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BY E-MAIL

November 22, 2021

Christine E. Long Registrar Ontario Energy Board 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Dear Ms. Long:

Re: Enbridge Gas Inc. (Enbridge Gas) Application for St. Laurent Ottawa North Replacement Project Approval

OEB File Number: EB-2020-0293

In accordance with Procedural Order No. 1, please find attached OEB staff interrogatories in the above proceeding. The attached document has been forwarded to the applicant and to all other registered parties to this proceeding.

Yours truly,

Original Signed By

Zora Crnojacki Project Advisor, Natural Gas Applications

Encl.



OEB Staff Interrogatories

Application for St. Laurent Ottawa North Replacement Project Approval

EB-2020-0293

November 22, 2021

ISSUE 1.0 NEED FOR THE PROJECT

1.1 Staff.1 Exhibit B, Tab 1, Schedule 1 pages 14-15, paragraph 27; pages 35-48: Options Considered; page 41, Table 10: Asset Health Index

Enbridge Gas determined that the St. Laurent Ottawa North Replacement Project (Project) is needed to manage risks associated with the declining health of steel distribution mains of the St. Laurent system. As required by the *CSA Z662 – Oil and Gas Pipeline System* standards, Enbridge Gas has been monitoring the condition of its pipeline systems and associated risks and is responsible for implementing the Integrity Management Program. Enbridge Gas's Distribution Integrity Management Program (DIMP) and Asset Health Review (AHR) determined the declining health of the mains installed in the 1970s. The pipelines Enbridge Gas has proposed for replacement were constructed in 1958.

The declining condition of the pipelines was determined based on results of system surveys, conducted at various locations between 2006 and 2018. These surveys and inspections include ground penetrating radar integrity project (2006); field work on leak repairs (2013), integrity dig (2014), bridge crossing inspection (2016), depth of cover surveys (2017), and indirect inspection to assess cathodic protection, coating, and depth of cover (2018). The results of these surveys and inspections identified the corrosion, dents, compression couplings, reduced depth of cover, past deficient cathodic protection as declining pipeline conditions that create a risk to St. Laurent system.

- a) According to Enbridge Gas, the main driver for the Project's need is operational risks due to declining integrity of the pipelines in the St. Laurent system. Please discuss any other factors that drive the need for the Project including the projected increase in customer demand. Please support your response by any additional information related to the assessment of these additional factors (e.g. customer volumetric forecast, system capacity analysis).
- 1.2 Staff.2 Ref: Exhibit A, Tab 2, Schedule 1, Application and Exhibit B, Tab 1, Schedule 1, paragraphs 69-74, Exhibit B, Tab 1, Schedule 1, page 46, paragraph 71 and page 47, Table 14: Project Phases, Facilities and Timing

According to Enbridge Gas, this application is for Phases 3 and 4 of a four-phase project needed to replace St. Laurent Pipeline due to integrity issues. Phases 1 and 2 were approved by the OEB in the EB-2019-0006 proceeding. Phases 1 and 2 have been completed and are in

service. Enbridge Gas requested in this application approval under section 90 for Phase 3 and Phase 4 of the Project.

Table 14 of Enbridge Gas's evidence outlines the four Project phases and the corresponding pipeline segments by construction start date, in-service-date (ISD), specifications of the pipeline length, diameter, material and pressure, number of customers to be transferred from the existing extra high pressure XHP system to the intermediate (IP) polyethylene (PE) system ahead of completion of the new XHP ST system and lists the abandonment schedule by year.

Phase	Segment	Project Start Date	In-Service Date	Facilities Installed	Customers	Facilities Abandoned	Year Abandoned
1	Avenue O Pressure Increase 30 psi to 45 psi	May-2018	May-2018	n/a	29	n/a	n/a
				123m - 8" PE IP		1.2km - 12" ST XHP	2023*
2	Plastia Tromblay	July 2010	Eebruary 2020	1.3km - 6" PE IP	170		
- 4	Plastic - Tremblay	July-2019	February-2020	142m - 4" PE IP	1/5	1.2km - 2" ST XHP	2019
				1.8km - 2" PE IP		776m - 1" & 1.25" ST XHP	
2	Disable Ch. Laurent /Danald to Mantasall	Ortobas 2010	August 2020	1.7km - 6" PE IP		1.7km 108.07.VUD	20228
2	Plastic - St. Laurent (Donald to Montreal)	October-2019	August-2020	11m - 2" PE IP	66	1.7km - 12° 51 XHP	2023*
	Diastia Lower Cestion 1	Aneil 2022	Nevember 2022	1.0km All DE ID	196	149m 12" ST XHP	2022
4	Plastic - Lower Section 1	April-2023	November-2023	1.9KM - 4" PE IP	186	1.9km - 4" ST XHP	2023
	Direction in successful and a	A	No	1.1		371m - 12" ST XHP	2022
4	Plastic - Lower Section 2	April-2023	November-2023	1.1KM - 4" PE IP	44	565m - 4" ST XHP	2023
3	Plastic - Coventry/Ogilvie	August-2022	December-2022	1.5km - 6" PE IP	14	1.5km - 6" ST XHP	2023*
2	Plastic St. Jourant (Danald to Highway 417)	August 2022	December 2022	400m - 6" PE IP	45	661m 10" CT VHD	2022*
2	Plastic - St. Laurent (Donald to Highway 417)	August-2022	December-2022	261m - 2" PE IP	40	00111-12 31 AHP	2023
				2.3km - 6" PE IP		2.9km - 12" ST XHP	2023*
3	Plastic - St. Laurent (Montreal to Rockcliffe)	April-2022	September-2022	600m 4" PE IP	133		
				122m - 2" PE IP		122m - 2" ST XHP	
4	Steel - East/West Coventry XHP	March-2023	December-2023	3.1km - 12" ST XHP	1	2.5 km - 12" ST XHP	2023**
				2.4km - 16" ST XHP		398m - 16" ST XHP	2023*
3	Steel - North/South - St. Laurent Control to Rockcliffe XHP	March-2022	December-2022	5.8km - 12" ST XHP	3		
				330m - 6" ST XHP		9.5km - 12" ST XHP	2023***

* Abandonment will take place in 2023 when Phase 4 is completed

** Phase 4 Steel - East/West Coventry XHP once in service allows for the abandonment of 2.5km of NPS 12 ST XHP pipeline. This includes the abandonment of 1.2km of NPS 12 ST XHP pipeline made possible by the installation of the Phase 2 Plastic - Tremblay facilities.

*** Phase 3 Steel - North/South - St. Laurent Control to Rockcliffe XHP once in service allows for the abandonment of 9.5km of NPS 12 ST XHP pipeline. This includes the abandonment of 2.9km of existing NPS 12 ST XHP pipeline made possible by the installation of the Phase 3 Plastic - St. Laurent (Montreal to Rockcliffe) facilities, the abandonment of 1.7km of NPS 12 ST XHP pipeline made possible by the installation of the Phase 3 Plastic - St. Laurent (Montreal to Rockcliffe) facilities, the abandonment of 1.7km of NPS 12 ST XHP pipeline made possible by the installation of the Phase 3 Plastic - St. Laurent (Donald to Montreal) facilities and the abandonment of 661m of NPS 12 ST XHP pipeline made possible by the installation of the Phase 3 Plastic - St. Laurent (Donald to Highway 417) facilities.

- a) Please file the Project information contained in the first five columns of Table 14, for Phase 3 and Phase 4 only, organized according to the phase and chronological sequence of the planned construction start and ISDs.
- b) Please confirm that the assignment of the pipeline segments to updated Phase 3 and updated Phase 4 is based on the Project's ISDs and on the construction schedules to accomplish the planned ISDs.

1.2 Staff.3 Ref: Exhibit B, Tab 1, Schedule 1, page 48, paragraph 75 and Exhibit D, Tab 1, Schedule 1, page 9, Table 8: Proposed Updated Construction Schedule by Phase and paragraph 12

Enbridge Gas planed the construction for Phase 3 to start in March 2022. Enbridge Gas indicated that it requests the OEB's approval "...not later than February 2022." Enbridge Gas proposed construction schedule for Phase 3 and Phase 4 indicates an expected ISD of December 2022 for Phase 3 and December 2023 for Phase 4.

	Updated Phase 3	Updated Phase 4
Receipt of Permits and Approvals	October, 2021	October, 2022
Expected LTC Approval	February, 2022	February, 2022
Commence Construction	March, 2022	March, 2023
Expected In-Service	December, 2022	December, 2023
Completion of Construction	December, 2022	December, 2023
Completion of Reinstatement	October, 2024	October, 2024
Final Inspection	March, 2025	March, 2025

Table 8: Proposed Updated Construction Schedule by Phase

- a) Please discuss Enbridge Gas's approach to accommodate the December 2022 ISD for Phase 3 and December 2023 ISD for Phase 4 in the event of delayed receipt of permits and approvals or commencement of construction activities.
- b) Please discuss Enbridge Gas approach to managing the risk to reliability of supply and pipeline integrity if:
 - i. the ISD for Phase 3 is delayed
 - ii. ii. Phase 4 ISD is delayed
- 1.2 Staff.4 Ref: Exhibit B, Tab 1, Schedule 1, pages 7-13, paragraphs 13-22: Consequences of Failure; page 10, Table 1: Customer Loss at 47 Degree Days by Customer Type; and page 12, Table 2: Customer Loss at 1 Degree Day by Customer Type

Enbridge Gas modelled two scenarios describing the consequences of pipeline failure which would trigger temporary reduction in operating pressure or service shutdown and an emergency response. The first scenario models the consequences of a service shutdown at 47

Degree Day (corresponding temperature of -29C) (Winter Scenario). The second scenario presents the consequences of a shutdown at 1 Degree Day (corresponding temperature of 17C) (Warm Day Scenario). The evidence includes projections of customer loss by customer type under the First Scenario and the Second Scenario.

Under the Winter Scenario, Enbridge Gas estimated the costs to repair the St. Laurent pipelines and make it safe in its franchise area to be \$54 M (Enbridge Gas estimated cost of repair in the Gazifere franchise area to be \$37M). Under the Warm Day Scenario, Enbridge Gas estimated the costs to repair the St. Laurent pipelines and make it safe in its franchise area to be \$22 M.

Customer Type	Number of Customers Lost: Enbridge Gas	Number of Customers Lost: Gazifère	Total Customers Lost	
Residential	28,226	28,285	56,511	
Apartment*	35	248	283	
Commercial*	3,345	2,037	5,382	
Industrial	17	7	24	
Total	31,623	30,577	62,200	

Table 1: Customer Loss at 47 Degree Days by Customer Type

*Commercial customers include some apartment customers due to building use.

Customer Type	Number of Customers Lost: Enbridge Gas	Number of Customers Lost: Gazifère	Total Customers Lost
Residential	15,342	0	15,342
Apartment*	31	0	31
Commercial*	1,292	0	1,292
Industrial	11	0	11
Total	16,676	0	16,676

*Commercial customers include some apartment customers due to building use.

Enbridge Gas indicated that service would be lost for 62,200 customers and for 16,676 customers under the Winter and Warm Day Scenarios respectively.

 a) Please provide a summary results of a qualitative risk assessment of risks associated by declining conditions of the St. Laurent system using Enbridge Gas Operational Risk Matrix.

- b) Please include a summary table of the operational risk of the St. Laurent system segments with an assessment of the financial, health and safety, customer loss and stakeholder concerns consequences and applying four levels of qualitative rating (i.e. very high risk, high risk, medium risk and low risk).
- c) Please discuss the need and timing of the Project in light of the above risk assessment.

ISSUE 2.0: PROJECT ALTERNATIVES

2.2 Staff.5 Ref: Exhibit B, Tab 1, Schedule 1, page 43, Table 12: Comparison of Leak Repair Option and Replacement Option and page 45, Table 13: Comparison of Repair Option & Replace Option (Project) Costs

Enbridge Gas considered and assessed three alternative options, including the proposed Project, to address the need to manage risks caused by declining conditions of the pipelines in the St. Laurent system:

- Retrofit Option to facilitate in-line inspection of the system (rejected)
- Repair Option (rejected)
- Replacement Option (proposed Project)

The estimated costs of the Retrofit Option costs to facilitate in-line inspection is approximately \$30.2 M. Enbridge Gas noted that in addition to the estimated retrofit costs of \$30.2 M there is "...still a high probability..." that additional capital costs be incurred to eliminate and repair the defects identified by the in-line inspection". Based on that Enbridge Gas rejected the Retrofit Option from further consideration.

For the comparative assessment of the Repair Option vs. the Replacement Option (i.e. the Project), Enbridge Gas applied a probability of pipeline failure over 40 years and beyond expressed by Asset Health Index (AHI) and compared the direct costs of the two options.

The cost comparison of direct capital costs estimates indicates that the total costs of the Repair Option is \$33.0M with a \$7.7M negative Net Present Value (NPV) compared to a Replacement Option total costs of \$73.5 M and a \$58.9M negative NPV.

The costs of the Repair Option estimated capital costs are lower than the Replacement Option. Enbridge Gas stated that it eliminated the Repair Option based on a comparative qualitative assessment of advantages and disadvantages of the Repair Option and the Replacement Option.

- a) Please discuss in more detail the reasons for not selecting the Repair Option despite lower estimated costs compared to the Project.
- 2.1 Staff.6 Ref: Application Cover Letter, September 10,2021, page 3 and Exhibit B, Tab 1, Schedule 1, pages 12-13, paragraph 23 Exhibit B, Tab 1, Schedule 1, page 42, Table 11 and Figure 17

Enbridge Gas eliminated from further consideration Integrated Resource Planning Alternative (IRPA) based on its assessment of the Project against Binary Screening Criteria set by the OEB in its Decision and Order on Enbridge Gas's Integrated Resource Planning Proposal (EB-2020-0091) issued on July 22, 2021 (IRP Decision). Enbridge Gas noted that it determined that "... the Project is driven by integrity concerns that must be addressed within three years and no demand or supply side solution can resolve integrity concerns".

To support its decision not to include IRPAs into the assessment of alternatives to the Project, Enbridge Gas referred to the following excerpt from the IRP Decision:

> If an identified system constraint/need must be met in under three years, an IRP Plan could not likely be implemented and its ability to resolve the identified system constraint could not be verified in time. Therefore, an IRP evaluation is not required. Exceptions to this criterion could include consideration of supplyside IRPAs and bridging or market-based alternatives where such IRPAs can address a more imminent need.

- a) Please present the assessment of the Project as preferred alternative against each of the five Binary Screening Criteria. Provide any additional information and explanation to demonstrate that the Binary Screening Criteria assessment eliminates IRPA as viable option to address the need for the Project.
- b) Tables 11 and Figure 17 show that 100% of the St. Laurent Mains remain in Asset Health Index Category HI 1 through 2041, with 4.3 cumulative leaks projected to that date, with asset health declining and number of projected leaks increasing rapidly after

2041. Please provide details as to why Enbridge is of the view that the integrity concerns driving this project must be addressed within three years.

- c) Please discuss the reasons for not considering "...supply side and bridging or marketbased alternatives..." that can result in alternatives that would reduce capital investment in replacement infrastructure in each Phase 3 and Phase 4 of the Project.
- d) What is the rationale for not considering and assessing alternatives that combine IRPA with a Replacement or Retrofit Options?

ISSUE 3.0: PROJECT COSTS AND ECONOMICS

3.1 Staff 7 Ref: Exhibit D, Tab 1, Schedule 1, page 10, Table 9: Estimated Project Costs

Enbridge Gas estimated the Project costs as shown in the table below to be approximately \$33.9 M for the IP PE pipeline segments and \$89.8M for XHP ST pipelines totalling approximately \$123.7M. Total capital cost of the Project (both Phase 3 and Phase 4), not including indirect overheads and interest during construction, is estimated to be approximately \$100.12 M, with \$19.7M for total contingency. The abandonment costs are not included in the cost estimates for the Project.

<u>ltem</u>	Description	IP PE Costs	XHP ST Costs	Total Costs
<u>NO.</u>				
1.0	Material Costs	\$358,484	\$1,268,313	\$1,626,797
2.0	Labour Costs	\$20,369,317	\$48,953,572	\$69,422,889
3.0	External Permitting & Land	\$6,303	787,387	\$793,690
4.0	Outside Services	\$2,849,096	\$4,523,814	\$7,372,910
5.0	Direct Overheads	\$531,062	\$751,515	\$1,282,577
6.0	Contingency Costs	\$3,318,390	\$16,405,401	\$19,723,791
7.0	Project Cost	\$27,432,652	\$72,690,002	\$100,122,654
8.0	Indirect Overheads	\$6,203,171	\$16,340,923	\$22,544,094
9.0	Interest During Construction	\$230,655	\$782,119	\$1,012,774
10.0	Total Project Costs**	\$33,866,478	\$89.813.044	\$123.679.522

Table 9:	Estimated	Project	Costs

*XHP ST costs are a Class 5 cost estimate

**Abandonment costs are not included in the cost estimates. Abandonment costs for IP PE are estimated to be \$2,817,235 and XHP ST abandonment costs are estimated to be \$7,518,548

- a) Please provide the costs of comparable projects that Enbridge Gas has completed in the past and that were approved by the OEB. Please also include the costs of completed Phase 1 and Phase 2 St. Laurent Replacement (EB-2019-0006) in the response. Please provide a breakdown of the costs for these projects showing the following information: the work year; pipe size; length; estimated costs; estimated cost per meter; actual costs; costs per meter; and level of contingency (in percentage of total capital costs).
- b) Please discuss the rationale for not including abandonment costs into the total cost estimates for the Project.
- c) Please describe the mechanism and timing for recovery of the abandonment costs estimated at approximately \$10.34 million.

3.2 Staff.8 Ref: Exhibit D, Tab 1, Schedule 1, page 10, Table 9: Estimated Project Costs

Enbridge Gas set 15% contingency for IP PE costs and 30% for XHP ST costs. The contingency applies to all direct capital costs "...to reflect preliminary design stage..." of the phases of the Project.

- a) Please discuss the rationale for determining the allocated levels of contingency for the Project. Please identify and describe the method used and risk factors taken into account to determine the appropriate contingency costs for the Phase 3 and Phase 4 of the Project.
- b) Does Enbridge Gas anticipate reducing or increasing the contingency costs as the Project moves to a more mature design and planning stage? Please discuss.
- 3.2 Staff.9 Ref. Enbridge Gas Inc. Application for natural gas distribution rates and other charges effective January 1, 2022, EB-2021-0148, October 15, 2021; Exhibit B, Tab 2, Schedule 1, page 24, Table 11: 2022 Incremental Capital Funding Request by Rate Zone

As part its section 36 application for 2022 rates, Enbridge Gas requested Incremental Capital Module (ICM) funding for several projects including Phase 3 of the St. Laurent Ottawa North Replacement Project. The ICM funding request for Phase 3 of the Project is \$86M.

- a) Please provide itemized cost estimates for Phase 3 of the St. Laurent Ottawa North Replacement Project.
- b) Please provide the total project in-service cost and itemized cost estimates for Phase 4 of the St. Laurent Ottawa North Replacement Project. What is Enbridge Gas's plan for recovery of costs for Phase 4 of the Project? Please discuss.

ISSUE 4.0: ENVIRONMENTAL IMPACTS

4.1 Staff.10 Ref: Exhibit C, Tab 1, Schedule 1: Environmental and Routing pages 1-15; page 5, paragraph 13; Attachments 3 and 4: Updated Stakeholders Consultation Logs

Enbridge Gas retained Dillon Consulting Ltd (Dillon) to complete an *Environmental Report: St. Laurent Ottawa North Pipeline Replacement Project* (June 2020) (ER), which assessed the existing bio-physical and socio-economic environment in the study area, the alternative routes, proposed the preferred route, conducted public consultation, conducted impacts assessment and proposed mitigation measures to minimize the impacts. The ER and the consultation process were conducted in accordance with the OEB's Environmental Guidelines for Location, *Construction and Operation of Hydrocarbon Pipelines in Ontario* [7th Edition, 2016] (OEB Environmental Guidelines).

On July 21, 2020, the ER was made available to the Ontario Pipeline Coordinating Committee (OPCC), Environment and Climate Change Canada (ECCC), National Capital Commission (NCC), Rideau Valley Conservation Authority (RVCA) and the City of Ottawa for review and comments.

Enbridge Gas indicated that there were several updates and amendments to the ER as result of concerns identified in the review of the ER and the route and that these updates were communicated to the parties through the notices and posting of updates to the ER.

Enbridge Gas also indicated that there would be additional studies conducted "...and reported as part of the federal environmental assessment process (anticipated to be completed late

2021/early 2022). The federal environmental assessment may be required for portions of the Project located on federal lands. Natural Heritage Summary Report is one of the requirements of the federal environmental assessment and is not within the scope of the ER.

- a) Please provide updates on stakeholders consultation logs, since filing the updated application on September 10, 2021.
- b) Please describe the status and timeline for adhering to federal environmental assessment requirements. Discuss if any anticipated delays in completing these requirements may affect the construction and in service date for the Phase 3 and Phase 4 of the Project.
- 4.1. Staff.11 Ref: Exhibit D, Tab 1, Schedule 1, page 1, paragraph 1 and Exhibit C, Tab 1, Schedule 1, page 3 paragraph 6

Enbridge Gas has committed to ensure that all the pipeline segments and pipeline components for the Project would be designed, installed and tested in accordance with Enbridge Gas's Construction and Maintenance Manual which meets or exceeds the requirements of the *CSA Z662 – Oil and Gas Pipeline System* standards and *Ontario Regulation 210/01, Oil and Gas Pipeline Systems*. These pipeline design, installation and testing requirements are adopted by the Technical Standards and Safety Authority (TSSA) which is the Provincial authority that oversees pipeline design, installation and testing. The TSSA is part of the Ontario Pipeline Coordinating Committee (OPCC) and as such received the Notice of Project Commencement. The TSSA in response to the Notice of Project Commencement, requested that Enbridge Gas complete a project application form. Enbridge Gas submitted this application form to the TSSA in December 2020.

a) Please file copies of any communication with the TSSA, in relation to the project application form it filed with the TSSA in December 2020.

4.1 Staff.12 Ref: Exhibit C, Tab 1, Schedule 1, pages 12-13, paragraphs 29-30

Enbridge Gas stated it would prepare the Environmental Protection Plans (EPP) for the Project. The EPP will incorporate the mitigation measures identified in the ER and received in the consultation with the OPCC and regulatory agencies. Enbridge Gas plans to complete the

EPP prior to mobilization and construction of the Project.

a) Please confirm that as part of the EPP process, Enbridge Gas will develop site specific environmental management, monitoring and contingency plans in order to implement general mitigation and contingency measures identified in the ER and in the consultation process.

4.1 Staff.13 Ref: Exhibit C, Tab 1, Schedule 1, page 14, paragraphs 33-36

Enbridge Gas completed archeological assessment (AA) Stage 1 in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) *2011 Standards and Guidelines for Consultant Archaeologists* (Government of Ontario, 2011). Stage 1 AA Report has been included in the evidence and was submitted on March 19,2020 to the MHSTCI for review and inclusion into the *Ontario Public Register of Archaeological Reports*. Stage 1 AA identified area with the Project footprint that have archaeological potential and require Stage 2 AA. The Stage 2 AA survey and report for the original Phase 3 (now Phase 4) IP PE pipeline segments area was submitted to the MHSTCI on July 29, 2021. The field work and the report for the original Phase 4 (now Phase 3) was planned to start late 2021.

- a) Please update the status of the MHSTCI's review of the Stage 1 AA for the entire Project and the date when Enbridge Gas expects a clearance letter from the MHSTCI with respect to the Stage 1 AA.
- b) Please provide the planned schedule for Enbridge Gas's commencement of Stage 2 AA survey for original Phase 4 (now Phase 3), indicating if the Stage 2 AA field has started, and planned date to complete the report, submit it to the MHSTCI, and receive the clearance from the MHSTCI.
- c) Please confirm that Enbridge Gas would file with the OEB clearance letters for Stage 1 AA, Stage 2 AA surveys for both Phase 3 and Phase 4 areas as soon as received from the MHSTCI.
- d) Please indicate the timeline by which Enbridge Gas must receive archaeological assessment approval from the MHSTCI to start the Project according to the schedule.

4.1 Staff.14 Ref: Exhibit C, Tab 1, Schedule 1, page 14, paragraphs 33-36

As part of the environmental assessment for the Project, in accordance with the *Ontario Heritage Act*, Enbridge Gas is required to complete a *Cultural Heritage Evaluation Report* prior to construction and submit it to the MHSTCI for their review and comment. A Cultural Heritage Assessment Report for the original Phase 3 was submitted to the MHSTCI on May 19, 2021. On June 29, 2021, the MHSTCI informed Enbridge Gas that they have no comments on the report.

- a) Please comment on the expected timeline for completion and filing with the MHSTCI of the Cultural Heritage Assessment Report for the original Phase 3?
- b) When is the final review of the Cultural Heritage Evaluation Report for the original Phase 4 expected to be completed by the MHSTCI?

4.1 Staff.15 Exhibit B, Tab 1, Schedule 1, page 47, paragraph 72 and Table 14: Project Phases Facilities and Timing

Phase	Segment	Project Start Date	In-Service Date	Facilities Installed	Customers	Facilities Abandoned	Year Aband
1	Avenue O Pressure Increase 30 psi to 45 psi	May-2018	May-2018	n/a	29	n/a	n/a
				123m - 8" PE IP		1.2km - 12" ST XHP	2023
2	Plactic Tremblay	July-2010	February 2020	1.3km - 6" PE IP	170		
-	Flasue - Tremblay	July-2019	rebruary-2020	142m - 4" PE IP	1/5	1.2km - 2" ST XHP	2010
				1.8km - 2" PE IP		776m - 1" & 1.25" ST XHP	2019
2	Plastic - St. Jaurent (Donald to Montreal)	October-2019	August-2020	1.7km - 6" PE IP	66	1.7km - 12" ST YUD	2022
2	Plastic - St. Laurent (Donald to Montreal)	October-2019	August-2020	11m - 2" PE IP	00	1.7Km - 12 - 51 Amr	2025
4	Plastic - Lower Section 1	April-2023	November-2023	1.9km - 4" PE IP	186	149m 12" ST XHP	2023
	Flashe - Lower Section 1	April-2025	November-2025	1.5611-4 PETP	100	1.9km - 4" ST XHP	2023
4	Plactic - Lower Section 2	April 2022	November 2022	1 1km - 4" DE ID	44	371m - 12" ST XHP	2022
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3	Plastic - Coventry/Ogilvie	August-2022	December-2022	1.5km - 6" PE IP	14	1.5km - 6" ST XHP	2023
3	Plastic - St. Laurent (Donald to Highway 417)	August-2022	December-2022	400m - 6" PE IP	45	661m - 12" ST XHP	2023
<u> </u>	Flashe St. Laurent (Bohala to Highway 417)	August-2022	December-2022	261m - 2" PE IP	45	00111-12 51 AIT	2023
				2.3km - 6" PE IP		2.9km - 12" ST XHP	2023*
3	Plastic - St. Laurent (Montreal to Rockcliffe)	April-2022	September-2022	600m 4" PE IP	133		
				122m - 2" PE IP		122m - 2" ST XHP	
4	Steel - East/West Coventry XHP	March-2023	December-2023	3.1km - 12" ST XHP	1	2.5 km - 12" ST XHP	2023*
				2.4km - 16" ST XHP		398m - 16" ST XHP	2023
3	Steel - North/South - St. Laurent Control to Rockcliffe XHP	March-2022	December-2022	5.8km - 12" ST XHP	3		
				330m - 6" ST XHP		9.5km - 12" ST XHP	2023**

Table 14: Project Phases, Facilities and Timing

* Abandonment will take place in 2023 when Phase 4 is completed

** Phase 4 Steel - East/West Coventry XHP once in service allows for the abandonment of 2.5km of NPS 12 ST XHP pipeline. This includes the abandonment of 1.2km of NPS 12 ST XHP pipeline made possible by the inst of the Phase 2 Plastic - Tremblay facilities.

*** Phase 3 Steel - North/South - St. Laurent Control to Rockcliffe XHP once in service allows for the abandonment of 9.5km of NPS 12 ST XHP pipeline. This includes the abandonment of 2.9km of existing NPS 12 ST XHP made possible by the installation of the Phase 3 Plastic - St. Laurent (Montreal to Rockcliffe) facilities, the abandonment of 1.7km of NPS 12 ST XHP pipeline made possible by the installation of the Phase 3 Plastic - St. Laurent (Montreal to Rockcliffe) facilities, the abandonment of 1.7km of NPS 12 ST XHP pipeline made possible by the installation of the Phase 3 Plastic - St. (Donald to Montreal) facilities and the abandonment of 661m of NPS 12 ST XHP pipeline made possible by the installation of the Phase 3 Plastic - St. Laurent (Donald to Highway 417) facilities.

If the Project is approved and constructed as planned it will result in the abandonment of approximately 21 km of the existing pipelines in the St. Laurent System during 2023.

- a) What are the applicable national and provincial regulatory standards and requirements that Enbridge Gas will have to follow for abandonment of the existing pipeline in place and for the removal of the sections of the existing pipeline from the ground?
- b) Please confirm that Enbridge Gas will comply with all the applicable national and provincial requirements related to the abandonment of the existing pipelines.

- c) Please describe any communication or consultation to date with the Technical Standards and Safety Authority (TSSA) regarding the abandonment of the pipelines.
- d) Please file copies of any correspondence with the TSSA regarding this matter. What are the next steps in communicating with the TSSA regarding the abandonment methods and plans?

ISSUE 5.0: ROUTE MAP AND FORM OF LANDOWNER AGREEMENTS

5.1 Staff.16 Ref: Exhibit C, Tab 1, Schedule 1, page 7-9: Routing and Letter by Enbridge Gas Inc. to the OEB, August 11, 2021, Project Update

The route for the Project has been determined with input from stakeholders during the consultation. The Ministry of Transportation (MTO) expressed concerns on the location of a pipeline route along Vanier Parkway. Enbridge Gas continued consultation with the MTO on the segment of the route along Vanier Parkway. The OEB placed the proceeding in abeyance to allow time for Enbridge Gas, MTO and RCMP to negotiate the adjustment to the route and reach an agreement on the acceptable route at that location. On August 11, 2021 Enbridge Gas filed a Project update notifying the OEB that an agreement on a mutually acceptable location of that segment was reached. On September 10, 2021 Enbridge Gas filed an updated application including final route for the Project.

- a) Since filing of the updated application on September 10, 2021 have any additional route adjustments been requested by the stakeholders?
- b) If so, please describe the requested adjustments including the location and rationale for the request.
- c) Please provide updates on negotiations with MTO and RCMP and planned timeline for continuing negotiation and process for acquiring permits required by the MTO related to the location near Vanier Parkway?

5.1 Staff.17 Ref: Exhibit C, Tab 1, Schedule 1, Routing, page 11-12, paragraph 28 and Exhibit E, Tab 1, Schedule 1, pages 2-4: and page x Table 1: Permits and Agreements Required

Enbridge Gas identified in its application the entities that would require approvals, permits and land easements for location, construction and operation of the Project. Enbridge Gas indicated all the permits and agreements required for the Project including the entities issuing these permits and approvals. Table 1 in the evidence presents a list of permits and agreements, describing the purpose and the issuing or approving authority.

- a) Referring to each permit listed in Table 1, please provide the status and anticipated time of each permit/approval application and the expected date of acquiring each of the permits. Discuss any anticipated potential delays that may affect construction schedule for the Project.
- b) Please provide listings of permits and agreements organized by provincial, municipal, federal authorities and other entities if applicable.
- 5.1 Staff.18 Ref: Exhibit E, Tab 1, Schedule 1, pages 1-5; page 2-4: Permits and Agreements Required; and Attachment 1: Working Area Agreement; Attachment 2: Transfer of Easement

Enbridge Gas noted that the majority of the proposed Project will be located within existing road allowances. Enbridge Gas filed the form of Working Area Agreement which has been previously approved by the OEB as part of the OEB's Decision and Order regarding Enbridge Gas's Innes Road Project (EB-2012-0438, OEB Decision and Order, April 11, 2013, pp. 5-6). Enbridge Gas also filed the form of Transfer of Easement Agreement has been previously approved by the OEB as part of the OEB's Decision and Order, April 11, 2013, pp. 5-6). Enbridge Gas also filed the form of Transfer of Easement Agreement has been previously approved by the OEB as part of the OEB's Decision and Order regarding Enbridge Gas's London Lines Replacement Project (EB-2020-0192, OEB Decision and Order, January 28, 2021, p. 29).

In addition to working area agreements and to the transfer of easement agreements, Enbridge Gas stated that it required Municipal Consent approval to locate the pipelines within the right of

way (ROW) from the City of Ottawa and may require the approvals and permits to occupy and use Federal lands may be required from the National Capital Commission (NCC).

- a) Has Enbridge Gas identified locations where the transfer of easement agreements and the working area agreements would be required? Have the landowners of these lands been identified? What is the prospect of acquiring these agreements on time without impacting the Project schedule? Please discuss.
- b) Please discuss any delays and consequences to the Project schedule with respect to timely obtaining any of the required land rights for the Project.
- c) Please describe the process of applying with the City of Ottawa for the required Municipal Consent to occupy the ROW. Provide the status of communication with the City of Ottawa to date and anticipated timeline to acquire the Municipal Consent.
- d) At which stage of Project design and planning does Enbridge Gas expect to locate the areas or segments of the route that would require the approvals by the NCC to occupy the Federal lands? Please discuss and describe the status of the communication with the NCC up to date.

ISSUE 6.0 INDIGNEOUS CONSULTATION

6.1 Staff.19 Ref: Exhibit C, Tab 1, Schedule 1, page 14, Archeological Assessment; Exhibit F, Tab 1, Schedule 1, pages 1-4 and Attachment 9, pages 1-9, Attachment 10: Indigenous Community Correspondence (as of September 1, 2021)

In accordance with the OEB's Environmental Guidelines, Enbridge Gas contacted on December 3, 2019 the Ministry of Energy Northern Development and Mines (MENDM) in respect to the Crown's duty to consult related to the Project. The MENDM by way of a letter delegated the procedural aspects of the Crown's Duty to Consult for the Project to Enbridge Gas on January 30, 2020 (Delegation Letter).

In the Delegation Letter the MENDM identified two Indigenous communities that Enbridge Gas should consult in relation to the Project:

- Algonquins of Ontario
- Mohawks of Akwesasne

Enbridge Gas provided the MENDM with its Indigenous Consultation Report (ICR) for the Project on March 2, 2021 and updated on March 4, 2021. The ICR states that Algonquins of Ontario and Mohawks of Akwesasne expressed no concerns or issues related to the Project. On April 13, 2021, Enbridge Gas received a letter from the MENDM indicating that it reviewed the ICR and that, in its opinion, the procedural aspects of consultation undertaken by Enbridge Gas to date are satisfactory (Sufficiency Letter).

Algonquins of Ontario, upon their request, reviewed the Stage 1 Archaeological Assessment report. Enbridge Gas responded to their comments and is committed to involve the Algonquins of Ontario in the Stage 2 Archaeological Assessment field work and provide capacity funding.

- a) Please update the logs on Indigenous consultation activities since September 10, 2021. Please summarize any issues and concerns Algonquins of Ontario and Mohawks of Akwesasne raised since September 10, 2021.
- b) If any issues were raised, please describe Enbridge Gas's plans, actions and commitments to address these concerns and resolve the outstanding issues.
- c) Please update the evidence with any correspondence between the MENDM and Enbridge Gas after the receipt of the Sufficiency Letter, dated April 13, 2021, regarding the MENDM's review of Enbridge Gas's Indigenous consultation activities.
- d) Please confirm Enbridge Gas's commitment to involve the Algonquins of Ontario in field work in Stage 2 Archaeological Assessment.

ISSUE 7.0 CONDITIONS OF APPROVAL

7.1 Staff.20 Ref: Exhibit A, Tab 2, Schedule 1

Enbridge Gas has applied for leave to construct facilities under section 90(1) of the OEB Act.

The OEB's standard conditions of approval for section 90 applications are provided below.

a) Please comment on the standard conditions of approval. If Enbridge Gas does not agree with any of the standard conditions of approval, please identify the specific conditions that Enbridge Gas disagrees with. Please specify any changes, amendments or additional conditions to the standard conditions. Explain the rationale for any proposed changes or amendments.

Leave to Construct Application under Section 90 of the OEB Act

Enbridge Gas Inc. EB-2020-0293 DRAFT Standard Conditions of Approval

- 1. Enbridge Gas Inc. shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2020-0293 and these Conditions of Approval.
- 2. (a) Authorization for leave to construct shall terminate 12 months after the decision is issued, unless construction has commenced prior to that date.
 (b) Enbridge Gas Inc. shall give the OEB notice in writing:
 - i. of the commencement of construction, at least 10 days prior to the date construction commences
 - ii. of the planned in-service date, at least 10 days prior to the date the facilities go into service
 - iii. of the date on which construction was completed, no later than 10 days following the completion of construction
 - iv. of the in-service date, no later than 10 days after the facilities go into service
- 3. Enbridge Gas Inc. shall obtain all necessary approvals, permits, licences, certificates, agreements and rights required to construct, operate and maintain the Project.
- 4. Enbridge Gas Inc. shall implement all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.
- 5. Enbridge Gas Inc. shall advise the OEB of any proposed change to OEB-approved

construction or restoration procedures. Except in an emergency, Enbridge Gas Inc. shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.

- 6. Concurrent with the final monitoring report referred to in Condition 7(b), Enbridge Gas Inc. shall file a Post Construction Financial Report, which shall provide a variance analysis of project cost, schedule and scope compared to the estimates filed in this proceeding, including the extent to which the project contingency was utilized. Enbridge Gas Inc. shall also file a copy of the Post Construction Financial Report in the proceeding where the actual capital costs of the project are proposed to be included in rate base or any proceeding where Enbridge Gas Inc. proposes to start collecting revenues associated with the Project, whichever is earlier. Both during and after construction, Enbridge Gas Inc. shall monitor the impacts of construction, and shall file with the OEB one electronic (searchable PDF) version of each of the following reports:
 - a) A post construction report, within three months of the in-service date, which shall:
 - i. provide a certification, by a senior executive of the company, of Enbridge Gas Inc. adherence to Condition 1
 - ii. describe any impacts and outstanding concerns identified during construction
 - iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction
 - iv. include a log of all complaints received by Enbridge Gas Inc., including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions
 - v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licenses, and certificates required to construct, operate, and maintain the proposed project
 - b) A final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
 - i. provide a certification, by a senior executive of the company, of Enbridge Gas Inc. adherence to Condition 4
 - ii. describe the condition of any rehabilitated land
 - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction
 - iv. include the results of analyses and monitoring programs and any recommendations arising therefrom
 - v. include a log of all complaints received by Enbridge Gas Inc., including the

date/time the complaint was received; a description of the complaint; any actions taken to address the complaint; and the rationale for taking such actions

7. Enbridge Gas Inc. shall designate one of their employees as project manager who will be the point of contact for these conditions, and shall provide the employee's name and contact information to the OEB and to all affected landowners, and shall clearly post the project manager's contact information in a prominent place at the construction site.