline Energy Network (OPEN) Project	Spectra Energy Corp	Pipeline	Natural Gas	2015	550,000	Early Development	468,000
Eureka Hunter Pipeline	Magnum Hunter Resources Corp.	Pipeline	Natural Gas	-	194,742	Construction Begun	-
Clarksville Gas and Water Natural Gas Interconnect Pipeline Project	Texas Gas Transmission LLC	Pipeline	Natural Gas	2015	52,000	Announced	-
Renaissance Gas Transmission	Spectra Energy Corp	Pipeline	Natural Gas	2016	1,217,137	Announced	-
Giles County Project	Columbia Gas Transmission LLC	Pipeline	Natural Gas	2014	46,000	Advanced Development	22,700
Eureka Hunter Pipeline	Magnum Hunter Resources Corp.	Pipeline	Natural Gas	-	194,742	Construction Begun	-
Marcellus / Tygart Valley Pipeline	Crestwood LP	Pipeline	Natural Gas	-	194,742	Construction Begun	70,000

SNL guarantees coverage on natural gas pipeline projects longer than 10 miles, storage projects over 0.1 Bcf, and LNG terminals filed with FERC. SNL does not comprehensively cover projects below this threshold.

Appendix C: Examples of Marcellus & Utica Gathering & Processing Projects

Project	Lead Sponsor(s)	Location	Capacity (MMcf/day)
Gathering			
Northern System Gathering Assets	Rice Energy	Marcellus	1,000
Susquehanna Supply Hub	Williams	Marcellus	1,000
Hess Gathering Facilities	PVR Partners	Utica	450
Processing[112]			
Houston	MarkWest	Marcellus	200
Majorsville	MarkWest	Marcellus	200
Mobley	MarkWest	Marcellus	400
Sherwood	MarkWest	Marcellus	600
Keystone	MarkWest	Marcellus	200
Cardiz	MarkWest	Utica	200
Seneca	MarkWest	Utica	400
Utica East Ohio Phase 2	Access	Utica	200
Utica East Ohio Phase 3	Access	Utica	200
Utica East Ohio Phase 4	Access	Utica	400
Natrium II	Blue Racer Midstream LLC	Utica	200
Pennant	Nisource Midstream & Hilcorp Energy	Utica	200
Three Rivers Midstream	Williams & Shell	Marcellus/Utica	200

112 Additional fractionation, gathering and liquids storage facilities are included in the processing projects.

Appendix D – NGL Transportation Projects

Project	Sponsor(s)	Destination	Capacity (bbls/day)	Operational Date
ATEX	Enterprise	Gulf Coast	190,000	Late 2013
Bluegrass NGL[113]	Williams & Boardwalk	Gulf Coast	200,000	Late 2015
Utica Marcellus Texas	Kinder Morgan & MarkWest	Gulf Coast	150,000	2016
Mariner East	Sunoco	East Coast	70,000	Early 2015
Mariner West	Sunoco	Ontario	50,000	Late 2013
Mariner South	Sunoco	Gulf Coast	200,000	Early 2015

113 Although Williams and Boardwalk announced that they had suspended further capital investment in Bluegrass on April 29, 2014, the sponsors continue to discuss the project with potential customers. The three Sunoco projects consist of Mariner East, Mariner West and Mariner South.

Appendix E – Gulf Coast Petrochemical Projects[114]

NORTH AMERICA ETHYLENE EXPANSIONS BASED ON SHALE GAS

Company	**Project**	**Capacity**	**Location**	**Start-up**
Sasol	New cracker	1.5m tonnes	Lake Charles, Louisiana	2017
Occidental Chemical/Mexichem	New cracker	544,000 tonnes	Ingleside, Texas	Feb 2017
ExxonMobil Chemical	New cracker New cracker	1.5m tonnes	Baytown, Texas	Late 2016
Chevron Phillips Chemical	New cracker	1.5m tonnes	Cedar Bayou, Texas	Mid-late 2017
Dow Chemical	New cracker	1.5m tonnes	Freeport, Texas	2017
Shell	New cracker	World-scale	Monaca, Pennsylvania	2019-2020*
Formosa Plastics	New cracker	1.2m tonnes	Point Comfort, Texas	2017
Williams	Expansion	272,158 tonnes	Gelsmar, Louisiana	Q4 2013**
INEOS	Debottleneck	115,000 tonnes	Chocolate Bayou, Texas	End 2013
Westlake Chemical	Expansion	113,399 tonnes	Lake Charles, Louisiana	2014
Westlake Chemical	Expansion	82,000 tonnes	Calvert City, Kentucky	Q2 2014
Lyondell Basell	Expansion	363,000 tonnes	La Porte, Texas	Mid-2014
Lyondell Basell	Expansion	113,000 tonnes	Channelview, Texas	2015
Lyondell Basell	Expansion	363,000 tonnes	Corpus Christi, Texas	Late 2015
BASF Fina Petrochemicals	Expansion	NA	Port Arthur, Texas	2014
Considered expansions				
Lyondell Basell	New cracker	World-scale	US	NA
Hanwha Chemical	New cracker	World-scale	US	NA
Axiall	New cracker	World-scale	US	NA
Indorama Ventures	New cracker	1.3m tonnes	US	NA
SABIC	New cracker	World-scale	US	NA
Odebrecht	New cracker	World-scale	US	NA
PTT Global Chemical	New cracker	World-scale	US	NA
Aither Chemicals	New cracker	272,000 tonnes	US Northeast	2016
NOVA Chemicals	Expansion	NA	Corunna, Ontario, Canada	NA

[114] ICIS, *Shell picks Linde for FEED on proposed cracker in Pennsylvania*, April 18, 2014. Based on Company press releases and ICIS analysis.

SEC INTERROGATORY #3

INTERROGATORY

[Ex.A-3-1, p.23]

Please provide a step-by-step description of how Enbridge calculated the average landed gas cost. Please provide details of all assumptions made.

RESPONSE

The following steps were used to conduct the landed cost analysis:

1. Determine assumptions – for each transportation path and procurement point, identify the relevant transportation tolls, fuel ratio, monthly commodity price, foreign exchange rate and other charges. These items are set out in Appendices B and C (updated) of Exhibit A, Tab 3, Schedule 1.

2. Standardize assumption inputs – convert all relevant inputs to GJ and convert all monetary units to Canadian dollars per GJ.

3. Determine monthly load profiles - monthly load profiles are determined for each transportation path analyzed. For purposes of this analysis, all transportation paths are assumed to be utilized at a 100% load factor.

4. Determine monthly cost profiles – monthly cost profiles for fuel are determined by multiplying the monthly load profile by the corresponding fuel ratio and the product is then multiplied by the corresponding monthly commodity cost. All other cost profiles are determined by multiplying the monthly load profile by the corresponding monthly unit costs.

5. Determine annual cost profiles – annual cost profiles are determined by summing the monthly cost profile for each calendar year.

6. Determine annual load profiles – annual load profiles are determined by summing the monthly load profile for each calendar year.

7. Determine annual unit cost profiles – annual unit cost profiles are determined by dividing the annual cost for each year by the corresponding annual load.

Witnesses: J. LeBlanc
A. Welburn

TRANSCANADA INTERROGATORY #1

INTERROGATORY

Reference:

i) Application, Exhibit A, Tab 3, Schedule 1, Page 14, Paragraphs 39 – 41

ii) Application, Exhibit A, Tab 3, Schedule 1, Page 15, Paragraph 42

Preamble:

In Reference i), Enbridge notes NEXUS' supplemental open seasons and the expansion of the project's size and scope due to its popularity, occurring after Enbridge's participation in the initial NEXUS open season. Enbridge then states: "[…] without support from major shippers such as Enbridge, the new infrastructure build […] would not proceed."

In Reference ii), Enbridge states that its participation in the NEXUS project "supports the development of new natural gas infrastructure that benefits its customers and the broader Ontario market."

Request:

a) If the OEB does not approve the cost consequences of Enbridge's transportation contract, does Enbridge believe the NEXUS project will proceed? Please explain.

b) Does Enbridge continue to believe that its participation in the initial NEXUS open season was critical to the viability of the proposed project, as stated in the application? If yes, why?

c) Why does the NEXUS project benefit the "broader Ontario market" when major incremental capacity has also been planned or will be provided by alternative pipelines that will also connect incremental Marcellus and/or Utica supply to Ontario such as the Niagara / Chippawa expansions, the Rover Pipeline, and the Constitution Pipeline? Please explain.

Witnesses: J. LeBlanc
A. Welburn

RESPONSE

a) See response to CCC Interrogatory #4 at Exhibit I.T1.EGDI.CCC.4.

b) As stated at Exhibit A, Tab 3, Schedule 1, page 15, paragraphs 41 and 42, Enbridge believes that the commitments made by major shippers such as Enbridge in the initial NEXUS open season were critical to the decision to proceed with the proposed project. Enbridge and Union's committed capacity represents a significant portion of the volumes of the NEXUS pipeline, as discussed in response to BOMA Interrogatory #2 at Exhibit I.T1.EGDI.BOMA.2.

c) NEXUS provides additional connectivity to Marcellus/Utica and supplier diversity to Dawn and the Ontario market.

Witnesses: J. LeBlanc
A. Welburn

TRANSCANADA INTERROGATORY #2

INTERROGATORY

Reference:

i) Application, Exhibit A, Tab 3, Schedule 1, Page 17, Paragraph 46

Preamble:

In Reference i), Enbridge states that the service awarded to Enbridge consists of "110,000 Dth per day of firm transportation service […]."

In the same paragraph, Enbridge notes their "option to increase contracted capacity to as much as 150,000 Dth per day, subject to certain conditions, on or before November 1, 2020."

Enbridge is requesting pre-approval of the cost consequences of their commitment on NEXUS. TransCanada seeks to clarify the cost consequences for which Enbridge is seeking approval.

Request:

a) Is Enbridge requesting pre-approval of the cost consequences of 110,000 Dth/d of firm transportation service, or 150,000 Dth/d of firm transportation service?

b) Does Enbridge intend to utilize the option to increase its contractual commitment by November 1, 2020? Please explain.

c) Please specify the specific circumstances or conditions necessary for Enbridge to utilize the 150,000 Dth/d option.

RESPONSE

a) See response to Board Staff Interrogatory #1 at Exhibit I.T1.EGDI.STAFF.1.

b) Enbridge has not made any decision on its option to increase its capacity on NEXUS at this time.

Witnesses: J. LeBlanc
A. Welburn

c) Any number of changes in Enbridge’s overall supply environment could lead Enbridge to choose to increase its capacity on NEXUS. Enbridge negotiated the option to retain flexibility and the ability to access anchor shipper privileges should an increased commitment make sense for its gas supply portfolio in the future. Enbridge is not asking for pre-approval for exercising this option at this time because it currently sees the 110,000 Dth/d commitment as striking the appropriate balance in its overall supply portfolio.

Witnesses: J. LeBlanc
A. Welburn

TRANSCANADA INTERROGATORY #3

INTERROGATORY

Reference:

i) Application, Exhibit A, Tab 3, Schedule 1, Appendix C, Page 1 of 1

Preamble:

Enbridge's most recently filed (May 2015) Landed Cost Analysis assumed an average foreign exchange rate of $1 US = $1.248 CDN from 2017 - 2032.
In light of significant changes to the Canadian-US exchange rate since the filing of the original application, TransCanada seeks updated information.

Request:

a) Please provide an updated Landed Cost Analysis utilizing the same format as in the reference above, and incorporating any changes that may have occurred since the most recent analysis, including - but not limited to - an updated foreign exchange assumption.

RESPONSE

The updated Landed Cost Analysis is included in the tables below. Relative to the May 2015 Landed Cost Analysis Enbridge has updated the following assumptions to reflect current information as of August 2015:

- Commodity prices
- Foreign exchange rate
- TransCanada tolls
- Fuel ratios

Witnesses: J. LeBlanc
A. Welburn

August 2015 - NEXUS Landed Cost Analysis for Updated Information ($CAD/GJ)

Pipeline	Pricing Point	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average (August 2015 Update)
TCPL from Niagara	Niagara	3.98	3.72	3.80	3.97	4.28	4.46	4.66	4.87	5.05	5.22	5.41	5.64	5.88	6.12	6.36	6.56	5.00
Dawn	Dawn	4.16	3.91	3.98	4.16	4.32	4.51	4.71	4.91	5.09	5.28	5.47	5.70	5.94	6.18	6.42	6.61	5.08
Vector	Chicago	4.41	4.25	4.30	4.40	4.57	4.76	4.96	5.17	5.35	5.52	5.72	5.96	6.20	6.44	6.68	6.88	5.35
NEXUS (-15%)	Dominion South	4.32	4.16	4.37	4.49	4.68	4.87	5.07	5.26	5.47	5.64	5.84	6.08	6.32	6.57	6.81	7.01	5.43
Rover	Dominion South	4.36	4.20	4.40	4.52	4.70	4.89	5.10	5.28	5.49	5.66	5.86	6.10	6.34	6.59	6.83	7.02	5.46
NEXUS (Anchor)	Dominion South	4.42	4.26	4.47	4.59	4.77	4.97	5.17	5.36	5.56	5.74	5.94	6.18	6.42	6.67	6.91	7.11	5.53
NEXUS (Base Case)	Dominion South	4.44	4.28	4.48	4.61	4.79	4.98	5.19	5.37	5.58	5.76	5.96	6.20	6.44	6.69	6.93	7.13	5.55
NEXUS (+15%)	Dominion South	4.56	4.40	4.60	4.72	4.91	5.10	5.30	5.49	5.70	5.87	6.07	6.32	6.56	6.81	7.05	7.25	5.67
ANR East	Dominion South	4.83	4.66	4.86	4.98	5.16	5.35	5.56	5.75	5.96	6.13	6.33	6.57	6.82	7.07	7.31	7.51	5.93
Alliance	CREC	4.78	4.83	4.95	5.22	5.40	5.60	5.81	6.03	6.23	6.41	6.62	6.87	7.13	7.39	7.64	7.86	6.17
TCPL	Empress	5.34	5.38	5.50	5.77	5.94	6.14	6.35	6.56	6.75	6.92	7.12	7.36	7.61	7.86	8.11	8.31	6.69

August 2015 - Average Commodity Prices ($CAD/GJ)

Pricing Point	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
Dawn	4.16	3.91	3.98	4.16	4.32	4.51	4.71	4.91	5.09	5.28	5.47	5.71	5.94	6.18	6.42	6.50	5.12
Chicago	4.16	3.99	4.04	4.14	4.31	4.50	4.70	4.90	5.08	5.25	5.44	5.68	5.91	6.15	6.39	6.47	5.11
Dominion South	3.30	3.15	3.36	3.48	3.67	3.86	4.06	4.24	4.44	4.61	4.80	5.03	5.26	5.50	5.74	5.83	4.45
CREC	3.26	3.29	3.41	3.66	3.83	4.02	4.22	4.42	4.60	4.77	4.96	5.19	5.43	5.67	5.91	5.99	4.60
Empress	3.41	3.45	3.57	3.82	3.99	4.18	4.37	4.58	4.76	4.93	5.12	5.35	5.58	5.82	6.06	6.14	4.76
Niagara	3.70	3.45	3.52	3.69	3.99	4.18	4.38	4.58	4.76	4.93	5.12	5.36	5.59	5.83	6.07	6.20	4.75

August 2015 - Average Foreign Exchange

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
CAD/USD	1.291	1.285	1.276	1.268	1.262	1.258	1.258	1.260	1.263	1.266	1.270	1.274	1.278	1.282	1.282	1.281	1.271

August 2015 - Fuel Ratio

Pipeline	Path	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
ANR East	Leesville-to-Dawn	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%
Rover	Leesville-to-Dawn	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%
Vector	Milford-to-Dawn	0.27%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.45%	0.41%
Vector	Chicago-to-Dawn	0.57%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.18%	1.05%
NEXUS (-15%)	Kensington-to-Milford	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (Base Case)	Kensington-to-Milford	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (+15%)	Kensington-to-Milford	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (Anchor)	Kensington-to-Milford	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
Alliance	CREC-to-Border	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%
Alliance	Border-to-Chicago	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
TCPL	Empress-to-Enbridge SWDA	3.99%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.27%	4.21%
TCPL	Niagara-to-Kirkwall	0.05%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.26%	0.22%
Union	Kirkwall-to-Dawn (C1)	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%	0.16%

August 2015 - Transportation Toll ($CAD/GJ)

Pipeline	Path	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
ANR East	Leesville-to-Dawn	1.432	1.425	1.415	1.406	1.399	1.395	1.395	1.397	1.400	1.404	1.409	1.413	1.417	1.421	1.421	1.420	1.411
Rover	Leesville-to-Dawn	0.979	0.975	0.967	0.961	0.957	0.954	0.954	0.955	0.957	0.960	0.963	0.966	0.969	0.972	0.972	0.971	0.965
Vector	Milford-to-Dawn	0.196	0.195	0.193	0.192	0.191	0.191	0.191	0.191	0.191	0.192	0.193	0.193	0.194	0.194	0.194	0.194	0.193
Vector	Chicago-to-Dawn	0.220	0.219	0.218	0.216	0.215	0.215	0.215	0.215	0.215	0.216	0.217	0.217	0.218	0.219	0.219	0.218	0.217
NEXUS (-15%)	Kensington-to-Milford	0.737	0.734	0.729	0.724	0.720	0.718	0.719	0.720	0.721	0.723	0.725	0.728	0.730	0.732	0.732	0.731	0.726
NEXUS (Base Case)	Kensington-to-Milford	0.857	0.853	0.846	0.841	0.837	0.835	0.835	0.836	0.838	0.840	0.843	0.845	0.848	0.850	0.850	0.850	0.844
NEXUS (+15%)	Kensington-to-Milford	0.976	0.972	0.964	0.958	0.954	0.951	0.951	0.952	0.954	0.957	0.960	0.963	0.966	0.969	0.969	0.968	0.962
NEXUS (Anchor)	Kensington-to-Milford	0.838	0.834	0.828	0.823	0.819	0.817	0.817	0.818	0.820	0.822	0.825	0.827	0.830	0.832	0.832	0.831	0.826
Alliance	CREC-to-Border	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560	0.560
Alliance	Border-to-Chicago	0.478	0.476	0.472	0.469	0.467	0.466	0.466	0.466	0.467	0.469	0.470	0.472	0.473	0.474	0.474	0.474	0.471
TCPL	Empress-to-Enbridge SWDA	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656	1.656
TCPL	Niagara-to-Kirkwall	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221
Union	Kirkwall-to-Dawn (C1)	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040

August 2015 - ACA ($CAD/GJ)

Pipeline	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
Rover	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
NEXUS	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
ANR East	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

August 2015 - Abandonment Surcharge ($CAD/GJ)

Pipeline	Path	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Average
Alliance	CREC-to-Border	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211	0.0211
Vector	Michigan Border-to-Dawn	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
TCPL	Empress-to-Enbridge SWDA	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327	0.1327
TCPL	Niagara-to-Kirkwall	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068

Witnesses: J. LeBlanc
A. Welburn

VECC INTERROGATORY #13

INTERROGATORY

Reference: A/T3/S1/pg.17

a) EGDI appears to have negotiated a reservation rate of 0.70 per Dth which is different than that of Union (0.77). Does EGDI know why it has been able to negotiate a lower reservation rate? If so please explain.

RESPONSE

Enbridge was not involved in the negotiations between Union and NEXUS and cannot comment on the reason for the difference in reservation rates.

Witnesses: J. LeBlanc
A. Welburn

VECC INTERROGATORY #14

INTERROGATORY

Reference: All

a) Please provide all correspondence between Alliance and Vector and EGDI with respect to the de-contracting on their respective Pipelines.

b) Does EGDI's have any understanding as to how the capacity released will be utilized by Alliance/Vector?

RESPONSE

a) Enbridge decided not to renew its Alliance capacity (75,000 MMcf/d) beyond November 2015. This decision was made in November 2010 in accordance with the renewal terms of Enbridge's contract on Alliance. The Alliance capacity was not renewed due to concerns about the economics of the path based on available information at the time. Please see attached for Enbridge's notice of non-renewal to Alliance.

   Enbridge holds 100,000 Dth/d of Vector capacity through an assignment from DTE which expires October 31, 2015. Enbridge decided not to renew this capacity in December 2012 when a decision had to be made in accordance with the renewal terms of Enbridge's assigned capacity on Vector. The decision to not renew this capacity was made given that Enbridge would no longer have Alliance capacity to feed Vector. Enbridge informed DTE of its decision to let the assignment expire by phone therefore there is no correspondence available.

b) Enbridge does not have any insight into how the capacity released will be utilized.

Witnesses: J. LeBlanc
A. Welburn

Fax Call Report

HP LaserJet **M5035 MFP Series**
Page 1

Fax Header Information

Enbridge Gas Distribution.
416-495-5802
Nov-30-2010 08:02 AM

Job	Date/Time	Type	Identification	Duration	Pgs	Result
434	Nov-30-2010 07:59 AM	Send	814032347040	1:47	3	Success

Enbridge Gas Distribution Inc.
500 Consumer Road
North York ON M2J 1P8
Tel 416 495 5255
Fax 416 495 5802
www.enbridge.com/gas

ENBRIDGE

fax

To: Nancy Harrington	From: Malini Giridhar
Company: Alliance Pipeline	No. of pages (including this cover): 3
Department:	Date: 2010-
Fax: 403-234-7040	If this transmission is not received in good order, please call: Lucy Wakabayashi 416 495 5794

NOTICE OF EXTENSION

FIRM TRANSPORTATION AGREEMENT NO. US5033
(the "TA")

BETWEEN:

ALLIANCE PIPELINE L.P.
(the "Transporter")

And

ENBRIDGE GAS DISTRIBUTION INC.
(the "Shipper")

Pursuant to Section 2 of the TA written notice is hereby given by the Shipper to the Transporter of the Shipper's election to:

☐ Extend the term of the TA for a period of _____ year(s)* from December 1, 2015 to November 30, _________ .
[*extension must be for a minimum of one year.]

OR

☑ Not extend the term of the TA.

Dated this 26 day of November, 2010.

(Must be dated and received by the Transporter no later than 5:00 p.m. Central Standard Time, December 1, 2010)

ENBRIDGE GAS DISTRIBUTION
(Shipper)

Per: Malini Giridhar
Name: Malini Giridhar
Title: Director, Energy Supply & Policy

ATTENTION: Nancy Harrington, Alliance Pipeline
Fax: 403-234-7040
Email: nancy.harrington@alliancepipeline.com

NOTICE OF EXTENSION

TRANSPORTATION SERVICE AGREEMENT NO. CA1033
(the "TSA")

BETWEEN:

ALLIANCE PIPELINE LIMITED PARTNERSHIP
(the "Transporter")

and

ENBRIDGE GAS DISTRIBUTION INC.
(the "Shipper")

Pursuant to Section 6.2 of the TSA written notice is hereby given by the Shipper to the Transporter of the Shipper's election to:

☐ Extend the term of the TSA for a period of _____ year(s)* from December 1, 2015 to November 30, _________ .
[*extension must be for a minimum of one year.]

OR

☑ Not extend the term of the TSA.

Dated this 26 day of November, 2010.

(Must be dated and received by the Transporter no later than 5:00 p.m. Central Standard Time, December 1, 2010)

ENBRIDGE GAS DISTRIBUTION
(Shipper)

Per: Malini Giridhar
Name: Malini Giridhar
Title: Director, Energy Supply & Policy

ATTENTION: Nancy Harrington, Alliance Pipeline
Fax: 403-234-7040
Email: nancy.harrington@alliancepipeline.com

VECC INTERROGATORY #15

INTERROGATORY

Reference: All

a) Please explain how EGDI's Gas Supply memorandum anticipates the NEXUS contract (that is how it alters or changes the gas supply plan if the contract were not approved).

RESPONSE

The Gas Supply Memorandum filed at Exhibit A, Tab 3, Schedule 3 addresses the years 2014-2015. NEXUS will not be in service during that time. The Gas Supply Memorandum discusses the NEXUS contract pre-approval application (page 24), but does not address how the NEXUS supply will be included within the gas supply portfolio, because the gas supply portfolio for years following 2015 is not addressed in the Gas Supply Memorandum. As explained in the pre-filed evidence, for Enbridge the volumes anticipated through the NEXUS commitment replace volumes that would otherwise be supplied from Chicago using the existing Vector capacity. That Vector capacity can be seen in the chart at page 32 of the Gas Supply Memorandum.

Witnesses: J. LeBlanc
A. Welburn

VECC INTERROGATORY #16

INTERROGATORY

Reference: A/T3/S1/pg.31

a) Please explain why in Table 3 Enbridge Gas Supply Acquisition absent NEXUS shows no increase in supplies brought in from Niagara.

RESPONSE

NEXUS capacity will displace supply that would have otherwise been procured at Chicago as discussed in the pre-filed evidence at Exhibit A, Tab 3, Schedule 1, page 32, paragraph 82. Tables 3 and 4 at Exhibit A, Tab 3, Schedule 1 assume that Enbridge does not increase its reliance on supply from Niagara over the forecast period. Doing so would negatively impact diversification of the Enbridge gas supply portfolio in the scenarios with and without NEXUS. Further discussion of the diversification benefits of NEXUS are provided in the response to Board Staff Interrogatory #7 at Exhibit I.T1.EGDI.STAFF.7.

Witnesses: J. LeBlanc
A. Welburn

VECC INTERROGATORY #17

INTERROGATORY

Reference: EGDI A/T3/S1/pg.32; Union A/pgs. 15-18

a) The evidence is unclear as to whether the pathway chosen from NEXUS to Dawn is different as between Union and EGDI. Please provide a single detailed map showing the delivery point of the NEXUS pipeline (Willow Run) and the Dawn delivery point for each of the two utilities.

b) If there are differences in the route chosen between Willow Run and Dawn please provide a table which shows each toll segment between the receipt point of the NEXUS pipeline and the receipt point of Dawn.

c) If there are differences in the route, please explain and contrast why each utility has chosen its respective route.

RESPONSE

a) Please refer to Union's pre-filed evidence at Exhibit A, page 16, Figure 3-2.

b) Enbridge assumes this question should read: "…between the receipt point of NEXUS and the delivery point of Dawn." The table below sets out the toll segments and corresponding tolls associated with the NEXUS path to Dawn applicable to the Enbridge path. Note that commodity costs, fuel ratios and other costs can impact the economics of a particular path.

Toll Segment	Toll
NEXUS Pipeline: Kensington, OH to Milford Junction, MI (Vector Interconnection point)	$0.70 USD Dth/day
Vector Pipeline: Milford Junction, MI to Dawn, ON	$0.16 USD Dth/day

Enbridge could have contracted for NEXUS capacity from Kensington, OH all the way to Dawn, ON. NEXUS would then likely have taken additional transportation capacity on Vector to complete the path for Enbridge's capacity. Enbridge would then have de-contracted a corresponding amount of Vector capacity. Enbridge however decided to retain control of its own capacity contracting on Vector. Enbridge felt this strategy better protected ratepayers in the event that NEXUS did

Witnesses: J. LeBlanc
A. Welburn

not get built as Enbridge would retain its capacity on Vector as contracted for today from Chicago to Dawn. When NEXUS comes into service Enbridge's Vector capacity will be restructured. This restructuring is discussed in Enbridge's pre-filed evidence at Exhibit A, Tab 3, Schedule 1, paragraph 83.

Witnesses: J. LeBlanc
A. Welburn

VECC INTERROGATORY #10

INTERROGATORY

Reference: A/S3/pg.12

a) Please explain the relevance of the Texas Easter Appalachian Lease (TEAL) to the supply options available for a NEXUS pipeline.

RESPONSE

As discussed at Exhibit A, Schedule 3, page 12, the lease by NEXUS on the Texas Eastern Appalachian Lease ("TEAL") project will provide NEXUS shippers with additional access to Marcellus and Utica supply options in Ohio, West Virginia, and Pennsylvania via a new interconnection between NEXUS and the Texas Eastern Transmission, LP ("Texas Eastern") system at Kensington, Ohio. Specifically, as stated in the Draft Resource Report filed by Texas Eastern with the FERC in June 2015:

> The TEAL Project will create additional firm pipeline capacity necessary to deliver 950,000 dekatherms per day ("Dth/d") of natural gas production from receipt points in the Appalachian Basin in Texas Eastern's Market Zone 2 between Berne, Ohio, and Braden Run, Pennsylvania, to a new connection with the NEXUS Project near Kensington in Columbiana County, Ohio…The capacity created by the TEAL Project will be contracted to NEXUS for use as part of the NEXUS Project and will provide NEXUS shippers with seamless transportation service from the portion of Texas Eastern's system extending from Berne, Ohio to Braden Run, Pennsylvania to growing markets along the NEXUS Project in northern Ohio, southeastern Michigan, and the Dawn Hub in Ontario.

Witness: J. Stephens

VECC INTERROGATORY #11

INTERROGATORY

Reference: A/S3

a) Based on EIA estimates what is the relationship between proven reserves of the Utica/Marcellus basin and capacity of the proposed NEXUS pipelines (e.g. how many years of operation would be required of the line to move proven reserves or equivalent).

b) Please provide the same for the proven/probable reserves.

RESPONSE

a) Sussex assumes the question refers to EIA's estimate of "proved reserves". As stated on Exhibit A, Schedule 3, page 25: the EIA's aggregate 2013 proved reserves estimate for Ohio, Pennsylvania, and West Virginia was approximately 64,700 Bcf. Assuming a NEXUS daily pipeline capacity of 1.5 Bcf/day or approximately 550 Bcf/year and dividing that annual amount (i.e., 550 Bcf/year) into the proved reserve estimate (i.e., 64,700 Bcf) results in 118 years.

b) Sussex assumes the question refers to the PGC's estimate of probable resources in the Atlantic Shale region. As stated on Exhibit A, Schedule 3, page 29: the PGC's probable resource in the Atlantic Shale is approximately 328,000 Bcf. Assuming a NEXUS daily pipeline capacity of 1.5 Bcf/day or approximately 550 Bcf/year and dividing that annual amount (i.e., 550 Bcf/year) into the probable resources estimate (i.e., 328,000 Bcf) results in approximately 600 years.

Witness: J. Stephens (Sussex)

VECC INTERROGATORY #12

INTERROGATORY

Reference: A/S5

a) What is the effect (directionally) on the basis differential if there is an increase in liquidity at Dawn due to the NEXUS pipeline?

b) Please recalculate the landed costs analysis for the "TCPL Niagara to Kirkwall" route using the same basis differential as for the NEXUS routes.

RESPONSE

a) A locational basis differential as is discussed in Exhibit A, Schedule 3 is a function of the difference in natural gas prices between two points. Liquidity and associated metrics are calculated for a particular point. Therefore, although increased liquidity may provide a more efficient and transparent price at a particular point, it (i.e., increased liquidity) may not impact the basis differentials to that point.

b) It appears that this question relates to the Union Gas landed cost analysis.

Witnesses: J. Stephens (Sussex)
J. LeBlanc
A. Welburn

VECC INTERROGATORY #13

INTERROGATORY

Reference: Union A/pg.40; EGDI A/T3/S1/pg.24

a) Please explain why the landed cost analysis summary of Union as compared to EGDI is significantly different.

RESPONSE

Please see Exhibit A, Schedule 3, pages 42 through 47 for a detailed discussion of the landed cost approach developed by Union and Enbridge, including the similarities and differences of each approach.

Since there are different assumptions used by Union and Enbridge (e.g., the source and timing of the natural gas price forecasts), the results reflect the differences in assumptions.

Witness: J. Stephens (Sussex)