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Ms. Nancy Marconi  
Registrar  
Ontario Energy Board  
P.O. Box 2319, 27th Floor  
2300 Yonge Street  
Toronto, ON M4P 1E4

June 22, 2022

**EB-2022-0088 – Haldimand Shores Expansion Leave to Construct  
Pollution Probe Submission**

Dear Ms. Marconi:

In accordance with Procedural Order No. 1 for the above-noted proceeding, please find attached Pollution Probe's Submission.

Respectfully submitted on behalf of Pollution Probe.

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**ONTARIO ENERGY BOARD**

**Enbridge Gas Inc.  
Haldimand Shores Expansion  
Leave to Construct**

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**POLLUTION PROBE SUBMISSION**

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**June 22, 2022**

**Submitted by: Michael Brophy  
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**Consultant for Pollution Probe**

## Background

Enbridge Gas Inc. (Enbridge) applied to the Ontario Energy Board (OEB) on March 11, 2022, under the Ontario Energy Board Act for an order granting leave to construct for approximately 7.8 kilometers of natural gas pipelines in the Township of Alnwick/Haldimand. Enbridge has also applied for approval of the form of agreement it will offer to landowners for the routing and construction of the proposed pipeline.

Enbridge stated that the pipelines are needed to supply natural gas to approximately 112 new residential customers in the community of Haldimand Shores who currently do not have access to natural gas service. Enbridge also stated that it intends to charge a System Expansion Surcharge to all new customers taking service from the project.

In accordance with Procedural Order No. 1, the following is the written submission of Pollution Probe.

## Project Need and Timing

As noted above the proposed project will serve a portion of customers in the Haldimand Shores community. The project is uneconomic under EBO 188, without the rate payer funded project grant and with it will meet the EBO 188 threshold requirements. Enbridge estimates the total project costs<sup>1</sup> at \$4,048,709 and indicates that subject to certain conditions it is eligible to a rate payer funded grant of \$2,827,923<sup>2</sup>, resulting in a net project cost of \$1,220,783. Using the gross costs for this project triggers a requirement for OEB Leave to Construct approval<sup>3</sup>, which may represent the only time the OEB will conduct a review of potential costs and impacts related to this project.

There is no obligation for Enbridge to build the project or for the OEB to approve the project, but Enbridge has confirmed it supports expansion of its natural gas pipelines to new communities<sup>4</sup>. Based on the project costs of \$4,048,709 and the Enbridge forecast of 112 customers, the total cost per customer to be funded from rate payers<sup>5</sup> is approximately \$36,150. This cost per customer will be higher if the actual number of customers attaching are less than the Enbridge forecast of 112. Consumer renovation and equipment costs related to installing natural gas burning equipment will be incremental for consumers choosing to attach to the proposed pipeline. As noted in the evidence, the current input cost per unit for natural gas is lower than some other fuels currently used in the community. It is important to include total costs for any comparison of fuel options and from an apples-to-apples costs comparison natural gas is not the

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<sup>1</sup> Including contingency amounts which may or may not be used.

<sup>2</sup> Exhibit I.PP.1a and Exhibit D, Tab 1, Schedule 1, Page 3.

<sup>3</sup> Exhibit I.PP.3

<sup>4</sup> Exhibit I.PP.2

<sup>5</sup> Rate payer cost include the grant, SES and capital recovery through rates.

most cost-effective option<sup>6</sup>. This Leave to Construct proceeding is primarily focused on the proposed pipeline and may not consider the best alternative for Ontario consumers (e.g. most economical lifecycle costs). Therefore, Pollution Probe has avoided replicating in this submission the analysis that the OEB has reviewed in other proceedings showing more cost effective options such as heat pumps. However, higher overall costs of switching to natural gas could be one of the reasons behind the poor attachment survey response results for this expansion project.

Projects like this are more complicated than typical expansion projects since they combine a rate payer funded grant, a 40 year System Expansion Surcharge (SES), uncertainty related to the attachment forecast<sup>7</sup> and an expectation that a 40 year amortization period would match the useful life of the pipeline.

The attachment survey response rate for this project was only 22% which is low and signifies uncertainty around interest in switching to natural gas. Enbridge indicated that for community expansion surveys completed in 2020, response rates ranged from 17% to 64% and the average response rate was 39%<sup>8</sup>. It appears that none of the projects surveyed in 2020 have yet been reviewed or approved by the OEB, so the survey results for this project will need to be assessed on their own merit. Pollution Probe suggests that it would have been more relevant to provide the OEB survey response rates for other similar expansion projects approved by the OEB and then show how the actual attachment rates related to the Leave to Construct survey estimates. Surveys alone are a difficult tool to validate what will really happen in reality, but they do provide insight into consumer directional intent. Given the number of similar Leave to Construct projects expected to be submitted in the near future, the OEB may wish to flag this as the proper comparison in this proceeding.

Based on the direct survey results at least 25 consumers have indicated an interest to attach to the proposed pipeline. Enbridge indicated that at this preliminary stage of the Project, approximately 21 customers (approximately 20% of total 10-year forecasted connections and 70% of year 1 forecasted connections) have initiated some form of request for natural gas<sup>9</sup>. The 21 customers expressing interest in natural gas service is roughly equivalent to the positive response rate for the survey<sup>10</sup>. To reach 78% of 142 customers<sup>11</sup> would require at least 90 more customers to commit to attach which seems aggressive given the survey response rate and results.

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<sup>6</sup> For example, heat pumps have a lower initial cost than \$36,150 per customer and lower annual operating costs.

<sup>7</sup> Per community survey.

<sup>8</sup> Exhibit I.STAFF.1

<sup>9</sup> Exhibit I.STAFF.1

<sup>10</sup> 78% x 22 respondents = 17.2

<sup>11</sup> Estimated by Enbridge at 112 customers

Should the OEB approve this project as requested, any under-attachment in the first 10 years will be at the risk to Enbridge and there is no guarantee that the OEB will approve additional collection from rate payers related to this project in the future. More specifically, Enbridge is willing to accept the earnings risks for this pipeline based on the survey results without any guarantees that the OEB will allow additional recovery from rate payers if attachment rates are lower than forecasted.

### Amortization Period

It appears that if the OEB grants Leave to Construct Approval for the project as filed, there would be no other OEB review of project costs and it would mean that the net project costs be amortized over a 40 year period. Pollution Probe has previously highlighted the risks and challenges with amortizing new pipelines over four decades when natural gas use is expected to decline over the same period. When the OEB approves a Leave to Construct, it also considers the expected useful life of the pipeline and this becomes the default value unless otherwise stated.

Enbridge also indicates that it intends to apply a System Expansion Surcharge (SES) as a fixed volumetric rate of \$0.23 per cubic metre of gas to be charged in addition to Enbridge's base distribution rates as approved by the OEB. The SES is proposed to be charged to all customers taking gas distribution service from the Project for a term of 40 years. Over the 40 year amortization and subsidy (i.e. SES) period it is reasonable to assume that the likelihood of switching to fossil fuels like natural gas will decrease over time due to the lower cost of other technologies and the increasing decarbonization of community energy in Ontario. Energy options for consumers in this community extend beyond those listed in the application and also include heat pumps (ground or air) as one example considered and approved by the OEB as an alternative to natural gas<sup>12</sup>. Enbridge has indicated that it is in negotiations to be a partner to deliver the Greener Homes program in Ontario which provides incentives for heat pumps<sup>13</sup>.

Decreasing the amortization period to align with a more realistic useful life is typically an option for new pipelines. However, in this case, the amortization period should match or exceed the SES period approved by the OEB or else the pipeline will be taken out of Enbridge capital rate base prior to the full SES recovery period. If the OEB wants to mitigate these rate payer risks for this project, it could decide to cease the SES contributions and capital recovery for the proposed pipeline in the case it becomes a stranded asset (i.e. not used and useful prior to the 40 year term end).

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<sup>12</sup> Heat pumps were one option considered and approved by the OEB in EB-2020-0091 and are also a DSM option that reduces natural gas use per detailed evidence from Enbridge and other parties in EB-2021-0002.

<sup>13</sup> Final Transcript EB-2021-0002 EGI DSM Vol 2 Mar 29 2022. Page 175 lines 16-19.

### Demand Side Management Consideration

Enbridge indicates that it “has and will continue to promote the efficient use of natural gas to the residents and businesses of Haldimand Shores ...”<sup>14</sup>. DSM is the OEB approved portfolio of programs available to all existing and potential natural gas customers in Ontario. A key principle for DSM is to minimize “lost opportunities”, particularly at the time when a potential customer is considering a renovation or change of heating equipment<sup>15</sup>. This situation applies directly to the proposed Haldimand Shores community expansion project.

Providing DSM information and options to potential community expansion customers has been a systematic internal challenge for Enbridge and attempts to date have failed to close that gap<sup>16</sup>. Enbridge previously indicated that it believes that it needs to do better when expanding to new communities and committed to “ensuring that when we [Enbridge] go out to communities, as part of trying to attract them as new customers, that they understand the conservation service that we offer and that that would be available to them at that point in time. So when they do their conversion we don't lose that opportunity”<sup>17</sup>.

Unfortunately, Enbridge has not directly marketed DSM or other energy efficiency opportunities to potential customers of NGEPC Community Expansion projects including Haldimand Shores<sup>18</sup>. The OEB has indicated previously that it expects DSM analysis and opportunities to be applied more effectively, particularly for large Leave to Construct projects<sup>19</sup>. It is recommended that DSM information and program materials be made available to all potential customers in the community and that the local contractors be requested to also share information on reducing energy costs and related emissions through undertaking energy efficient decisions during the renovation or major equipment change.

### Environmental and Socio-economic Impacts

There are numerous environmental and socio-economic issues related to the project. Enbridge indicates that construction of the Project will be conducted in accordance with Enbridge Gas's Construction and Maintenance Manual and the recommendations in the Environmental Report (ER). An Environmental Protection Plan (“EPP”) will be

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<sup>14</sup> Exhibit B, Tab 1, Schedule 1, Page 5.

<sup>15</sup> Final Transcript EB-2021-0002 EGI DSM Vol 3 March 30 2022. Page 84, lines 26-27.

<sup>16</sup> Final Transcript EB-2021-0002 EGI DSM Vol 3 March 30 2022. Page 86 line 23 to page 87 lines 2-5.

<sup>17</sup> Final Transcript EB-2021-0002 EGI DSM Vol 3 March 30 2022. Page 87 line 25 to page 88 line 2.

<sup>18</sup> Exhibit I.PP.4

<sup>19</sup> E.g. EB-2020-0192 Decision.

developed for the Project prior to construction. The EPP will incorporate recommended mitigation measures contained in the ER and those mitigation measures obtained from agency consultation for the environmental issues associated with the proposed works<sup>20</sup>.

A review of available Water Well Records in 1 km of the Project confirms that the depth to bedrock is between 0 to 21.3 m below ground surface. With proposed depth of the pipeline greater than 1 m, it is likely that bedrock may be encountered along the pipeline route resulting in the need for blasting, hoe ramming or other mechanical removal means. Encountering bedrock significantly increases construction costs and impacts to environmental and socio-economic features. If this occurs close to the watercourse crossings, special permitting may be needed (e.g. fish impacts). Blasting within 100 m of water wells also requires a detailed monitoring program. The ER indicated that 179 well records occur within 1 km of the pipeline study area. Until the EPP is completed, it is not possible to understand the full impacts of these activities, costs and related mitigation requirements.

The ER identified three watercourses that will be crossed by the proposed pipeline. As two of the watercourses are crossed twice, there are a total of five watercourse crossings. Each of the three watercourses are identified as having a cold-water thermal regime which means that they are spawning habitat and sensitive to disturbance including drilling fluid fractures during directional drilling. Permits will be required prior to construction and all required mitigation measures should be included in the EPP.

Enbridge indicated that the OEB Ontario Pipeline Coordination Committee (OPCC) agencies were emailed project information and a link to the Environmental Report on January 14, 2022<sup>21</sup>. The OPCC log updated June 8, 2022 indicate that most OPCC agencies have not yet responded or signed off on the project at this time. If the OEB approves this project based on the current public record, several activities will need to occur prior to construction, including the completion of the consultation and permitting process, plus identification and mitigation of the outstanding environmental and socio-economic impacts through development and implementation of an EPP. Once the EPP is completed the net impacts and related mitigation costs will be better known.

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<sup>20</sup> Exhibit E, Tab 1, Schedule 1, Page 3.

<sup>21</sup> Exhibit I.STAFF.3, Attachment 1