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Ms. Nancy Marconi
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March 11, 2024

**EB-2023-0343 East Gwillimbury Community Expansion Project Leave to Construct
Pollution Probe Interrogatories to the Applicant**

Dear Ms. Marconi:

In accordance with Procedural Order No. 1 for the above-noted proceeding, please find attached Pollution Probe's Interrogatories to the Applicant. Pollution Probe is filing these one week in advance of the deadline to provide additional time for all parties to review them.

Respectfully submitted on behalf of Pollution Probe.

Michael Brophy, P.Eng., M.Eng., MBA
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Cc: Enbridge Regulatory (via email)
All Parties (via email)
Richard Carlson, Pollution Probe (via email)

ONTARIO ENERGY BOARD

**Enbridge Gas Inc.
East Gwillimbury Expansion Project
Leave to Construct**

POLLUTION PROBE INTERROGATORIES

March 11, 2024

**Submitted by: Michael Brophy
Michael Brophy Consulting Inc.
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28 Macnaughton Road
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Consultant for Pollution Probe

1-PP-1

References: [B/1/1] Enbridge indicates that the scope of Project includes two Phases including 9 Sections.

- a) Please explain why a two phase approach was determined as best for this project.
- b) Please explain the impact if only one phase was approved in this proceeding.
- c) Please confirm that there are 7 distinct (separate and not connected per project map) areas of pipeline and/or services combined to make up this project. If not correct, please confirm the right number of distinct areas.
- d) Please indicate how many customers (residential, C/I, agricultural) are proposed to be served via each of the 9 segments and how many customers (residential, C/I, agricultural) would be impacted if each segment was not built.
- e) Please explain what extra capacity exists in the surrounding distribution and transmission system to support peak capacity for the additional customers forecasted.

1-PP-2

Based on the scattered distribution of customer connections (per maps filed by Enbridge), this project appears to be an in-fill project rather than a system expansion project.

- a) Please confirm this is an infill project and if not, please explain.
- b) Please describe how EBO 188 or other OEB guidelines/decisions treat an infill project vs. a system expansion project.
- c) If this is just a collection of infill customers, please explain why Enbridge bundled it into a broader project.
- d) Please provide the estimated costs for each discrete portion of the project (i.e. the 7 areas per the project map that are not connected to each other).
- e) If the attachments were just done individually as infill projects, would Enbridge need Leave to Construct approval? If no, please explain the benefit of grouping them in a manner that requires Leave to Construct approval.

1-PP-3

Reference: Enbridge Gas has discussed the proposed Project with the Town of East Gwillimbury since 2020. The Town of East Gwillimbury first formally identified its support for the Project in a letter dated June 4, 2020, included as Attachment 2. The Town of East Gwillimbury has emphasized their support for the Project through a second letter of support, dated November 15, 2023, included as Attachment 3. [B/1/1]

- a) Please confirm that Enbridge provided the information (or template) in the most recent (or both) letter(s) from the Town of East Gwillimbury in support of the project.
- b) Please provide a copy of all correspondence from Enbridge to the Town of East Gwillimbury in the past nine months (all correspondence that is not already include in the evidence filed by Enbridge).

1-PP-4

Reference: Exhibit A, Tab 2, Schedule 1, Attachment 1, Attachment 2 and Attachment 3.

- a) Please describe the “existing tie-in pipelines”
- b) Please provide labels and/or colour coding on the Project map to indicate which segments are NPS 2 PE, NPS 4 PE, NPS 4 ST and which are Phase 1 vs. Phase 2. Please also add the location of the Ancillary Facilities (i.e. the 2 stations proposed).
- c) The customer heat map in Attachments 2 and 3 do not appear to align with the proposed location of pipelines in Attachment A. Please explain and/or provide an overlay of the pipelines from Attachment A onto the heat maps in Appendix B and C.

1-PP-5

Please provide specific details on the number/type of customers, pipeline details and services related to the segment of the project located at Yonge Street and Queensville Sideroad.

1-PP-6

Enbridge indicates that the project was reviewed and selected for a grant by the Government of Ontario under Phase 2 of the NGEF.

- a) Please provide a copy of the approvals from the Government of Ontario and the OEB for this Project, and please highlight the specific approvals and scope related to the project.
- b) Please identify any variances between the information in the NGEF application and the information in this application.
- c) Please confirm that NGEF approval for access to grant funding does not automatically provide Leave to Construct (or other required regulatory) approvals related to this project.
- d) Please provide any approvals received from the Government of Ontario and/or the OEB related to the proposed project.
- e) Is there a mandated timeframe under NGEF for completion of the proposed pipeline? If yes, please provide the relevant condition that dictates specific timing.
- f) Please confirm that Enbridge will not proceed with the project (or any of the discrete segments) without OEB Leave to Construct approval.

1-PP-7

Reference: Enbridge indicates that “76% of respondents indicated that they would be likely (extremely likely, very likely or likely) to convert to natural gas if it were made available. Of those likely to convert, approximately 82% indicated that they would convert within 1 year of natural gas service becoming available, 16% indicated they would convert within 1-2 years of natural gas service becoming available, and the remaining 3% would convert after 2 years or more of natural gas service becoming available”. [B/1/1]

Table 1 of the Forum Research Inc. Survey [B/1/1 Attachment 4, Page 3] indicates that At an aggregate level, only 32% are likely to replace their main heating system. Please explain the discrepancy between the expected 32% equipment change rate expected vs. the higher numbers Enbridge expects for equipment replacements.

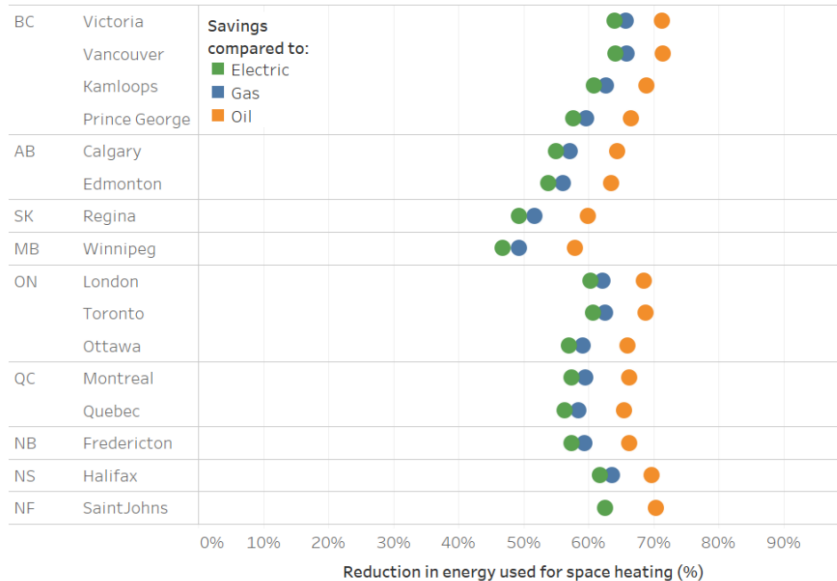
1-PP-8

“Prior to being surveyed, respondents were given an Enbridge Gas brochure that outlined the benefits and costs (including the System Expansion Surcharge and Federal Carbon Pricing Program)”. [B/1/1 Attachment 4, Page 2] Please provide a copy of this brochure.

1-PP-9

Reference: PollutionProbe_IR_AppendixA_CanmetReport [from Enbridge per EB-2022-0200 Exhibit J11.5]

Figure 1: Energy Savings (percentage) for a ccASHP compared to natural gas, oil and baseboard electric.



The CanmetENERGY cold-climate air source heat pump (ccASHP) Report filed by Enbridge indicates in Figure 1 (above), that for Ontario jurisdictions a ccASHP is approximately 50% to 70% more efficient than natural gas, oil or resistance (i.e. baseboard) electric.

- a) Please indicate whether this best available information for ccASHPs was shared with potential customers as part of the information related to heat pumps. If it was, please provide a copy of the information/materials provided to consumers.
- b) This information was provided by Enbridge in 2023 based on a 2022 Study. If Enbridge has a more recent/relevant study/information that provides a different savings rate for ccASHPs vs. natural gas, oil or electric resistance heating, please provide a copy.

1-PP-10

Reference: PollutionProbe_IR_AppendixB_HeatPumpSlidesMarch2024_20240319.
Heat pump manufacturer slides from March 2024.

- a) Current ccASHP performance specifications indicate that a ccASHPs operate above natural gas furnace efficiencies even at very cold temperatures (i.e. 126% at -30 Celsius). If Enbridge has more recent information that differs from the information in the Appendix B slides, please provide the materials.
- b) Enbridge indicated in the recent EB-2022-0200 proceeding that it did not think that an ASHP could operate below -15 Celsius. Please confirm that Enbridge is now aware that a ccASHP is able to operate to much colder temperatures as outlined in the manufacturer information provided in Appendix B. If incorrect, please provide Enbridge's current assumptions and related references.

1-PP-11

Reference: PollutionProbe_IR_AppendixC_HeatPumpConversionGuidehouse per EB-2022-0200.

Enbridge's Guidehouse Energy Transition expert indicated that 40% to 85% of Ontario households are expected to switch to a heat pump by 2050. If Enbridge has more current information or reports, please provide a copy.

2-PP-12

Reference: Exhibit B, Tab 1, Schedule 1, Figure 1

- a) Please confirm that the values in Figure 1 relate to fuel only and do not include incremental equipment costs to retrofit a home or business with natural gas.
- b) Please confirm that the values in Figure 1 only include costs and savings related to heat and exclude costs/savings for cooling.
- c) Please confirm that the values in Figure 1 related to electricity are for electric resistance (e.g. baseboard) heating only. If that is not correct, please state the assumptions and provide the calculation.
- d) Please confirm that the options provided in Figure 1 are meant to represent common fuels used historically in comparison to natural gas and not a comprehensive list of current/future options for consumers in the community. If not correct, please explain.

2-PP-13

References:

PollutionProbe_IR_AppendixD_IESO_FreeASHP launched fall 2023
Exhibit B, Tab 1, Schedule 1, Figure 1

- a) Please explain why a cold climate air source heat pump is not an option included for customer consideration or included in Figure 1, given that the information needed to populated Figure 1 is readily available.
- b) An electric cold climate air source heat pump saves up to 50% on heating costs compared to current electric heating, but Enbridge information indicates that switching to natural gas would only save up to 23% on heating costs, or less than half the savings that could be provided from a cold climate air source heat pump. Please explain why a customer would switch to natural gas in this scenario and give up over half the annual energy cost savings available for a cold climate air source heat pump.
- c) Has Enbridge provided any information on the free IESO cold climate air source heat pump program launched in 2023 for eligible customers currently heating their home with electricity? If yes, please provide copies of materials. If not, please explain why not.

2-PP-14

Reference: Table 1: Estimated Annual Fuel Costs & Fuel Cost Savings for a Typical Rate 1 Residential Customer.

- a) Please explain why electric ground source heat pump and electric air source heat pump are list by Enbridge as 'not applicable' to the analysis in the table.
- b) Please explain why cold climate air source heat pump information is not included for, particularly given that the information needed to populated the Table is readily available.

2-PP-15

Reference: "Enbridge Gas served new or upgraded natural gas service requests from customers on the understanding that these customers are sufficiently informed about the available energy and technology solutions and that they have chosen the alternative that best suits their needs" [EB-2022-0200 2.6-Staff-81, part (c)]

- a) Please confirm that the above evidence from Enbridge is still accurate. If it is no longer accurate, please provide updated evidence to indicate how Enbridge views its role in providing resources and educational information on a full range of modern energy/technology options to new, potential or existing customers.
- b) If the assumption above was determined to be incorrect (i.e. the relevant option information is not readily available), what role does Enbridge have to provide the relevant information.
- c) Please provide the reference materials (or survey results, etc.) Enbridge is relying on when it assumes that "customers are sufficiently informed about the available energy and technology solutions and that they have chosen the alternative that best suits their needs".

2-PP-16

- a) Please provide a copy of the all materials used for public consultation including those used for the Open House.
- b) Please provide a copy of all marketing and communication material provided by Enbridge or partners to consumers/businesses in the community to promote DSM or other energy efficiency opportunities when considering renovation of a primary (water/space) heating systems.
- c) Please provide a copy of all communication material provided by Enbridge or partners to educate consumers/businesses on options and incentives under the Greener Homes program (delivered by Enbridge in Ontario).
- d) Please confirm how many of the potential attachments have completed one or more home audits required under the Greener Homes Grant Program.
- e) Has Enbridge conducted analysis on consumers along the proposed pipeline that can or have (currently or recently) participated in the Greener Homes Grant Program. If yes, please provide a copy of the information and analysis.

3-PP-17

- a) Please confirm that the revenue horizon (for EBO 188 analysis) for the proposed Project in the application is 40 years. If that is incorrect, please provide the correct figure.
- b) Please provide the current wording that mandates a 40 year period be used for project economic analysis.
- c) Please confirm the actual amortization that Enbridge intends to apply to the Project.
- d) Please explain how any residual (unamortized) costs would be recovered from rate payers if the proposed pipeline becomes stranded (i.e. not used and useful) before it is fully depreciated.

3-PP-18

Enbridge indicates that the project cost estimate in this application is approximately \$820,000 lower than the amount included in the project proposal to the Government of Ontario (2019/2020) for funding under Phase 2 of the NGEF by (EB-2019-0255).

- a) Please explain how that difference impacts the amount of eligible grant.
- b) Please explain how much the project can change before Enbridge is required to reapply to the NGEF (or an alternate process to accommodate significant changes in cost)

3-PP-19

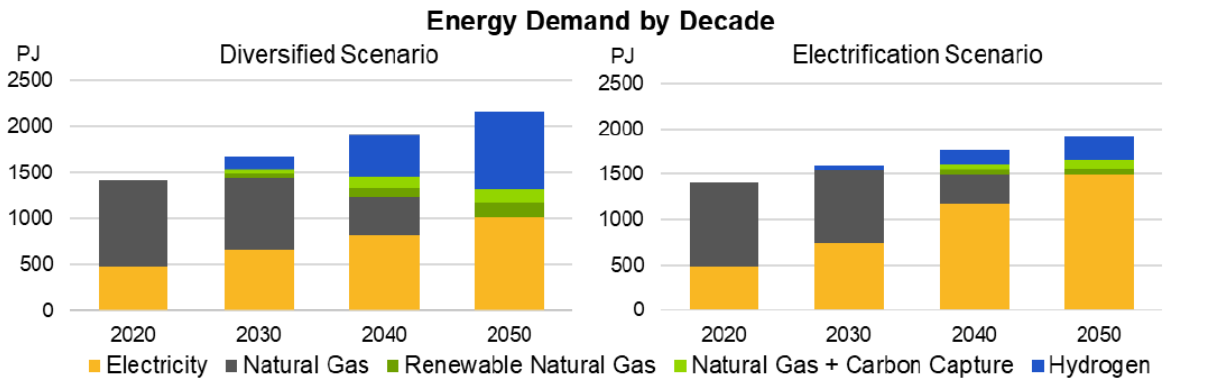
Has Enbridge conducted a risk assessment on the probability that the proposed pipeline will become a stranded asset before being fully depreciated? If yes, please provide a copy of the assessment and all related materials. If no, what evidence exists to support that the pipeline will remain used and useful for the full amortization period.

3-PP-20

Please provide the rationale (a copy of written material or summary if done verbally) Enbridge provided to Provincial staff (including those in the Ministry of Energy) supporting a 40 year amortization period for natural gas pipelines and any costs savings that would accrue by amortizing those capital costs.

3-PP-21

Reference: Pathways to Net Zero Emissions for Ontario ¹.



Enbridge indicates that for both the (Enbridge-preferred) Diversified Scenario and the Electrification Scenario that by 2050 natural gas will no longer be used in Ontario with the potential exception of select large volume industrial customers that have economic access to carbon capture and geological sequestration.

- a) Please explain why an amortization period past 2050 (i.e. greater than 25 years) is appropriate if natural gas will no longer be available to these customers prior to 2050.
- b) Please confirm that Enbridge has not received approval (from the OEB, TSSA or other relevant regulator) for use of 100% hydrogen for the Project assets proposed. If approval has been received for 100% hydrogen, please provide a copy of such approval.
- c) If Enbridge intends to use hydrogen to serve this community once natural gas is no longer available, please provide details on the source, transmission and lifecycle carbon emissions of the proposed hydrogen.

3-PP-22

Please confirm that Enbridge will fund Phase 1 of this project from its 2024 capital envelope and Phase 2 from its 2025 capital envelope. If that is not correct, please clarify.

¹ EB-2022-0200 Exhibit 1.10.5.2_Pathways to Net-Zero Emissions for Ontario_BLACKLINE_20230421

3-PP-23

Reference: “Enbridge Gas proposes to charge a System Expansion Surcharge (“SES”) to all new customers taking gas distribution service from the Project for a term of 40 years. In accordance with the OEB’s EB-2020-0094 Decision and Order, the SES will be a fixed volumetric rate of \$0.23 per cubic metre of gas, which is in addition to all other rates approved by the OEB to be charged by Enbridge Gas.” [A/2/1 Page 3-4]

- a) Please confirm that EB-2020-0094 is the most recent valid OEB Decision related to the revenue horizon for new customers under this project. If not correct, please provide the most recent OEB Decision reference or other relevant reference.
- b) Enbridge is aware that Bill 165 (Keeping Energy Costs Down Act) could make certain legislative changes impacting OEB Decisions, guidance or otherwise set requirements for consideration (e.g. revenue horizon). Please explain what elements of the Bill would apply to this project and the OEB’s pending decision, in lieu of reliance on previous OEB Decisions or guidance.
- c) The proposed project is not proposed to be commissioned until 2025 which is year 2 of Enbridge’s Custom Incentive Rates term (EB-2022-0200). Please indicate what issues (if any) related to Phase 2 or Phase 3 of the Enbridge Customer Incentive Rates term could impact this project in 2025 or beyond.

3-PP-24

Reference: PollutionProbe_IR_AppendixE_ExpansionProjectPI

Recent Enbridge Community Expansion Projects have shown a trend of decreasing Portfolio Index (PI) and a lower actual PI than forecasted in the OEB Leave to Construct proceedings. This has also cause the actual Project Portfolio to dip below the OEB required PI=1.0.

- a) Please indicate how the proposed Project compares to other recent community expansion projects and why the OEB should not expect this Project to follow the noted trend.
- b) Please explain how this project can proceed with a PI of only 0.99, particularly since it would also drag the portfolio PI below OEB requirements.
- c) Please outline what mitigation measures Enbridge has in place in an attempt to ensure that the PI for the project does not drop further below an actual value of 1.

4-PP-25

Reference: EGI_East Gwillimbury_F-1-1_Attachment 1 (Redacted) _20231128

- a) Please explain why the Environmental Report filed is only a Draft version.
- b) Please confirm when the final Environmental Report is expected to be available and filed with the OEB.

4-PP-26

Please provide any additional stakeholder and OPCC comments/correspondence since the application was filed.

4-PP-27

Reference: The route and location for the proposed facilities associated with the Project were reviewed by an independent environmental consultant through the process outlined in the Ontario Energy Board's "*Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario*" (7th Edition, 2016)

- a) Please explain why Enbridge has not used the most recent (8th Edition) OEB Environmental Guidelines.
- b) Please explain what additional work is required to comply with the current OEB Environmental Guidelines.

4-PP-28

Reference: Exhibit F, Tab 1, Schedule 1.

The Environmental Report identifies wetland impacts from the proposed project. Please provide details on what approvals and additional studies Enbridge is undertaking related to these wetlands. If the approvals (and related restrictions) have already been obtained, please provide a copy.

4-PP-29

Reference: Exhibit F, Tab 1, Schedule 1.

The Environmental Report identifies cold water watercourses in the project study area. Please confirm what schedule and construction restrictions will be in place related to these watercourses. If those requirements and related approvals are not already obtained, please indicate when they are expected.

4-PP-30

Please provide a copy of the detailed mitigation plan for the proposed pipeline.