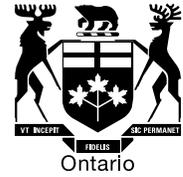


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**BY E-MAIL**

November 1, 2018

Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, 27th Floor  
Toronto, ON M4P 1E4  
[BoardSec@oeb.ca](mailto:BoardSec@oeb.ca)

Dear Ms. Walli:

**Re: OEB Staff Submission  
Enbridge Gas Distribution Inc.  
Application for leave to construct a natural gas pipeline under the Don  
River in the City of Toronto  
OEB File No. EB-2018-0108**

Please find attached OEB staff's submission in the above referenced matter.

Yours truly,

*Original signed by*

Ritchie Murray  
Project Advisor

Cc (by email):

Andrew Mandyam [egdregulatoryproceedings@enbridge.com](mailto:egdregulatoryproceedings@enbridge.com)  
Guri Pannu [guri.pannu@enbridge.com](mailto:guri.pannu@enbridge.com)

## Introduction

Enbridge Gas Distribution Inc. (Enbridge) is proposing to construct 350 metres of nominal pipe size (NPS) 30 inch extra-high pressure natural gas pipeline in the City of Toronto (Project). Enbridge says that the Project is needed to replace a segment of Enbridge's Don Valley pipeline that crosses the Don River by way of an infrastructure bridge that was constructed in 1929 and is owned by Enbridge (Bridge). Enbridge says that the Bridge is no longer fit for service and poses a risk to the safe operation and reliability of the Don Valley Pipeline. Enbridge proposes to relocate that portion of the Don Valley pipeline that is currently on the Bridge to a new location underneath the Don River from Bayview Avenue to Sunlight Park Road.

Enbridge is seeking the following orders.

- a) Under section 90 of the *Ontario Energy Board Act* (OEB Act), leave to construct the Project.
- b) Under section 97 of the OEB Act, approval of the proposed form of easement agreements.

Enbridge filed its original application on July 18, 2018. Enbridge filed an updated application on August 14, 2018, that corrected an error in the length of the Project from 250 metres to 350 metres. Notice was issued on August 21, 2018. The OEB did not receive any requests for intervention. Procedural Order 1 was issued on October 1, 2018. Interrogatory responses were filed on October 22, 2018.

Enbridge has requested a written hearing with a decision no later than December 2018 so that it can begin construction in 2019.

OEB staff submits that the OEB should grant leave to construct the project. However, as explained below, OEB staff has concerns that the Project is still at an early stage of development and as a result, there is uncertainty about the final cost of the Project. OEB staff suggests that if the Project is approved, standard condition of approval #5 should be revised, similar to the condition recently imposed in respect of Enbridge's Liberty Village project,<sup>1</sup> to allow for a full prudence review of the Project costs.

OEB staff also submits that if leave to construct is granted, it should be conditional on Enbridge filing with the OEB a clearance letter from the Ministry of Tourism, Culture and Sport (MTCS) for the Project regarding the Stage 1 Archaeological Assessment (AA).

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<sup>1</sup> EB-2018-0096

## Need for the Project

OEB staff submits that Enbridge has established the need for the Project.

Enbridge bases the need for the Project on four engineering studies that were performed to assess the structural condition of the Bridge and its ability to withstand the impact of hydraulic loads and flood events. Enbridge says that the reports have identified structural changes with the Bridge since its construction that may become further compromised by flood events and ultimately undermine the safe operation of the Don Valley pipeline. This existing pipeline supplies a large population of non-interruptible residential, commercial and industrial customers in Toronto (including the Portlands Energy Centre natural gas fired electric generating plant). Enbridge's evidence states:

“In the case of Bridge damage which could lead to pipeline damage ... a significant number of customers may lose gas supply, and ... [a]n outage of this magnitude may take many days or even weeks to restore service, once the pipeline issue has been addressed.”<sup>2</sup>

The first report was prepared in 2009 by Byrne Engineering Inc. The Byrne report provided an analysis of the structural condition of the Bridge in its current state relative to the time it was built. The report concluded that under non-flood conditions the Bridge is adequate to carry expected dead, live and snow loads, however due to the hydraulic and ice pressures expected during a regulatory flood event,<sup>3</sup> several Bridge components are inadequate to carry the factored load effects.<sup>4</sup>

The second report was prepared in 2013 by Stantec Consulting Ltd. (Stantec; Stantec Report). The Stantec Report also provided an analysis of the structural condition of the Bridge in its current state relative to the time it was built. A visual inspection of the Bridge did not detect significant structural deformation or damage.<sup>5</sup>

The third report was prepared in 2016 by Stantec (Stantec Update 1).<sup>6</sup> The fourth report was an update of the 2016 report (Stantec Update 2).<sup>7</sup> These reports provided further analysis of the structural condition of the Bridge along with an assessment of hydraulic

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<sup>2</sup> Exhibit B, Tab 1, Schedule 1, pages 15 & 16

<sup>3</sup> Within TRCA's jurisdiction, a “regulatory flood event” is the “regional storm” (i.e., Hurricane Hazel), or the 100 year storm; whichever is greater. <https://trca.ca/conservation/flood-risk-management/flood-plain-map-viewer/>

<sup>4</sup> Exhibit B, Tab 1, Schedule 1, Attachment 1.

<sup>5</sup> Exhibit B, Tab 1, Schedule 1, Attachment 2.

<sup>6</sup> Exhibit B, Tab 1, Schedule 1, Attachment 3.

<sup>7</sup> Exhibit B, Tab 1, Schedule 1, Attachment 4.

modelling for the lower Don River to determine the impact of hydraulic loads and flood events on the Bridge. The reports concluded that a 100 year event or several smaller events could cause critical embankment erosion, pipe exposure, or bridge deck destabilization.

Based on these reports, Enbridge has decided to replace the segment of its Don Valley pipeline that crosses the Don River on this bridge.

Enbridge responded to OEB staff interrogatories regarding sources of information and assumptions in the reports related to weather events. The sources of information include reports on flooding prepared by the Toronto and Region Conservation Authority (TRCA) and the TRCA's Don Valley Advisory Board, a book authored by Assistant Professor Jennifer Bonnell of York University, and a journal article published in the *Annals of Geology*.<sup>8</sup> Enbridge says that the weather assumptions are reasonable and do not contain a safety factor.<sup>9</sup>

OEB staff has no reason to dispute the engineering studies, sources of information or the reasonableness of the assumptions. OEB staff submits that Enbridge has demonstrated that the Bridge poses a risk to the existing pipeline and therefore there is need for the Project.

## **Proposed Facilities and Alternatives**

OEB staff has no concerns with the proposed facilities that comprise the Project or the rationale for rejecting the alternatives.

Enbridge retained Stantec to complete an Environmental Report (ER) and to propose a route for the Project. Stantec proposed three potential routes: Preliminary Preferred Route (PPR), Alternative Route 1 (AR1), and Alternative Route 2 (AR2). Following its consultation activities, Enbridge selected the AR2 as its final preferred route (FPR). For reasons explained below and as further discussed in the Routing and Environmental section of this submission, OEB staff accepts the selection of the FPR as compared to the alternatives.

The Project is composed of approximately 350 metres of NPS 30 inch extra-high pressure steel pipe that will be primarily located on previously disturbed municipal right-of-way and will travel under the Don River from Bayview Avenue to Sunlight Park Road.

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<sup>8</sup> OEB staff interrogatory #5.

<sup>9</sup> Ibid.

Enbridge considered three alternatives to the Project.<sup>10</sup>

1. Enbridge considered rehabilitating the Bridge. This option would require installation of piles around the bridge abutments. Enbridge says that that the piles had the potential to damage two adjacent cast iron sanitary sewers, and was therefore deemed not viable.
2. Enbridge considered rebuilding the Bridge. Enbridge deemed this option not viable because of potential conflicts between other existing structures in the area. Enbridge also noted the City of Toronto's policy no longer permits pipelines on bridges, and Enbridge's own policy to only install a pipeline on a bridge as a last resort.
3. Enbridge considered an alternative trenchless installation method. Enbridge deemed this option not viable due to stakeholder concerns and possible impacts to the TRCA's existing West Flood Protection Landform (FPL) and/or its proposed East FPL.

OEB staff notes that Enbridge's evidence on the alternatives to the Project was only provided in response to an interrogatory. OEB staff submits that Enbridge should be directed that for future projects it must provide evidence in its applications regarding the alternatives it has considered.

On April 6, 2018, Enbridge submitted copies of the ER to the Ontario Pipeline Coordinating Committee (OPCC), including the Technical Standards and Safety Authority (TSSA). As of October 22, 2018, no OPCC member had responded to Enbridge with concerns about the safety or design of the Pipeline.<sup>11</sup>

## Franchises and Certificates

Enbridge provided evidence demonstrating that it has the right to supply gas to the City of Toronto.<sup>12</sup>

## Economics and Feasibility

Subject to the comments below about uncertainty regarding the final cost of the Project, OEB staff has no concerns with the economics or feasibility of the Project.

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<sup>10</sup> OEB staff interrogatory #12.

<sup>11</sup> OEB staff interrogatory #8.

<sup>12</sup> OEB staff interrogatory #1.

The estimated cost of the Project is approximately \$25.6 million. Enbridge did not conduct an economic feasibility analysis using the discounted cash flow method, which is normally required for pipeline distribution system expansion projects.<sup>13</sup> Enbridge stated that the Project is a replacement project driven by an integrity issue and consequently there are no revenues associated with the Project.<sup>14</sup> The costs associated with removal and abandonment of the existing pipeline will be charged to the cost of retirements.<sup>15</sup>

OEB staff submits that the rationale for not conducting an economic analysis is acceptable and notes that the OEB has accepted the rationale in previous applications for leave to construct replacement projects<sup>16</sup>.

Given that the relocation of the pipeline is driven by integrity concerns with the Bridge, and the Bridge is owned by Enbridge, OEB staff questioned whether the Bridge would be removed and if so, how its removal would be funded. Enbridge stated that it is treating the Project and the removal of the Bridge as two separate projects, both of which will be paid for through funds collected from ratepayers and held in a deferral account to fund the removal of pipeline assets and the subsequent site restoration. The costs associated with removal of the Bridge are not included in the current application. Enbridge stated that it will not be seeking any contributions from the City of Toronto or Bell Canada, both of which also have assets on the Bridge.<sup>17</sup> OEB staff submits that Enbridge should explain its position with respect to the treatment of costs in a future case where it may be seeking approval of Bridge removal costs.

Enbridge provided a breakdown of the Project's capital costs as set out in Table One below<sup>18</sup>. OEB staff noted that there is a 30% contingency applied to the Project sub-total and asked Enbridge to explain the need for a 30% contingency. Enbridge responded that it followed its established guidelines for a project at this stage of scope development and risk profile. OEB notes that the contingency is higher than the 25% associated with Enbridge's Liberty Village project.<sup>19</sup> In that proceeding, the OEB found there was "insufficient evidence to support the assumed 25% contingency level."<sup>20</sup>

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<sup>13</sup> *Ontario Energy Board Guidelines for Assessing and Reporting on Natural System Expansion in Ontario* set out in the OEB's EBO 188 "Report to the Board" dated January 30, 1998 (EBO 188).

<sup>14</sup> OEB staff interrogatory #16.

<sup>15</sup> OEB staff interrogatory #9 c).

<sup>16</sup> EB-2017-0118, Decision and Order, June 23, 2017, page 6

<sup>17</sup> *Ibid.*

<sup>18</sup> Exhibit D, Tab 2, Schedule 1

<sup>19</sup> EB-2018-0096.

<sup>20</sup> EB-2018-0096, Decision and Order, September 27, 2018, pages 5-6.

OEB staff asked Enbridge to compare the total capital cost of the Project to one or more comparable projects completed by Enbridge in the last 15 years.<sup>21</sup> Enbridge provide information on two projects, but noted that they are not comparable given that Enbridge plans to install the Project by a different method of trenchless technology called micro-tunneling which has a higher level of risk; Enbridge did not provide further explanation as to why that is the case.<sup>22</sup>

Given that there is insufficient evidence on the higher risk associated with micro-tunnelling, OEB staff cannot comment on the amount of contingency it may require.

OEB staff has no other concerns with the Project (as is noted in the rest of this submission), and so one option for the OEB would be to grant Enbridge leave to construct approval for the Project, but allow for a full prudence review of the Project costs, including the costs of the proposed installation method, in the proceeding in which Enbridge proposes to include the capital costs of the Project in rate base. This would differ from the OEB's traditional approach for projects that receive Leave to Construct approval, where any further prudence review is typically focused on cost over runs. This is a similar condition to that established by the OEB in Enbridge's Liberty Village project.

**Table One: Capital Costs of the Project<sup>23</sup>**

<u>Item No.</u>	<u>Description</u>	<u>Cost</u>
1.0	Material Costs	\$710,107
2.0	Labour Costs	\$17,060,285
3.0	External & Regulatory Costs	\$860,000
4.0	Land Costs	\$301,000
5.0	Overhead Costs	\$759,000
6.0	Contingency Costs	\$5,907,147
7.0	Total Project Cost	\$25,597,539

## Routing and Environmental Matters

OEB staff has no concerns with the preferred routing, route selection methodology, or environmental aspects of the Project.

<sup>21</sup> OEB staff interrogatory #11.

<sup>22</sup> OEB staff interrogatory #11, page 3.

<sup>23</sup> Exhibit D, Tab 2, Schedule 1.

Stantec undertook a study and prepared an Environmental Report (ER) to select a preferred route for the proposed Project and to identify any potential environmental and/or socio-economic impacts that the Project could have on the existing environment. Mitigation measures designed to minimize environmental and socio-economic impacts were also developed as part of the ER. OEB staff notes that the ER conforms to the OEB's Environmental Guidelines.<sup>24</sup> According to the ER, Stantec does not anticipate any long-term impacts from the construction and / or operation of the proposed Project if the mitigation measures recommended in the ER are used.

The FPR for the Project commences at the NPS 30 inch pipeline on the west side of the Don River, approximately 25 metres north of the Bridge. The route crosses the Don River and the DVP via a trenchless crossing to the DVP interchange for Eastern Avenue on the east side of the Don River. From there, the route travels southward and terminates at Sunlight Park Road where it connects to the existing NPS 30 inch pipeline. The length of the preferred route is approximately 320 metres.

The PPR commences at the existing NPS 30 inch gas pipeline on the west side of the Don River approximately 25 metres north of the Bridge. From here, the route travels southwest along Bayview Avenue, before crossing below the Flood Protection Landform Feature (a.k.a. Corktown Common), Don River and Don Valley Parkway (DVP) via a trenchless crossing and terminates at Sunlight Park Road where it connects to the existing gas NPS 30 inch pipeline. The length of the PPR is approximately 700 metres.

AR1 commences at the existing NPS 30 inch gas pipeline on the west side of the Don River approximately 25 metres north of the Enbridge infrastructure bridge. The route travels south to approximately 50 metres south of the Bridge. The route crosses the Don River and the DVP via a trenchless crossing where it terminates at Sunlight Park Road and connects to the existing NPS 30 inch gas pipeline. The length of AR1 is approximately 400 metres.

The main reasons for rejecting the PPR and AR1 route options that Stantec proposed were that the FPR option is shorter in length and does not traverse through sensitive landforms such as the Flood Protection Landform. The preferred route also does not have any condominiums adjacent to it and it crosses significantly less infrastructure than the other two routes.

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<sup>24</sup> *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (7th Edition), 2016

Enbridge finalized a Stage 1 AA on April 4, 2018, and submitted it to the MTCS. Enbridge has yet to receive a response from the MTCS regarding the AA.<sup>25</sup> OEB staff submits that leave to construct should be, in addition to the standard conditions of approval, conditional on Enbridge filing with the OEB a clearance letter from the MTCS for the Project.

## Land Matters and Consultations

OEB staff has no concerns with respect to Enbridge's proposed land use or its proposed form of land use agreements.

The FPR is primarily located on previously disturbed municipal right-of-way. The balance of the FPR is located on municipal lands, and easements will be required from the City of Toronto, TRCA and one private land owner. The City of Toronto has advised Enbridge that it requires the approval of the TRCA before it will grant permanent and temporary easements to Enbridge; negotiations with the TRCA and the one private land owner are on-going.<sup>26</sup>

Enbridge has filed three forms of land use agreement for approval by the OEB for use in the Project as required. The form of easements were previously approved by the OEB most recently on Enbridge's Liberty Village project and have not been modified since that proceeding.<sup>27</sup> OEB staff submits that the OEB should approve these forms of agreement.

## Indigenous Consultation and Duty to Consult

OEB staff submits that Enbridge has satisfied the procedural aspects of the Crown's duty to consult.

In accordance with the OEB's Environmental Guidelines, Enbridge contacted the Ministry of Energy (MOE)<sup>28</sup> with respect to the Crown's duty to consult on October 10, 2017. In a letter dated November 28, 2017, the MOE delegated the procedural aspects of Duty to Consult for the Project to Enbridge and specifically identified the Mississaugas of the New Credit First Nation as a potentially affected Indigenous group. Enbridge submitted evidence its Indigenous consultations to the MOE, and on September 10, 2018 received a written reply from the MOE stating that, "...the Ministry

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<sup>25</sup> OEB staff interrogatory #10.

<sup>26</sup> OEB staff interrogatory #13.

<sup>27</sup> EB-2018-0096

<sup>28</sup> Subsequent to Enbridge filing its application, the MOE became the Ministry of Energy, Northern Development and Mines.

is of the opinion that the procedural aspects of consultation undertaken by Enbridge to date for the purposes of the Ontario Energy Board's Leave to Construct for the Don River NPS 30 project is satisfactory."

## Standard LTC Conditions of Approval

Enbridge is not aware of the two changes to the standard conditions that OEB staff is proposing in this submission. Enbridge may wish to comment on those changes in its reply. However, Enbridge did review the OEB's current standard conditions of approval for leave to construct projects and agrees to all of them as written, with the exception of a proposed revision to Condition 5 as follows:

Concurrent with the final monitoring report referred to in Condition 6(b), Enbridge shall file a Post Construction Financial Report, which shall indicate the actual capital costs of the project and shall provide an explanation for any significant variances from the cost estimates filed in this proceeding. Enbridge 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 proposes to start collecting revenues associated with the project, whichever is earlier.~~

Enbridge noted that the Project is a replacement project, and consequently there are no revenues associated with the Project and therefore proposed that the last part of Condition 5 be deleted.

OEB staff notes that if Enbridge is not going to be *starting to collect revenues*, then this part of the condition would not be triggered and so its removal is not necessary. OEB staff submits that the standard conditions of approval are intended to be standard across all leave to constructs unless there is a compelling reason for change. OEB staff submits that it is not necessary in this case to change condition 5. The standard conditions of approval are attached as Appendix A.

## Conclusion

Notwithstanding its concerns about the level of contingency included in the proposed Project, OEB staff submits that the OEB should grant Enbridge's request for leave to construct the Project contingent on the following:

1. The OEB should allow for a full prudence review of the Project's costs in the proceeding in which the capital costs of the project are proposed to be included in rate base.
2. Enbridge file with the OEB a clearance letter from the MTCS for the Project.
3. OEB staff also submits that standard condition of approval 5 does not need to be amended as requested by Enbridge.

All of which is respectfully submitted.

**Leave to Construct Conditions of Approval  
Application under Section 90 of the OEB Act  
Enbridge Gas Distribution Inc.  
EB-2018-0108**

1. Enbridge Gas Distribution Inc. (Enbridge) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2018-0108 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 shall give the OEB notice in writing:
  - i. Of the commencement of construction, at least ten days prior to the date construction commences
  - ii. Of the planned in-service date, at least ten 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 shall implement all the recommendations of the Environmental Protection Plan filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.
4. Enbridge shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Enbridge 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.
5. Concurrent with the final monitoring report referred to in Condition 6(b), Enbridge shall file a Post Construction Financial Report, which shall indicate the actual capital costs of the project and shall provide an explanation for any significant variances from the cost estimates filed in this proceeding. Enbridge 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 proposes to start collecting revenues associated with the project, whichever is earlier.

6. Both during and after construction, Enbridge shall monitor the impacts of construction, and shall file with the OEB one paper copy and 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's 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, 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, licences, 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's adherence to Condition 3
- 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, 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.