# EB-2024-0200 St. Laurent Pipeline Project

## **Interrogatories of Environmental Defence**

## **Interrogatory #2-ED-1**

Reference: Exhibit A, Tab 2, Schedule 2

## Question(s):

(a) On page 3 Enbridge states: "Extensive Inspection and Repair alternative may reduce the risks to the pipeline at a particular point in time; however, in the long term this option carries significant uncertainties, as new conditions and circumstances could arise that make it inadequate at mitigating those risks." Please define "long term" as used in this sentence, including a reference to a year or range of years.

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

Reference: Exhibit A, Tab 2, Schedule 2

Question(s):

- (a) If SLP is approved and ICM recovery is not approved, would Enbridge proceed with the project regardless?
- (b) If yes, how would it adjust its capital spending accordingly

#### **Interrogatory #2-ED-3**

Reference: Exhibit B, Tab 1, Schedule 1

Question(s):

- (a) Please provide full details on all robotic in-line inspection (ILI) used.
- (b) What robotic ILI options were not used?

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

Reference: Exhibit B, Tab 1, Schedule 1

Question(s):

(a) Please list the adjoining pipelines in a table indicating: (i) the kms, (ii) the vintage, (iii) the likelihood of whether Enbridge will propose replacing them within the next decade,

and (iv) a comparison between the testing on those adjoining pipelines versus the ones that Enbridge plans to replace.

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

Reference: Exhibit B, Tab 3, Schedule 1

Question(s):

- (a) Please provide a table listing the in one column excepts from each part of the rebasing phase 1 decision that is relevant to this application and in the second column a description of how Enbridge has followed that guidance. Please indicate any OEB guidance that Enbridge has been unable to follow.
- (b) Please provide a table listing the in one column excepts from each part of the IRP decision that is relevant to this application and in the second column a description of how Enbridge has followed that guidance. Please indicate any OEB guidance that Enbridge has been unable to follow.
- (c) Page 26 provides an except from the Electrification and Energy Transition Panel Report. Please provide a copy of the report as an attachment so it can be appropriately referred to in evidence.
- (d) Please provide a copy of all correspondence from Enbridge employees to members of the panel.

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

Reference: Exhibit B, Tab 3, Schedule 1

Question(s):

- (a) Please provide a table with a complete breakdown of the costs for the "extensive inspection and repair" option by cost category and year.
- (b) Please provide a detailed description of how Enbridge calculated the cost of the "extensive inspection and repair" option.
- (c) For the "extensive inspection and repair" option, please indicate how many repairs are forecast to be required each year and the cost of each. Please provide an annual breakdown.

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

Reference: Exhibit B, Tab 3, Schedule 1

Question(s):

- (a) Please provide a costing of "Alternative 6: Partial Replacement" shown in page 5.
- (b) Please provide a table with a complete breakdown of the costs for this option by cost category and year.

- (c) Please provide a detailed description of how Enbridge calculated the cost of this option.
- (d) For this option, please indicate how many repairs are forecast to be required each year and the cost of each. Please provide an annual breakdown.

## Interrogatory #2-ED-8

Reference: Exhibit B, Tab 3, Schedule 1

Question(s):

- (a) Please provide a table showing the profit (i.e. return on equity) that Enbridge would earn from the options of (i) full replacement, (ii) extensive inspection and repair, and (iii) partial replacement up until the date the assets are fully depreciated. Please make and state any assumptions as needed (e.g. depreciation rates and capital parameters remaining static).
- (b) Please provide a copy of Table 7 from page 19 with a breakdown of the costs that are capital versus O&M.
- (c) Please provide a copy of Table 7 from page 19 that includes the cost of capital that will be incurred for each option over the financial lifetime of the assets in question. Please provide all calculations.
- (d) Please provide a copy of Table 7 from page 19 that includes the cost of capital that will be incurred for each option over the financial lifetime of the assets in question on the assumption that all inspection costs are treated as O&M, not capital.

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

Reference: Exhibit B, Tab 3, Schedule 1

#### Question(s):

- (a) Please reproduce Table 7 form page 19 including site restoration costs (incl. abandonment), both included in the NPV of each option and separated out for each option in an additional row.
- (b) Please reproduce Table 7 form page 19 including all costs set out in Table 1 of Exhibit E, Tab 1, Schedule 1.

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

Reference: Exhibit B, Tab 3, Schedule 1

#### Question(s):

(a) Please list all repairs that have been undertaken on the stretch of pipe that would be replaced over the past 10 years. Please provide this in a table with columns for the date of the repair, the cost of the repair, and a description of the repair (e.g. length of pipe remediated or replaced).

## Interrogatory #2-ED-11

Reference: Exhibit B, Tab 3, Schedule 1, Attachment 1

Question(s):

- (a) Please provide the live spreadsheets used by Integral.
- (b) The attachment is merely a slide deck. Please provide a copy of any reports or other more detailed results provided by Integral to Enbridge.
- (c) Please provide the full data outcomes for all scenarios, including the number and proportion of houses with and without a gas furnace as their main heating source.
- (d) How much did the Integral report cost?

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

Reference: Exhibit B, Tab 3, Schedule 1, Attachment 1

Question(s):

(a) Please provide the outcome of a scenario where 100% of customers switch to an allelectric heat pump from their gas furnace as of 2030 (e.g. pursuant to a government mandate) and each of those customers is assumed to exit the gas system in 5 years of installing the heat pump. If this exact scenario cannot be modelled due to model limitations, please model a scenario that as closely resembles this as possible. Please provide the outcome in tabular format and in a figure equivalent to that shown on page 23.

(b)

#### Interrogatory #2-ED-13

Reference: Exhibit B, Tab 3, Schedule 1, Attachment 1

Question(s):

- (a) Please reproduce the figures on pages 23 to 26 replacing CER 2023 with the most costeffective pathway found in the following report from the Canadian Climate Institute: <u>https://climateinstitute.ca/reports/building-heat/</u>.
- (b) Please confirm that the CER 2023 scenario plotted on pages 23 to 26 is not a prediction?
- (c) Please confirm that the CER 2023 scenario plotted on pages 23 to 26 is not based on a calculation of the most cost-effective pathway?

#### Interrogatory #2-ED-14

Reference: Exhibit B, Tab 3, Schedule 1, Attachment 1

Question(s):

- (a) Please work with Enbridge confirm what the average annual total gas distribution cost for Enbridge residential customers is, including fixed and variable charges?
- (b) Please provide a simplified analysis to provide an indication of the increases in average annual total distribution charges that would occur as customers leave the gas system. Please calculate the average annual total gas distribution charges for 100%, 90%, 80%, ... 10% of customers exiting the gas system. When customers leave the system, please assume that the distribution charges they were once paying are evenly distributed among the remaining customers. Please provide the results in a table.
- (c) Please reproduce figure 24 with the results of (b) shown on the vertical axis (to the left or right of the figure).

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

Reference: Exhibit C, Tab 1, Schedule 1

Question(s):

(a) Please reproduce Table 7 on page 19, adding a 26-year case (consistent with the useful life of the asset ending in 2050) and adding the "Alternative 6: Partial Replacement" from page 5 as an additional column.

## **Interrogatory #2-ED-16**

Reference: Exhibit C, Tab 1, Schedule 1

Question(s):

- (a) Please reproduce Table 7 on page 19, adding a 26-year case (consistent with the useful life of the asset ending in 2050) and adding an alternative whereby inspection and repair is pursued for 3 years, followed by a full replacement.
- (a) How much would it cost (NPV) in additional inspection and repair costs to defer the project by 3 years? What savings would accrue (NPV) by deferring the full replacement costs? What is the net of those figures?
- (b) How much would it cost (NPV) in additional inspection and repair costs to defer the project by 5 years? What savings would accrue (NPV) by deferring the full replacement costs? What is the net of those figures?

#### **Interrogatory #2-ED-17**

Reference: Exhibit C, Tab 1, Schedule 1

Question(s):

(a) Page 24 describes the Posterity results. This question is for Posterity. What would the lifetime savings be from the ETEE discussed on paragraph 49 of page 24 (e.g. energy savings from more efficient homes and equipment)?

## **Interrogatory #2-ED-18**

Reference: Exhibit C, Tab 1, Schedule 1

Question(s):

- (a) Please provide a breakdown of the peak demand on the SLP by sector (residential, commercial, and industrial).
- (b) Approximately what percent of the peak demand on the SLP is for building heat? Please provide all calculations.
- (c) Approximately what percent of the peak demand on the SLP is from customers whose primary use of gas is for building heat?
- (d) What percent of the peak demand on the SLP is for hard-to-decarbonize high-heat processes?

## **Interrogatory #2-ED-19**

Reference: Exhibit C, Tab 1, Schedule 1

Question(s):

- (a) In what year would the proposed capital costs be fully depreciated according the current depreciation rates?
- (b) How much of the cost of the project would be undepreciated as of 2050?
- (c) How much would Enbridge earn in return on equity from the increase in rate base associated with this project. Please make and state simplifying assumptions as necessary.

#### **Interrogatory #2-ED-20**

Reference: Exhibit C, Tab 1, Schedule 1

Question(s):

(a) What load forecasts did Enbridge use for the different scenarios they analyzed (of the different useful lives of the pipe, with the shortest being 31 years). In particular, what did Enbridge forecast, by year, for both annual throughput and peak hour demand for each scenario. Is there any scenario where Enbridge forecast declining sales and/or peak.

#### **Interrogatory #2-ED-21**

Reference: Exhibit C, Tab 1, Schedule 1, Attachment 2

## Question(s):

- (a) Please provide a copy of the Posterity "mirror" model and all spreadsheets used.
- (b) Please indicate the percent of peak demand included and excluded in the Posterity study.
- (c) Who decided that contract customers should be excluded from the study Posterity or Enbridge?
- (d) Please provide the names and CVs of the authors of the Posterity study.
- (e) Please prove all inputs and all outputs of the Posterity study.
- (f) Please re-run the Posterity study including contract customers.
- (g) Please provide a breakdown of the peak demand from contract customers by customer type (to the extent possible, please mirror the sectors used in the APS).
- (h) Has Posterity seen a copy of the latest draft APS?
- (i) Has Enbridge seen a copy of the latest draft APS?
- (j) How does Posterity believe the latest APS would likely change the results of this study? Please describe the main potential drivers for change and the likely direction of those changes. Please provide Posterity with a copy of the draft APS if they do not already have it.
- (k) For the potential savings, please provide a table showing the potential peak demand reductions per year broken by sector and measure.
- (1) Does the Posterity report include heat pumps as a measure? If it did not and they were included, how might that change the results?

## **Interrogatory #2-ED-22**

Reference: Exhibit E, Tab 1, Schedule 1

#### Question(s):

- (a) Does Table 1 on page 2 include site restoration costs, including abandonment? If not, please add that to the table and provide the revised copy.
- (b) Please reconcile the \$134 million full replacement cost figure in table 7 in Exhibit C, Tab 1, Schedule 1, page 19 with the total costs of \$216 million in Exhibit E, Tab 1, Schedule 1. Please provide a list of costs included in one but not the other and a justification for doing so.