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BY E-MAIL

October 23, 2018

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4
BoardSec@oeb.ca

Dear Ms. Walli:

**Re: OEB Staff Submission
Enbridge Gas Distribution Inc.
Application for leave to construct a natural gas pipeline in North York,
Toronto
OEB File No. EB-2018-0097**

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
Guri Pannu guri.pannu@enbridge.com

Introduction

On August 1, 2018, Enbridge Gas Distribution Inc. (Enbridge) filed an application seeking leave to construct approximately 3.2 kilometres of nominal pipe size (NPS) 12 inch high pressure steel gas pipeline, approximately 20 metres of NPS 8 inch steel intermediate pressure pipeline, and a district station in the City of Toronto (the Project). Enbridge is also asking the OEB to approve the form of agreement it offers to landowners. The Project will supply gas to meet current demand and future growth in the area.

The proposed route begins at the intersection of Bathurst Street and Steeles Avenue West, travels south along Bathurst Street, and terminates south of the intersection of Bathurst Street and Ellerslie Avenue.

On August 14, 2018, Enbridge filed an updated map that identified the location of the district station.

As explained below, OEB staff has concerns about Enbridge's rationale for not pursuing geo-targeted demand side management (DSM) as an alternative to the Project.

In addition, in view of the fact that the Project is still at an early stage of development and there is therefore uncertainty about the final cost, OEB staff suggests that if the Project is approved, in addition to the standard conditions of approval, a condition should be included similar to the condition recently imposed in respect of Enbridge's Liberty Village project, requiring Enbridge to file detailed cost information at the time it seeks to have the Project costs reflected in rates.

Need for the Project; Alternatives to the Project

OEB staff is concerned that there is insufficient evidence to support Enbridge's assertion that geo-targeted DSM is not a viable alternative to the Project.

OEB staff has had the opportunity to review the submission on this point by the School Energy Coalition (SEC), which was filed on October 22, 2018, and substantially agrees with it.

As SEC notes, ICF Canada was engaged by both Enbridge and Union Gas Limited and prepared a report entitled "Natural Gas Integrated Resource Planning: Initial Assessment of the Potential to Employ Targeted DSM to Influence Future Natural Gas Infrastructure Investment" and dated January 2018. The report examines the Bathurst Project as a case study and concludes that "it may be more cost-effective to launch geo-targeted DSM program [sic] than to install the reinforcement project. This finding is primarily a result of the high capital costs of the reinforcement project and the relatively small demand growth rate in this community (i.e. 0.5% annually)."¹ Enbridge

¹ Attachment 1 to SEC Interrogatory #1, page 33 of 49.

subsequently revised the assumptions on which the consultant relied. In particular, it determined that annual load growth would be an average of 590 m³/h, compared to the 153 m³/h assumed in the consultant's report. In an interrogatory response, Enbridge explained that "The growth information provided to ICF was originally the best available information at the time and was based on 2016 projections and included Hemson growth forecasts. The project was revised to utilize updated localized and current growth forecasts."² Enbridge provided an internal memo indicating that the higher growth forecasts were based on "updated information from Developer and Municipal plans."³ However, Enbridge has not filed the actual information it received from developers or the municipality, or other evidence to support the revised forecasts. Because the internal memo was filed with Enbridge's interrogatory responses, and not with the application itself, the parties have not had an opportunity to ask Enbridge further questions about it.

In OEB staff's view Enbridge has not provided enough evidence to demonstrate that geo-targeted DSM is not a viable alternative to the Project. OEB staff submits that Enbridge should be required to file additional information to support its revised growth forecasts and demonstrate that it considered DSM as a means to either defer or partially displace the pipeline capacity required to meet the forecasted demand in the area.

OEB staff notes that the April 2019 in-service date can still accommodate an extended regulatory process for this current proceeding. If Enbridge agrees to file additional information, OEB staff recommends 10 days for a second round of interrogatories, 10 days for responses and 10 days for final submissions on the DSM issue. The OEB can still be in a position to issue a decision in late December or early January 2019.

Proposed Facilities

Subject to the comments above about Enbridge's assessment of alternatives to the Project, OEB staff has no concerns with the proposed facilities.

Enbridge retained Dillon Consulting (Dillon) to complete an Environmental Report (ER) and to propose a route for the pipeline. Dillon proposed two potential routes: the Preliminary Preferred Route (PPR) and the Alternative Route (AR). Following its consultation activities, Enbridge selected the PPR as its final preferred route (FPR). OEB staff accepts the selection of the FPR as compared to the AR as further discussed in the Routing and Environmental Section.

The proposed facilities are composed of approximately 3.2 km of NPS 12 inch high pressure steel pipe and approximately 20 m of NPS 8 inch intermediate pressure steel pipe and is located within the municipal road allowance. The proposed route begins at the intersection of Bathurst Street and Steeles Avenue West, travels south along Bathurst Street, and terminates south of the intersection of Bathurst Street and Eglinton

² SEC Interrogatory #1.

³ Attachment 2 to SEC Interrogatory #1.

Avenue. There would be a district station constructed at the intersection of Bathurst Street and Betty Ann Drive.

Enbridge proposes to initiate construction of the Project in April 2019 with gas distribution service continuing to be available for existing customers and service to new customers starting in December 2019.

Enbridge explained that it proposes an in-service date of December 2019, despite the customer addition forecast not beginning until 2020, because it must coordinate its construction with that of other utilities in the same area. Upon completion of the Bathurst Reinforcement Project and other utility works on Bathurst Street, Enbridge anticipates a moratorium will be placed on further work along the preferred route.⁴

Franchises and Certificates

Enbridge provided evidence demonstrating that it has the right to supply gas to the City of Toronto.⁵

Economics and Feasibility

OEB staff has no concerns with the economics or feasibility of the Project. However, as discussed below, the Project is still in an early stage of development.

In accordance with the EBO 188 Guidelines, Enbridge provided evidence that it used the discounted cash flow (DCF) method in its evaluation of the economic feasibility of the Project. The EBO 188 Guideline's profitability index calculation uses forecast revenues, based on the customer additions forecast for a 10 year period, with a DCF analysis of 40 years. The total capital cost of the Project is estimated to be approximately \$9.15 million and its Profitability Index is forecast to be 0.857. This exceeds the minimum PI of 0.8 required by the EBO 188 Guidelines for an individual project.

OEB staff noted that the estimated Labour and Construction Cost of the Project is approximately \$5.5 million, representing approximately 80% of the project sub-total (i.e., the project cost before contingency and interest during construction is applied). OEB staff asked Enbridge to explain how the estimate for Labour and Construction Cost was determined. Enbridge responded that it received a quote for the work from one of its contractors at a time when there were still a number of uncertainties including "no preliminary drawings, survey, or subsurface utility information" and "the site review was limited to knowledge of Enbridge's existing infrastructure in the area and above grade features."⁶

⁴ SEC interrogatory #6.

⁵ OEB staff interrogatory #1.

⁶ OEB staff interrogatory #7, c).

OEB staff asked Enbridge to compare the total capital cost of this project to one or more comparable projects completed by Enbridge in the last five years.⁷ Enbridge provided the following table.

Table One: Comparison of Project Costs⁸

	City	Work Year	Pipe Size	Length	Estimated cost	Estimated cost per meter	Actual Total Costs	Actual cost per meter
Brimley - Replacement	Scarborough	2017	12" ST HP, 4" ST HP and 2" ST HP	1024	3,348,416	3,270	2,339,152	2,284
Molson, MacPherson Roxborough Replacement	Toronto	2016-2017	12" ST HP 2" PE IP	1030	3,462,783	3,362	4,722,564	4,585
Bathurst Reinforcement	North York	2019	12" ST HP, 8" ST IP	3200	9,147,651	2,859	TBD	TBD

Enbridge states that the estimated costs for both the Brimley Replacement project and Molson MacPherson Roxborough (MMR) Replacement project included a 25% contingency.⁹

OEB staff observes that the actual cost per metre of the Brimley Replacement project (\$2,284 per metre) is approximately 20% less and the MMR Replacement project (\$4,585 per metre) is approximately 60% more expensive than the estimated cost per meter of the Project (\$2,859 per metre).

Enbridge's evidence explains that the MMR Replacement project was more expensive given cost overruns associated with permanent restoration, and the unforeseen requirement to install the main at nonstandard depths given utility congestion in the area.

Enbridge states that the restoration requirements for the Project are not expected to be as extensive given that other utility work will commence upon the Project's completion, so there will be fewer permanent repairs required. However, given the utility congestion on, and span of, the route and the complexity of a "second station" to be installed for the Project, Enbridge expects the estimated cost per meter on the Project to be "slightly higher" than that of the Brimley Replacement project.¹⁰ In OEB staff's view, this answer is only partially helpful. Enbridge's application refers repeatedly (including in the Project map that was included in Enbridge's application update) to only one district station, at

⁷ OEB staff interrogatory #7, g).

⁸ Ibid.

⁹ Ibid.

¹⁰ OEB staff interrogatory #7, g).

the corner of Bathurst Street and Betty Ann Drive. The “second station” was mentioned for the first time in the interrogatory response, and is not included in Enbridge’s request for leave to construct.

There is a 30% contingency applied to the Project sub-total. OEB staff 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.¹¹ It is not clear from Enbridge’s response whether, in addition to the 30% contingency identified, there is some other contingency inherent in the estimated Labour and Construction Cost of the Project associated with the uncertainties that existed at the time that estimate was prepared. In either case, the contingency is higher than the 25% associated with Enbridge’s Liberty Village project. In that proceeding, the OEB found there was “insufficient evidence to support the assumed 25% contingency level.”¹²

In OEB staff’s view, it is reasonable to expect the level of contingency to be higher the less developed the planning is; OEB staff would expect the contingency to decline as the detailed planning advances. OEB staff therefore does not suggest that the contingency currently built into Enbridge’s budget is unreasonable. Nevertheless, because there is so much cost uncertainty, it would be appropriate, in OEB staff’s view, to include a condition of approval similar to the condition attached to the OEB’s approval of the Liberty Village project, which read:

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.* [Emphasis added.]¹³

The OEB explained: “The OEB directs Enbridge to provide a detailed review of the final costs of the Project as part of its next rate application. The review shall provide a variance analysis of project cost, schedule and scope compared to the original estimates, including the extent to which the project contingency was utilized.”¹⁴

Routing and Environmental Matters

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

¹¹ OEB staff interrogatory #7, d).

¹² EB-2018-0096, Decision and Order, September 27, 2018, pages 5-6.

¹³ EB-2018-0096, Decision and Order, September 27, 2018, Appendix B.

¹⁴ EB-2018-0096, Decision and Order, September 27, 2018, pages 6.

Dillon undertook a study to select a preferred route for the proposed pipeline 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 study. The study results have been documented in the Environmental Report (ER). OEB staff notes that the ER conforms with the OEB's Environmental Guidelines.¹⁵ Dillon does not anticipate any long-term impacts from the construction and / or operation of the proposed pipeline if the mitigation measures recommended in the ER are used.

An amended ER was submitted to the Ontario Pipeline Coordination Committee (OPCC) on July 13, 2018, as the original ER was inadvertently missing information. Enbridge responded to queries from the Ministry of Tourism, Culture and Sport (MTCS), an OPCC member. As noted below, the MTCS has approved the Project. No comments were received from other members of the OPCC.

The total length of the FPR is approximately 3.2 kilometers and is entirely located within the municipal road allowance. The FPR commences at the intersection of Bathurst Street and Steeles Avenue West within the City of Toronto, travels south along Bathurst Street, and terminates south of the intersection of Bathurst Street and Eglinton Avenue.

An alternate route was identified by Dillon. The AR is composed of approximately 3.6 km of NPS 12 inch high pressure steel pipe and is located within the municipal road allowance. The AR begins on Steeles Avenue West, east of the intersection of Steeles Avenue West and Village Gate. It travels west on Steeles Avenue West before turning south onto Village Gate. The AR then turns east onto Greenwin Village Road, then south onto Chelmsford Avenue. It then turns east onto Drewry Avenue, then south onto Grantbrook Street. It then turns east onto Finch Avenue West, then south onto Senlac Road. The AR terminates at the intersection of Senlac Road and Betty Ann Drive

In selecting the FPR, Dillon assessed the PPR and AR from an environmental and socioeconomic perspective. The main reasons for selecting the FPR were that the FPR travels a shorter distance, has less turns and road crossings, and crosses less residential properties than the alternative route.

In Dillon's opinion, there will be no long-term impacts from the construction and / or operation of the proposed pipeline as long as Enbridge adheres to the mitigation measures recommended in the ER.

The MTCS has reviewed the Project's Stage 1 Archaeological Assessment and issued a clearance letter on September 20, 2018. The Stage 1 Archaeological Assessment determined that the study area does not require a Stage 2 Archaeological Assessment.

¹⁵ *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (7th Edition), 2016.

Enbridge also confirmed in its interrogatory response that no additional Species at Risk mitigation measures have been identified or developed through communications with its consultant and the Ministry of Natural Resources and Forestry.

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 entire proposed route is located within municipal road allowance; Enbridge has not identified any requirements for non-municipally owned land. Although Enbridge does not expect to require the use of private land, it has filed a Form of Working Area Agreement which Enbridge would offer affected landowners should the need arise. The OEB has previously approved this Form of Working Area Agreement.¹⁶

Enbridge has held discussions with the municipality and public meetings with local residents. Enbridge is aware of concerns about traffic congestion and access to emergency services for senior citizens were expressed about the PPR. Enbridge anticipates that the identified impacts can be minimized by implementing the mitigation measures identified in the ER.

Indigenous Consultation and Duty to Consult

In accordance with the OEB's Environmental Guidelines, Enbridge contacted the Ministry of Energy (MOE)¹⁷ with respect to the Crown's duty to consult on January 19, 2018, and again on February 2, 2018 with updated routing. Enbridge received a written reply from the MOE on February 27, 2018. The MOE indicated that no duty to consult has been triggered, and it will not be necessary for the MOE to provide a letter of opinion regarding the sufficiency of consultation.

As a result of the MOE's determination, Enbridge did not file an Indigenous Consultation Report for the Project. As directed by the OEB, Enbridge served notice to the Métis Nations of Ontario (MNO), but MNO did not request intervenor status. Should an Indigenous community identify itself as being potentially affected by the Project, Enbridge has committed to engage with that Indigenous community accordingly.

Given that the MOE has indicated that no duty to consult is triggered by the Project, OEB staff has no concerns in respect of Indigenous consultation.

Standard LTC Conditions of Approval

¹⁶ The OEB previously approved this Form of Working Area Agreement for use in the proceeding for Enbridge's Liberty Village Project (EB-2018-0096).

¹⁷ Subsequent to Enbridge filing its application, the MOE became the Ministry of Energy, Northern Development and Mines.

With the exception of OEB staff's proposal to amend Standard Condition of Approval 5, Enbridge has reviewed and agreed to the OEB's standard conditions of approval for leave to construct projects (attached as Appendix A).¹⁸

Conclusion

OEB staff submits that Enbridge should be required to file additional information to support its revised growth forecasts and demonstrate that it considered DSM as a means to either defer or partially displace the pipeline capacity required to meet the forecasted demand in the area. OEB staff also submits that the leave to construct, if granted, should include, in addition to the standard conditions of approval, a condition similar to the one about costs which was included in the approval for Enbridge's Liberty Village project.

All of which is respectfully submitted.

¹⁸ Enbridge's response to OEB staff interrogatory #7. To be clear, Enbridge was not asked to comment on the revisions to the standard Condition 5 that OEB staff now proposes.

APPENDIX A
Leave to Construct Conditions of Approval
Application under Section 90 of the OEB Act
Enbridge Gas Distribution Inc.
EB-2018-0097

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-2018-0097 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; and
 - 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. Enbridge shall file, in the proceeding where the actual capital costs of the project are proposed to be included in rate base, 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.

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; and
- 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; and
- 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.