

EB-2021-0148
Enbridge Gas 2022 ICM

Interrogatories of Environmental Defence to Enbridge

Interrogatory # B-ED-1

Reference: Exhibit B, Tab 2, Schedule 1, Page 31

Questions:

- (a) Please provide an expanded version of table 12 showing all years until the revenue requirement is \$0. Please also add rows showing (i) Enbridge’s overall revenue requirement for each year and (ii) the revenue requirement from the ICM request as a percent of the total. If the values in future years are uncertain, please make and state assumptions and caveats as needed.
- (b) Please propose program design details regarding issues such as: (i) the method and timing of determining program results for the purposes of determining shareholder incentives, (ii) the method of attributing measured gas savings to those arising from the program and those arising from external factors, and (iii) the appropriate duration of customer engagement and results measurement.
- (c) If Enbridge were to adopt Enerlife’s recommendation beginning in 2023, please discuss a reasonable program ramp-up by way of budget envelopes for each year from 2023 to 2027.

Interrogatory # B-ED-2

Reference: Exhibit B, Tab 2, Schedule 2, Appendix A, Page 469

Questions:

- (a) Please provide the complete tables used to calculate the NPV assessment of alternatives for the Dawn-Cuthbert project (including DCF tables or equivalent).
- (b) Please complete the following table:

	2022	...	Final year	Total
Option A - Repair				
ILI inspection costs				
MFL inspection costs				
Integrity digs				
Pipeline replacement cost				

Other (please describe)				
Total				
Option B - Replace				
ILI inspection costs				
MFL inspection costs				
Integrity digs				
Pipeline replacement cost				
Other (please describe)				
Total				

- (c) Do the NPV values include abandonment costs? If not, please (i) provide revised NPV values including abandonment costs, (ii) provide updated DCF tables including abandonment costs, and (iii) provide an updated version of the table in (b) including the abandonment costs.
- (d) Please reproduce table 1 on page 471 with an additional column reconciling these figures with the amounts included in the \$20.13 million NPV figure on the previous page.
- (e) For each cost in table 1 on page 471 that is not included in the NPV calculations, please explain why that decision was made.
- (f) Please recalculate the NPV figures for option A and B with a time horizon that ends in 2050. Please provide all underlying calculations.
- (g) Please provide a

Interrogatory # B-ED-3

Reference: Exhibit B, Tab 2, Schedule 2, Appendix A, Page 469

Questions:

- (a) If the OEB were to direct Enbridge to select Option A, when would Enbridge conduct its first EMAT ILI inspection?
- (b) If the OEB were to direct Enbridge to select Option A, would the repair costs incurred by Enbridge be added to the revenue requirement at rebasing or would they need to be covered by existing rates? Please explain.
- (c) Please explain in detail why this project cannot wait for rebasing.
- (d) Please provide a table showing the date of each inspection of the station and a bullet point summary of the findings. Please file the reports containing the conclusions of these inspection.

Interrogatory # B-ED-4

Reference: Exhibit B, Tab 2, Schedule 2, Appendix A, Page 469

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.
- (c) Please confirm the percentage of Ontario's annual greenhouse gas emissions that are attributable to natural gas combustion.
- (d) 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.
- (e) Please estimate the probability that portion of gas pipeline will be required by 2050. Please provide a specific percentage with any caveats as necessary.
- (f) Is Enbridge willing to bear any of the risk that the proposed infrastructure will be underutilized or stranded by 2050? If no, why not? If yes, what portion?

Interrogatory # B-ED-5

Reference: Exhibit B, Tab 2, Schedule 2, Appendix A, Page 469

Questions:

- (a) Is the repair option (option A) 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 # B-ED-6

Reference: Exhibit B, Tab 2, Schedule 2, Appendix A, Page 469

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 # B-ED-7

Reference: Exhibit B, Tab 2, Schedule 2, Appendix A, Page 469

Questions:

- (a) Please assess the probability that the pipeline will still need to be replaced in 2031 even with inspections and integrity digs. Please provide an estimated probability. Please fully justify your answer.
- (b) Please assess the probability that the pipeline will not need to be replaced until 2040 with inspections and integrity digs. Please provide an estimated probability. Please fully justify your answer.

Interrogatory # B-ED-8

Reference: Exhibit B, Tab 2, Schedule 2, Appendix A, Page 469

Question:

- (a) Would Enbridge's planned Dawn to Corunna impact the need for this project or the impacts of an integrity issue in this area?

Interrogatory # B-ED-9

Reference: Exhibit B, Tab 2, Schedule 2, Page 10

Preamble: Enbridge describes the need for the Byron Station as follows:

Multiple Integrity concerns were identified through an indirect heater assessment conducted by Enbridge Gas. Concerns include noise complaints, integrity of Station inlet valves and inability of the existing Station to support the long term demand of the London market beyond 2022.

Questions:

- (a) Please provide a full breakdown of the cost of the work that would be required solely to fix the integrity of Station inlet valves and the heating system.
- (b) Please describe the capacity of the station before and after the proposed work.
- (c) Please explain in detail why leave to construct is not required even though this project is intended in part to support the long term demand of the London market beyond 2022.
- (d) Please explain in detail why this project cannot wait for rebasing.
- (e) Please provide a table showing the date of each inspection of the station and a bullet point summary of the findings. Please file the reports containing the conclusions of these inspection.

Interrogatory # B-ED-10

Reference: Exhibit B, Tab 2, Schedule 2, Appendix B, Page 3

Questions:

- (a) Please list all CSA standards and other binding legal standards that apply to this project and describe how they apply.
- (b) Would Enbridge be in breach of any CSA or other binding legal standards were it not to proceed with this project? If yes, please provide a table with an excerpt of the standard in question, how continued operation would be in breach of that standard, and the cost to address only that specific issue in isolation.

Interrogatory # B-ED-11

Reference: Exhibit B, Tab 2, Schedule 2, Appendix B, Page 27

Questions:

- (a) Please estimate the cost of (i) Replacement of heater systems and meters only; and (ii) Replacement of the heater systems, meters and regulators only.
- (b) Please provide an NPV comparison (i) a full rebuild, (ii) replacement of heater systems and meters only, and (iii) replacement of the heater systems, meters and regulators only.
- (c) Please explain why “the construction duration was too long to accommodate the Station shut down without impacting security of supply” for the partial replacement but not the full replacement.
- (d) Could the partial replacement construction take place in phases to avoid impacting security of supply?
- (e) How long of a window is available for construction to take place without impacting security of supply?
- (e) How long of a window is available for construction to take place without requiring temporary by-pass stations?
- (f) How long is option B expected to take?

Interrogatory # B-ED-12

Reference: Exhibit B, Tab 2, Schedule 2, Appendix B, Page 30

Question:

- (a) On approximately what date did Enbridge first notify the OEB of the Byron project?
- (b) On approximately what date did Enbridge first decide that it would be seeking ICM funding for this project?
- (c) Why did Enbridge begin construction in May 2021?
- (d) Could Enbridge have delayed construction until after this application had been heard? If not, why not?

Interrogatory # B-ED-13

Preamble:

This alternative considered replacing components of the existing Station but was dismissed as the construction duration was too long to accommodate the Station shut down without impacting security of supply. In addition, this alternative would not mitigate all of the noise and maintenance and operational concerns with the existing Station. Variants of this alternative were also considered, including: (i) Replacement of heater systems and meters; and (ii) Replacement of the heater systems, meters and regulators. These variants were dismissed as viable alternatives...

Questions:

- (a) On approximately what date did Enbridge begin and end the assessment described above?
- (b) Please provide the internal Enbridge documentation detailing the replacement option and the decision not to pursue it.

Interrogatory # B-ED-14

- (a) Please provide the complete tables used to calculate the NPV assessment of alternatives for the Kirkland project (including DCF tables or equivalent).
- (b) Please complete the following table:

	2022	...	Final year	Total
Option C - Repair				
Inspection costs				
Integrity digs				
Pipeline replacement cost				
Other (please describe)				
Total				
Option B - Replace				
Inspection costs				
Integrity digs				
Pipeline replacement cost				
Other (please describe)				
Total				

- (c) Do the NPV values include abandonment costs? If not, please (i) provide revised NPV values including abandonment costs, (ii) provide updated DCF tables including

abandonment costs, and (iii) provide an updated version of the table in (b) including the abandonment costs. This is requested only for Options C and B.

- (d) Please reproduce table 1 on page 147 with an additional column reconciling these figures with the amounts included in the \$15.5 million NPV figure on the previous page.
- (e) For each cost in table 1 on page 147 that is not included in the NPV calculations, please explain why that decision was made.
- (f) Please recalculate the NPV figures for option B and C with a time horizon that ends in 2050. Please provide all underlying calculations.
- (g) Please recalculate the NPV figures for option B and C with a time horizon that ends in 2040. Please provide all underlying calculations.

Interrogatory # B-ED-15

Reference: Exhibit B, Tab 2, Schedule 2, Appendix C, Page 145

Questions:

- (a) If the OEB were to direct Enbridge to select Option C, when would Enbridge conduct its first inspection?
- (b) If the OEB were to direct Enbridge to select Option C, would the repair costs incurred by Enbridge be added to the revenue requirement at rebasing or would they need to be covered by existing rates? Please explain.
- (c) Please explain in detail why this project cannot wait for rebasing.
- (d) Please provide a table showing the date of each inspection of the station and a bullet point summary of the findings. Please file the reports containing the conclusions of these inspection.

Interrogatory # B-ED-16

Reference: Exhibit B, Tab 2, Schedule 2, Appendix C, Page 145

Questions:

- (a) Approximately when will replacement costs for the proposed pipeline 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.
- (c) Please confirm the percentage of Ontario's annual greenhouse gas emissions that are attributable to natural gas combustion.
- (d) Please estimate the probability that this portion of pipeline will be required by 2050. Please provide a specific percentage with any caveats as necessary.
- (e) Is Enbridge willing to bear any of the risk that the proposed infrastructure will be underutilized or stranded by 2050? If no, why not? If yes, what portion?

Interrogatory # B-ED-17

Reference: Exhibit B, Tab 2, Schedule 2, Appendix C, Page 145

Questions:

- (a) Is the repair option (option C) 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 # B-ED-18

Reference: Exhibit B, Tab 2, Schedule 2, Appendix C, Page 145

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 # B-ED-19

Reference: Exhibit B, Tab 2, Schedule 2, Appendix C, Page 145

Questions:

- (a) Please assess the probability that the pipeline will still need to be replaced in 2031 even with inspections and integrity digs. Please provide an estimated probability. Please fully justify your answer.
- (b) Please assess the probability that the pipeline will not need to be replaced until 2040 with inspections and integrity digs. Please provide an estimated probability. Please fully justify your answer.

Interrogatory # B-ED-20

Reference: Exhibit C, Tab 2, Schedule 1

Questions:

- (a) Please reproduce figure 1 on page 3 with an overall trendline including both LUG and LEGD.
- (b) What is the financial cost of UFG in 2020?

- (c) How many tonnes CO₂e are released per m³ of gas leaked to the atmosphere?
- (d) Please reproduce figure 2 on page 4 with a column showing the tonnes CO₂e of the UFG each year.
- (e) If UFG were to be subject to the carbon price in the future as of 2030, what would the annual cost be based on the current trajectory of UFG and the carbon price in 2030?
- (f) Does the UFG report estimate behind-the-meter UFG?
- (g) Does Enbridge have an estimate of behind-the-meter UFG? If yes, please provide it.

Interrogatory # B-ED-21

Reference: Exhibit C, Tab 2, Schedule 1

Questions:

- (a) If a performance metric were set for UFG for Enbridge, what does Enbridge believe that metric should be and what would a reasonable starting target be?
- (b) Aside from a formal OEB-mandated performance metric, is Enbridge willing to adopt a targeted UFG value or consider doing so at rebasing?