DECISION AND ORDER

EB-2020-0293

ENBRIDGE GAS INC.

St. Laurent Ottawa North Replacement Project

BEFORE: Anthony Zlahtic
Presiding Commissioner

Emad Elsayed
Commissioner

May 3, 2022
# TABLE OF CONTENTS

1. \hspace{1cm} OVERVIEW .............................................................................................................................................. 2
2. \hspace{1cm} PROCESS .................................................................................................................................................. 4
3. \hspace{1cm} DECISION .................................................................................................................................................. 6
   3.1 \hspace{1cm} NEED FOR THE PROJECT .................................................................................................................. 7
   3.2 \hspace{1cm} ALTERNATIVES TO THE PROJECT ...................................................................................................... 15
   3.3 \hspace{1cm} PROJECT COST AND ECONOMICS ................................................................................................. 24
   3.4 \hspace{1cm} ENVIRONMENTAL IMPACTS ............................................................................................................. 26
   3.5 \hspace{1cm} LANDOWNER AGREEMENTS ............................................................................................................. 27
   3.6 \hspace{1cm} INDIGENOUS CONSULTATION ........................................................................................................... 28
   3.7 \hspace{1cm} CONDITIONS OF APPROVAL ........................................................................................................... 30
4. \hspace{1cm} ORDER ....................................................................................................................................................... 31
1 OVERVIEW

On March 2, 2021 Enbridge Gas Inc. (Enbridge Gas) filed an application under section 90 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, (Schedule B) (OEB Act) seeking an order granting leave to construct approximately 19.8 kilometres of natural gas pipeline and associated facilities in the City of Ottawa (Project). The application is for Phases 3 and 4 of a four-phase project to replace the St. Laurent Pipeline based on integrity issues identified by Enbridge Gas (St. Laurent Ottawa North Pipeline). Phases 1 and 2 have been completed and are in service. The general location of the Project is represented on the map below.
The proposed natural gas pipeline would replace portions of the existing St. Laurent Ottawa North Pipeline in the two final phases of the multi-year project. The OEB’s determination on Phases 3 and 4 will not impact the functioning of Phases 1 and 2. Enbridge Gas has also applied under section 97 of the OEB Act for approval of the form of land-use agreements it has offered or will offer to landowners affected by the route of the Project.

Enbridge Gas’s expected In Service Dates (ISD) are December 2022 and December 2023 for Phase 3 and Phase 4 respectively. Based on a request for leave to construct approval no later than February 2022, construction was planned to start in March 2022 and March 2023 for Phase 3 and Phase 4 respectively.

For the reasons provided in this Decision and Order, the OEB denies Enbridge Gas’s leave to construct application. The OEB finds that the need for the Project and the alternatives to the Project have not been appropriately assessed. Enbridge Gas has not demonstrated that the pipeline integrity is compromised, and that pipeline replacement is required at this time. The OEB urges Enbridge Gas to thoroughly examine other alternatives such as the development and implementation of an in-line inspection and maintenance program using available modern technology, and propose appropriate action based on its findings as part of its next rebasing application.
2 PROCESS

The original Notice of Hearing for this application was issued by the OEB on March 19, 2021. Each of Energy Probe Research Foundation (Energy Probe), Environmental Defence Canada Inc. (Environmental Defence), Federation of Rental Housing Providers of Ontario (FRPO), Industrial Gas Users Association (IGUA), Pollution Probe and School Energy Coalition (SEC) applied and were granted intervenor status and cost eligibility.

On May 5, 2021, the OEB placed Enbridge Gas’s application in abeyance to allow Enbridge Gas to adjust a segment of the proposed pipeline route. The route adjustment was required in response to issues raised by the Ministry of Transportation (Ministry). On August 11, 2021, Enbridge Gas filed a letter informing the OEB that after discussions with the Ministry and the Royal Canadian Mounted Police (RCMP), Enbridge Gas had arrived at mutually acceptable modified route to run within RCMP’s property near Vanier Parkway. On September 10, 2021, Enbridge Gas filed an updated application with the OEB.

The OEB issued a Notice of Hearing of the updated application on September 30, 2021. By letter dated October 1, 2021, the City of Ottawa applied for and was granted intervenor status.

The status of the previously approved intervenors remained in effect.

The OEB issued six procedural orders. Procedural Order No. 1 set the timeline for OEB staff and intervenor interrogatories and responses by Enbridge Gas. In Procedural Order No. 2 the OEB granted a request by Enbridge Gas for an extension of the deadline for interrogatory responses to December 13, 2021. Enbridge Gas filed the interrogatory responses on December 13, 2021.

On December 17, 2021, the OEB issued Procedural Order No. 3 which set the schedule for a transcribed Technical Conference, undertakings, written submissions by intervenors and OEB staff and written reply submission by Enbridge Gas. On December 21, 2021 the OEB issued Procedural Order No. 4 approving Enbridge Gas’s request to extend the final written submission deadline from February 22, 2022 to March 3, 2022.

On December 17, 2021, SEC, on its own behalf and in collaboration with the City of Ottawa and Pollution Probe (collectively, the Sponsors), requested that the OEB allow the Sponsors to submit documentary evidence (Sponsors’ Evidence), and produce a witness panel, to speak to the need, cost-effectiveness, and timing of the Project. On
January 13, 2022, the OEB issued Procedural Order No. 5 approving the Sponsors’ request to file the evidence and setting a new schedule for the proceeding including filing the Sponsors’ Evidence; responding evidence from Enbridge Gas; a transcribed Technical Conference; undertakings from the Technical Conference; written final arguments by intervenors and OEB staff; and written final argument by Enbridge Gas. According to the procedural schedule, the record of the proceeding would be completed by April 4, 2022 with the filing of Enbridge Gas’s reply argument.

The Sponsors’ Evidence was presented by the City of Ottawa and the Ottawa Community Housing Corporation (OCHC). The Sponsors’ Evidence covered the actions and plans of these organizations to reduce their natural gas demand within the area served by the St. Laurent system.

The Technical Conference, which was scheduled to be completed on March 4, 2022 was extended to March 7, 2022. To provide for sufficient time for the remainder of the procedural steps, the OEB issued Procedural Order No. 6 extending the procedural schedule set out in Procedural Order No. 5. Responses to undertakings from the Technical Conference were filed on March 14, 2022. Intervenors and OEB staff filed written submissions on March 24, 2022. The last procedural step was Enbridge Gas’s final argument filed on April 7, 2022. That submission completed the record for the proceeding.
3 DECISION

This decision is structured consistent with the standard Issues List for natural gas leave to construct applications, to address the following issues:

1. Need for the Project
2. Project Alternatives
3. Project Cost and Economics
4. Environmental Impacts
5. Landowner Agreements
6. Indigenous Consultation
7. Conditions of Approval

No party, with the exception of Energy Probe, fully supported the OEB’s approval of the Project. The discovery and submissions by OEB staff and intervenors were focused on issues of need for the Project and on the Project alternatives.¹ The cost and economics were discussed in the context of the comparison of alternatives, and of the consequences of stranded (under-utilized) assets for ratepayers due to potential reduction of natural gas demand resulting from decarbonization and net-zero targets and policies under development. Energy Probe supported the OEB’s approval of the Project as filed and submitted that Enbridge Gas provided sufficient evidence on each of the issues in the proceeding.

Environmental Defence, FRPO, IGUA, City of Ottawa, Pollution Probe, SEC, and OEB staff all suggested that the OEB deny the application and that repair of the existing pipeline as needed, including monitoring of the declining integrity, would be a more appropriate alternative to the Project. Some these parties and the OEB staff supported retrofitting the pipeline to allow for in-line inspection to facilitate repairs on a proactive, rather than reactive, basis. Summaries of the positions of parties are included in the sections below.

¹ No major concerns were expressed with environmental impacts, landowner agreements or Indigenous consultation related to the Project.
3.1 Need for the Project

Enbridge Gas submitted that the need for the Project is underpinned by the ongoing integrity decline of vintage steel distribution mains. According to Enbridge Gas, the replacement of these portions of the St. Laurent Ottawa North Pipeline is needed to manage the risk to the safe and reliable natural gas service to approximately 165,000 customers in the City of Ottawa and Gatineau.

In its reply submission, Enbridge Gas emphasized that the need for the Project has been demonstrated and that the pipeline replacement as proposed is the best alternative to address the declining integrity of the St. Laurent Ottawa North Pipeline. Enbridge Gas asserted that the need for the replacement has been “…properly assessed through a comprehensive review with substantial documented evidence and review by pipeline integrity experts.”

Enbridge Gas submitted that the need for replacement must take into account both the evidence of declining integrity and the potential consequences, should a failure occur. Enbridge Gas identified the key characteristics that give the St. Laurent system a high risk profile: i) single source supplied system; ii) extra high operating pressure; iii ) supplies natural gas to approximately 165,000 customers in the City of Ottawa and Gatineau including Ottawa Health Sciences Centre, Parliament Hill, University of Ottawa; iv) feeds 10 district stations, two large control stations, and several private header stations; v) location in high consequence urban area, densely populated and transit routes; vi) pipeline failure could result in loss of service for a large number of residential and commercial customers and cause a public safety risk. Based on these critical characteristics, Enbridge Gas maintained that the St. Laurent system is a critical infrastructure and that the operational risk should be addressed by replacement.

In formulating the findings on the need for the Project, the OEB considered the following issues:

- Integrity of the Existing Pipeline
- Assessment of Risk of Declining Integrity
- Predicted Likelihood of Leaks
- Severity of Consequences of Pipeline Failure

Integrity of the Existing Pipeline

As required by Canadian Standards Association (CSA) Standard Z662 – Oil and Gas Pipeline System standards, Enbridge Gas has been monitoring the condition of its pipeline systems and associated risks and is responsible for implementing an Integrity Management Program. Enbridge Gas’s Distribution Integrity Management Program...
(DIMP) and Asset Health Review (AHR) determined that vintage steel distribution mains installed in the 1970s and before have demonstrated declining health. This assessment included the St. Laurent Ottawa North Pipeline which Enbridge Gas is proposing to replace through this application.

According to Enbridge Gas, the declining condition of the pipelines was determined based on the results of system surveys and inspections, conducted at various locations between 2006 and 2018. These surveys and inspections included a ground penetrating radar integrity project (2006); field work on leak repairs (2013); integrity dig (2014); bridge crossing inspection (2016); depth of cover surveys (2017); and indirect inspection to assess cathodic protection, coating, and depth of cover (2018). The results of these surveys and inspections identified corrosion, dents, compression couplings, reduced depth of cover, and past deficient cathodic protection as pipeline conditions that create a risk to the integrity of St. Laurent system. Enbridge Gas currently does not have the necessary infrastructure to conduct an in-line inspection of the St. Laurent Ottawa North Pipeline to further assess its condition.

Enbridge Gas noted that the area served by the existing St. Laurent system is a single-source natural gas network serving thousands of customers, and that the consequences of a failure, depending on the severity of the damage or defect, could be severe. In the extreme, Enbridge Gas asserted that it could be faced with the need to shut down the pipeline entirely, causing a loss of service for thousands of customers.

**Assessment of Declining Integrity**

An assessment of risk is determined by considering the probability or likelihood of a pipeline failure event and the severity of consequences should this event occur. Enbridge Gas provided evidence on the probability of pipeline failures and the severity of the consequences were a failure to occur.

Enbridge Gas provided a qualitative risk assessment, in the Standard Operational Risk Matrix, of service shutdown due to corrosion issues for two periods, including a winter and a summer scenario: i) 20 years average risk (2021-2041); and ii) 40 years average risk (2021-2061).²

² Enbridge Gas Inc. response to interrogatory I.STAFF.4
Enbridge Gas assessed the average risk of customer loss as “high” or “very high” in the winter scenarios for the next 20 year and the next 40 year timeframes. Customer loss is defined as the potential for emergency service shutdown to repair leaks due to corrosion related issues. This risk rating was based on the combination of severity of the consequences of leaks and the likelihood of the occurrence of leaks. Enbridge Gas stated that based on its “…Risk Evaluation criteria, risks rated at or above “High” require risk treatment.” 3

### Predicted Likelihood of Leaks

Enbridge Gas used its Asset Health Index (AHI) methodology to predict how the condition of the existing St. Laurent Ottawa North Pipeline would change over a forty-year time frame (if not replaced), and to project the number of leaks that may occur. The analysis showed a decline in asset health over time, and the projected number of leaks rising over multiple decades.

Enbridge Gas provided five AHI Pipe Asset Classes based on the predicted time to first or next failure4 and used these classes to show a graph representing a declining health of the pipeline between 2021 and 20615. The predicted time of the first or next failure is greater than 40 years for the period between 2021 and 2043. The graph shows that,

3 Enbridge Gas Inc. response to interrogatory I.STAFF.4 c)  
4 Application, Tab 1, Schedule 1, page 41, Table 10 Asset Health Index (Pipe Asset Class)  
5 Application, Tab 1, Schedule 1, page 43, Figure 17:St. Laurent Pipeline Asset Health Index
starting in 2045, the projected time of the first or next failure become shorter and that the risk increases from 2045 to 2061.

![Table 10: Asset Health Index (Pipe Asset Class)](image)

<table>
<thead>
<tr>
<th>HEALTH INDEX CATEGORY</th>
<th>TIME TO FIRST OR NEXT FAILURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1S</td>
<td>Greater than 40 years</td>
</tr>
<tr>
<td>H12</td>
<td>Within 40 years</td>
</tr>
<tr>
<td>H13</td>
<td>Within 25 years</td>
</tr>
<tr>
<td>H14</td>
<td>Within 10 years</td>
</tr>
<tr>
<td>H15</td>
<td>Within 5 years</td>
</tr>
</tbody>
</table>

![Figure 17: St. Laurent Pipeline Asset Health Index](image)

Regarding the prediction of the number of leaks, Enbridge Gas AHI model predicts 4.3 cumulative leaks by 2041. By 2051, it predicts 13 cumulative leaks, and by 2061, 36.8 cumulative leaks. Enbridge Gas’s evidence showed that, by 2041, only an estimated 1% of these leaks (0.043 cumulative leaks) would potentially require pipeline isolation leading to customer disconnection. This is shown in table below.  

6 Application, Exhibit B, Tab 1, Schedule 1, Table 11: Asset Health Index and Projected Cumulative Leaks, page 42
As for past occurrences, Enbridge Gas indicated that it had one corrosion-related leak in the St. Laurent system in the past 10 years. This leak was repaired by way of a cut-out of an 8 metre segment of the pipeline at a cost of $151,550.47. Enbridge Gas also indicated that in the past 10 years, there had been other repairs to the pipelines in the St. Laurent system due to corrosion that did not result in a leak (loss of containment).\(^7\)

Enbridge Gas estimated that roughly 1% of the system leaks predicted by its AHI model could trigger a scenario where it would have no option but to isolate the pipeline and disconnect customers. Enbridge Gas noted that this was an order-of-magnitude estimate only, and the approach to repair a leak would be entirely dependent on the specific circumstances of any given leak.\(^8\)

Enbridge Gas confirmed that it has not experienced any catastrophic failures (complete ruptures of the pipeline) on any pipelines similar in nature to the St. Laurent pipeline system.\(^9\)

---

\(^7\) Enbridge Gas Inc. response to interrogatory I.FRPO.14  
\(^8\) Tech Conference Day 1, pp. 209-212. Exhibit JT 1.26  
\(^9\) Exhibit JT 1.9
Enbridge Gas also indicated that the complete shutdown to repair a leak is assessed as a “rare event”, not a high probability event.

**Severity of Consequences of Pipeline Failure**

Enbridge Gas modelled two scenarios describing the consequences of pipeline failure which would trigger a complete service shutdown and an emergency response. The first scenario models the consequences of a service shutdown at 47 Degree Day (corresponding temperature of -29C). The second scenario presents the consequences of a shutdown at 1 Degree Day (corresponding temperature of 17C). The tables below from the Enbridge Gas evidence include projections of customer losses by customer type under the two scenarios.\(^\text{10}\)

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

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>Number of Customers Lost: Enbridge Gas</th>
<th>Number of Customers Lost: Gazifère</th>
<th>Total Customers Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>26,226</td>
<td>26,285</td>
<td>56,511</td>
</tr>
<tr>
<td>Apartment*</td>
<td>35</td>
<td>248</td>
<td>283</td>
</tr>
<tr>
<td>Commercial*</td>
<td>3,345</td>
<td>2,037</td>
<td>5,382</td>
</tr>
<tr>
<td>Industrial</td>
<td>17</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31,623</strong></td>
<td><strong>30,577</strong></td>
<td><strong>62,200</strong></td>
</tr>
</tbody>
</table>

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

### Table 2: Customer Loss at 1 Degree Day by Customer Type

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>Number of Customers Lost: Enbridge Gas</th>
<th>Number of Customers Lost: Gazifère</th>
<th>Total Customers Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>15,342</td>
<td>0</td>
<td>15,342</td>
</tr>
<tr>
<td>Apartment*</td>
<td>31</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Commercial*</td>
<td>1,292</td>
<td>0</td>
<td>1,292</td>
</tr>
<tr>
<td>Industrial</td>
<td>11</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16,676</strong></td>
<td>0</td>
<td><strong>16,676</strong></td>
</tr>
</tbody>
</table>

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

Under the 47 Degree Day scenario, customer loss would be 62,200 customers in Enbridge Gas’s and Gazifere’s franchise areas. Under the 1 Degree Day scenario, customer loss would be 16,676 customers in Enbridge Gas’s franchise area and no loss in Gazifere’s franchise area.

---

\(^{10}\) Exhibit B, Tab 1, Schedule 1, pages 7-13, paragraphs 13-22: Consequences of Failure; page 10, Table 1: Customer Loss at 47 Degree Days by Customer Type; and page 12, Table 2: Customer Loss at 1 Degree Day by Customer Type
The estimated cost associated with such an event in the Enbridge Gas franchise area in the 47 Degree Day scenario is $54M (Enbridge Gas estimated the cost of repair in the Gazifere franchise area to be $37M). Under the 1 Degree Day scenario, Enbridge Gas estimated the cost of an event to be $22M in its franchise area. Most of the cost estimates provided by Enbridge Gas for the two scenarios would be attributable to projected customer claims due to loss of service.11

Positions of Parties

The City of Ottawa submitted that the evidence on the integrity of the existing pipeline is contradictory. The City of Ottawa recommended that “…provided that integrity issues are not an immediate significant concern” the OEB should consider not approving the Project. The City of Ottawa noted that its Energy Evolution Plan, which would contribute to lowering demand for natural gas, should be considered and that not approving the Project would have benefits such as reducing the impact on local businesses, allowing the transition to a lower natural gas demand, continuing to monitor the integrity of the St. Laurent Ottawa North Pipeline, and allowing for natural gas infrastructure planning integrated with the Energy Evolution Plan.

FRPO’s view was that Enbridge Gas’s evidence was lacking sufficient technical information (i.e. disclosure of the potential for robotic inspection) to demonstrate that the pipeline is in poor condition and that the replacement is urgently needed. FRPO stated that risk and consequences of failure and outage to the customers were exaggerated. FRPO urged the OEB to deny the application and “…order EGI to perform enhanced in-line inspection and maintenance and report findings as part of its rebasing application”.12

IGUA submitted that the OEB should carefully consider whether Enbridge Gas has established that the integrity of the existing pipeline is “compromised and full replacement is required at this time”.13 IGUA highlighted the inelasticity of natural gas demand of large industrial customers (compared to residential and commercial), and barriers to their conversion from natural gas indicating that increasing access to natural gas may be part of decarbonization transition for the industrial customers. IGUA is concerned with “…exposure to stranded ‘small pipe’ assets” such as the potentially under-utilized St. Laurent Ottawa North Pipeline should the trends of reduced demand continue as part of wider decarbonization programs. IGUA noted a risk of higher natural

---

11 Enbridge Gas Inc. in response to I.FRPO.25
12 FRPO Written Submission, March 21, 2022, page 1
13 IGUA Written Submission, March 24, 2022
gas costs to its members who are, in IGUA’s words, captive customers, because of the inelasticity of their demand for industrial processes and manufacturing.

Pollution Probe recommended that the OEB reject the Project, stating that the need for a replacement has not been supported by Enbridge Gas’s evidence on declining integrity and safety risks.

SEC submitted that the OEB should deny the approval of the Project. SEC’s position was that the need for replacement at this time was not supported by Enbridge Gas’s evidence.

OEB Staff was not convinced that an immediate pipeline replacement was required. OEB staff noted that, based solely on the predicted likelihood of leaks, the urgency to address the integrity decline concerns did not appear high.

Findings

The OEB finds that Enbridge Gas has not demonstrated that the risk associated with the subject pipelines warrants complete replacement at this time. The issue of associated risk is addressed in this section. The issue of Project alternatives is addressed in the next section.

The risk of a catastrophic failure of the subject pipelines is a function of the probability of failure and the consequences of such failure. While Enbridge Gas may have demonstrated that a catastrophic failure of the pipelines could have severe consequences for its customers by virtue of their location in a densely populated urban area, the OEB finds that Enbridge Gas has not demonstrated that the likelihood of such failure warrants a replacement of these pipelines at this time.

This finding is based on Enbridge Gas’s probabilistic analysis which predicted a small number of future leaks over the next 20 to 30 years and a very low likelihood of those leaks requiring pipeline isolation leading to customer disconnection. Enbridge Gas’s predicted AHI shows that the subject pipelines would remain in the top (best health) category for at least 20 more years.

In its reply argument, Enbridge Gas downplayed the significance of its AHI statistical analysis stating that “the AHI analysis (and the resulting corrosion-related leak forecast) is derived not from known issues related to the St. Laurent Pipeline, but it is instead derived from a statistical analysis of a number of pipelines across Enbridge Gas’s service territory and based upon a specific set of generalizing assumptions.”

Enbridge Gas introduced and relied on the AHI analysis during the proceeding and did...

14 Enbridge Gas Reply Submission, page 21, para 41.
not describe these limitations in the original application. Given that Enbridge Gas only emphasized these limitations in its reply argument, the parties in this proceeding did not have an opportunity to challenge Enbridge Gas’s claims about the AHI limitations and the weight that should be placed on the AHI results. The OEB also notes that the low actual historical incidence of corrosion-related leaks specific to the St. Laurent system (one such leak in the last 10 years) does not demonstrate that pipeline replacement is warranted at this time.

Enbridge Gas did indicate that the AHI information should be considered along with other information obtained from integrity digs and repairs on the St. Laurent Pipeline. Enbridge Gas stated that these other sources of information were excluded from the AHI as they could not be reliably translated into meaningful qualifiers at the time of assessments.

Enbridge Gas also indicated that the risk can be mitigated by increased leak survey frequency and regular monitoring of the pipelines.

The OEB suggests that Enbridge Gas take a proactive approach to inspecting and maintaining the subject pipeline until it can be demonstrated that pipeline replacement is necessary. This may include development and implementation of an in-line inspection and maintenance program using available modern technology as discussed in the next section. The evidence in this proceeding revealed that Enbridge Gas does not currently have the necessary infrastructure to carry out such in-line inspections in the St. Laurent Pipeline.

### 3.2 Alternatives to the Project

Enbridge Gas presented comparative assessments of alternatives to the Project including:

- Options to manage integrity decline risk: Retrofit Option and Repair Option
- Integrated Resource Planning Alternatives (IRPAs)
- Downsizing the pipeline in response to potential natural gas demand reduction in the future

Enbridge Gas did not accept the Retrofit Option or Repair Option as preferred alternatives to the Project because, in Enbridge Gas’s view, these alternative options do not resolve the integrity issues and cause additional costs (the potential cost of ongoing repairs, and, for the Retrofit Option, the upfront cost of retrofit). Enbridge Gas
maintained that the proposed Project is the best alternative to meet the need to manage the declining integrity risks and ensure continuous safe and reliable service.

Enbridge Gas rejected IRPA as a viable alternative, as in its view, it does not address the integrity issue which is the underpinning need for the Project. Enbridge Gas also rejected the alternative of downsizing the pipeline in combination with demand reduction by IRPA or other programs and initiatives, on the basis that demand reduction sufficient to downsize the pipeline was not feasible within the short timeframe that the integrity concerns need to be addressed.

In reaching its conclusion regarding the evaluation of alternatives to the Project, the OEB considered the following options and issues:

- Retrofit Option
- Repair Option
- Sponsors’ Evidence and City of Ottawa’s Energy Evolution Plan
- Integrated Resource Planning Alternatives
- Downsizing the Pipeline due to Reduced Future Demand for Natural Gas

**Retrofit Option**

As an alternative to the Project, Enbridge Gas considered retrofitting the St. Laurent Ottawa North Pipeline to allow for in-line inspection. This would enable a more comprehensive assessment of the condition of the pipeline and potentially allow for a more proactive (rather than reactive) repair program. Enbridge Gas determined that the cost of retrofits and in-line filters needed to accommodate in-line inspection would be approximately $30.2 M.

Enbridge Gas rejected this alternative, noting that the retrofit would not resolve the integrity issues, with customers being exposed to the possibility of ongoing repair costs (in addition to the high capital cost of the retrofit), which could potentially culminate in a full pipeline replacement if the systemic nature of the integrity concerns was confirmed.\(^{15}\) However, Enbridge Gas also noted that the retrofit could theoretically enable the pipeline to be inspected and repaired indefinitely.\(^{16}\) In its reply submission, Enbridge Gas submitted that a retrofit would not guarantee that all future repairs would be solely proactive.\(^{17}\)

\(^{15}\) Enbridge Gas Inc. response to interrogatory I.Staff.5
\(^{16}\) Enbridge Gas inc. response to interrogatory I.Staff.5
\(^{17}\) Enbridge Gas Reply Submission, page 40.
Repair Option

The Repair Option involves Enbridge Gas reactively responding to identified leaks or concerns using Enbridge Gas’s existing practices.\(^\text{18}\)

Enbridge Gas compared the Repair Option to the proposed Project assuming the probability of pipeline failure over 40 years and beyond. Enbridge Gas used the AHI for this comparative assessment.

Enbridge Gas estimated the direct capital cost of the Repair Option to be $33.0 M compared to Project total costs of $73.5 M.\(^\text{19}\) The table below indicates lower total cost and Net Present Value of the Repair Option vs. Project (i.e. Replace Option).\(^\text{20}\) The costs in the table exclude contingency costs and costs associated with the intermediate pressure polyethylene portions of the Project. Including these costs brings the Project cost (Replace Option) to $123.7 M.

<table>
<thead>
<tr>
<th></th>
<th>Repair Option</th>
<th>Replace Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$33.0</td>
<td>$73.5</td>
</tr>
<tr>
<td>Net Present Value</td>
<td>$(7.7)</td>
<td>$(58.9)</td>
</tr>
</tbody>
</table>

Enbridge Gas rejected the Repair Option, stating that continuing to manage the pipeline in a reactive manner exposes ratepayers and the general public to an unacceptable level of risk to reliable service and safety.

Enbridge Gas also provided an updated cost comparison of the Replace Option and Repair Option in the table below adding the in-line inspection costs which actually would be a Retrofit Option \(^\text{21}\).

\(^\text{18}\) See Exhibit I.ED.10c for a description of these practices
\(^\text{19}\) Enbridge Gas Inc. response to interrogatory I.ED.17
\(^\text{20}\) Exhibit B, Tab 1, Schedule 1, page 47
\(^\text{21}\) Transcript Technical Conference, March 4, 2022, page 99 line 20 to page 100 line 27 and JT1.16
Table 13: Comparison of Repair Option and Replace Option (Project) Costs Including Abandonment

<table>
<thead>
<tr>
<th></th>
<th>Repair Option</th>
<th>Replace Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost</td>
<td>$63.8</td>
<td>$111.5</td>
</tr>
<tr>
<td>Net Present Value</td>
<td>($33.9)</td>
<td>($91.2)</td>
</tr>
</tbody>
</table>

Note:
Replace Option includes both the abandonment costs and the IP PE costs, etc. The NPV impact for the abandonment cost is approx. ($6.9) million. Total abandonment cost is approx. 10.3 million.

The comparison in the table above includes additional cost of abandonment and cost of intermediate pressure polyethylene pipelines in the Replace Option and costs of retrofit and in-line inspection costs in the Repair Option. The updated information shows that the Retrofit Option (in-line inspection plus repairs) is $57 M less expensive than the Project.
Sponsors’ Evidence and City of Ottawa’s Evolution Plan

The Sponsors’ Evidence provided details on the City of Ottawa’s Energy Evolution Plan, approved by City Council in October 2020, and the programs and plans initiated in support of this plan.

The Energy Evolution Plan aims to reduce the corporate City of Ottawa emissions to zero by 2040 and community-wide emissions from all entities within the City of Ottawa to zero by 2050. The City of Ottawa indicated that by 2050, renewable natural gas is expected to provide approximately 12% of the community’s energy requirements, versus the 50% of the community’s energy needs that is currently provided by conventional natural gas. The City of Ottawa indicated that it had not yet determined whether or for how long the existing natural gas distribution infrastructure would be needed to distribute renewable natural gas.22 The corporate City of Ottawa accounts for only about 3-4% of the overall natural gas consumption by the community.23

Broadly speaking, this planned reduction in natural gas use (for both corporate City of Ottawa buildings and buildings in the community) would be achieved through a combination of fuel switching from natural gas to electric heat pumps and building retrofits to significantly reduce building energy demand. The City of Ottawa and OCHC both provided details on the initial projects they have undertaken or were in the process of undertaking under this emissions reduction strategy.

The Sponsors’ Evidence also stated that the federal government’s Energy Services Acquisition Program would materially reduce natural gas use in the St. Laurent Ottawa North Pipeline area, due to conversion of the Cliff Street heating and cooling plant from steam to hot water, with a projected greenhouse gas emissions reduction of 87% by 2025, with almost all of this reduction coming from reductions in natural gas use.24 However, the City of Ottawa was unable to provide specific details from the federal government on the estimated reduction in natural gas demand from the Cliff Street plant.25

22 Response to interrogatories on Sponsors’ Evidence, 2.1-Staff-4
23 Response to interrogatories on Sponsors’ Evidence, EGL.2(b)
24 Sponsors Evidence, page 4
25 Response to Undertaking JT 2.8.
Integrated Resource Planning Alternatives

Enbridge Gas submitted that a detailed assessment of IRP alternatives was not required, because the Project is driven by integrity concerns that must be addressed within 3 years, and thus fails the “Timing” screening criterion in the IRP Framework.26

Enbridge Gas based its assessment against the Binary Screening Criteria set by the OEB in its Decision and Order on Enbridge Gas’s Integrated Resource Planning Proposal issued on July 22, 2021 (IRP Decision)27. Enbridge Gas noted that it determined that “… the Project is driven by integrity concerns that must be addressed within three years and no demand or supply side solution can resolve integrity concerns”. To support its decision not to include IRPAs in the assessment of alternatives to the Project, Enbridge Gas referred to the following excerpt from the IRP Decision:

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

Prior to the issuance of the IRP Framework, Enbridge Gas had already engaged a consultant to undertake a preliminary examination of the potential for Demand Side Management (DSM) to provide reductions in peak demand, as discussed in the next section. However, once the IRP Framework was in place, Enbridge Gas determined that it was not appropriate or necessary to conduct further IRP assessment due to the timing screening criterion.28

Downsizing due to Demand Reductions or IRP Alternatives

Enbridge Gas sized the proposed Project based on the peak design day demand that would need to be met based on its current customers and firm contractual customer commitments, using its existing demand forecasting methodology.29 Enbridge Gas did not seek to add pipeline capacity for growth, relative to the existing pipeline.

26 IRP Framework, section 5.2
27 EB-2020-0091
28 Application Exhibit B, Tab 1, Schedule 1, pages 12-13, paragraph 23
29 Enbridge Gas Inc. response to interrogatory I.ED.6
Enbridge Gas retained a third-party consultant (Posterity Group) to evaluate the potential for targeted DSM or enhanced targeted energy efficiency to provide reductions in peak demand that might reduce the size of the Project, based on estimates of the achievable DSM potential in the 2019 Achievable Potential Study. This analysis concluded that there was not enough DSM potential to reduce the size of the pipeline.

Enbridge Gas indicated that it had not specifically taken into account the programs and plans described in the Sponsors’ Evidence in its demand forecast, as these programs were aspirational in nature. In responding evidence, Enbridge Gas estimated the potential peak demand reductions that could be achieved by City of Ottawa sites, OCHC sites, and the Cliff Street heating and cooling plant served by the St. Laurent Ottawa North Pipeline. Enbridge Gas concluded that, even if all of these sites reduced their peak natural gas demand to zero, the overall peak demand reduction would only be about 1/3 of that needed to downsize the proposed Project by one pipeline size. Approximately 75% of the potential peak day demand reductions attributable to these sites is from the Cliff Street plant. Enbridge Gas indicated that despite the plans to reduce emissions and natural gas use at the Cliff Street plant, its understanding was that the facility would retain its current contract demand for natural gas.

**Positions of the Parties**

The City of Ottawa did not propose a specific alternative to the Project. However, the City of Ottawa indicated that “approving another natural gas pipeline to supply the City of Ottawa for the next 40-100 years is in direct conflict with Energy Evolution in the City of Ottawa.” City staff indicated that its preference would be for an integrated energy planning approach that would require the main energy suppliers (gas, electricity and district energy) to work together to build an energy system which meets the Energy Evolution climate goals while ensuring affordability and energy security.

Environmental Defence requested that the OEB direct Enbridge Gas to implement the Repair Option stating that it is a safe option which also avoids the risk of under-

---

30 Enbridge Gas Inc. response I.Staff.6(d), including attachment
31 The Posterity memo indicates that a reduction of 63,900 m³/hr in peak hour demand would be needed to reduce the pipeline size, while the maximum potential peak demand reduction from DSM was only 10,100 m³/hr. {Elsewhere, in Exhibit I.ED.13 and responding evidence, Enbridge Gas indicates that only a 32,500 m³/hr peak demand reduction would be needed for downsizing.}
32 Interrogatory responses to Enbridge Gas’s Evidence, Exhibit I.Ottawa,3
33 Enbridge Gas Responding Evidence, pages 3-5 of 7
34 Interrogatory response to Enbridge Gas’s Evidence, Exhibit I.EP.2; Technical Conference Transcript, March 4, 2022 Day 1, page 209. Technical Conference Transcript, March 5, 2022 Day 2, pages 68-69
35 Letter to the OEB, City of Ottawa, October 1, 2021
36 Response to interrogatories on Sponsors’ Evidence, 2.1-Staff-4
utilization of the Project’s infrastructure. Environmental Defence observed that
decarbonization plans by the City of Ottawa and federal 2050 fossil fuels net-zero target
legislation 37 exposes the pipeline to becoming a stranded under-utilized asset at the
risk of ratepayers.

IGUA recommended that the OEB carefully considers Enbridge Gas’s evidence on the
need for and alternatives to the Project and suggested that the OEB consider the
monitor and repair alternative instead of approving the replacement as proposed in the
Project.

Pollution Probe pointed to the higher cost of the Project as compared to the alternatives
and noted the likelihood of stranded assets suggested that it would be more beneficial
to extend the life of already depreciated existing pipeline assets. Pollution Probe
observed that Enbridge Gas did not provide risk assessment of the Project becoming
under-utilized over the next decades. Pollution Probe recommended “the more prudent
and economic alternative of monitoring and maintaining the existing pipeline”.

SEC summarized its submission by stating that there is no urgent need for the pipeline
replacement, as major customers will be reducing reliance on fossil-based gas which is
consistent with government policies and commitments by Canada and internationally.

In terms of the alternatives to the replacement, SEC proposed that Enbridge Gas should
implement the Repair Option and report to the OEB at the time of its rebasing
application.38 SEC argued that a Repair Option has lower and known costs, avoids
stranded asset risk and allows time for imminent potential reduction in natural gas
demand due to the implementation of decarbonization and net-zero plans. SEC also
noted that the Repair Option carries lower regulatory risk compared to the Project
(Replacement Option). SEC offered views on future replacement saying that if Enbridge
Gas applies in the future for St. Laurent Ottawa North Pipeline replacement, it must
include in the evidence a forecast of average and peak demand for the full useful life of
the pipeline and consider gas use reduction plans of its customers and complete
assessment of all alternatives including IRP alternatives.

OEB staff recognized the need for integrity risk management but was not convinced that
the Project would be the best alternative to address the need. OEB Staff suggested that
the (reactive) repair option might not be appropriate because of increasing reliability risk
of the declining integrity of the existing pipeline. OEB staff submitted that the Retrofit
Option could be more appropriate than the pursuit of the Project. In OEB staff’s view the

37 Canadian Net-Zero Emissions Accountability Act, S.C. 2021, c.22
38 SEC Final Argument, March 24, 2022, page 7, paragraph 1.3.8
Retrofit Option would allow the pipeline life to be extended by several decades, and the retrofit would also likely be more economical than a full replacement at this time, due to, among other things, the time value of delaying the high capital cost of the replacement. OEB staff noted that this would also provide flexibility for a possible pipeline size reduction if a replacement would be required should demand reductions associated with Energy Evolution or through IRPA initiated by Enbridge Gas be realized. OEB staff suggested that a Retrofit Option may be the most appropriate alternative to address the declining conditions of the St. Laurent Ottawa North Pipeline.

OEB staff submitted that the IRP alternatives pursued by Enbridge Gas, including targeted DSM, in the near term would not feasibly reduce the peak demand served by the St. Laurent system on a scale sufficient to reduce the sizing of the proposed Project.

OEB staff supported the energy planning approach described by the City of Ottawa, and closer collaboration between Enbridge Gas and the City of Ottawa to proactively plan a course of action.

Findings

The OEB finds that Enbridge Gas has not provided sufficient evidence to demonstrate that the proposed Project (pipeline replacement) is the best available alternative. As an example, Enbridge Gas’s comparison of the total cost and Net Present Value of the Project (pipeline replacement) versus the pipeline Retrofit Option which would allow for ongoing in-line inspection and repair, showed that the Retrofit Option is a less costly alternative even though Enbridge Gas presented a number of qualitative factors to demonstrate that the replacement option is preferrable.

Several parties argued the Retrofit Option, in addition to having a lower initial capital cost, would also have the potential advantage of providing flexibility for a possible pipeline size reduction should demand reductions be realized. In its reply argument, Enbridge Gas only provided a qualitative description of some of the disadvantages of the Retrofit Option.

The OEB urges Enbridge Gas to thoroughly examine other alternatives such as the development and implementation of an in-line inspection and maintenance program using available modern technology, and propose appropriate action based on its findings, as part of its next rebasing application.

The OEB suggests that Enbridge Gas should work collaboratively with the City of Ottawa and other stakeholders to proactively plan a course of action if and when pipeline replacement is required, including the pursuit of Integrated Resource Planning (IRP) alternatives. Enbridge Gas has not carried out a detailed assessment of the IRP.
alternative citing that the pipeline integrity concerns must be addressed in less than three years which is the OEB threshold for carrying out an IRP assessment. As discussed earlier, Enbridge Gas has not provided strong evidence to support the claim that the integrity threat to the pipelines is imminent and that replacement in less than three years is necessary.

In more general terms and to the extent applicable for future leave to construct applications, the OEB encourages Enbridge Gas to undertake in-depth quantitative and qualitative analyses of alternatives that specifically include the impacts of IRP, DSM programs and de-carbonization efforts.

### 3.3 Project Cost and Economics

Enbridge Gas estimated the Project costs as shown in the table below to be approximately $33.9 M for the IP PE pipeline segments and $89.8 M for XHP ST pipelines, totalling approximately $123.7 M.

The abandonment costs are not included in the cost estimates for the Project.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>IP PE Costs</th>
<th>XHP ST Costs</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Material Costs</td>
<td>$358,484</td>
<td>$1,268,313</td>
<td>$1,626,797</td>
</tr>
<tr>
<td>2.0</td>
<td>Labour Costs</td>
<td>$20,369,317</td>
<td>$48,953,572</td>
<td>$69,422,889</td>
</tr>
<tr>
<td>3.0</td>
<td>External Permitting &amp; Land</td>
<td>$6,303</td>
<td>787,387</td>
<td>$793,690</td>
</tr>
<tr>
<td>4.0</td>
<td>Outside Services</td>
<td>$2,849,096</td>
<td>$4,523,814</td>
<td>$7,372,910</td>
</tr>
<tr>
<td>5.0</td>
<td>Direct Overheads</td>
<td>$531,062</td>
<td>$751,515</td>
<td>$1,282,577</td>
</tr>
<tr>
<td>6.0</td>
<td>Contingency Costs</td>
<td>$3,318,390</td>
<td>$16,405,401</td>
<td>$19,723,791</td>
</tr>
<tr>
<td>7.0</td>
<td>Project Cost</td>
<td>$27,432,652</td>
<td>$72,690,002</td>
<td>$100,122,654</td>
</tr>
<tr>
<td>8.0</td>
<td>Indirect Overheads</td>
<td>$8,203,171</td>
<td>$16,340,923</td>
<td>$24,544,094</td>
</tr>
<tr>
<td>9.0</td>
<td>Interest During Construction</td>
<td>$230,655</td>
<td>$782,119</td>
<td>$1,012,774</td>
</tr>
</tbody>
</table>

*XHP ST costs are a Class 5 cost estimate

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

---

Decision and Order
May 3, 2022
Enbridge Gas provided the costs of comparable projects completed in the past and approved by the OEB including the cost of the completed Phase 1 and Phase 2 of the St. Laurent Replacement Project. The table below summarizes this information.  

<table>
<thead>
<tr>
<th>Class #</th>
<th>Project Name</th>
<th>City</th>
<th>Year</th>
<th>Pipe Size (Diameter / Material)</th>
<th>Length (km)</th>
<th>Estimated Total Costs (millions)</th>
<th>Estimated $/meter*</th>
<th>Assumed Contingency</th>
<th>Actual Total Costs (millions)</th>
<th>Actual $/meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>EB-2019-006</td>
<td>Sudbury NPS 10 Replacement Project</td>
<td>Sudbury</td>
<td>2015</td>
<td>NPS 12 Steel</td>
<td>0.7</td>
<td>$2,185</td>
<td>$3,930</td>
<td>10%</td>
<td>$3,293</td>
<td>$1,481</td>
</tr>
<tr>
<td>EB-2019-012</td>
<td>Sudbury NPS 10 Replacement Project</td>
<td>Sudbury</td>
<td>2016</td>
<td>NPS 12 Steel</td>
<td>5.9</td>
<td>$10,974</td>
<td>$1,874</td>
<td>13%</td>
<td>$11,481</td>
<td>$1,941</td>
</tr>
<tr>
<td>EB-2019-022</td>
<td>Sudbury NPS 10 Replacement Project</td>
<td>Sudbury</td>
<td>2016-2017</td>
<td>NPS 12 Steel</td>
<td>2.8</td>
<td>$6,304</td>
<td>$2,251</td>
<td>12%</td>
<td>$4,305</td>
<td>$1,502</td>
</tr>
<tr>
<td>EB-2017-015</td>
<td>Sudbury NPS 10 Replacement Project</td>
<td>Sudbury</td>
<td>2018</td>
<td>NPS 12 Steel</td>
<td>20</td>
<td>$74,000</td>
<td>$3,700</td>
<td>15%</td>
<td>$82,816</td>
<td>$4,131</td>
</tr>
<tr>
<td>EB-2019-017</td>
<td>St Laurent Pipeline Project Phase 1/2</td>
<td>Ottawa</td>
<td>2018-2020</td>
<td>NPS 2, NPS 4, NPS 6 &amp; NPS 8 PE</td>
<td>6.1</td>
<td>N/A</td>
<td>N/A</td>
<td>25%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>EB-2019-017</td>
<td>Windsor Line Replacement Project</td>
<td>Southwestern Ontario</td>
<td>2020</td>
<td>NPS 6 Steel</td>
<td>94</td>
<td>$192,744</td>
<td>$4,999</td>
<td>15%</td>
<td>$207,809</td>
<td>$5,000</td>
</tr>
<tr>
<td>EB-2019-012</td>
<td>London Lines Replacement Project</td>
<td>Southwestern Ontario</td>
<td>2021</td>
<td>NPS 6 Steel</td>
<td>90.9</td>
<td>$133,969</td>
<td>$4,940</td>
<td>14%</td>
<td>$138,909</td>
<td>$5,000</td>
</tr>
<tr>
<td>EB-2020-019</td>
<td>St Laurent Ottawa North Replacement Project Phases 1/4</td>
<td>Ottawa</td>
<td>2022-2023</td>
<td>NPS 6, NPS 6 &amp; NPS 8 PE</td>
<td>18.8</td>
<td>$100,123</td>
<td>$5,053</td>
<td>15% for PE</td>
<td>$100,123</td>
<td>$5,053</td>
</tr>
</tbody>
</table>

*Variations in cost per metre are significantly influenced by specific project scope parameters.

Notes:
(1) EB-2017-0180: The 2018 Sudbury Replacement Project had large proportions of rock excavation, waterbend management, a specialized Cathodic Protection design and bypass installations, which are all costly activities that are not present to the same extent or not present at all in the previously approved OEB projects as indicated in the table. It is the influence of this construction scope that has increased the cost per metre for the 2018 Sudbury Replacement Project. Estimated Total Costs for this project were later increased to $53 million.
(2) EB-2019-006: The actual costs listed are for all components of St. Laurent Phase 1/2. The estimated costs are listed as N/A because portions of Phase 1/2 were not included in the LTC submission. As only portions of Phase 1/2 were included in the LTC submission EB-2019-006, the estimated costs included in the LTC submission EB-2019-006 were $5,711 million for the installation of 1.7 km of NPS 6 PE main, resulting in a cost per metre of $3,324/km.
(3) EB-2019-0172: For comparison purposes, Estimated Total Costs as indicated in the table for the Windsor Line Replacement Project represents “Estimated Incremental Project Capital Costs” (includes Indirect Overheads of $14,061 million).
(4) EB-2020-0192: For comparison purposes, Estimated Total Costs as indicated in the table for the London Line Replacement Project represents “Estimated Incremental Project Capital Costs” (includes Stations, Services, Abandonment and ICD, excludes Indirect Overheads of $30,151 million).

Enbridge Gas stated that the contingency levels of 15% for polyethylene and 30% steel segments of the Project apply to all direct capital costs. The contingency levels are, according to Enbridge Gas, determined at the time of filing the application “…to correspond to the project/design maturity at the time of filing…” Enbridge Gas indicated that it would reduce contingency cost as the Project’s risks are identified and mitigated and design is finalized.

The contingency levels for the projects included in the above comparison table are 15% and below except for the St. Laurent Project Phases 1 and 2 where it was 25%. The estimated cost for the Project is the highest in comparison to the costs of other completed projects.

Enbridge Gas has applied for Incremental Capital Module (ICM) Treatment to receive approval for the recovery of the costs for Phase 3 of the St. Laurent Project as part of the Company’s 2022 Rates Phase 2 Application. The OEB issued its decision on this
application and did not approve the ICM treatment for the Phase 3 of the St. Laurent Ottawa North Pipeline project, on the basis that the need for the Project has not been determined at this time.42

Positions of the Parties

Regarding the estimated costs of the Project, OEB staff noted that it could not conclude that the estimated costs are unreasonable. OEB staff noted that, should the Project be approved, the OEB’s Standard Conditions of Approval, require that Enbridge Gas file with the OEB the actual capital cost of the Project and explain variances and use of contingencies.

No other party made submissions on this issue.

Findings

Given that Enbridge Gas’s application is denied based on the lack of evidence to support immediate need, the OEB is not making any specific findings regarding the reasonableness of the estimated Project cost details. However, for similar future applications, the OEB urges Enbridge Gas to provide more details about life-cycle costs including abandonment costs and the probability of future under-utilization. The OEB also encourages Enbridge Gas in future applications to elaborate on the reasons for any significant discrepancies between its cost estimate for the proposed project and other similar projects which was lacking in this application.

3.4 Environmental Impacts

Enbridge Gas retained Dillon Consulting Ltd (Dillon) to complete an Environmental Report: St. Laurent Ottawa North Pipeline Replacement Project (June 2020) (ER), which assessed the existing bio-physical and socio-economic environment in the study area, the alternative routes, proposed the preferred route, conducted public consultation, conducted impacts assessment and proposed mitigation measures to minimize the impacts.

The ER and the consultation process were conducted in accordance with the OEB's Environmental Guidelines for Location, Construction and Operation of Hydrocarbon Pipelines in Ontario [7th Edition, 2016] (OEB Environmental Guidelines).

42 Decision and Order, EB-2021-0148, April 12, 2022, page 12
On July 21, 2020, the ER was made available to the Ontario Pipeline Coordinating Committee (OPCC), Environment and Climate Change Canada (ECCC), National Capital Commission (NCC), Rideau Valley Conservation Authority (RVCA) and the City of Ottawa for review and comments. The federal environmental assessment may be required for portions of the Project located on federal lands. Enbridge Gas stated that the consultation with the federal agencies is underway.43

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

Enbridge Gas stated that it would prepare the Environmental Protection Plans (EPP) for the Project. Enbridge Gas confirmed that the EPP will include site-specific environmental management, monitoring and contingency plans to implement the mitigation and contingency measures outlined in the ER and ER Amendment and identified through the consultation process.44

**Positions of the Parties**

OEB staff submitted that Enbridge Gas has completed the ER in accordance with the OEB Environmental Guidelines. No other party made submissions on this issue.

**Findings**

Given that Enbridge Gas’s application is denied, the environmental work carried out in support of the proposed Project is not applicable at this time and has to be updated should Enbridge Gas choose to pursue other options with the subject pipelines.

### 3.5 Landowner Agreements

Enbridge Gas filed the form of Working Area Agreement which has been previously approved by the OEB as part of the OEB’s Decision and Order regarding Enbridge Gas’s Innes Road Project.45 Enbridge Gas also filed the form of Transfer of Easement Agreement has been previously approved by the OEB as part of the OEB’s Decision and Order regarding Enbridge Gas’s London Lines Replacement Project.46

---

43 Enbridge Gas Inc. response to I.STAFF.10 b)  
44 Enbridge Gas Inc. response to I.STAFF.12  
45 EB-2012-0438, OEB Decision and Order, April 11, 2013, pages 5-6  
46 EB-2020-0192, OEB Decision and Order, January 28, 2021, page 29
Gas has been consulting with the affected landowners and indicated that the landowners raised no concerns. Enbridge Gas expects no delays in acquiring the land rights for the Project.47

In addition to working area agreements and to the transfer of easement agreements, Enbridge Gas stated that it required Municipal Consent approval from the City of Ottawa to locate the pipelines within the right of way (ROW) and may require approvals and permits to occupy and use Federal lands from the National Capital Commission (NCC).

Enbridge Gas identified in its application all the permits, approvals and agreements required for the Project including the entities issuing these permits and approvals. Enbridge Gas does not anticipate any delays related to permit acquisition that could affect the Project construction schedule 48.

Positions of the Parties

OEB staff submitted that the OEB should approve the proposed forms of agreements as both forms were previously approved by the OEB. No other party made submissions on this issue.

Findings

The OEB finds that it is not necessary to make a finding in this regard given that it has denied the application.

3.6 Indigenous Consultation

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

- Algonquins of Ontario
- Mohawks of Akwesasne

47 Enbridge Gas Inc. response to I.STAFF.18 a) and b)
48 Enbridge Gas Inc. response to I.STAFF.17 a)
Enbridge Gas provided the MENDM with its Indigenous Consultation Report (ICR) for the Project on March 2, 2021 and updated it on March 4, 2021. The ICR states that Algonquins of Ontario and Mohawks of Akwesasne expressed no concerns or issues related to the Project.

On April 13, 2021, Enbridge Gas received a letter from the Ministry of Energy indicating that it reviewed the ICR and that, in its opinion, the procedural aspects of consultation undertaken by Enbridge Gas to date are satisfactory (referred to as Sufficiency Letter or Opinion Letter).

The Algonquins of Ontario reviewed the Stage 1 Archaeological Assessment report. Enbridge Gas responded to their comments and is committed to involve the Algonquins of Ontario in the Stage 2 Archaeological Assessment field work and provide capacity funding. Enbridge Gas noted that the Algonquins of Ontario and the Mohawks of Akwesasne participated in virtual monitoring associated with the field work for Phase 3 and Phase 4 Stage 2 Archaeological Assessments. Enbridge Gas confirmed its commitment to involving Indigenous communities in Archeological Assessment work.49

In response to an OEB staff interrogatory, Enbridge Gas stated that no issues or concerns with the Project were raised by the Algonquins of Ontario or the Mohawks of Akwesasne since September 10, 2021. Enbridge Gas also noted that it received no correspondence or communication from the Ministry of Energy since the Opinion Letter was issued on April 13, 2021.50

**Positions of the Parties**

OEB staff submitted that Enbridge Gas appeared to have made efforts to engage with affected Indigenous groups and no concerns that could materially affect the Project had been raised through its consultations to date. OEB staff observed that Enbridge Gas appeared to be cooperating with the Indigenous communities during the consultation process and that it made commitments to the Indigenous communities related to the Project. OEB staff stated that it was not aware of any potential adverse impacts of the Project to any Aboriginal or treaty rights.

No other party made submission on this issue.

---

49 Enbridge Gas Inc. response to I.STAFF 19 d)
50 Enbridge Gas Inc. response to I.STAFF 19 b) and c)
Findings
The OEB finds that it is not necessary to make a finding in this regard given that it has denied the application.

3.7 Conditions of Approval

OEB staff sought comments from Enbridge Gas on the OEB’s Standard Conditions of Approval for leave to construct applications\(^5\). In response, Enbridge Gas agreed with the Standard Conditions of Approval.

Section 23 of the OEB Act permits the OEB, when making an order, to impose such conditions as it considers appropriate.

OEB staff submitted that, should the OEB grant leave to construct the Project, the approval should be subject to the Conditions of Approval as proposed in the OEB staff submission.

Findings
Since leave to construct the subject pipelines is not being granted by the OEB to Enbridge Gas, Conditions of Approval are not applicable and the OEB is making no findings on the draft Conditions of Approval.

\(^5\) The link to the OEB Standard Conditions for section 90 applications was also provided in the notice of application together with the Standard Issues List for section 90 applications.
4 ORDER

THE ONTARIO ENERGY BOARD ORDERS THAT:

1. Enbridge Gas Inc.'s application pursuant to section 90(1) of the OEB Act, for a leave to construct the Project in the City of Ottawa as described in its application is denied.

2. The information which had previously been designated by the OEB as confidential on an interim basis shall be treated as confidential on a final basis.

3. Parties in receipt of confidential information shall either return the subject information to the Registrar and communicate to Enbridge Gas Inc. that they have done so or destroy the information and execute a Certificate of Destruction, following the end of this proceeding. The Certificate must be filed with the Registrar and a copy sent to Enbridge Gas Inc.

4. Eligible intervenors shall file with the OEB and forward to Enbridge Gas Inc. their respective cost claims in accordance with the OEB’s Practice Direction on Cost Awards on or before May 19, 2022.

5. Enbridge Gas Inc. shall file with the OEB and forward to intervenors any objections to the claimed costs of the intervenors on or before May 26, 2022.

6. If Enbridge Gas Inc. objects to any intervenor costs, those intervenors shall file with the OEB and forward to Enbridge Gas Inc. their responses, if any, to the objections to cost claims on or before June 2, 2022.

7. Enbridge Gas Inc. shall pay the OEB’s costs incidental to this proceeding upon receipt of the OEB’s invoice.

Parties are responsible for ensuring that any documents they file with the OEB, such as applicant and intervenor evidence, interrogatories and responses to interrogatories or any other type of document, do not include personal information (as that phrase is defined in the Freedom of Information and Protection of Privacy Act), unless filed in accordance with rule 9A of the OEB’s Rules of Practice and Procedure.

Please quote file number, EB-2020-0293 for all materials filed and submit them in searchable/unrestricted PDF format with a digital signature through the OEB’s online filing portal.

- Filings should clearly state the sender’s name, postal address, telephone number and e-mail address.
• Please use the document naming conventions and document submission standards outlined in the Regulatory Electronic Submission System (RESS) Document Guidelines found at the File documents online page on the OEB’s website.

• Parties are encouraged to use RESS. Those who have not yet set up an account, or require assistance using the online filing portal can contact registrar@oeb.ca for assistance.

• Cost claims are filed through the OEB’s online filing portal. Please visit the File documents online page of the OEB’s website for more information. All participants shall download a copy of their submitted cost claim and serve it on all required parties as per the Practice Direction on Cost Awards.

All communications should be directed to the attention of the Registrar and be received by end of business, 4:45 p.m., on the required date.

With respect to distribution lists for all electronic correspondence and materials related to this proceeding, parties must include the Case Manager, Zora Crnojacki at Zora.Crnojacki@oeb.ca and OEB Counsel, James Sidlofsky at James.Sidlofsky@oeb.ca.

Email: registrar@oeb.ca

Tel: 1-877-632-2727 (Toll free)

DATED at Toronto May 3, 2022

ONTARIO ENERGY BOARD

Nancy Marconi

Nancy Marconi
Registrar