

# Elson Advocacy

November 22, 2021

**Ms. Christine Long**

Registrar

Ontario Energy Board

2300 Yonge Street, Suite 2700, P.O. Box 2319

Toronto, Ontario M4P 1E4

Dear Ms. Long

**Re: EB-2020-0293 – Enbridge Gas Inc. – St. Laurent Ottawa Replacement  
Project**

Enclosed please find the interrogatories of Environmental Defence in the above matter.

Yours truly,



Kent Elson

cc: Parties in the above proceeding

**EB-2020-0293**  
**Enbridge St. Laurent Ottawa North Replacement Project**

**Interrogatories of Environmental Defence**

**Interrogatory # 1-ED-1**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 37

Questions:

- (a) Please reproduce table 8 at the above reference adding a column to show the estimated cost of replacing each portion of the pipeline listed in that table.
- (b) Please describe the steps that Enbridge took to consider the possibility of retrofitting *part* of the applicable pipeline to allow in-line inspections and defer or avoid that *part* of the proposed abandonment and replacement.

**Interrogatory # 2-ED-2**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 44

Preamble:

Enbridge states on page 44 that “[t]he cost comparison was completed on ST XHP gas main costs only.”

Questions:

- (a) Please provide breakdown of the proposed project costs attributable to the ST XHP gas main versus the other portions of the project.
- (b) Please provide a detailed description and quantification of the anticipated costs for the repair and replace options for (i) the ST XHP portion and (ii) the remaining portions.
- (c) Why did Enbridge undertake the cost comparison only on the ST XHP gas main costs?
- (d) Please redo the cost comparison and provide a revised copy of table 13 including all portions of the project, not just the ST XHP gas main. Please provide all underlying assumptions, figures, and calculations.

**Interrogatory # 2-ED-3**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 45

Preamble:

**Table 13: Comparison of Repair Option & Replace Option (Project) Costs**

<b>(\$ millions)</b>	<b>Repair Option</b>	<b>Replace Option</b>
<b>Total Cost</b>	\$33.0	\$73.5
<b>Net Present Value</b>	\$(7.7)	\$(58.9)

Questions:

- (a) Please provide the full and broken-out discounted cash flow spreadsheets underlying the cost comparison in table 13. Please provide these as an excel spreadsheet.
- (b) Please provide a description explaining how the costs were estimated over time in the DCF spreadsheets.
- (c) Please provide a full and detailed breakdown of the components of the total cost figures in table 13.
- (d) Please provide a revised version of table 13 for a scenario where the pipelines in question are only needed up to 2050 (i.e. for 2023 to 2050 only). Enbridge does not need to agree that this scenario is possible or probable.
- (e) Does the \$73.5 million cost of the replacement option include abandonment costs? If not, please provide a revised version of table 13 and a revised version of the table from question (d) above that includes the abandonment costs.
- (f) Does table 13 include the repair costs and the retrofit costs to allow for in-line inspections? If not, please explain why not and please reproduce table 13 to also include the applicable retrofit costs.

#### **Interrogatory # 2-ED-4**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 45

Questions:

- (a) Please confirm the percentage of Ontario's annual greenhouse gas emissions that are attributable to natural gas combustion.
- (b) Please estimate the probability (%) that electric heat pumps will be a significantly less expensive method to heat most buildings compared to natural gas (e.g. due to carbon pricing, improved equipment, etc.) in: (i) 2030, (ii) 2040, and (iii) 2050. Please provide a specific percentage with any caveats as necessary.

#### **Interrogatory # 2-ED-5**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 45

Questions:

- (a) Approximately when will replacement costs for the proposed pipelines be fully depreciated? Please make and state all assumptions and caveats as necessary.

- (b) How much of the cost of the pipeline replacement will likely remain undepreciated by (i) 2040 and (ii) 2050? Please make and state all assumptions and caveats as necessary.

### **Interrogatory # 2-ED-6**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 45

Preamble:

Questions:

- (a) Please estimate the probability (%) that an NPS 16 pipe will be required in the relevant areas versus an NPS 12 pipe in: (i) 2030, (ii) 2040, and (iii) 2050? Please provide a specific percentage with any caveats as necessary.
- (b) Please estimate the probability (%) that any gas pipeline will be required for the area in question by 2050. Please provide a specific percentage with any caveats as necessary.
- (c) Is Enbridge willing to bear any of the risk that the proposed infrastructure will be underutilized or stranded by 2050?

### **Interrogatory # 2-ED-7**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 45

Questions:

- (a) Please confirm that the abandonment costs will be paid out of a pool of funds that Enbridge has collected in the past. Please explain the answer in detail.
- (b) Please detail the abandonment costs and how they will be funded.
- (c) If the repair option is chosen, how will that impact the funds that have been reserved for pipeline abandonment?

### **Interrogatory # 2-ED-8**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 45

Questions:

- (a) If the pipelines are replaced, how much will be collected in rates for the future abandonment by 2050. Please provide a response on a best-efforts basis. Please provide all calculations and underlying assumptions and figures.
- (b) How much does Enbridge collect from rates each year in relation to future abandonment expenses? In other words, how much of Enbridge's rates are attributable to abandonment costs on an average annual basis?

- (c) If the pipelines are replaced and Enbridge goes bankrupt before they are abandoned such that it cannot pay for the abandonment, please confirm that there is no separate source of funds reserved to pay for abandonment. Please fully explain the response.

### **Interrogatory # 2-ED-9**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 45

Questions:

- (a) Please provide a breakdown of the cost for each project segment described in table 14.  
(b) Please reproduce table 14 with an extra column showing the cost of each segment and the total cost. Please include all costs.

### **Interrogatory # 2-ED-10**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 6, 35

Preamble:

Pg. 6: "It is the responsibility of the pipeline operator, in this case Enbridge Gas, to monitor the condition of its pipeline assets and in accordance with guidance set out in CSA Z662. Should the condition of a pipeline be such that it creates a risk pursuant to CSA Z662 guidance, the pipeline operator must address the condition of the pipeline."

Questions:

- (a) Is the repair option sufficient to meet the standards set out in CSA Z662? If not, please explain in detail and provide the section numbers and excerpts of all relevant portions of CSA Z662.  
(b) Please attach excerpts from all asset management plans addressing this pipeline.  
(c) When did Enbridge first decide that the pipelines at issue in this application had to be replaced? How have the safety and reliability issues been addressed operationally since that time?

### **Interrogatory # 2-ED-11**

Reference: Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 6, 35

Questions:

- (a) How has Enbridge been ensuring the ongoing safe and reliable operation of the pipelines in question despite their problematic conditions?  
(b) How long would it be sufficiently safe and reliable for Enbridge to continue to ensure the safe and reliable operation of the pipelines through the methods described in (a).

- (c) How long could Enbridge provide for sufficiently safe and reliable operation of the pipelines through repairs?

### **Interrogatory # 2-ED-12**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 13

Preamble:

“Enbridge Gas has applied the OEB-approved Binary Screening Criteria to the Project and determined that it is not appropriate to conduct further IRP assessment, as the Project is driven by integrity concerns that must be addressed within three years and no demand or supply side solution can resolve the integrity concerns.”

Questions:

- (a) When did Enbridge first identify the safety and reliability issues underlying the proposed project.
- (b) The problems with these pipelines appear to have existed for quite some time. Please explain why the replacement is a priority now and yet was not earlier?
- (c) Please provide a detailed timeline listing and describing the steps taken by Enbridge with respect to the identification and development of this project.
- (d) If timing were not an issue, how much could be saved in construction costs by downsizing the pipes? Please provide all figures and details in relation to the response.
- (e) How much would the project cost if half of the NPS 16 were downgraded to NPS 12?

### **Interrogatory # 2-ED-13**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 13

Preamble:

“Enbridge Gas has applied the OEB-approved Binary Screening Criteria to the Project and determined that it is not appropriate to conduct further IRP assessment, as the Project is driven by integrity concerns that must be addressed within three years and no demand or supply side solution can resolve the integrity concerns.”

Questions:

- (a) Please provide a table showing the peak design day demand forecast for the relevant pipelines and their capacity before and after the project,
- (b) Please indicate the demand threshold at which the NPS 16 pipes could be downsized to NPS 12.
- (c) Please indicate the demand threshold at which half of the NPS 16 pipes could be downsized to NPS 12.

- (d) Please provide a demand forecast for these pipelines for the (i) annual demand, (ii) average daily demand, and (iii) design day demand. Please provide the forecast for each year for as long a period as is reasonably feasible.
- (e) Please recreate the forecasts in (d) on the assumption that all cost-effective conservation as outlined in the latest DSM potential study is implemented.

### **Interrogatory # 2-ED-14**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 13

Preamble:

- (a) Please describe Enbridge's obligations with respect to IRP as they existed prior to the recent release of the OEB's IRP Framework on July 22, 2021. Please include reference to all relevant OEB decisions and guidelines, including its decision in the GTA pipeline case.
- (b) Please describe in detail the steps that Enbridge took to meet its IRP obligations with respect to this project prior to the release of the OEB's IRP Framework.

### **Interrogatory # 2-ED-15**

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 13

Preamble:

The OEB made the following direction to Enbridge on page 20 of the London Lines decision:

“However, despite the OEB approval of the application for leave to construct this Project, the OEB agrees with Environmental Defence that Enbridge Gas has an obligation to conduct a more rigorous Integrated Resource Planning assessment at the preliminary stage of projects development in future cases.<sup>53</sup> As OEB staff also notes the failure to present detailed analyses makes it unlikely that Enbridge Gas would select an alternative including DSM or other non-build project option. The OEB acknowledges that more direction is likely to be provided to Enbridge Gas in future leave to construct projects as part of the ongoing IRP proceeding. In the interim, however, the OEB believes that all parties would be assisted if Enbridge Gas would, in the future, undertake in-depth quantitative and qualitative analyses of alternatives that specifically include the impacts of DSM programs on the need for, or project design of facilities for which Enbridge Gas has applied for leave to construct.”<sup>1</sup>

Questions:

- (a) Please confirm that London Lines was a replacement case. If not, please explain.
- (b) Please describe in detail all steps taken by Enbridge to comply with the above direction made by the OEB.

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<sup>1</sup> EB-2020-0192, Decision and Order, January 28, 2021, p. 20

### Interrogatory # 2-ED-16

Reference: EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 13

Question:

- (a) Please provide a map showing how these pipelines connect into the wider gas distribution and transmission system. Please include arrows to show the direction of flow at peak. Please include pipelines on the Quebec side.

### Interrogatory # 3-ED-17

Reference: EB-2020-0293, Exhibit D, Tab 1, Schedule 1, Page 10; Exhibit B, Tab 1, Schedule 1, Page 6, 35; EB-2020-0293, Exhibit B, Tab 1, Schedule 1, Page 45

Preamble:

Table 9: Estimated Project Costs

<u>Item No.</u>	<u>Description</u>	<u>IP PE Costs</u>	<u>XHP ST Costs</u>	<u>Total Costs</u>
1.0	Material Costs	\$358,484	\$1,268,313	\$1,626,797
2.0	Labour Costs	\$20,369,317	\$48,953,572	\$69,422,889
3.0	External Permitting & Land	\$6,303	787,387	\$793,690
4.0	Outside Services	\$2,849,096	\$4,523,814	\$7,372,910
5.0	Direct Overheads	\$531,062	\$751,515	\$1,282,577
6.0	Contingency Costs	\$3,318,390	\$16,405,401	\$19,723,791
7.0	Project Cost	\$27,432,652	\$72,690,002	\$100,122,654
8.0	Indirect Overheads	\$6,203,171	\$16,340,923	\$22,544,094
9.0	Interest During Construction	\$230,655	\$782,119	\$1,012,774
10.0	Total Project Costs**	\$33,866,478	\$89,813,044	\$123,679,522

\*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

Questions:

- (a) Please provide a table reconciling the cost as shown in table 9 above with the costs in Exhibit B, Tab 1, Schedule 1, Page 45, table 13.
- (b) Please reproduce table 9 with an additional column showing the portion costs for each item that were included in Exhibit B, Tab 1, Schedule 1, Page 45, table 13.
- (c) Please express the total cost of the project as a dollar figure per customer served by the pipelines in question. Please provide all underlying figures and calculations.
- (d) Please express the total cost of the project as a dollar figure per residential customer served by the pipelines in question. Please provide all underlying figures and calculations.
- (e) Please add the abandonment costs to table 9.



### **Interrogatory # 3-ED-18**

Reference: EB-2020-0293, Exhibit D, Tab 1, Schedule 1, Page 10

Questions:

- (a) Please provide the total estimated cost of abandonment.
- (b) Please compare the estimated abandonment costs with abandonment costs in a number of comparable projects. Please include comparative information such as cost per km.
- (c) Are the abandonment costs more or less than the amount collected through the depreciation expense for future abandonment costs thus far in relation to these pipelines? Please explain.
- (d) Enbridge has previously stated "[f]uture abandonment costs charged to earnings through the depreciation expense are recorded as a liability on the Enbridge Gas financial statements and are collected from all ratepayers." How much money has Enbridge collected from ratepayers for abandonment costs in relation to these pipelines? If these funds are collected on a broader basis or over a wider geographical area, please provide the broader financial figures and attribute a portion to these pipelines on a best-efforts basis (e.g. by kilometer, by customers served, etc.). Please explain the answer.
- (e) What amount has Enbridge collected from ratepayers through the depreciation expense for all future abandonment costs in Ontario? How many km of pipeline does Enbridge have in service in Ontario that are NPS 12 or larger? What is the size of this current project as an approximate percentage of Enbridge's pipeline system in Ontario?
- (f) Please provide a table showing the amounts collected by Enbridge in rates attributable to abandonment over each of the most recent five years for which this data exists.

### **Interrogatory # 4-ED-19**

Reference: Exhibit C

Questions:

- (a) Please file a high resolution map showing the pipeline to be abandoned, the proposed new facilities, and any upstream or parallel pipelines.
- (b) Please describe the specific steps that will be taken to abandon the pipeline (e.g. filling with grout). Please describe the impacts of this work on the street (e.g. noise, partitioning off part of the street, traffic impacts, duration of those impacts, etc.). Please provide a map summarizing where those impacts will be felt.
- (c) Has Enbridge received agreement and approval from the City of Ottawa regarding its proposed method of abandonment? Please list and describe the approvals that are required in this regard.
- (d) Please file all permits and agreements potentially relevant to the method of abandonment in this case.

- (e) With respect to the abandoned pipe, would Enbridge be liable/responsible for removing it in the future should it be necessary (e.g. to make room for other utilities)? If not, who would be liable/responsible for this removal?

**Interrogatory # 4-ED-20**

Reference: Exhibit C

Questions:

- (a) Please provide a high-resolution map showing all lane closures and public land use (e.g. sidewalk closures, park access agreements, etc.) required for the proposed project including the abandonment of the old pipe.
- (b) Please provide a list of all: (i) lane closures, (ii) sidewalk closures, and (iii) any other public land use required for the proposed project, including the abandonment of the old pipe. For each item in the list, please include the estimated length of time associated with the item.
- (c) Please list all impacts on public transit routes (on a route-by-route basis). For each item in the list, please include the estimated length of time associated with the item.
- (d) What is the least expensive route considered for the proposed project?