

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 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 list 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 3, Paragraph 9.

Witness: D. Small

Nexus Pipeline

5. The Nexus Gas Transmission Project (“Nexus”) is a proposed pipeline that will provide natural gas markets in northern Ohio, southeastern Michigan, Chicago, and the Dawn Hub with a direct link to natural gas located within the Appalachian basin.
6. The 1.5 Bcf per day (1,635,535 GJ per day) project requires the construction of approximately 410 kilometres of greenfield pipe 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.
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 from Kensington, Ohio to the Milford Junction interconnect with Vector. The receipts from the Nexus pipeline at Milford Junction will displace supply from Chicago and be transported to Dawn on Enbridge’s existing Vector capacity. The planned in-service date for Nexus was November 1, 2017 but has been recently delayed to 2018 as a result of not receiving Federal Energy Regulatory Commission (“FERC”) approval due to a lack of voting quorum. In order to mitigate the impact of the Nexus in-service delay, Enbridge will continue to fill its Vector capacity with supply from Chicago until the contracted capacity on Nexus comes into service.
8. The cost consequences for the long-term transportation capacity with Nexus were pre-approved by the Ontario Energy Board (“the Board”) in EB-2015-0175.

Witness: D. Small

Vaughan Mainline Expansion Project

9. The Vaughan Mainline Expansion Project includes approximately 12km of new natural gas pipeline which will connect into pre-existing facilities on the TCPL Mainline in the western part of the GTA. 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.
10. This capacity will be used to meet system demand and to facilitate Phase 2 of the Dawn Access Settlement Agreement.²
11. 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.³
12. TransCanada has had some difficulties with some aspects the construction of the Vaughan Mainline Expansion Project that relate to the horizontal directional drilling of the Main Humber River, but contingency plans have been put in place and TransCanada maintains that the in-service date is November 1, 2017.

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

³ The NEB website provides updates on the progress of the Vaughan Mainline Expansion here: <https://apps.neb-one.gc.ca/REGDOCS/Item/View/3063416>

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 the TCPL Mainline in Waddington, near the Enbridge EDA.

14. The 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. Furthermore, in March 2017 Constitution lost a court case in which the pipeline argued that requests made by the State of New York to obtain certain permits to build a pipeline were not required.⁵ Unsatisfied with the decision, Constitution has filed an appeal and is currently awaiting a ruling.

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

Rover Pipeline

⁴ The Constitution Pipeline webpage tracks news developments here:

<http://constitutionpipeline.com/news/>

⁵ <https://stateimpact.npr.org/pennsylvania/2017/03/17/federal-judge-rejects-permits-challenge-in-new-setback-to-constitution-pipeline/>

16. The approved Rover Pipeline is currently under construction. This project has a design capacity of 3.25 Bcf per day (3,537,155 GJ per day) and will source supply from processing plants in West Virginia, eastern Ohio and western Pennsylvania for delivery to markets around the United States via interconnects with existing pipelines. 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.
17. Despite the pipeline having all required approvals and being under construction, some issues arose which have challenged the project’s construction timeline.⁶ Rover maintains it will begin making deliveries to Market Zone North in late-2017.

National Fuel’s Northern Access 2016 project

18. National Fuel’s Northern Access 2016 project will add 490 MMcf per day (533,294 GJ per day) of delivery to TCPL’s Chippawa receipt point. The project was originally slated for an in-service date of November 1, 2016, but has had to revise that in-service date multiple times due largely to the difficult legal environment in New York state. Given the current struggles the project is having in gaining water permits from New York state, the Northern Access 2016 project now projects it will be in service at some point in 2020.
19. The supply from this project will be imported to Canada at the Chippawa receipt point and can be transported further downstream to Dawn via the TCPL Mainline and Union system.

⁶ For a synopsis of the issues faced by Rover, see the following:
<https://www.bloomberg.com/news/articles/2017-06-22/dakota-access-builder-now-bungling-4-2-billion-pipeline-in-ohio/>

Other Developments

Enbridge Requirement at Dawn

20. 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 capacity on pipelines that deliver to Dawn, as described elsewhere in the 2018 gas supply evidence, or to allow for the utility's winter requirement at Dawn to be shifted to the summer months by contracting for a level of incremental storage capacity, or shorter term hybrid seasonal exchanges at Dawn. In the longer-term, additional diversity could be achieved through contracting for new transportation services to Dawn, or through the acquisition of supply at points other than Dawn such as 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}

21. In April 2017 TCPL filed with the NEB an application for a new long-term fixed-price tolling service, called Dawn Long Term Fixed Price service ("Dawn LTFP"), that will allow for incremental utilization of the Mainline between Empress, Alberta and the Dawn Hub. At a capacity of 1.5 PJ/d (1.4 Bcf/d), TCPL's Dawn LTFP service will enable natural gas producers in Western Canada to bring gas to the Dawn market at a cheaper toll. The service was made available to shippers for a 10 year contract term of non-renewable capacity, with the option to early terminate after five years. If Dawn LTFP is approved by the NEB, the toll impacts are unknown at this time as

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.

Witness: D. Small

TCPL has proposed to address the allocation of costs and revenues for the Dawn LTFP service in a 2018 toll review and post-2020 toll design proceeding.

22. Dawn LTFP was offered to the market two times. The first open season was run in October 2016 and was unsuccessful due to the lack of shipper interest. Dawn LTFP was offered again in February 2017, which resulted in TCPL receiving its desired level of shipper interest. The Company submitted a conditional bid into the first Dawn LTFP Open season that included, among other things, the elimination of a condition of service that obligated shippers to not oppose TCPL's pricing discretion with respect to services such as Interruptible Transportation ("IT") or Short Term Firm Transportation ("STFT") for a period of 10 years following commencement of the service contract. Another condition of service that the Company eliminated in its bid was the requirement for prospective bidders to support any regulatory proceeding required to implement or continue the Dawn LTFP service. The Company did not agree with this condition and wanted to reserve the right to intervene to fully understand the service and any impacts to its customers. TCPL did not accept the Company's bid in the first Dawn LTFP Open Season due to concerns of non-conformance. When the second Dawn LTFP open season was issued, it contained similar conditions to the first Dawn LTFP open season. The Company did not bid into the second Dawn LTFP open season because the Company would have submitted a similar conditional bid to the first Dawn LTFP open season which was not accepted by TCPL.

Cap & Trade and Environmental Regulation

23. 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 began its Cap and Trade program in January 2017.

Witness: D. Small

24. In March 2016, the Ontario Energy Board (“OEB”) initiated a consultative process to “develop a natural gas regulatory framework” (“Regulatory Framework”) and “guide the OEB’s assessment of natural gas distributors’ Cap and Trade Compliance Plans, including the cost consequences of these plans and the mechanism for recovery of costs in rates.” (“Compliance Plan”)⁹ The Regulatory Framework development was completed in September 2016.¹⁰ As per the OEB’s direction in the Regulatory Framework, Enbridge submitted its 2017 Compliance Plan to the Board in November 2016.¹¹ Pending the OEB’s decision on the Company’s 2017 Compliance Plan, the Company’s 2018 Compliance Plan is expected to be filed in late-2017.

25. 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.¹² 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.

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

¹⁰ See EB-2016-0363

¹¹ See EB-2016-0300

¹² <https://www.ontario.ca/page/climate-change-action-plan>

<https://www.ontario.ca/laws/statute/s16007>

[https://www.ebr.gov.on.ca/ERS-WEB-](https://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTI3ODA1&statusId=MTk0NDU3&language=en)

[External/displaynoticecontent.do?noticeId=MTI3ODA1&statusId=MTk0NDU3&language=en](https://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTI3ODA1&statusId=MTk0NDU3&language=en)

Witness: D. Small

26. 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.

Renewable Natural Gas (“RNG”)

27. As part of the Province’s Green Energy Strategy, Enbridge is working towards including RNG as a portion of its future supply requirements and anticipates that it will include further details in its 2018 Compliance Plan. In the near term, any new RNG supply would displace gas supply currently procured at Dawn.

Western Canadian Liquefied Natural Gas Exports

28. There are 20 Liquefied Natural Gas (“LNG”) export projects that have been 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, there will be incremental competition for WCSB supply.
29. Two projects in British Columbia have already lost favour with their project sponsors due to changing market conditions.

- i. Prince Rupert LNG, with a planned maximum operating capacity of 21.6 MMt/yr, owned by Royal Dutch Shell PLC, had its development discontinued in March 2017.¹³
 - ii. Pacific Northwest LNG, with a planned maximum operating capacity of 19.7 MMt/yr, majority-owned by PETRONAS, had its development discontinued in July 2017.¹⁴
30. However, some projects see favourable market conditions in British Columbia. Specifically, the 2.1 MMt/yr Woodfibre LNG project recently received Federal approval for a 40-year export licence of LNG. With the support of the Federal government and First Nations communities, Woodfibre LNG is scheduled to begin exporting in 2020.¹⁵

2018 TCPL Toll Review

31. 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.
32. 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.

¹³ <https://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/shell-officially-shelves-plans-to-build-prince-rupert-lng-project/>

¹⁴ <http://www.pacificnorthwestlng.com/media/NewsRelease-Backgrounder-PNWLNG-July25-2017.pdf>

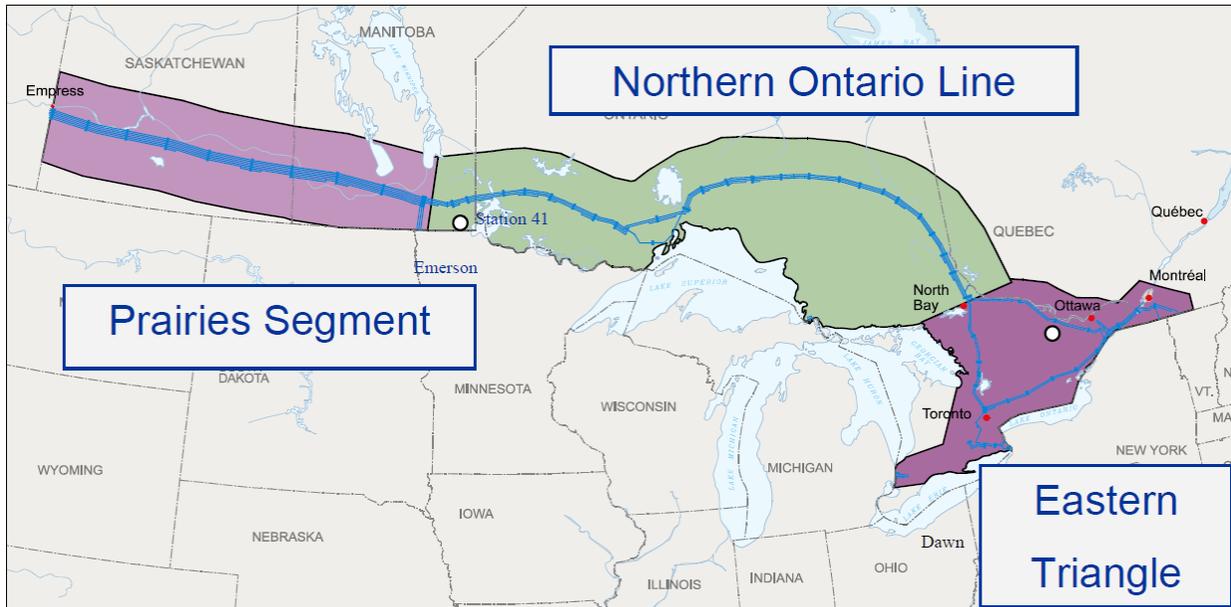
¹⁵ <http://www.cbc.ca/news/canada/british-columbia/woodfibre-lng-project-confident-it-will-move-forward-despite-pacific-northwest-setback-1.4224156>

TCPL Mainline 2013-2030 Settlement Agreement

33. 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 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.¹⁶ As per these conditions of the Settlement Agreement, Enbridge will evaluate its post-2020 requirements and is expecting to communicate its intentions to TCPL in the coming year.
34. 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.

¹⁶ This provision is specific to situations where existing capacity is not available for long-haul to short-haul conversion.

Figure 1 – Segments of the TCPL Mainline



35. 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

36. In the EB-2016-0142 proceeding, Enbridge agreed that “before the Company develops or acquires additional storage capacity for utility or regulated gas supply purposes it will file analysis with the Board setting out the need and justification for the incremental storage”.¹⁷ In the EB-2016-0215 proceeding, Enbridge agreed to file a copy of the study then being prepared by ICF International concerning Enbridge's future storage requirements.¹⁸

¹⁷ EB-2016-0142 (2015 ESM), Exhibit N1, Tab 1, Schedule 1, page 15.

¹⁸ EB-2016-0215 (2017 Rates), Exhibit N1, Tab 1, Schedule 1, page 9.

Witness: D. Small

37. In March 2017, the Company filed the report developed by ICF International which evaluated incremental storage options that the Company might pursue.¹⁹
38. At this time, as set out in the gas supply evidence in this proceeding²⁰, Enbridge is planning to acquire between 2 and 3 PJ of additional storage in April 2018. Furthermore, from time to time, the Company will consider shorter term high deliverability seasonal exchanges that provide operational flexibility to meet winter demand.

Heat Value

39. For the purposes of developing its 2018 gas supply costs, the Company has used a conversion factor of 38.42 MJ/m³, which is more closely aligned with recent heat value observations made by the Company.

New Service Types for Direct Purchase Market

40. During 2017, Enbridge surveyed its Direct Purchase market customers to gain an understanding of the demand for new Direct Purchase service types to deliver supply to new receipt points (eg., Niagara Falls, Chippawa, Iroquois, etc). While the number of respondents to the survey was low, those customers that did respond expressed an interest in being able to have other service types being made available to them.
41. Although the Company is not planning to offer new service types for the 2018 test year, Enbridge remains committed to its customers and being able to provide the services that the customers want and need. Commensurate with the qualifications for offering or continuing a transportation service as agreed to in the Dawn Access

¹⁹ Filed under docket EB-2015-0215.

²⁰ See Exhibit D1, Tab 2, Schedule 3.

Settlement Agreement (EB-2014-0323), the Company will offer a new bundled transportation service, such as DTS, where there is at least a minimum threshold volume of 50,000 GJ per day for that bundled service type and where there is operational capacity to offer such service.