

GAS SUPPLY FUTURE CONSIDERATIONS

1. Enbridge Gas Distribution (“Enbridge” or “the Company”) considers the long-term implications of its decisions throughout its gas supply planning process. There are often projects proposed or under development which have the potential to impact the Company’s future gas supply planning options. There are also proposals and discussions from government and industry that can impact the landscape of the natural gas market in which Enbridge operates. For these reasons, Enbridge monitors projects and other developments closely.
2. This evidence provides information about known and expected new infrastructure projects and about trends, policies, proceedings and plans that may impact on Enbridge’s future gas supply planning options.

Contract Terms – Renewals and New Facilities

3. Contract terms for transportation capacity that requires the construction of new facilities are often different from those that utilize existing pipeline capacity. Acquiring transportation capacity generally requires a longer contract term commitment if new capital investment is required, as compared to contracting on existing infrastructure which may not require as great a commitment.¹

Natural Gas Infrastructure Projects

4. The following list of projects could impact Enbridge’s gas supply planning options in the future. This list is not intended to be exhaustive and the Company is not requesting preapproval of the cost consequences related to the projects that are discussed. The intent of the following is to provide some context in relation to the projects that have the potential to impact Enbridge’s gas supply planning.

¹ For further discussion on transportation contracting decisions, see the “Transportation Portfolio” section in Exhibit D1, Tab 2, Schedule 2, Section 2.4.

Witnesses: M. Kirk
D. Small

NEXUS Pipeline

5. The NEXUS Gas Transmission Project (“NEXUS”) is a proposed pipeline that will provide natural gas markets in Ohio, Michigan, Chicago, and the Dawn Hub in Ontario with a direct link to natural gas located within the Appalachian basin. The 1.5 Bcf per day (1,601,514 GJ per day) project requires the construction of approximately 410 kilometres of new greenfield pipeline and includes the efficient use of existing and expanded transportation capacity along the Texas Eastern Transmission, LP system in Ohio, the DTE Pipeline Company (“DTE”) gas transportation system in eastern Michigan, and the Vector Pipeline system in southeastern and eastern Michigan, northern Indiana, eastern Illinois and western Ontario.
6. NEXUS helps to diversify supply being transported to Dawn by offsetting Chicago supply with supply from the Appalachian basin.
7. Enbridge has entered into a Precedent Agreement with the lead developers of NEXUS, DTE and Spectra Energy Transmission, LLC, for 110,000 Dth per day (116,056 GJ per day) of firm transportation capacity scheduled to start in 2017.
8. Preapproval of the cost consequences for the long-term transportation capacity with NEXUS was approved by the Ontario Energy Board (“the Board”) in EB-2015-0175.

Witnesses: M. Kirk
D. Small

King's North Project

9. The King's North Project consists of approximately 11km of new natural gas pipeline that will connect the Albion Pipeline (also referred to as Segment A of Enbridge's GTA Project) to TCPL Mainline through interconnects at Albion Station and west of the Maple compressor station. This project underpins elections made by Enbridge in TCPL's 2016 New Capacity Open Season ("NCOS") to replace 166,000 GJ per day of non-renewable firm transportation from Empress to the Enbridge EDA with 170,000 GJ per day of renewable firm transportation from Parkway to the Enbridge EDA. The King's North Project is also required to implement Phase 2 of the Dawn Access Settlement Agreement.²

10. The project had a target in-service date of November 1, 2016 which was recently delayed to the end of November 2016. In the event of a delay, Enbridge has conditionally extended the non-renewable firm transportation that is being replaced until the earlier of November 1, 2017 or the implementation of the King's North Project.

Vaughan Mainline Expansion Project

11. The Vaughan Mainline Expansion Project includes approximately 12km of new natural gas pipeline which will connect into the King's North Project and existing TCPL Mainline, providing a loop between King's North and the Maple Compressor Station. The project was approved by the National Energy Board ("NEB") on August 4, 2016 and has a target in-service date of November 1, 2017. This project underpins elections made by Enbridge in TCPL's 2017 NCOS which includes 171,066 GJ per day of new short-haul capacity from Parkway of which 97,845 GJ per day will be converted from currently contracted long-haul capacity.

² King's North is part of the "Downstream Infrastructure" referred to in the Phase 2 Preconditions in EB-2014-0323
Witnesses: M. Kirk
D. Small

This capacity will be used to meet system supply demand and to facilitate Phase 2 of the Dawn Access Settlement Agreement.³

12. In the event of a delay to the Vaughan Mainline Expansion Project, Enbridge has negotiated a conditional extension to the conversion from long haul to short haul until the earlier of October 31, 2018 or until all necessary assets for incremental short haul transportation are in-service.

Constitution Pipeline

13. The Constitution Pipeline proposes to transport natural gas produced in northern Pennsylvania (650,000 Dth or 685,786 GJ per day) through the state of New York where it would interconnect with multiple pipelines, including the Iroquois Pipeline which, in turn, interconnects with TCPL in Waddington, near the Enbridge EDA.
14. The Federal Energy Regulatory Commission (“FERC”) issued a certificate of public convenience and necessity for the Constitution Pipeline in December 2014. Since that time, however, planning and construction of the pipeline has been mired in controversy.⁴ In July 2016, FERC approved a request from Constitution Pipeline for an additional two years to complete the pipeline, extending the deadline from December 2016 to December 2018.
15. The completion of Constitution Pipeline would increase the viability of importing United States shale gas directly into eastern Ontario and provide an opportunity to diversify the Company’s supply portfolio, particularly for the Enbridge EDA. Specifically, natural gas transported on the Constitution and Iroquois Pipelines

³ The Vaughan Mainline Expansion Project is part of the “Downstream Infrastructure” referred to in the Phase 2 Preconditions in EB-2014-0323

⁴ The Constitution Pipeline webpage tracks news developments here:
<http://constitutionpipeline.com/news/>

Witnesses: M. Kirk
D. Small

could increase the liquidity of the Iroquois trading hub which would make it a more reliable and cost effective source of supply in the future.

Rover Pipeline

16. The proposed Rover Pipeline would transport 3.25 Bcf per day (3,469,948 GJ per day) from processing plants in West Virginia, eastern Ohio and western Pennsylvania for delivery to markets around the United States via interconnects with existing pipelines. The primary consideration for Enbridge is that Rover is expected to transport up to 1,100,000 Dth per day (1,160,562 GJ per day) to “Market Zone North” – a delivery point on Rover which encompasses the delivery points of Dawn, PEPL North, and Vector. This is expected to have a positive impact on the liquidity at the Dawn Hub.

Other Developments

Enbridge Requirement at Dawn

17. While Enbridge has taken steps to diversify its gas transportation portfolio through increased short haul transportation capacity from Dawn to the franchise area, there is also a benefit to diversifying supply options upstream of Dawn through alternative means. In the near-term, that may include exploring opportunities such as contracting for incremental capacity on the NEXUS⁵ and Link pipelines⁶, as described elsewhere in the 2017 test year evidence. In the longer-term, additional diversity at Dawn could be achieved through contracting for new transportation services, such as TCPL’s long-term fixed-price service described in the section below, or through the acquisition of supply at points other than Dawn such as

⁵ NEXUS deliveries to Dawn offset Chicago deliveries since Vector capacity is utilized

⁶ 2017 arrangements utilizing the Link Pipeline are discussed at Exhibit D1, Tab 2, Schedule 3, Paragraphs 14 and 21

Witnesses: M. Kirk
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Iroquois should it become a more liquid hub (as discussed in the Constitution Pipeline section above).

TCPL's Long-Term Fixed-Price Service^{7, 8}

18. TCPL has discussed the potential for a new long-term fixed-price tolling structure to help natural gas producers in Western Canada compete with producers in the United States northeast. The service will be available to shippers through 10 year contracts. TCPL has indicated the service would be priced to attract incremental supply, resulting in more throughput than would otherwise occur. The incremental utilization of the Mainline could lead to a reduction in tolls for other TCPL services and the incremental supply being transported to Dawn would help to meet an increasing requirement for supply at Dawn.

Cap & Trade and Environmental Regulation

19. Enbridge recognizes the Government of Ontario's efforts to reduce Greenhouse Gas ("GHG") emissions and is committed to helping the Province meet its GHG reduction targets. As part of its emissions reduction program, the Government has passed legislation to establish a Cap and Trade program, set to commence in January 2017.
20. In March 2016, the Ontario Energy Board ("OEB") initiated a consultative process to "develop a natural gas regulatory framework" and "guide the OEB's assessment of natural gas distributors' Cap and Trade Compliance Plans, including the cost

⁷ <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/transcanada-aims-to-launch-discount-toll-system-by-2017/article31172664/> and <http://www.bloomberg.com/news/articles/2016-07-21/transcanada-prepares-to-court-bids-for-cheaper-mainline-gas-toll>

⁸ TCPL's response to Information Request NEB 3.1 in RH-001-2016

Witnesses: M. Kirk
D. Small

consequences of these plans and the mechanism for recovery of costs in rates.”⁹
Enbridge continues to work with the Board in developing the framework.

21. On June 8, 2016, the Ontario government released its Climate Change Action Plan (“CCAP”), outlining the approach to addressing climate change and the investment of funds collected through the Cap and Trade program. The CCAP, legislation, and regulation can be accessed on the government of Ontario webpage.¹⁰ Initiatives discussed in the CCAP that could impact Enbridge and its customers include, *inter alia*:

- Investments in Natural Gas Vehicle infrastructure;
- Commitments to renewable natural gas as part of the energy mix; and
- Changes to building codes to achieve “net-zero carbon emissions” for new homes and small buildings.

22. Currently, it is not clear how the implementation of the Cap and Trade Program and the CCAP will impact on future natural gas consumption. Enbridge will continue to work with the Government on these issues and others that have the potential to impact the Company and its customers.

TCPL’s Proposal to Modernize Storage Transportation Service

23. In February 2016, TCPL filed an application with the NEB seeking amendments to the Storage Transportation Service (“STS”) effective April 1, 2017. As a companion service to long haul FT service, STS provides transportation to and from a storage location and is used to manage both seasonal and daily fluctuations in demand.

⁹ Cap and Trade Initiation Letter filed in EB-2015-0363

¹⁰ <https://www.ontario.ca/page/climate-change-action-plan>
<https://www.ontario.ca/laws/statute/s16007>
<https://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTI3ODA1&statusId=MTk0NDU3&language=en>

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Enbridge has relied on STS as part of its gas supply portfolio for more than 25 years.

24. Enbridge is actively participating in the proceeding and has estimated that the amendments could cause approximately \$1 million in annual incremental transportation costs under the Company's current gas transportation portfolio. The incremental costs may be mitigated post 2020 once Enbridge's commitment to maintain 265,000 GJ per day of long-haul firm transportation on the Mainline expires.
25. Information related to this proceeding can be found in NEB Hearing Order RH-001-2016.

Western Canadian Liquefied Natural Gas Exports

26. There are 20 Liquefied Natural Gas ("LNG") export projects proposed for the British Columbia coast which aim to export LNG primarily to Asian and South American markets, using gas supply from the Western Canadian Sedimentary Basin ("WCSB"). 18 of the 20 projects have been granted export licenses by the NEB, amounting to a total capacity of 306.4 million tonnes per year (for context, current global LNG trade is approximately 245 million tonnes per year). The LNG export projects will face challenges which include competing with established market participants such as the United States and Australia. Should the LNG export project(s) come into effect, WCSB supply available for transportation to eastern Canada will be reduced, all else being equal.

National Fuel's Northern Access 2016 project

27. National Fuel's Northern Access 2016 project will add 490 MMcf per day (523,161 GJ per day) of capacity to TCPL's Chippawa receipt point.

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The project was originally slated for an in-service date of November 1, 2016, but due to a difficult regulatory environment, tight construction timelines, and depressed natural gas prices reducing future supply expectations, National Fuel delayed the in-service date of the project to November 1, 2017.

28. However, following the announcement of the project's delay in February 2016, National Fuel announced in June 2016 that it has arranged with its subsidiary, Seneca Resources, to jointly develop wells in order to bring supply to the Northern Access 2016 project. Despite that, there remains the challenge of gaining regulatory approval for construction of the project.
29. The supply to be imported at Chippawa can be transported to Dawn via the TCPL Mainline and Union system.

2018 TCPL Toll Review

30. In its RH-001-2014 Decision, the NEB approved TCPL's current tolls, and associated Tariff changes, to be in place until December 31, 2020, subject only to a limited toll review prior to 2018 for the 2018 to 2020 period. The intention of the review is to update tolls for changes to revenue requirements and billing determinants.
31. The NEB directed TCPL to file an application prior to December 31, 2017 for approval of tolls for the 2018 to 2020 period. Enbridge will review the tolling implications and actively participate in the proceeding if appropriate.

TCPL Mainline 2013-2030 Settlement Agreement

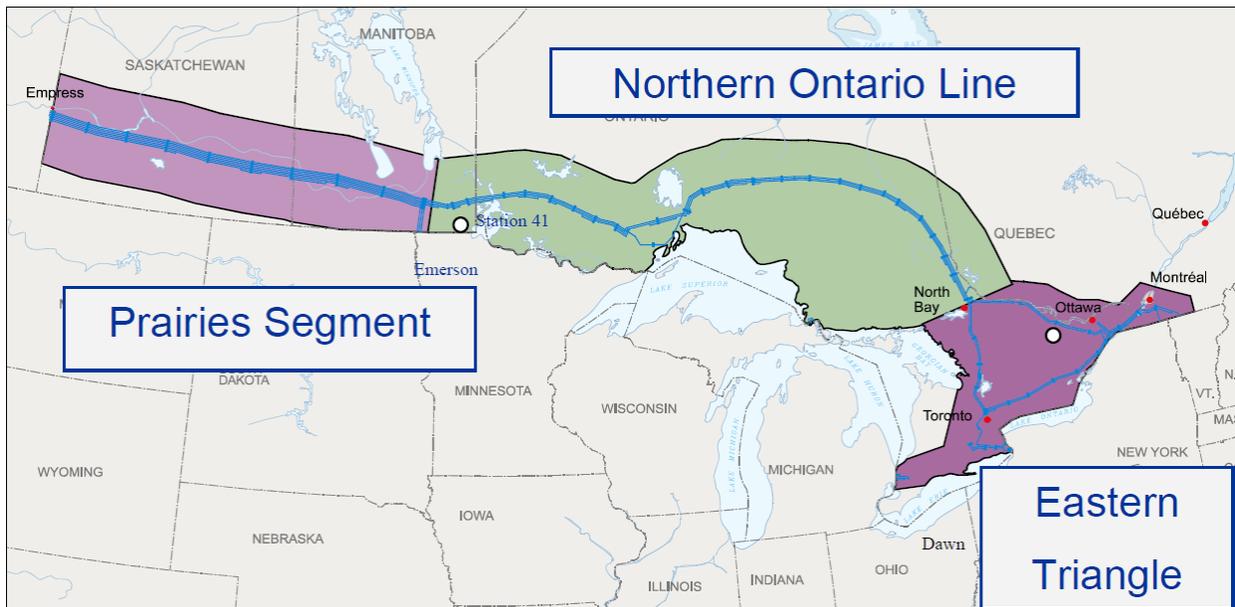
32. In the Settlement Agreement to RH-001-2014, Enbridge agreed to hold long-haul contracts with a minimum contract quantity of 265,000 GJ per day during the period

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of January 1, 2015 to December 31, 2020. Also stated in the Settlement Agreement is that Mainline Shippers must notify TCPL of conversion from long-haul capacity to short-haul capacity three years in advance of the requested commencement date.¹¹ As per these conditions of the Settlement Agreement, Enbridge will evaluate its post-2020 requirements and communicate its intentions to TCPL in the coming year.

33. In the RH-001-2014 Decision, the NEB approved segmentation tolling parameters in principle as the basis for establishing Mainline tolls post-2020. The segmentation is expected to separate cost of service and throughput data, for toll design purposes, between the Prairies Segment, Northern Ontario Line, and the Eastern Triangle as illustrated in Figure 1.

Figure 1 – Segments of the TCPL Mainline



¹¹ This provision is specific to situations where existing capacity is not available for long-haul to short-haul conversion

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34. Enbridge intends to actively participate in TCPL's post 2020 tolls proceeding to ensure that the tolls associated with a significant portion of its gas transportation portfolio are appropriate.

Incremental Storage

35. In the Settlement Agreement to EB-2015-0122, Enbridge agreed to perform a detailed review of the need for incremental storage in future years with the support of an external consultant. Consistent with the Settlement Agreement, the Company has retained a consultant for the purpose of reviewing its potential incremental storage requirements.

Heat Value

36. For the purposes of developing its 2017 gas supply costs, the Company has used a conversion factor of 37.69 MJ/m^3 , which is consistent with prior years. However, more recently, the heat value of gas received by Enbridge has had a consistently higher heat value, averaging closer to 38.00 MJ/m^3 . The Company is in the process of investigating whether or not there needs to be a change to the heat value conversion factor used in the budgeting process and will indicate its plans in due course.

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