Ontario Energy Board | Commission de l'énergie de l'Ontario

BY EMAIL

November 9, 2020

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

Dear Ms. Long:

Re: Enbridge Gas Inc.
NPS 20 Replacement Cherry to Bathurst Project
OEB Staff Submission
OEB File No. EB-2020-0136

In accordance with Procedural Order No. 3, please find attached the OEB staff submission for the above proceeding. This document has been sent to Enbridge Gas Inc. and to all other registered parties to this proceeding.

Enbridge Gas Inc. is reminded that its reply submission is due by November 17, 2020.

Yours truly,

Azalyn Manzano

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Date: 2020.11.09 14:48:20 -05'00'

Azalyn Manzano
Advisor, Natural Gas

Encl.

c. Enbridge Gas Inc., City of Toronto, Energy Probe, Environmental Defence, FRPO, Metrolinx, Pollution Probe

NPS 20 Replacement Cherry to Bathurst Project

Enbridge Gas Inc.

EB-2020-0136

OEB Staff Submission

November 9, 2020

1 INTRODUCTION AND SUMMARY

On July 31, 2020 Enbridge Gas Inc. (Enbridge Gas) applied to the Ontario Energy Board (OEB) under section 90(1) of the *Ontario Energy Board Act, 1998* for leave to construct a natural gas pipeline and ancillary facilities in the City of Toronto (the Project). Enbridge Gas also applied under section 97 of the Act, for approval of the form of Temporary Land Use Agreement to be offered to affected landowners.

The Project involves the replacement of a 4.3 kilometre section of 20-inch (NPS 20) high pressure vintage steel pipeline from Cherry Street to Remembrance Drive (west of Bathurst Street) on Lake Shore Boulevard and a 230 metre section of vintage steel pipeline from Mill Street to Lake Shore Boulevard on Parliament Street with new NPS 20 high pressure steel pipeline (the Project or C2B segment). According to the application, the need for the Project is to address several integrity concerns which, if not addressed, are expected to impact both the safety and security of supply of the pipeline. The total estimated cost of the Project is $133M.

Construction of the Project is scheduled to begin in June 2021 with an in-service date of August 2022. Enbridge Gas requests a decision from the OEB by February 2021.

2 PROCESS

Enbridge Gas filed the Application on July 31, 2020. The OEB issued a completeness letter on August 14, 2020, and a Notice of Hearing on August 21, 2020. The intervention period ended on September 14, 2020.

Procedural Order No. 1 was issued on September 21, 2020. Energy Probe, Environmental Defence, Federation of Rental-housing Providers of Ontario (FRPO), Metrolinx, Pollution Probe and the City of Toronto were granted intervenor status. Energy Probe, Environmental Defence, FRPO and Pollution Probe were granted cost award eligibility. The Procedural Order provided for interrogatories and submissions on the Application. OEB staff and intervenors filed written interrogatories on October 1, 2020. Enbridge Gas filed interrogatory responses on October 21, 2020. Enbridge Gas filed its argument-in-chief on November 2, 2020.

Enbridge Gas's reply submission is due by November 17, 2020.

3 SUBMISSIONS

OEB staff agrees that there is a need for the Project in order to address integrity and safety concerns. OEB staff has no issues with the proposed Project costs and is satisfied that environmental, Indigenous consultation and land matters have been adequately addressed to date.

3.1 Need for the Project and Proposed Facilities

OEB staff submits that the proposed Project is needed and should be approved at this time. OEB staff has no issues or concerns with Enbridge Gas's proposed facilities.

Need for the Project

Enbridge Gas has requested leave to construct 4.5 kilometres of NPS 20 high pressure steel pipeline in a like-for-like replacement of the existing vintage steel pipe originally constructed in 1954. The pipeline to be replaced is part of the approximately 1,065-kilometre long Kipling Oshawa Loop (KOL), a vast network of multiple-sized high pressure natural gas mains[1] extending from Mississauga to almost Bowmanville.

Enbridge Gas stated that the area served by the Project has the highest density of customers within the Enbridge Gas franchise area, and serves several large customers in addition to the residential, commercial, institutional and government buildings in the area. It also indirectly serves hospitals, commercial office towers and condominiums representing approximately 40 million square feet of real estate within downtown Toronto via an Enbridge Gas customer, Enwave Energy Corporation. Enbridge Gas stated that a pipeline failure could result in loss of natural gas distribution service for thousands of customers or in the extreme, place public safety at risk. Enbridge Gas further indicated that the consequences are amplified by the presence of wall-to-wall concrete, a densely populated downtown core, the Gardiner Expressway, utility congested road allowance, and close proximity to railway/public transportation[2].

Enbridge Gas stated that its Asset Management Plan has identified the KOL as having all the typical characteristics of vintage steel mains (mains installed prior to 1970) including corrosion, dents, compression couplings on mains and services, reduced depth of cover, shallow blow-off valves, drips/siphons, lack of cathodic protection, live stubs, mitered bends, stray current from hydro infrastructure and contaminated soil.

[1] Exhibit I.Toronto.17(a)
[2] Argument-in-chief, p. 3

Enbridge Gas stated that Inline Inspections (ILI) in 2016 and 2018 covering 1.9 km of the 4.5 km C2B segment indicate that the C2B segment requires remediation or replacement due to pipeline conditions, pursuant to CSA Z662 guidelines. The 2016 ILI found two areas that required immediate rehabilitation in the form of integrity digs, which were done in 2017. The results of the ILIs also indicated that there is a significant amount of corrosion (that if left unmitigated can cause the steel to lose its strength and render it unable to contain the natural gas within the pipeline at its operating pressure), and dents (which cause a local stress and a reduction in the pipeline diameter). Enbridge Gas stated that due to the location of the segment for which the ILIs were conducted, comparable environmental conditions (e.g. high concentrations of petroleum hydrocarbons and volatile organic compounds) and the year of construction, it was reasonable to expect that the remaining 2.6 km of the C2B segment is in similar condition[3].

In response to Environmental Defence's interrogatories regarding the proportion of pipeline capacity that would be required in five to ten years if natural gas-related emission targets in the Government of Ontario's Environment Plan are met, Enbridge Gas stated that even if future natural gas consumption is reduced, the replacement will be required[4]. Enbridge Gas stated that its focus is on ensuring that it has the assets required to meet its customers' immediate and long-term demand requirements on an annual and design day basis. When asked about the risk of the proposed pipe being stranded in 2050, Enbridge Gas stated that it expects the project to be utilized for the foreseeable future[5].

Enbridge Gas stated that it is aware of 55 developments in the immediate area of the Project that are either scheduled for occupancy in 2020 or 2021, under construction or in the development process[6]. Enbridge Gas stated that the reason for the replacement does not relate to projected load growth, and that it does not propose to increase the diameter of the pipeline[7]. However, Enbridge Gas refers to this growth to support its view that there will be ongoing and potentially increasing demand to be served by the Project, even if there are some demand reductions from existing customers[8].

Enbridge Gas stated that the NPS 20 KOL Replacement Project, a five-phase plan to replace 46 kilometres of pipeline along Lake Shore Boulevard from Lisgar Station to Station B, was identified in the EGD's 2018-2027 Asset Management Plan; the

[3] Exhibit I.EP.10(b)
[4] Exhibit I.ED.3(a) and (b)
[5] Exhibit I.ED.8(c)
[6] Exhibit B, Tab 1, Schedule 1, p. 17
[7] Exhibit I.Toronto.16
[8] Argument-in-chief, p. 13

proposed Project is Phase 1 of the NPS 20 KOL Replacement Project [9]. In response to interrogatories about replacing other vintage NPS 20 sections of the KOL, Enbridge Gas stated that there are maintenance programs in place for smaller pipelines. For vintage NPS 20 sections of the KOL, Enbridge Gas anticipates using similar inline inspection practices but currently has not prepared any timelines for this work. Enbridge Gas also mentioned that it was replacing a different segment of the KOL in the NPS 20 Waterfront Relocation Project[10] recently filed with the OEB[11]. In terms of using Integrated Resource Planning (IRP) to downsize or delay replacing sections of the KOL, Enbridge Gas noted that where a facility project (such as this Project) is designed to meet a safety or reliability need, which includes the replacement of short pipeline segments for integrity purposes, it would not be a suitable candidate for IRP[12].

OEB staff notes that in the decision for the Phase 1 St. Laurent Project application[13], the OEB stated that it had concerns about granting stand-alone approval for one part of a multi-phase project, and that it prefers to consider the overall plan for supply to an area when assessing each project, whenever possible. It is unclear to OEB staff as to which stage of planning Enbridge Gas is currently at for the other phases for the NPS 20 KOL Replacement, as the Asset Management Plan in evidence is dated 2018. However, there does not appear to be a similar dependency between this Project and future phases on the NPS 20 KOL Replacement plan, as was the case in the Phase 1 St. Laurent Project. As such, OEB staff submits that it is in the public interest to approve the Project at this time, given the conditions uncovered in the ILIs in the C2B segment and the potential integrity and public safety issues presented by Enbridge Gas.

Proposed Facilities

Enbridge Gas is proposing to construct 4.3 kilometres of NPS 20 high pressure steel pipeline commencing at the intersection of Cherry Street and Lake Shore Boulevard, where it will tie-in to an existing natural gas pipeline. From there, the new pipeline would travel west along Lake Shore Boulevard to Remembrance Drive where it will tie-in to an existing natural gas pipeline. Enbridge Gas will also construct a tie-in lateral (the North Tie-in Lateral) which commences at the intersection of Mill Street and Parliament Street and will tie-in to an existing natural gas pipeline. From there, the North Tie-in Lateral will travel approximately 230 metres south along Parliament Street to Lake Shore Boulevard where it will tie-in to the facilities to be constructed along Lake Shore Boulevard. Enbridge Gas's argument-in-chief stated that the Project route also goes down along

[9] Exhibit I.EP.3
[10] EB-2020-0198
[11] Exhibit I.Toronto.17(a)
[12] Exhibit I.Staff.1(f), Argument-in-chief, p. 14
[13] EB-2019-0006

parts of Harbour Street[14]. OEB staff requests that Enbridge Gas confirm whether or not the Project will travel along parts of Harbour Street, as this was removed in the August 27, 2020 update to the application.

Enbridge Gas confirmed that no ancillary facilities or stations are required to be constructed for this project, but that there are five existing district stations that will require inlet piping alterations to facilitate tying into the new Project[15]. Enbridge Gas stated that it was also considering using two sections of the existing pipeline totaling approximately 293.9 metres as they are newer pipe installed around 1996 and 1997[16].

Enbridge Gas stated that the 4.5 km of existing pipeline will be abandoned in place (by cutting the pipeline into sections and sealing all open ends[17]) at the same time as reinstatement[18]. Enbridge Gas also stated that it would commission the new pipeline prior to the abandonment of the existing pipeline to ensure uninterrupted service to existing customers, and that if live service tie-overs for the 27 existing customers fed directly off the existing main cannot occur, Enbridge Gas will contact the impacted customer(s) directly to coordinate the service relay to minimize disruption of service[19].

3.2 Project Alternatives

OEB staff supports the proposed alternative of replacing the C2B segment with NPS 20 as well as the proposed route. Enbridge Gas stated that it used a high-level screening process and determined that in-depth Integrated Resource Planning (IRP) analysis is not warranted for this Project as this project is needed to address integrity issues (and is like-for-like) which serves thousands of customers in downtown Toronto. , .
.
OEB staff submits that it would be unlikely that incremental demand-side management options could meet all the requirements of the Project or displace some capacity as the high-level screening process performed by Enbridge determined that an in-depth IRP analysis was not required. However, Enbridge Gas did not provide any additional evidence that addressed DSM alternatives and more evidence in this area should be expected in future applications.[20]

[14] Argument-in-chief, p. 10
[15] Exhibit I.Staff.1(b)
[16] Exhibit I.Toronto.36(b)
[17] Exhibit I.ED.10(g) and Argument-in-chief, p. 10
[18] Exhibit I.ED.10(a) and (g); Exhibit I.Staff.2(a)
[19] Exhibit I.Staff.2(b) and (c)
[20] Exhibit I.ED.2, Exhibit I.ED.3, Exhibit I.ED.4

OEB staff agrees with Enbridge Gas that the savings from using a smaller pipeline would be relatively modest and would result in increased operational costs from inline inspections (as Enbridge Gas would not be able to do single runs). A smaller pipeline also would not provide the same amount of reliability and flexibility as an NPS 20 pipeline in the case of a supply disruption[21]. OEB staff also has no issues with Enbridge Gas's assessment of alternative routings, or its rationale for selecting the preferred routing, which took into account Enbridge Gas's experience in building pipelines in the City of Toronto, public consultation, environmental and socio-economic concerns, and technical and constructability requirements.

Enbridge Gas considered the following alternatives to the Project: a) repairing issues at localized areas via integrity digs rather than replacing the segment, b) replacing the C2B segment with NPS 16 rather than NPS 20 to lower the overall cost of the project, and c) alternative routes for the Project.

Repairing Issues at Localized Areas

Using the data from the ILIs, Enbridge Gas prorated the 72 integrity digs predicted for the 1.9 km of inline inspected pipeline over the entire 4.5 km C2B segment and extrapolated that 171 integrity digs would be required on the C2B segment over the next 40 years, equating to one integrity dig for every 26 metres of the C2B segment[22].

The one advantage of the repair option, as presented by Enbridge Gas, appears to be that the capital expenditures from the integrity digs can be spread over 40 years. However, Enbridge Gas stated that there may be even more integrity digs required after 40 years, that the existing depth of cover issues would remain, and that the same vintage pipe remains in place and continues to degrade. Enbridge Gas also listed other disadvantages to the repair option, including the impact to the public and to its reputation as construction crews would be returning to similar locations over the next 40 years. This would also entail a need to coordinate this work with development in the area, and the fact that many fittings along the C2B segment are inaccessible due to development around and above the pipeline.

Enbridge Gas confirmed that it had assumed that the replacement option would have no integrity digs over the next 40 years, as the pipeline being installed would be new and manufactured and constructed to today's standards, which includes having a greater

[21] Exhibit I.Staff.1(e)
[22] Exhibit I.EP.9(a)

wall thickness, improved pipeline coating and implementing advanced corrosion mitigation practices[23].

Enbridge Gas also conducted a Discounted Cash Flow analysis on direct project capital costs using the same method in Appendix B of E.B.O. 188 on the repair option and the replacement option[24]. Enbridge Gas based the cost of the repair option on the actual costs for integrity digs completed on the C2B segment in 2017. Enbridge Gas provided a table (reproduced in Table 1 below) showing that the total cost of the repair option would be $262 million, with a net present value (NPV) of -$74 million, compared with the total cost of the replacement option, which was $107 million, with an NPV of -$84 million.

Table 1. Comparison of Repair Option and NPS 20 Replacement Option

($ Millions)	**Repair Issues at Localized Areas as They Occur**	**Replace 4.5 km Segment of KOL Line**
Total Cost	$262	$107
Net Present Value	($74)	($84)

Enbridge Gas explained that the lower NPV of the repair option was due to the time value of money[25], which OEB staff understands to mean that the expenditures spread out over the next 40 years are seen as less expensive in terms of net present value, as opposed to the net present value of a relatively large capital investment in the next two years. Enbridge Gas also noted that the calculation did not take into account the economic impacts to residents and local businesses, or a scenario where a larger replacement in the future would be required. The integrity digs would also rehabilitate only the pipe at the localized dig sites, and would not improve the condition of the remaining pipe section[26]. Enbridge Gas stated that while a pipeline could be repaired indefinitely, it does not believe that continual repair of the C2B segment is a viable option for such a vital pipeline[27].

Replacing the C2B Segment with NPS 16

Enbridge Gas ran three scenarios to determine whether the KOL could maintain natural gas supply if the C2B segment were to be downsized to NPS 16: a) no feed from the Mississauga Southern Link Line, b) no feed from the West Mall Feeder Station and c) the isolation of the DV Line. In all three scenarios, the downsizing of the C2B

[23] Exhibit.I.EP.15
[24] Exhibit I.PP.6(a)
[25] Exhibit I.Staff.3(b)
[26] Exhibit I.EP.2, Attachment 1, p. 2
[27] Exhibit I.Toronto.13

segment of the KOL proved to be a non-viable option with current demand levels[28]. Enbridge Gas stated that its analysis showed that minimum pressures would not be maintained on parts of the C2B segment if the pipeline were to be downsized, and would cause a supply disruption at one of the studied locations[29].

Enbridge Gas stated that as it had determined that the NPS 16 option was not a viable option, it did not develop a project cost estimate for this option. Enbridge Gas estimated that the cost of a downsized NPS 16 replacement pipeline would be reduced by approximately 5% to 10%. Enbridge Gas explained that the modest cost reduction is due to the fact that the construction method for an NPS 20 pipeline is the same for an NPS 16 pipeline, and would only affect materials costs, drill size and welding times[30].

Enbridge Gas stated that an NPS 16 replacement would impact its existing operational flexibility and reduce its ability to implement a straightforward ILI program on the KOL, should it choose to do so in the future[31]. Enbridge Gas explained that the existing pipeline currently has many unpiggable fittings which preclude Enbridge Gas from conducting ILIs, and that Enbridge Gas's current design practices for vital mains require piggable fittings for any new installation. Enbridge Gas stated that a pipeline constructed with different sizes negates this potential for single ILI runs, leading to increased future costs if an ILI program is developed for this pipeline in the future[32].

Route Alternatives

Enbridge Gas retained Golder Associates Inc. and Dillon Consulting Ltd. (Dillon) to evaluate alternative routes for the Project. Enbridge Gas chose three routes within right of way for assessment as part of the Environmental Report (ER). Enbridge Gas stated that the Preferred Route (PR) was chosen based on public consultation, environmental and socio-economic concerns, and technical and constructability requirements, and as the PR is sited in existing, previously disturbed municipal road right of way, potential adverse effects to the surrounding environment are greatly reduced[33].

Other than the Preferred Route, Enbridge Gas stated that it did not develop cost estimates for any other route examined by Golder or examined in the ER[34]. Enbridge Gas stated that combining the work done by Golder and Dillon with the experience that

[28] Exhibit I.ED.5
[29] Argument-in-chief, p. 14
[30] Exhibit I.FRPO.5(a)
[31] Argument-in-chief, p. 14
[32] Exhibit I.ED.5
[33] Argument-in-chief, p. 16
[34] Exhibit I.ED.11(d)

Enbridge Gas has building pipelines in the City of Toronto and the comments received during the open houses, Enbridge Gas is confident that the proposed route is the most suitable for the Project[35].

3.3 Project Costs and Schedule

OEB staff submits that the estimated cost of the Project appears to be reasonable, given the location and length of the line that is being replaced. OEB staff also submits that the rationale for not conducting an economic analysis to determine the Profitability Index of the Project is acceptable and notes that the OEB has accepted the rationale in previous applications for leave to construct replacement projects where the need was driven by integrity requirements[36]. OEB staff also has no issues with the proposed construction schedule.

The total estimated cost of the Project is approximately $133M. This includes $3.5M for the material costs, $71.8M for labour costs, $24.1M in indirect overhead costs, and $24.8M in contingency costs.

Enbridge Gas stated that the costs include a 30% contingency applied to all direct capital costs to reflect the preliminary design stage of this Project. The contingency is required to cover the costs of known risks that cannot be estimated at the time the estimate is prepared including underground issues (e.g., utility conflicts, subsurface conditions such as rock and soil quality), working space requirements (e.g. easement costs, temporary working easements, width of right of way and congestion of utilities) and the possibility of delays due to weather, as well as additional project specific risks such as working in the vicinity of the Gardiner Expressway and other main traffic arteries[37].

When asked about the discrepancy between the application's stated project cost of $133 million[38] versus the $107 million in Table 1, Enbridge Gas stated that $107 million correspond to the direct capital cost for the replacement Project over 2020-2022, as seen in Table 2 below[39].

[35] Exhibit I.EP.18(b)
[36] EB-2019-0172
[37] Exhibit I.PP.13(d)
[38] Exhibit D, Tab 1, Schedule 1, p. 5
[39] Exhibit I.Staff.3(b), Exhibit I.ED.9(a)

Table 2. Breakdown of Project Costs[40]

Item No.	Description	Cost
1.0	Material Costs	$3,486,320
2.0	Labour Costs	$71,820,730
3.0	External Permitting, Land	$1,055,700
4.0	Outside Services	$5,199,780
5.0	Direct Overheads	$950,975
6.0	Contingency Costs	$24,754,051
7.0	Project Cost	**$107,267,556**
8.0	Indirect Overheads	$24,073,159
9.0	IDC	$1,707,176
10.0	Total Project Costs	$133,047,891

Enbridge Gas stated that it had not conducted an economic analysis for the Project because it is driven by integrity requirements and will not change the available capacity for the C2B segment of the KOL. Enbridge Gas also stated that it plans to request incremental capital module (ICM) treatment of some or all of the Project costs within its 2022 rates application, subject to calculation of the ICM threshold for the EGD rate zone for 2022[41]. .

Abandonment costs are estimated to be approximately $2 million; Enbridge Gas confirmed that these costs are part of the material, labour and direct overheads line items in the Project cost estimates[42]. Enbridge Gas stated that it would not be seeking specific approval of abandonment costs; rather, the actual cost of retirement will be charged to accumulated depreciation[43].

OEB staff requested that Enbridge Gas compare the total capital costs of the Project to comparable replacement projects completed in the past and approved by the OEB[44]. Table 3 below reproduces Enbridge Gas's list of comparable projects and their respective costs.

[40] A more detailed breakdown can be found in interrogatory response Exhibit I.EP.23.
[41] Exhibit I.Staff.3(d)
[42] Exhibit I.ED.10(b)
[43] Exhibit I.ED.10(c)
[44] Exhibit I.Staff.3(f)

Table 3. Comparable Projects and Costs

Project	City	Work Year	Pipe Size	Length	Estimated cost	Estimated cost per meter	Assumed Contingency	Actual Total Costs	Actual cost per meter
GTA Project - WC21 & Hydro Tower HDD	Markham	2015	36"	354 m	$1,827,114	$5,155	16% ** (Project)	$3,860,982*	$10,894
Keele & CNR	Vaughan	2016 - 2018	26" ST	327 m	$5,614,030	$17,168	30%	$4,979,098	$15,227
NPS 30 Don River Replacement	Toronto	2019	30" ST	326 m	$25,597,539	$78,762	30%	$23,517,742***	$72,140
NPS 20 Replacement Cherry to Bathurst	Toronto	2021 - 2022	20" ST	4380 m	$107,267,556	$24,490	30%	TBD	TBD

Enbridge Gas stated that while the Project is similar in some ways to the projects listed above, it is a much longer project in terms of pipeline length and is located in the core of downtown Toronto, and as such, the estimated cost of the Project takes these increased costs into account[45]. OEB staff submits that the estimated costs are reasonable given the pipeline length and location of the Project.

OEB staff requests that Enbridge Gas confirm that the $107 million cost of this 4.5-kilometre Project is included in the cost of the $240 million 45-kilometre "Lakeshore" replacement referenced in the EGD Asset Management Plan[46].

Enbridge Gas stated that construction is expected to commence in June 2021, with the Project expected to be in-service as of August 2022. Enbridge Gas's proposed construction schedule is reproduced in Table 4 below. OEB staff submits that the proposed schedule appears to be reasonable considering the constraints of constructing pipeline in a densely populated and well-traveled urban area.

Table 4. Proposed Construction Schedule

Receipt of Permits and Approvals	April, 2021
Expected LTC Approval	February, 2021
Commence Construction	June, 2021
Expected In-Service	August, 2022
Completion of Construction	September, 2022
Completion of Reinstatement	October, 2022
Final Inspection	June, 2023

[45] Exhibit I.Staff.3(f)
[46] Exhibit I.EP.3, Attachment 1, p. 11

3.4 Environmental Issues and Land Matters

Based on the evidence which is summarized below, OEB staff has no environmental concerns with the proposed Project. OEB staff also has no concerns with respect to Enbridge Gas's proposed land use. OEB staff submits that the OEB should approve the form of Temporary Land Use Agreement.

Enbridge Gas retained Dillon to undertake a route evaluation and an environmental assessment for the proposed pipeline. Dillon prepared an Environmental Report (ER) for the Project in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition, 2016* (Environmental Guidelines)[47]. The ER for the Project identified the environmental and socio-economic features along the route of the proposed pipeline. According to the ER, Dillon does not anticipate any permanent or adverse environmental impacts from the construction and operation of the Project, provided the mitigation measures recommended in the ER are followed. Enbridge Gas stated that it agreed with Dillon's findings[48] and indicated that construction of the Project will be conducted in accordance with Enbridge Gas's Construction and Maintenance Manual and the recommendations in the ER[49].

Enbridge Gas stated that an Environmental Protection Plan (EPP) incorporating mitigation measures from the ER and agency consultations will be developed and finalized once all permit conditions have been received[50].

Enbridge Gas also stated that a qualified Environmental Inspector or suitable representative would be available to assist the Project Manager in ensuring that the mitigation measures identified in the EPP as well as permitting requirements and any associated conditions of approval in the OEB's Decision are adhered to and that commitments made to the public, landowners and agencies are honoured. The Environmental Inspector and Project Manager will also ensure that any unforeseen environmental circumstances that arise before, during and after construction are appropriately addressed.

Enbridge Gas stated that it would use trenchless technology where necessary in order to enable efficient installation of the proposed pipeline with minimal disruption to

[47] Application, Exhibit C, Tab 1, Schedule 1, Attachment 1
[48] Application, Exhibit C, Tab 1, Schedule 1, p. 1
[49] Application, Exhibit C, Tab 1, Schedule 1, p. 10
[50] Exhibit I.Toronto.20(b)

existing infrastructure and the public, and open trench installation methods on shorter length installations and where trenchless installation was not feasible[51].

OPCC Review

Enbridge Gas circulated a copy of the ER to the Ontario Pipeline Coordinating Committee (OPCC) on April 13, 2020. A summary of comments received by Enbridge Gas prior to filing the Application and the corresponding responses to the OPCC are provided in evidence[52]. Enbridge Gas provided its correspondence with the Toronto & Region Conservation Authority (TRCA) and the Technical Standards & Safety Authority (TSSA). The TRCA had no objection in principle to the proposed Project[53]. The TSSA stated that it had no comments at this time, and that it will visit the construction site as part of auditing this Project[54].

Enbridge Gas retained Timmins Martelle Heritage Consultants Inc. to complete a Stage 1 Archaeological Assessment (Stage 1 AA) for the Project. The Stage 1 AA was submitted to Mississaugas of the Credit First Nation and Alderville First Nation on March 20, 2020 and the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) on June 4, 2020. Enbridge Gas stated that it did not receive any comments from the First Nations within the 42-day comment window requested by Enbridge Gas. Enbridge Gas stated that it would provide the OEB with the acceptance letter from the MHSTCI when Enbridge Gas receives the letter.

Abandonment

Enbridge Gas stated that the existing pipeline would be abandoned in accordance with Enbridge Gas's Construction and Maintenance Manual[55] and that TSSA abandonment guidelines and the applicable current edition of CSA code Z662 will be followed for all pipeline abandonment in place[56].

Enbridge Gas stated that it does not require approval from the City of Toronto to abandon the pipeline in place[57], and that its standard procedure is to abandon pipelines in place. Enbridge Gas stated that the removal of the existing NPS 20 would be cost

[51] Exhibit I.Toronto.19(b)
[52] Exhibit I.Staff.4(a)
[53] Exhibit I.Staff.4, Attachment 2, p. 12
[54] Exhibit I.Staff.4, Attachment 5, p. 26
[55] Exhibit I.PP.9(a)
[56] Exhibit I.Staff.2(a)
[57] Exhibit I.PP.8(d)

prohibitive, and labour intensive, and estimated that the costs for the complete removal of the 4.5 km segment to be as much as $100 million[58].

Coordination with the City of Toronto

Enbridge Gas stated that it was aware of other works planned by the City of Toronto taking place along the Preferred Route and committed to working with the City of Toronto through coordination meetings and the Toronto Public Utilities Coordinating Committee processes currently in place to avoid conflict[59]. Enbridge Gas stated that it would provide the City of Toronto with a desktop study on geotechnical information for the Project's alignment[60], design drawings[61], site-specific water crossing plans and specifications when available[62] and as-built plans when requested[63]. Enbridge Gas also stated that it would consult with the City of Toronto for further direction, if the Project requires the occupation of any parks[64]. Enbridge Gas further indicated that it would complete temporary restoration throughout the Project and then complete permanent restoration after the installation is complete (planning for complete restoration by October 2022)[65].

Enbridge Gas also stated that a project-specific plan to manage suspect soils will be included as part of the EPP, and that a project-specific traffic management plan and emergency response plan will be developed prior to construction[66]. Enbridge Gas stated that it would coordinate with the City of Toronto to account for the impacts of Gardiner closures. Enbridge Gas confirmed that it would comply with all Toronto by-laws and obtain all necessary approvals, permits, licences, and certificates required to construct, operate and maintain the Project[67].

Other Permits and Approvals

Enbridge Gas reported that a number of other permits and approvals are pending, including: permits from the City of Toronto for noise exemption, road cut and occupancy, sewer discharge and tree removal, rail crossing permits from Hydro One and Metrolinx, environmental permits from the Ministry of the Environment,

[58] Exhibit I.PP.8(e)
[59] Exhibit I.Toronto.1(a-i)
[60] Exhibit I.Toronto.3
[61] Exhibit I.Toronto.4
[62] Exhibit I.Toronto.18(c)
[63] Exhibit I.Toronto.6
[64] Exhibit I.Toronto.8(c)
[65] Exhibit I.Toronto.10(a) and (d)
[66] Exhibit I.Toronto.21, 22(a) and 25(b)
[67] Exhibit I.Toronto.35

Conservation and Parks and Environment and Climate Change Canada, archaeological clearance from the Ministry of Heritage, Sport, Tourism and Culture Industries, and a permit from the Toronto & Region Conservation Authority for development along shorelines and watercourses[68].

Enbridge Gas confirmed that it would not start construction until it has received all necessary permissions relevant to the construction being undertaken[69].

Land Matters

Enbridge Gas confirmed that is not seeking any easements from the City of Toronto, and that all work is being designed within the road allowance[70]. Enbridge Gas stated that it may need temporary working areas along the pipeline route where the road allowance is too narrow or confined to facilitate construction. Enbridge Gas seeks approval of the form of Temporary Land Use Agreement[71], which Enbridge Gas confirmed was approved by the OEB in the NPS 30 Don River Replacement Project proceeding[72]. Enbridge Gas stated that it does not anticipate a requirement for temporary land use as it will be using its own Station B facility for storage[73].

Enbridge Gas stated that it currently does not have any concerns with respect to obtaining any of the required land rights and/or permits for the Project[74].

3.5 Indigenous Consultation

OEB staff has no concerns with respect to Indigenous consultation, and notes that no Indigenous communities intervened or expressed any concerns in the proceeding.

The Ministry of Energy, Northern Development and Mines (MENDM) delegated to Enbridge Gas the procedural aspects of the Crown's Duty to Consult. In a letter dated October 14, 2020, the MENDM indicated that Enbridge Gas's consultation activities with respect to the Project are satisfactory[75].

[68] Exhibit I.Staff.6(c)
[69] Exhibit I.EP.26(b)
[70] Exhibit I.Toronto.24(a)
[71] Application, Exhibit E, Tab 1, Schedule 1, Attachment 1
[72] Exhibit I.Staff.6(b)
[73] Exhibit I.Staff.6(d)
[74] Exhibit I.Staff.6(d)
[75] Exhibit I.Staff.5, Attachment 1

3.6 Conditions of Approval

The OEB Act permits the OEB, when making an order, to "impose such conditions as it considers proper."[76] OEB staff asked Enbridge Gas to comment on a set of proposed conditions of approval for the leave to construct portion of the application, which is reproduced in Appendix A. Enbridge Gas responded that it agreed with the proposed conditions of approval, with the exception of 2(a). Enbridge Gas requested that the authorization for leave to construct this Project terminate 18 months after the decision is issued, rather than 12 months[77]. Enbridge Gas stated that this was consistent with the conditions of approval for the NPS 30 Don River Replacement Project[78], which is a recent project completed in Toronto. OEB staff has no objections to extending the authorization for leave to construct and notes that other recent LTC projects in Toronto were also given 18 months[79].

Enbridge Gas also requested that the OEB include an additional Condition of Approval, which was included in a previous leave to construct decision[80]: "Enbridge Gas shall obtain all necessary approvals, permits, licences, certificates, agreements and rights required to construct, operate and maintain the Project". OEB staff has no objections to adding the additional condition of approval.

OEB staff submits that the OEB should approve the Project subject to the Conditions of Approval attached as Appendix A to this submission.

All of which is respectfully submitted.

[76] OEB Act, s. 23
[77] Exhibit I.Staff.7
[78] EB-2018-0108
[79] EB-2018-0096 Bathurst Reinforcement LTC; EB-2018-0097 Liberty Village LTC
[80] EB-2019-0188

Appendix A

Enbridge Gas Inc.
NPS 20 Cherry to Bathurst Replacement Project
OEB Act Section 90 Leave to Construct

PROPOSED CONDITIONS OF APPROVAL

1. Enbridge Gas Inc. (Enbridge Gas) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2020-0136 and these Conditions of Approval.
2. (a) Authorization for leave to construct shall terminate 18 months after the decision is issued, unless construction has commenced prior to that date.

   (b) Enbridge Gas 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 ten days following the completion of construction; and

   iv. of the in-service date, no later than ten days after the facilities go into service.
3. Enbridge Gas 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.
4. Enbridge Gas shall obtain all necessary approvals, permits, licences, certificates, agreements and rights required to construct, operate and maintain the Project.
5. Enbridge Gas shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Enbridge Gas 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.
6. Enbridge Gas 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.
7. Both during and after construction, Enbridge Gas shall monitor the impacts of construction, and shall file with the OEB an 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'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 Gas, 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, 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'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 Gas, 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.

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