

JULY 22, 2013 UPDATE TO EXHIBIT A, TAB 3

Introduction

1. This Schedule will outline the changes to the Leave to Construct (“LTC”) application and consolidate the evidentiary updates for all Schedules within Exhibit A, Tab 3. Exhibits B through E that were updated accordingly. The previous Schedules within Exhibit A, Tab 3 will be referenced, but not updated as the changes in Exhibit A, Tab 3, while important, do not significantly alter the previously submitted record with respect to the load demand forecast, need for the proposed facilities, or the timing required for the in-service dates. The purpose of this evidence is to describe the changes in the application from the previous updates. A summary of the updates can be found at Exhibit A, Tab 2, Schedule 4.

Changes to the Application

2. The reason for this update is the termination of a Memorandum of Understanding (“MOU”) with TransCanada that provided exclusive access to capacity on the Segment A pipeline of the GTA Project. The update addresses two issues resulting from the termination of the MOU: 1) supply and interconnection to Segment A pipeline, and; 2) rate methodology for open access to transportation capacity on the Segment A pipeline. The fundamental change in facilities is that the Segment A initiation point is reinstated from the previously proposed Bram West interconnection with TransCanada to the originally proposed initiation point at Parkway West with Union Gas. Furthermore, the capacity of the pipeline, which was previously dedicated and under contract to TransCanada, is now proposed to be open access. As a result, the application has been updated to have the rate methodology under Rate 332 applicable to any party that would transport on the Segment A pipeline. In addition, while the Application envisaged Segment A as either NPS 42 or NPS 36, Enbridge has finalized the pipeline as a NPS 42.

The GTA Project will continue to meet the distribution need of the GTA. Further, the changes allow the GTA Project to accommodate the eventual resolution of market access issues, including supply sourcing as envisaged in the MOU with TransCanada, open access to capacity, and timing of the build out of infrastructure from Albion to Maple. The changes proposed in this update allow for open access to the transmission path facilitated by the GTA Project, enabling supply sourcing flexibility, supply cost savings and the rational build out from Albion to Maple.

Segment A Pipe Sizing

3. The changes in the North American natural gas market require a strategic shift in supply lines, for both distribution and transmission. The shared usage of the Segment A pipeline for distribution and transmission, and also the path through Albion, is a preferred path for regional infrastructure development. This has been supported by both Union and TransCanada as compared to other alternatives for elimination of the Parkway to Maple constraint. The benefits to the local environment and economies of scale from having one pipeline constructed, rather than two, make this solution superior to other alternatives. In addition, the GTA has limited land options for the placement of large infrastructure projects, such as the proposed facilities. Under-sizing of the Segment A pipeline may result in significantly increased costs in the future if additional infrastructure is required at a later date.
4. Expected volume requirements from parties in this application are:
 - 500 TJ/d for anticipated TransCanada conversion of back haul to forward haul;
 - 258 TJ/d for Gaz Métro;

- 110 TJ/d for Union Gas;
- 170 TJ/d for the Enbridge Eastern region; and
- Additional volume from other parties seeking to firm up part of their supply.

These anticipated volume requirements would exceed the approximately 800 TJ/d available for transmission capacity of a NPS 36 Segment A pipeline. A NPS 42 Segment A would not limit the required future market access from Parkway to Maple. In addition, Enbridge expects that future market access to short haul will be required to meet the growth in peak day in its Eastern Region and non GTA parts of its franchise, and that flexibility is important to accommodate any future displacement of long haul capacity as a result of unforeseen market changes in the supply of natural gas. Based on the above, a NPS 42 pipe size for Segment A would best meet the long term needs of the market for access to short haul transport.

5. With respect to the dependency on Segment A for transportation benefits along the Parkway to Maple path, it is recognized there has not been an application for the required facilities for the Albion to Maple build, and the timing of the build out is currently uncertain. There are dependencies on a successful National Energy Board (“NEB”) application for the build out of this path to be placed in-service as well. However, the distribution benefits that accrue to Enbridge customers are not dependent on the build out from Albion to Maple. Given that the economics of the GTA Project, with a NPS 42 Segment A pipeline, are positive and benefit the ratepayer, even if the Albion to Maple path is delayed, the GTA Project approval can be considered in isolation of the broader transmission discussion. The larger

pipe size being proposed will not restrict future market access along the path and Enbridge ratepayers will receive benefit as soon as the facilities are in-service.

6. As shown in Exhibit E, Tab 1, Schedule 1, a NPS 42 is economically feasible based on the Ontario Energy Board's (the "Board") feasibility guidelines. This was previously shown in the response to Board Staff Interrogatory #14 at Exhibit I.A3.EGD.STAFF.14. The Economic Sensitivity section below shows many scenarios, including a NPS 42 with no associated transportation service revenues. In all cases shown, with a NPS 42 for Segment A, the project is feasible. Any delay in the proposed in-service date beyond 2015 for the purpose of right sizing the Segment A pipeline to meet immediate transportation demand is not justified. The approximately \$55 million cost of a larger diameter pipeline is less than the potential monetary benefits for distribution ratepayers of approximately \$133 million in the first year alone.

7. Enbridge had always intended that Segment A was a distribution pipeline for its purposes and that the remaining capacity would be used to provide market access to short haul transportation services on a non-discriminatory basis. In this way, the principles of the Board's Storage and Transportation Access Rule ("STAR") would be respected. The intent for shared infrastructure development was to provide for efficient use of existing and proposed regional pipeline infrastructure that satisfied both the needs of Enbridge and market access to shippers. Enbridge has committed to hosting a New Capacity Open Season ("NCOS") and provide non-discriminatory access to the Segment A pipeline in order to become compliant with STAR. The NCOS will close no later than September 6th, 2013 and will be used to allocate the available transportation capacity on Segment A.

8. The proposed rate methodology for Rate 332 is described in Exhibit E, Tab 1, Schedule 2. As described, 60% of the revenue requirement for the Segment A pipeline will be allocated to the transportation service and 40% will be allocated to distribution. In the event there are no shippers for the transport service, distribution ratepayers will be allocated the entire revenue requirement.
9. Enbridge will be working with shippers on the Segment A pipeline to include placement of Financial Backstopping Agreements (“FBAs”). The shippers are expected to bear some of the risk on upfront costs associated with the Segment A pipeline, in particular the approximately \$55 million¹ in cost associated with NPS 42 as compared to NPS 36 and also any consequences of a delay in the build out of the Albion to Maple path.

Project Rationale

10. This amendment does not change the rationale for the project. As outlined in Exhibit A, Tab 3, Schedule 1, the GTA Project will:
 - a. Meet customer growth requirements from 2015 to 2025;
 - b. Reduce operational risks and enhance safety and reliability by:
 - i. Improving diversity and flexibility of the distribution system;
 - ii. Providing the ability to lower pressures on key supply lines;
 - c. Provide entry point diversity by reducing dependence on Parkway Gate Station; and
 - d. Improve supply chain diversity, reduce upstream supply risks and reduce gas supply costs over the period 2015 to 2025.

¹ Based on approximation prorating pipe length against the previous cost estimate differences from NPS 42 and NPS 36 (\$42 M) provided for the shorter route length. This is an approximation and a detailed cost estimate has not been performed for the Parkway West to Albion complete route for NPS 36.

11. To further demonstrate the impact of the changes, the economic feasibility can be disaggregated into the fundamental components of the project:

a) Benefits

The project has been predicated on three streams of benefits:

- i. Customer Growth²: The customer growth forecast has not been updated and is the same as the previous filing. There is no difference in forecasted cash flows.
- ii. Transport Revenue³: The transport revenue is updated based on an allocation of 60% of the Segment A pipeline to transportation service. The change is due to open market access to the shared use Segment A pipeline. Sensitivity on the transport service revenue forecast is examined in the Economic Sensitivity section below.
- iii. Gas Supply Savings⁴: The forecasted gas supply savings are the same as at most recent filing found in the response to Board Staff Interrogatory #11 at Exhibit I.A2.EGD.STAFF.11, with the exception of the removal of costs associated with the Parkway to Bram West portion of the path. The toll payable to TransCanada is no longer required due to the new initiation point.

b) Costs

The costs of the proposed facilities have increased due to:

- i. The increased length of Segment A pipeline associated with the change from Bram West to Parkway West. This cost increase is offset by no longer having a toll on the Parkway to Bram West

² For reference: DCF Analysis found at Exhibit E, Tab 1, Schedule 1, Attachment, Row 16

³ For reference: DCF Analysis found at Exhibit E, Tab 1, Schedule 1, Attachment, Row 17

⁴ For reference: DCF Analysis found at Exhibit E, Tab 1, Schedule 1, Attachment, Row 18

portion of the path. Sensitivity is examined in more detail in the Economic Sensitivity section below.

- ii. The increased pipe size from NPS 36 to NPS 42 for the Segment A pipeline. Sensitivity to transport revenue is examined in the Economic Sensitivity section below.

12. The amendments have forecast benefit streams that are similar to what has already been presented in the discovery process, and when considered in conjunction with the offsetting capital cost impact the project economics are not materially altered.

Impacts to the Exhibit A, Tab 3 Evidence

13. The following sections document the changes to the schedules within Exhibit A, Tab 3 due to the Update No. 6 amendment of the application.

Exhibit A, Tab 3, Schedule 1- Purpose, Need and Timing

14. The Purpose, Need and Timing of the proposed facilities have not been altered from any previous amendment. The needs expressed in the Customer Growth, Enhanced Reliability of the XHP Distribution System, Entry Point Diversification and Upstream Supply chain sections have not changed. The Company is seeking a decision by December 15, 2013 in order to meet the required in-service date as outlined in the Timing section below.

Exhibit A, Tab 3, Schedule 3 - Operations and Limitations of Existing Facilities

15. There are no changes to the Operations and Limitations of Existing Facilities.

Exhibit A, Tab 3, Schedule 4 - Market Growth

16. There are no changes to the growth forecast.

Exhibit A, Tab 3, Schedule 5 - Natural Gas Demand, Supply and Expected Gas Supply

17. In its amendment dated May 15, 2013 (Update No. 3) Enbridge provided an update to the expected gas supply benefits as a result of: 1) amendments to the GTA Project Leave to Construct Application ("GTA LTC"); 2) changed assumptions related to transportation capacity displacement with the GTA Project facilities in place, and; 3) the NEB Decision in RH-003-2011 ("Decision") related to tolls on the TransCanada Mainline. Subsequent to the May 15, 2013 update, on June 11, 2013 the NEB issued Toll Order TG-006-2013 which made TransCanada's Compliance Filing tolls final and effective July 1, 2013. Enbridge provided an update to the expected gas supply benefits in the response to Board Staff Interrogatory #11 found at Exhibit I.A2.EGD.STAFF.11.

Gas Supply Benefits

18. Three gas supply benefit scenarios are presented for comparison in Attachment 1. Each scenario assumes that long haul firm transportation capacity and peaking supplies are displaced with short haul firm transportation capacity. The three scenarios are as follows:
- a) Scenario 1, Previous Base Case (see Attachment 1, Table A4):
 - i. Provides the expected gas supply benefits calculated using final Mainline tolls pursuant to NEB Toll Order TG-006-2013. This scenario is consistent with the expected gas supply benefits provided in the response to Board Staff Interrogatory #11 found at Exhibit I.A2.EGD.STAFF.11.
 - ii. This scenario assumes the Company would displace approximately 100,000 GJ/d of peaking supplies and approximately 300,000 GJ/d of long haul firm transportation capacity from Empress to the Enbridge CDA with 400,000 GJ/d of short haul firm transportation capacity from Dawn to Bram West CDA via Union and

TransCanada and from Niagara Falls to Parkway Enbridge CDA via TransCanada once the GTA Project facilities are in-service. This scenario also assumes that Direct Purchase customers would contract for approximately 158,000 GJ/d of long haul firm transportation capacity from Empress and continue to receive an assignment from the Company of approximately 42,000 GJ/d of short haul firm transportation capacity from Dawn to the Enbridge CDA absent the GTA Project facilities. With the GTA Project facilities in-service these Direct Purchase transportation arrangements would be displaced with 200,000 GJ/d of short haul firm transportation capacity from Dawn to Bram West CDA via the Union and TransCanada systems.

- iii. Expected gas supply benefits under this scenario are approximately \$893 million for system gas customers and \$572 million for Direct Purchase customers for a total of approximately \$1,465 million over the 2015 to 2025 timeframe.

b) Scenario 2, Current Base Case (see Attachment 1, Table A5):

- i. Provides the expected gas supply benefits calculated using final Mainline tolls with the initiation point of Segment A at Parkway West rather than Bram West. This scenario incorporates the assumptions from the Previous Base Case above but removes the costs⁵ associated with the Parkway to Bram West CDA contract and maintains the assumption that supplies will be sourced at Dawn and Niagara Falls. In this scenario, supplies sourced at Dawn are transported via the Union system to Parkway and

⁵ Includes toll and assumed fuel charges.

supplies sourced at Niagara Falls are transported via the TransCanada system to Enbridge Parkway CDA.

- ii. Expected gas supply benefits under this scenario are approximately \$1,091 million for system gas customers and \$642 million for Direct Purchase customers for a total of approximately \$1,733 million over the 2015 to 2025 timeframe. The Company has utilized the expected gas supply benefits stream from the Current Base Case when assessing the economics associated with this update to the GTA Project evidence.

c) Scenario 3, No Niagara Supply (see Attachment 1, Table A6):

- i. Provides the expected gas supply benefits assuming supplies are sourced at Dawn rather than Dawn and Niagara Falls. This scenario incorporates the assumptions from the Current Base Case but assumes that the costs associated with procuring supply at Niagara Falls, and transporting those supplies via the Niagara Falls to Parkway Enbridge CDA contract, are displaced with supplies procured at Dawn and transported to Parkway via the Union system.
- ii. Expected gas supply benefits under this scenario are approximately \$1,145 million for system gas customers and \$642 million for Direct Purchase customers for a total of approximately \$1,786 million over the 2015 to 2025 timeframe. Enbridge has included this scenario as a point of reference to demonstrate that the expected gas supply benefits do not change materially over the 2015 to 2025 timeframe if supplies are not sourced from Niagara Falls. However, due to increased diversity of supply the Current Base Case is the preferred supply and contracting arrangement.

19. It should be noted that where applicable, all expected gas supply benefit scenarios presented here are calculated using the same tolls, fuel ratios and commodity prices assumed in the Previous Base Case. That is all scenarios include TransCanada tolls based on NEB Toll Order TG-006-2013 (issued June 11, 2013) which made TransCanada's Compliance Filing tolls final and effective July 1, 2013 and assume Union M12 Dawn to Parkway tolls as filed in EB-2013-0074. In addition, the rationale for the contracting assumptions in all three scenarios remains the same as the rationale provide in Exhibit A, Tab 3, Schedule 5.
20. Attachment 1 Tables A1 to A3 provide the toll, fuel and commodity price assumptions used in all scenarios. Attachment 1 Tables A4 to A6 provide the expected gas supply benefits calculations for each scenario.

Exhibit A, Tab 3, Schedule 6 - Proposed Facilities, Operation and System Benefits

21. The changes to the proposed facilities are limited to:
- The pipe size for Segment A is finalized at NPS 42;
 - The initiation point for Segment A is Parkway West⁶; and
 - Custody transfer metering costs are included at Albion Gate Station for the transport service.
22. There are no changes to the following:
- Parkway West Gate Station, NPS 36 315m tie-in, or the Parkway Bypass Station; and
 - Pipeline and associated facilities for Segment B.

⁶ The new initiation point relocates the in-line inspection (“ILI”) launching facilities to Parkway West. The function and design of these facilities are not materially altered.

23. Updated estimated costs for the above changes can be found at Exhibit C, Tab 2, Schedule 1. These costs have been used to provide an update to the project economic feasibility in Exhibit E, Tab 1, Schedule 1.
24. Updated maps of the proposed facilities are included as Attachment 2.

Exhibit A, Tab 3, Schedule 7 – Alternatives

25. There are no changes to the alternatives with the exception of termination of the interconnection with TransCanada at Bram West and the reinstatement of the alternative to interconnect with Union at the Parkway West.

Exhibit A, Tab 3, Schedule 8 - Timing

26. Enbridge is seeking a decision by the Board no later than December 15, 2013 in order to proceed with commitment to long lead time materials and resources for construction required to meet the in-service date requirements of November 2015 for the proposed facilities.
27. As previously outlined in Exhibit A, Tab 3, Schedule 8, the GTA Project has significant complexities due to urban construction, multiple jurisdictions/permitting and lead times on skilled resources and custom materials.
28. From Enbridge's perspective the GTA Project has always been intended to meet the need for providing safe and reliable distribution service to customers. Enbridge has been working toward a November 2015 in-service date due to the time sensitive issues the GTA Project addresses. Enbridge continues to work toward that in-service date in order to realize the benefits of the GTA Project, which will result in savings of \$1,733 million from 2015 to 2025.

As previously stated in Exhibit E, Tab 1, Schedule 1:

“Benefits associated with reliability, diversity, and flexibility are substantial and are the primary purpose of this project.”

The GTA Project allows the Company to maintain forecast minimum system pressures on the XHP system, which may be violated without additional facilities in place by winter 2015/16. The proposed facilities also allow for the lowering of pressures on vintage, large diameter, high pressure pipelines within the GTA, allowing for a more reliable delivery of natural gas to customers.

29. In order to preserve the 2015 in-service date for the facilities, Enbridge must commit to costs related to detailed Engineering, including project design, planning, and procurement. Enbridge forecasts this is a substantial commitment of over \$30 million for the Company to December 15, 2013. Enbridge firmly believes the GTA Project is necessary to provide safe, reliable and economic delivery of natural gas to its customers, and has taken significant appropriate action to this end. Specific items that require firm commitments in Q1 2014 to maintain timeline for a November 2015 in-service date are the pipe and mainline valves, and the contract resources for mainline construction and Horizontal Directional Drilling (“HDD”). Procurement of these items would require an additional commitment of \$30-45 million for potential cancelation charges were the project not to proceed.

Economic Sensitivity

30. The base case for comparison of the economic sensitivities considers the following project parameters:

- NPS 42 Segment A Parkway West to Albion;
- Segment A flows of 800 TJ/d for distribution and 1200 TJ/d of transport service from Parkway West to Albion; and
- All other facilities remain as previously proposed.

31. The economic feasibility for the base case has been updated in Exhibit E, Tab 1, Schedule 1. This feasibility, in addition to the most recent feasibility previously filed at Exhibit JT2.16, are included for comparison with the economic sensitivity scenarios summarized at Attachment 3. The economic sensitivity scenarios include:

Column	Scenario	Pipe Size and Route
1	Previous Base Case (filed at Exhibit JT2.16 on June 18, 2013)	NPS 36 Bram West to Albion
2	Current Base Case (filed at Exhibit E, Tab 1, Schedule 1)	NPS 42 Parkway West to Albion
3	Current Base Case with 75% Transportation Savings	
4	Current Base Case with 50% Transportation Savings	
5	Current Base Case with 0% Transportation Services Charges (i.e. no contracted shippers on Segment A)	
6	Current Base Case with No Distribution Customer Additions	
7	Current Base Case with 10% Increase in Capital Cost	

32. In all scenarios the project is feasible and beneficial to ratepayers.

33. The estimated rate impacts and bill impacts were previously filed in response to Environmental Defence Interrogatory #21 at Exhibit I.A4.EGD.ED.21. For

comparative purposes, an update to the estimated rate impacts and bill impacts for the Current Base Case is included below.

<u>Rate Class</u>	<u>BUNDLED RATES</u>
	<u>Sales Service</u>
1	1.6%
6	1.6%
9	0.6%
100	1.2%
110	1.2%
115	1.1%
135	0.6%
145	1.0%
170	0.8%
200	1.8%
	<u>UNBUNDLED RATES</u>
125	23.5%
300	8.6%

34. The rate impacts depicted above are based solely on the increase in Enbridge's revenue requirement stemming from the GTA Project. However, as indicated at Exhibit E, Tab 1, Schedule 1, page 8, the Company has identified significant savings in gas costs resulting from the GTA Project. The estimated annual rate impact for 2016 (relative to existing April 1, 2013 QRAM rates) for the GTA Project and forecast gas transportation savings by customer rate class is as follows:

<u>Rate Class</u>	<u>BUNDLED RATES</u> <u>Sales Service</u>
1	-2.2%
6	-3.3%
9	-4.2%
100	-5.7%
110	-5.7%
115	-6.3%
135	-6.9%
145	-6.1%
170	-7.3%
200	-4.6%

	<u>UNBUNDLED RATES</u>
125	23.5%
300	8.6%