



130 Queens Quay East, Suite 902
Toronto, Ontario M5A 0P6
T 416.926.1907 F 416.926.1601
www.pollutionprobe.org

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

December 14, 2023

**EB-2022-0157 – Panhandle Regional Expansion Project Leave to Construct
Pollution Probe Submission**

Dear Ms. Marconi:

In accordance with OEB direction, please find attached Pollution Probe's Submission for the above-noted proceeding.

Respectfully submitted on behalf of Pollution Probe.

Michael Brophy, P.Eng., M.Eng., MBA
Michael Brophy Consulting Inc.
Consultant to Pollution Probe
Phone: 647-330-1217
Email: Michael.brophy@rogers.com

Cc: Dave Janisse, Enbridge Regulatory (via email)
Charles Keizer, Tory (via email)
All Parties (via email)
Richard Carlson, Pollution Probe (via email)

ONTARIO ENERGY BOARD

**Enbridge Gas Inc.
Panhandle Reinforcement Expansion Project
Leave to Construct**

POLLUTION PROBE SUBMISSION

December 14, 2023

**Submitted by: Michael Brophy
Michael.brophy@rogers.com
Phone: 647-330-1217
28 Macnaughton Road
Toronto, Ontario M4G 3H4**

Consultant for Pollution Probe

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In accordance with Procedural Order No. 8, the following is the written submission of Pollution Probe. Pollution Probe is aware that other parties intend to go into detail on some specific issues (e.g. OEB Test benefits/costs, supply side rebalancing options, precedent applications, etc.). Pollution Probe recognizes the importance of those elements to the OEB's consideration of the proposed project, but has attempted to reduce duplication where possible. This should not be interpreted as diminishing the importance of those issues and considerations. Pollution Probe would also like to thank stakeholders for the efficient coordination. The proceeding over the past 15 months has been challenging, especially with a major change to the application in summer 2023. The OEB process adjustments and efficient coordination has been very helpful.

Background and Context

Enbridge Gas Inc. (Enbridge) originally applied to the Ontario Energy Board (OEB) on June 10, 2022, under sections 90 and 97 of the Ontario Energy Board Act for an order granting leave to construct a project which included approximately 19 kilometres of natural gas pipeline from its Dover Transmission Station in the Municipality of Chatham Kent to its existing pipeline in the Municipality of Lakeshore (Panhandle Loop) and approximately 12 kilometres of natural gas pipeline in the Municipality of Lakeshore, Town of Kingsville and the Municipality of Leamington (Leamington Interconnect). The project also involved valve site station work required to tie in the proposed pipelines. Enbridge also applied to the OEB for approval of the form of land-use agreements it has or will offer to landowners on the route of the project. Enbridge requested urgent approval based on its interest to build the proposed pipelines by November 2023.

The OEB provided a procedural process of discovery related to the evidence filed June 10, 2022 which included an Interrogatory stage and Technical Conference. On December 5, 2022, Enbridge requested that the OEB place the application in Abeyance given that the project cost, design, demand and related project elements were no longer valid and the project needed to be reassessed. On December 17, 2023 the OEB placed the proceeding into Abeyance.

Enbridge filed an amended application on June 16, 2023. In the amended application, Enbridge stated that it reassessed the project and decided to remove the Leamington Interconnect. Enbridge also updated the project demand forecast, cost estimate, project construction and in-service date¹, economics and the other evidence affected by the changes in the project's scope, schedule and costs. An Integrated Resource Plan (IRP) report was not filed with the Updated application, but was provided in response to stakeholder requests in October 2023.

¹ Moved by one year from November 1, 2023 to November 1, 2024.

In parallel, Enbridge has requested an incremental rate rider for the Panhandle Reinforcement Expansion Project (“PREP” or “Project”) in EB-2022-0200. This is akin to incremental rate treatment through the historical Incremental Capital Module approach, but in this case it is an incremental capital request within the Enbridge Rebasing application (2024-2028). Pollution Probe recommended that the incremental rate rider be declined, in part given that the request was premature (i.e. Project not required and had not been assessed through the Leave to Construct process) and also that this Project has not been prioritized against all the other capital projects in Enbridge’s Asset Management Plan. An incremental rate rider to effectively increase Enbridge’s capital envelope from rate payer funding does not align with the declining need for fossil fuel pipelines as Ontario consumers reduce energy use and move to more cost-effective and cleaner energy options².

Enbridge suggests that this proceeding should not consider the rate impacts of the Project given rates are part of the Rebasing proceeding³. Pollution Probe disagrees in that the OEB Decision for this Leave to Construct proceeding is specifically inter-linked with the relief requested by Enbridge in the Rebasing proceeding. For example, if the OEB rejects the Leave to Construct request, the incremental rate rider becomes irrelevant. Also, if the OEB were to approve the project and require the costs to be paid through a contribution by those customers receiving the benefits (i.e. the small number of contract customers), this Decision would need to ensure that the capital (including Indirect Overheads) were appropriately removed from the Rebasing envelope so that they are not recovered twice from rate payers. If the OEB were to approve Enbridge’s request, there does not appear to be any future OEB review of this project.

Options for Consideration

This section provides a high-level summary of the options for OEB consideration. Additional details and recommendations are included in the submission below, but Pollution Probe thought it would be helpful to the OEB to provide this section first. Pollution Probe believes that there is insufficient evidence to support approval of the Project and that if built, the pipeline will become a stranded asset on the backs of rate payers that don’t want to pay for it⁴. However, if the OEB does grant Leave to Construct

² For example, the OEB approved DSM + Greener Homes Grant incentives pay the majority of the costs for modern technologies like an electric cold-climate air source heat pump that can provide peak heating and cooling – More information available at: K1.4 PollutionProbe_HearingCompendium_20231110, Page 2-5 and K2.6 PollutionProbe_HearingCompendium_Part2_20231113, Pages 1-7.

³ EB-2022-0200

⁴ If the OEB requires a CIAC from contract customers, some of this risk and costs would be mitigated as long as the contribution is collected as a lump sum. There are only 4 out of 27 contracts developed with contract customers on the Panhandle system and the contracts only range from 5-12 years, much less than the 55 year amortization period proposed by Enbridge.

approvals, there are specific opportunities to mitigate the risks for rate payers and to ensure that the customers the pipeline is mean to serve actually pay for the project.

Option 1 – Deny Leave to Construct

The OEB could decline Leave to Construct approval for the project on the basis that the evidence and actual customer demand is insufficient to validate the Project need, economic assumptions and require that if Enbridge decide to refile for project approval in the future, require that Enbridge:

- Undertake a more future-focused and integrated analysis of pipeline infrastructure for the entire Panhandle system, rather than an isolated project approach⁵. Enbridge has included several Panhandle related projects in its Asset Management Plan (AMP), but has provided no integrated assessment of these proposed projects, per typical OEB expectations.
- Provide a more robust assessment of the likelihood, costs and impacts of the new proposed assets becoming Stranded Assets and/or significantly underutilized before the they are fully amortized. Enbridge conducted no risk assessment of these risks in this application and that is a baseline expectation for future filings.
- More robust confirmation and binding commitment of contract customer intent to actually increase gas demand, including their willingness to pay their fair contribution toward Project costs if that is required to fund the Project.
- Undertake more adequate, meaningful, and robust IRP option analysis, including providing current and prospective customers with information on real alternatives. This should include more detailed information on IRP incentives and options to assist in avoiding the incremental capital pipeline expenditures.
- Conduct meaningful IRP consultation including detailed project information on the OEB mandated IRP website, IRP options in the OEB mandated regional sessions, consultation with customers and detailed consultation with the OEB IRP Technical Working Group. Project information should include proposed need, costs, alternatives assessed and a description of what would need to occur to avoid the Project.
- Provide information (via handouts, electronic communication and/or community education sessions) to current and prospective customers on the full range of incentives and options available (including DSM and those from complimentary programs such as the IESO cold climate heat pump program⁶ and Greener Homes

⁵ This is consistent with OEB direction for other project like the St. Laurent Project when Enbridge brought an individual project forward for approval rather than a full integrated plan. Reference: EB-2019-0006 OEB Decision and Order. Page 2.

⁶ K2.6 PollutionProbe_HearingCompendium_Part2_20231113, Page 2-6.

Grant program⁷). More cost-effective DSM and IRP alternatives have been chronically under-promoted against incremental natural gas options⁸. Enbridge is encouraged to work with all relevant partners (including IESO, LDCs, contractors, associations, etc.) in developing and disseminating this information. In cases where others have better programs and incentive than Enbridge to reduce energy, demand and related costs, Enbridge is encouraged to share that information with consumers as well, in alignment with Provincial policy direction⁹.

Enbridge requested a rate rider in the Rebasing application¹⁰ to recover the costs of this project from all ratepayers. The incremental rate rider requested by Enbridge for this Project would cease to be relevant under this option.

Option 2 – Grant Leave to Construct

The OEB could grant Leave to construct approval for the project and put in place specific elements to mitigate certain issues, risks and costs. Should the OEB decide to grant Leave to Construct approval, it could require that Enbridge secure firm contributions from contract customers requesting the incremental demand equal to or greater than 94% of the Project costs, plus required the same Contribution in Aide of Construction (CIAC) treatment for all contract customers using the residual Project capacity over the next 5 years. This would ensure that the Project will not be built if the demand is not validated as real. Enbridge also indicated that it expects additional contract demand to use up some or all of the other 6% of demand¹¹ in the near future. This would mean that if the contract customers actually make firm commitments and the agreements include a CIAC proportional to their share of the incremental capacity, the entire Project would be paid for by those that actually use the Project. There are a lot of ‘what ifs’ and leaps of faith required to get to that conclusion, but the theoretical math can be done easily. Relevant CIAC Examples (with and without Indirect Overheads) is included in Appendix A.

Pollution Probe recommends that the OEB use the full Project costs (including Indirect Overheads) for calculating and applying the customer CIAC, since those are costs Enbridge is allocating to the Project estimate. The OEB could also decide to apply the Project costs without Indirect Overhead contributions, which means that general rate payers would be cross-subsidizing those costs. If Pollution Probe’s recommendation is

⁷ Some examples include More information available at: K1.4 PollutionProbe_HearingCompendium_20231110, Page 2-5 and K2.6 PollutionProbe_HearingCompendium_Part2_20231113, Pages 1-6.

⁸ Examples include: EB-2022-0200 Final Transcript EB-2022-0200 Vol 2 page 75 line 25 to page 76 line 12.

⁹ letter-of-direction-from-the-Minister-of-Energy-20231129, Pages 3-4.

¹⁰ EB-2022-0200

¹¹ Exhibit I.APPrO.6

adopted, the \$68.8 million in Indirect Overheads¹² will need to be removed from Enbridge's Rebasing Capital envelope to avoid double charging rate payers.

A firm contractual CIAC is the only tool available to the OEB to ensure that the demand Enbridge has forecasted is real and that customers are willing to pay for it before the Project proceed. It is entirely likely that customers will more thoroughly assess their natural gas use and options if they are asked to make a firm commitment on demand and related Project costs. The Project could be avoided in whole or part if that prudent approach is undertaken. Pollution Probe suggest that this is another form of Integrated Resource Planning (IRP) in line with what the OEB has been trying to accomplish through its IRP Decision and Framework¹³. In fact, the only IRP tool Enbridge has applied since 2021 was a similar approach to avoid an incremental Kingston pipeline. Validate if the demand is real and if it is not, the project goes away.

Enbridge confirmed it would manage Project risks in a more prudent manner if the risks lie with Enbridge¹⁴ rather than rate payers. Enbridge should carry the risk related to the Project. These risks would be mitigated if the contract customers driving the project pay for the entire project costs, including O/Hs. There would be no residual capital that would come from the Enbridge capital envelop and no capitalized costs to amortize or strand. Similarly, an incremental rate rider would be not required since customers driving the Project would pay those costs through a CIAC. Enbridge should be at risk to ensure that there is sufficient contracts in place to provide the CIAC prior to building the Project. This takes away the incentive to build uneconomic capital assets and stranding ratepayers with the costs.

Similar to Option 1, Pollution Probe recommends that the OEB require Enbridge to proactively communicate to current and prospective customers the options and incentives available through the Greener Homes Grant Program, DSM and other related programs as outline in Option 1. This action would have the added benefit of ensuring that customers on the Panhandle system are aware of the full suite of energy options and incentives, which will decrease capacity issues in the future. Enbridge should provide a copy of all materials and outreach activities in the Post-Construction Report for the project.

Separating Facts from Fiction

Below is a summary table of important core issues to the proceeding and the principal facts on the record. For many of these issues the facts became more clear as the proceeding advanced and in some cases the facts changed as the evidence was

¹² Exhibit I.SEC.2

¹³ EB-2020-0091

¹⁴ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 126-127.

updated. Pollution Probe thought a clear link to facts for each of these issue up front would be useful. Additional detail is included in each relevant section of this submission.

Issue	Facts
There is firm demand for the proposed pipeline supported by firm customer contracts.	False, there is no firm demand in place to support the Project. A non-binding Expression of Interest ¹⁵ was undertaken by Enbridge and only 4 ¹⁶ out of 27 ¹⁷ , less than 15% decided to even progress to a written contract stage and none of those are firm contracts. Enbridge withheld providing a CIAC estimate to customer, despite requests from those customers to know what the contribution could be before they made any future decisions. The proposed pipeline has a proposed amortization period of 55 years, but the 4 contracts only range from 5-12 ¹⁸ years with no CIAC estimate provided by Enbridge.
The project is directly needed to supply Ontario's short term electricity generation.	Enbridge confirmed that the Project driver is the Brighton Beach Generating Station and that no other gas power generator on the Panhandle system are impacted by the proposed Project ¹⁹ . The Brighton Beach Generating Station does not require the Project to operate and has accommodated for operating without the project in it's contracts with Enbridge and IESO.
The project does not require any customer Contribution in aide of Construction (CIAC) given that there are no direct customers, defining the project as 'transmission' and under EBO 134.	Incorrect. Enbridge's proposed Project is a loop which becomes part of the integrated Panhandle system ²⁰ . The focus on the term 'transmission line' is a red herring and should not detract the OEB from the relevant facts. Enbridge repeatedly confirmed that the primary principle it is using in this proceeding to define the system as "transmission" and therefore Enbridge's basis for the use of EBO 134 is that it had no direct customer connections ²¹ . This was proven to be false ²² and under the OEB guidelines, the system could clearly be defined as distribution. Regardless, it is counterproductive to spend time debating semantics and conjecture. What is important is the treatment the project should receive and the OEB has flexibility to do that.
The OEB has no authority to apply a CIAC, despite the project estimated demand being driven by a small number of contracts customers.	The OEB has the authority, freedom and responsibility to make a decision that is in the public interest given all the facts available. Similarly, the OEB had the authority to set guidelines for EBO 188/134 and has the ability to apply either guidance, both, or none ²³ . The facts confirm that there are direct customers already connected to large diameter pipeline system, which indicates that EBO 188 is applicable ²⁴ . Even if the OEB were to narrowly apply EBO 134, Enbridge has confirmed that there is nothing in EBO 134 that would exclude consideration of a CIAC ²⁵ . In fact contributions have been applied even in cases where EBO 134 has been used ²⁶ .

¹⁵ EGI_ARGChief_Panhandle Regional Expansion Project_20231130, paragraph 10.

¹⁶ Exhibit J2.12 (3 contracts are greenhouse customers and 1 is power generation)

¹⁷ Exhibit I.STAFF.24

¹⁸ Exhibit J2.12 and Exhibit I.PP.32, Attachment 1,

¹⁹ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 1, Page 36, lines 11-15

²⁰ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 211, lines 8-9.

²¹ Final Transcript EB-2022-0157 Enbridge LTC Hearing Vol 1, Page 114, lines 8-17.

²² Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 2, line 14 to page 3, line 7 and Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 3, line 6 to Page 4, line 6

²³ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 188, lines 4-11.

²⁴ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 2, line 14 to page 3, line 7 and Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 3, line 6 to Page 4, line 6

²⁵ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 1, Page 175, lines 8-10

²⁶ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 40-44.

Issue	Facts
The energy transition is something to think about later in the future.	False, it is already under way and the next 10 year period is in the heart of the transition period which continues to accelerate. Tomorrow is too late. Enbridge's own Customer Survey data notes a statistically significant decrease in the penetration of natural gas heating and natural gas water heating in 2021 compared to the previous year ²⁷ . The decline of 9% in just 3 years ²⁸ is a significant trend away from natural gas and significantly lower than the assumptions Enbridge included in the project application (Enbridge estimate future penetration rates approximately of 95%-99%, approximately 20% higher than their own survey results indicate) ²⁹ .
Gas rate payers do not want to pay for the proposed pipeline project.	Enbridge indicated that the small number of contract customers it verbally surveyed through the Enbridge Account Executives indicated that in general they do not want to pay for the project. Those same contract customers did express interest in knowing the magnitude of any contribution before they make any decisions about their future gas needs. Enbridge has refused to provide CIAC estimates to customers, which has undermined the credibility/need of any real demand increases that it is forecasting. No contract customers have indicated that they would proceed with any incremental demand if there was a cost to them for doing so. It is logical that customers prefer not to pay costs for another (\$358 million) pipelines. This would be especially true for the general gas rate payers that would receive no benefits from the project. If no rate payers are willing to pay for the pipeline, that undermines the need for the project.
There are no IRP alternatives to mitigate system demand.	IRP alternatives were not credibly assessed by Enbridge and were dismissed early in favour of the new capital project. The scope of the Posterity analysis consisted of limited general service market (less than half the demand) and did not include any customer or stakeholder feedback ³⁰ . There is a significant number of real IRP options available that were not even considered by Enbridge. Despite over 3000 projects being assessed in Enbridge's Asset Management Plan, there are zero actual IRP solutions proposed in lieu of more capital pipelines ³¹ . This trend will not change unless the OEB enforces IRP requirements and expectations more stringently. A more detailed list of IRP option examples is included in this submission. Current and prospective customers will be using less gas or choosing not to connect at all in favour of more cost-effective and lower carbon options. There is a trend away from natural gas which has even been reinforced by Enbridge's own survey results ³² .
Stranded Assets are something to worry about later.	Incorrect, the time to assess and consider Stranded Assets are before capital project is approved and constructed. Afterwards is too late to mitigate the risks and costs. Aligning the risk and cost consequences of stranded assets with Enbridge is the most effective way to ensure risk mitigation and better decision making on capital spending. Enbridge has done no risk assessment related to stranded assets in its Capital planning process or for this specific project ³³ . Enbridge indicated that it will make assets decisions differently if it knows that the consequences of those decision rest with Enbridge rather than on rate payers shoulders ³⁴ .

²⁷ Exhibit I.STAFF.EGIReply.1, Attachment 1, Page 4

²⁸ Exhibit I.STAFF.EGIReply.1, Attachment 1, Page 9

²⁹ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 133 lines 7-12.

³⁰ Exhibit I.PP.40

³¹ Day 2 Tr Page 214 lines 6-14 and EB-2020-0091 EGI_AMP_Addendum_20231031

³² Exhibit I.STAFF.EGIReply.1, Attachment 1, Page 9

³³ Exhibit I.PP.43 and Final Transcript EB-2022-0200 Enbridge Gas Rebasing Vol 14, Page 111 lines 6- page 112 line 15.

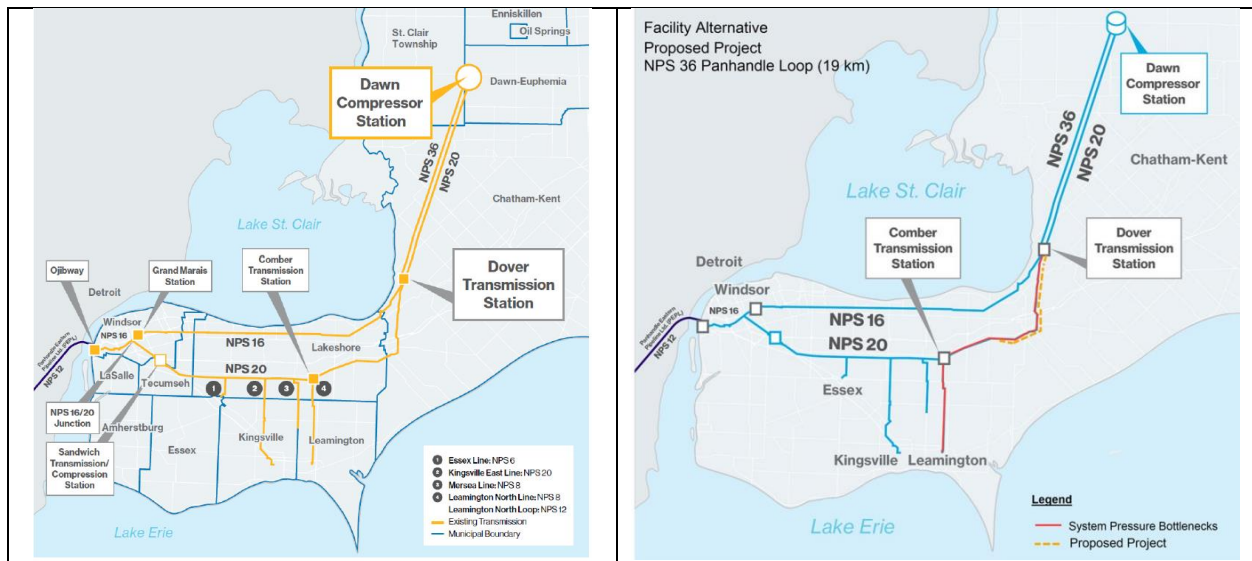
³⁴ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 126-127

Project Scope

The Project (updated scope per 2023 filing) includes the construction of:

- (a) approximately 19 km of Nominal Pipe Size (“NPS”) 36 natural gas pipeline from the existing Enbridge Gas Dover Transmission Station in the Municipality of Chatham-Kent to a new valve site in the Municipality of Lakeshore; and
- (b) ancillary measurement, pressure regulation and station facilities within the Township of Dawn Euphemia and in the Municipality of Chatham-Kent.

Enbridge indicated that the Project is a looping of the current system and once implemented the loop will just become an integrated portion of the Panhandle system³⁵. Customers will not be able to request which pipeline they are supplied from given that the pipelines operate as an integrated system. A diagram of the proposed project (loop) relative to the system is shown below³⁶.



The updated costs of the proposed Project is \$358 million. Enbridge confirmed that the Leamington Interconnect project which was removed from this OEB request is forecast to proceed in the near future and complete in 2026 at an incremental cost of \$118.8 million. This Project would also represent the seventh phase of Panhandle pipeline expansion in the past decade³⁷ and Enbridge has indicated that more phases are

³⁵ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 211, lines 8-9.

³⁶ Diagrams from K1.1 EGI_PresentationOralHearing_20231109, slide 3 and Exhibit I.STAFF.7 Figure 1

³⁷ KT1.1_EGI_Presentation_TechnicalConference_20221006, slide 4

expected to come forward in the near future per the Enbridge Asset Management Plan³⁸.

The forecast net book value that would already be included in the determination of rate base for the Panhandle system prior to the Project in-service date of November 1, 2024 is \$422.2 million³⁹. This is existing costs for the same system still being collected from rate payers.

Enbridge confirmed that the Project driver is the Brighton Beach Generating Station and that no other gas power generator on the Panhandle system are impacted by the proposed Project⁴⁰.

This Project has been plagued with uncertainty and change, ultimately leading to a proceeding Abeyance and a restructured application removing large elements of pipeline compared to the original application. Based on Enbridge’s current estimate, the reduced Project will cost 45% more than forecasted in the 2022 Project application⁴¹.

Project Demand

The Panhandle system is currently in a surplus position compared to what Enbridge has modelled for a peak design day demand⁴². The demand and capacity profile forecasted by Enbridge below is predicated with the incremental potential contract demand Enbridge has forecasted, and assuming no DSM or IRP occurring on the system. The following provides Enbridge’s forecast of system demand and capacity⁴³.

	Historical Actuals		FORECAST									
	Winter 19/20	Winter 20/21	Winter 21/22	Winter 22/23	Winter 23/24	Winter 24/25	Winter 25/26	Winter 26/27	Winter 27/28	Winter 28/29	Winter 29/30	Winter 30/31
Panhandle System Capacity (TJ/d)	725	725	713	713	713	713	713	713	713	713	713	713
Design Day Demand Forecast (TJ/d)	640	656	672	694	744	828	854	880	906	932	958	983
Surplus (shortfall is negative) (TJ/d)	84	69	41	20	(31)	(114)	(140)	(166)	(192)	(218)	(244)	(270)

The Project put forward by Enbridge is proposed to meet the forecasted incremental demand from the small number of contract customers (power generation and greenhouses).

³⁸ EB-2022-0200, Exhibit 2, Tab 6, Schedule 2, Appendix A, Page 53-59 and Exhibit I.SEC.4b

³⁹ Exhibit I.IGUA.1

⁴⁰ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 1, Page 36, lines 11-15

⁴¹ 145% = \$358 million/\$246.6 million per Exhibit I.SEC.2

⁴² Exhibit I.STAFF.6

⁴³ Exhibit I.STAFF.6

If the Project is constructed in 2024, Enbridge estimates the following capacity and demand⁴⁴. This is based on the same assumptions as outlined above.

	Historical Actuals				FORECAST							
	W19/20	W 20/21	W 21/22	W 22/23	W 23/24 Stage 1	W 24/25 Stage 2	W 25/26	W 26/27	W 27/28	W 28/29	W 29/30	W 30/31
Proposed System Capacity	725	725	713	713	833	916	916	916	916	916	916	916
Demand Base Forecast (TJ/d)	640	656	672	694	744	828	854	880	906	932	958	983
Surplus (shortfall is negative)	84	69	41	20	89	89	63	37	11	(15)	(41)	(67)

It is important to note that the Project is modelled to meet a Peak Design Days with maximum concurrent forecasted incremental demand assumed from customers. The Panhandle System Design Day weather condition is a 43.1 Heating Degree Day (“HDD”), which represents an average daily temperature of -25.1 degrees centigrade⁴⁵. The Peak Design Day has only occurred once in 10 years, or approximately a 0.027% daily probability, and the previous peak was mitigated through other options (e.g. incremental supply at Ojibway for the last peak day)⁴⁶. It is understandable and prudent to use tools/IRP options to mitigate a low probability Peak Days rather than to over size pipelines or build new ones like this \$358 million Project.

Enbridge indicates that the additional capacity resulting from the Project will support the continued reliable and secure delivery of natural gas to the growing residential, commercial, and industrial customer segments within the Panhandle Market⁴⁷. This is not a status quo Project and as noted above, there is excess system capacity today. Consumer choice in alignment with the Energy Transition has already shown decreased demand for natural gas and OEB direction for DSM and IRP will further provide excess capacity in the current infrastructure the future. Even the Enbridge’s customer survey results recognize this trend⁴⁸.

The need for the Project is based on what future demand is real. Forecasts are simply forecasts and the value and importance of a forecast is entirely based on the firm evidence and facts supporting the forecast. If the assumptions and inputs to a model are weak, the modelling outputs will be weak and unreliable. The Enbridge modeling above entirely assumes that all the non-binding⁴⁹ demand Enbridge identified from the 27 contract customers⁵⁰ is real and firms up into actual incremental demand and executed agreements. Enbridge has been working on the project for many years and less than 15% of the contract customers identified have agreed to even enter a

⁴⁴ Exhibit I.STAFF.6

⁴⁵ Exhibit B/2/1 and Exhibit I.PP.12

⁴⁶ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 7 line 22 to Page 10, line 1.

⁴⁷ Exhibit A, Tab 3, Schedule 1, paragraph 6.

⁴⁸ Exhibit I.STAFF.EGIReply.1, Attachment 1, Page 9

⁴⁹ EGI_ARGChief_Panhandle Regional Expansion Project_20231130, paragraph 10.

⁵⁰ Exhibit I.STAFF.24

conditional agreement, despite the fact that it can be cancelled if necessary⁵¹. It also assumes no system demand decreases occur from OEB directed DSM, IRP or customer choice (e.g. cold climate air source heat pumps or other options) as the Energy Transition continue to accelerate.

Is the incremental demand that Enbridge has forecasted real? The only real way to find out is to have signed agreements from all 27 contract customers (or more if Enbridge's belief is correct that others will be lining up soon) that ensures firm demand equaling Enbridge's forecast, plus a commitment that those customers are willing to pay their fair share for the Project. Currently, none of this exists. After all this time, Enbridge only has 4 out of 27, or less than 15%⁵² of the contract customers willing to enter an agreement and even those agreements have conditions and exit clauses which enable Enbridge or the customer to cancel the agreement.

No customer has expressed any willingness to make any firm commitment prior to knowing what Contribution in Aid of Construction (CIAC) they may need to pay. The 4 contract customers that signed conditional agreements have the ability to withdraw their potential interest for future demand if they have to pay for it⁵³. Enbridge confirmed that the principal contract customer (Atura's Brighton Beach Generating Station) has no commitment under the new contract to take any incremental demand⁵⁴. The demand estimate underlying the Project has no firm or credible basis to ensure that any incremental demand will actually occur. Approving a \$358 million pipeline with a 55 year amortization life and without any firm commitments is not a prudent approach. No prudent business would make a decision to proceed with such a Project unless the risks and costs could be transferred onto others (in this case general rate payers based on Enbridge's request). This is clearly not in the public interest. Enbridge already has contract flexibility to give customers extra capacity when the system does not need it 99.97% of the time⁵⁵. If customers want extra firm capacity beyond that, they must be willing to pay for the Project required to deliver it. It is that simple. If they pay for the Project and it sits unused, at least rate payers will be partially protected⁵⁶.

Furthermore, even based on the tentative non-binding⁵⁷ demand forecast that Enbridge solicited, Enbridge assumes all the demand it has forecasted is concurrent demand and

⁵¹ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 206 line 24 to Page 208, line 2.

⁵² Exhibit J2.12 (3 contracts are greenhouse customers and 1 is power generation)

⁵³ Exhibit I.PP.32, Attachment 1, Exhibit J2.12 and Exhibit I.PP.5, Attachment 1

⁵⁴ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 91, lines 1-20. Exhibit I.PP.32, Attachment 1.

⁵⁵ Peak Design Day has only occurred once in 10 years, or approximately a 0.027% daily probability. $1 - 0.027\% = 99.97\%$

⁵⁶ Rate payers will still be exposed to operational costs and abandonment costs which a material amount. Building a large diameter pipeline that is not actually needed would also have environmental and socio-economic impacts.

⁵⁷ EGI_ARGChief_Panhandle Regional Expansion Project_20231130, paragraph 10.

Enbridge has done no analysis to determine what amount may actually be concurrent⁵⁸. The OEB may wish to direct Enbridge to include robust analysis on customer forecasts and concurrent peak loads of customers for all future projects.

System flexibility from non-concurrent peaks, Interruptible rates and other tools have significant value that have not been adequately considered by Enbridge. The Enbridge forecast for future system peak also assume no IRP, DSM or Energy Transition decline in peak natural gas demand over the entire life of the proposed pipeline. Very unrealistic given the declines Enbridge is already seeing on an annual basis based on its customer survey results. Enbridge's most recent Customer Survey data notes a statistically significant decrease in the penetration of natural gas heating and natural gas water heating in 2021 compared to the previous years⁵⁹. The decline of 9% in just 3 years⁶⁰ is a significant trend away from natural gas and significantly lower than the assumptions Enbridge included in the Project application (Enbridge estimate future penetration rates approximately of 95%-99%, approximately 20% higher than their own survey results indicate)⁶¹.

No information was provided to contract customers on an estimated CIAC, despite the simplicity of making those calculation based on the information available. Enbridge has put a list together that would represent 94% of the Project capacity⁶², but very little tangible support has been secured even if the pipeline was free to them (i.e. cross-subsidized from other rate payers not receiving any of the benefits). Less than 15% of those contract customers identified have agreed to even enter a conditional agreement, despite the fact that it can be cancelled if necessary⁶³. Those that have expressed interest, have no requirements to take any of the extra demand that would be provided by the Project. Enbridge also indicated that it expects additional contract demand to use up some or all of the other 6% of demand⁶⁴ in the near future. This would mean that if the contract customers actually made firm commitments and the agreements include a CIAC proportional to their share of the incremental capacity, there is a theoretical possibility that the entire Project could be paid for by those that will actually use the Project. There are a lot of 'what ifs' and leaps of faith are required to get to that promise land, but the theoretical math can be done easily. An example of the math is included in Appendix A. The only way to have prudently tested incremental demand is to get signed contracts from all the implicated customers that included their proportional CIAC. This is

⁵⁸ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 21, line 20 to Page 22, line 8.

⁵⁹ Exhibit I.STAFF.EGIReply.1, Attachment 1, Page 4

⁶⁰ Exhibit I.STAFF.EGIReply.1, Attachment 1, Page 9

⁶¹ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 133 lines 7-12.

⁶² Exhibit I.STAFF.24

⁶³ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 206 line 24 to Page 208, line 2.

⁶⁴ Exhibit I.APPrO.6

standard and fair practice in supporting projects that serve a small number of contract customers

Enbridge indicated that potential incremental demand from general service customers could make up approximately 6% of the incremental capacity of the proposed Project, if the additional contract loads do not materialize⁶⁵. This assumption is simply an Enbridge model 'plug' to balance the Project demand to reach 100% of the new pipeline capacity. If the incremental contract load occurs, there will be 0% incremental capacity for general service. Enbridge only has a list of contract customers that could add to 94% of the demand and needed to allocate the other 6% to someone.

A significant problem with this modeling approach is that it assumes general service natural gas use will remain at current levels of grow. This is not the trend. There is a trend away from natural gas which has even been statistically recognized by Enbridge's own survey results⁶⁶. Current and prospective customers will be using less gas or choosing not to connect at all in favour of enhanced DSM, or more cost-effective and lower carbon options. General Service is not the principal drive of demand growth on the Panhandle system, but just a 10% decrease in residential demand from DSM or IRP alone would decrease peak demand by 16.4 TJ/d based on Winter 2023/2024 peak demand modeling⁶⁷. The evidence indicates that general service demand will decrease and that is logical given all the tools and customer choice aligned with reducing energy costs and the Energy Transition.

Project Costs

Enbridge's proposed Project cost estimate is \$358 million, inclusive of Indirect Overheads. There are over 3000 capital projects in the Enbridge Asset Management Plan and this is one of the most expensive⁶⁸. The Enbridge Asset Management Plan estimated the Panhandle Reinforcement Project to be \$197,451,236⁶⁹, which is a large difference. Even the current estimate of \$358 million is not a firm estimate and is subject to change. They are based on non-binding estimates that are over a year old⁷⁰. There are also no contracting tools proposed to limit the Project costs or pass risk onto contractors. Given the cost estimate increases Enbridge has asked for relative to the original Project estimate, there is a high level of risk that rate payers could be left with a bill much greater than \$358 million.

⁶⁵ EGI_ARGChief_Panhandle Regional Expansion Project_20231130, paragraph 9.

⁶⁶ Exhibit I.STAFF.EGIReply.1, Attachment 1, Page 9

⁶⁷ Exhibit I.PP.40f

⁶⁸ Day 2 Tr Page 214 lines 6-14 and EB-2020-0091 EGI_AMP_Addendum_20231031

⁶⁹ EB-2022-0200, Exhibit 2, Tab 6, Schedule 2, Appendix A, Page 56

⁷⁰ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 184.

Based on Enbridge’s current estimate, the reduced Project will actually cost 45% more than the same project forecasted in the 2022 applications⁷¹. A comparison of the 2023 Updated cost estimate vs. the 2022 cost estimate is provided in the table below⁷².

		19km of NPS 36 Pipeline and Ancillary Facilities (Amended Application, June 2023)	19km of NPS 36 Pipeline and Ancillary Facilities (Initial Application, June 2022)
<u>Item No.</u>	<u>Cost Description</u>	<u>Project Costs (\$)</u>	<u>Project Costs (\$)</u>
1	Materials	57,000,000	56,600,000
2	Labour, External Permitting and Land, and Outside Services	199,300,000	124,100,000
3	Contingency	20,800,000	19,200,000
4	Interest During Construction	12,100,000	3,500,000
5	Total Direct Capital Cost	289,200,000	203,400,000
6	Indirect Overheads	68,800,000	43,200,000
7	Total Project Cost	358,000,000	246,600,000

Enbridge confirmed that there are other incremental costs for the Project that were not included in the application and that all Project related costs must be considered⁷³. For example, Enbridge indicated to its Board of Directors that the “Carbon intensity of Project is ~70 tCO₂e/PJ with 5,000 tCO₂e annual emissions” and that the Project will require \$21 million of carbon offset costs to achieve 2050 net zero included in Project economics⁷⁴. Similarly, there will be other maintenance and abandonment costs beyond the Project estimate provided⁷⁵.

Enbridge has not conducted any risk assessment that the Project could become a Stranded Assets before it is fully depreciated in 55 years⁷⁶. Enbridge has not engaged prudent cost and risk mitigation techniques for this Project, assuming that all these risks will fall onto rate payers rather than Enbridge. Enbridge reconfirmed that if these risks

⁷¹ 145% = \$358 million/\$246.6 million per Exhibit I.SEC.2

⁷² Exhibit I.SEC.2

⁷³ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 36, line 21 to Page 37, line 120.

⁷⁴ 2022-09-22, EB-2022-0157, Exhibit I.PP.16, Attachment 5, page 3

⁷⁵ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 37, line 24 to Page 38, line 17.

⁷⁶ Exhibit I.PP.43

were to flow to Enbridge shareholders, they would manage those risks in a more prudent manner and do things differently⁷⁷.

Enbridge suggests that the Project and cross-subsidization of \$358 million is critical for the electricity sector since the Panhandle serves a number for gas-fired generating stations. The most notable is Atura's Brighton Beach Generating Station which is noted by Enbridge as the principal customer driver for the project⁷⁸. In fact, Enbridge clearly confirmed that the real project driver is only the Brighton Beach Generating Station and that no other gas power generator on the Panhandle system are impacted by the proposed Project.

"So then if this project wasn't approved and built, it would have no impact to any of the power generators other than Brighton Beach. Is that what you are saying?"

MR. CIUPKA: Correct."⁷⁹

Despite the lack of any specific evidence to support the supposition, Enbridge has implied that the Project is critical for Ontario's short term electricity supply⁸⁰. General references to high level policy documents provided by Enbridge is no substitute for actual, specific information, particularly when such a large, expensive Project is under consideration. Enbridge has an opportunity to request that Atura and/or IESO join them as witnesses in the proceeding, but their absence to provide evidence reinforces that lack of real need for this Project.

If the Project was actually critical Provincial infrastructure required for the electricity grid, the Province would have clearly indicated so by name. This is not the case as Enbridge would like the OEB to believe. In fact, the evidence clearly indicates that this Project is not mandatory for either Brighton Beach Generating Station or other Ontario gas generators. Enbridge confirmed that they are not electricity sector experts and they can only interpret what they understand is occurring in that sector. Facts indicate that current Panhandle pipelines are sufficient to meet the contractual needs of the power generators attached to the Panhandle system. For example, Atura's Brighton Beach Generating Station has planned to operate through its IESO contract even without the Project.

Enbridge indicated that they are attempting to maintain a delivery pressure to the Brighton Beach Generating Station of 1724 kPa which reduces Atura's own requirement

⁷⁷ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 126-127.

⁷⁸ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 1, Page 36, lines 11-15.

⁷⁹ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 1, Page 36, lines 11-15.

⁸⁰ EGI_ARGChief_Panhandle Regional Expansion Project_20231130, Page 13.

for on-site compression facilities⁸¹. Customers (such as Atura) do not pay through their contract rates any costs related to pressure. Contracts only offer what the system is able to provide⁸². Atura benefits for free from receiving higher pressures since it reduces the on-site compression needed and related costs⁸³. Providing higher pressure to the power generator essentially uses gas rate payers to cross-subsidize electricity rates and/or increases profit for the merchant plant owners.

The choice for Atura is to either pay for the Project or increase their on-site compression, like done at other gas power generator sites in Ontario. It is a classic IRP alternative that Enbridge did not include in its IRP analysis and in this case the benefits would be avoiding a \$358 million cost to gas rate payers. Both the Enbridge⁸⁴ and the IESO⁸⁵ contracts with Atura's Brighton Beach Generating Station have specific clauses that accommodate the Project not being built or if the Project is approved, for Atura to pay their fair share of the costs in the form of a CIAC.

Economics Treatment

In this application, Enbridge has proposed an amortization period of 55 years⁸⁶, out to 2079 based on a 2024 in-service date. This exceeds any rational useful life estimate for the proposed assets. Pollution Probe has previously highlighted the risks and challenges with amortizing new pipelines over decades when natural gas use is expected to decline over the same period. Even Enbridge's recent Guidehouse Net Zero study forecasted this to occur (details in the IRP section). The primary contract customers identified by Enbridge for the project (Brighton Beach Generating Station) only has a 10 year generating agreement with IESO for its current site and no evidence is available to suggest the contract would be renewed. When the OEB approves a Leave to Construct, it must also consider if the expected useful life of the pipeline is supported by the evidence provided. The onus is on the applicant to support that the project assumptions are reasonable, including amortization period. Enbridge has recently acknowledged that revenue horizon for pipelines should be decreased to reduce risks from the Energy Transition⁸⁷.

⁸¹ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 1, Page 34 lines 6-12.

⁸² Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 29 line 8 to Page 30 line 3.

⁸³ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 29 line 8 to Page 30 line 3.

⁸⁴ Exhibit I.PP.32, Attachment 1

⁸⁵ K2.5 SEC_PREP_Compndium_20231113, Pages 56-58.

⁸⁶ Exhibit I.PP.45b

⁸⁷ EB-2022-0200 EGI_ReplyARG_2024 Rebasing_20231011, paragraph 285.

Enbridge has suggested that the Project is a “transmission” pipeline and therefore no CIAC should be applied. Enbridge’s proposed Project is a loop which becomes part of the integrated Panhandle system⁸⁸. The focus on the term ‘transmission’ wording is a red herring and should not detract the OEB from the relevant facts. Enbridge repeatedly confirmed that the primary basis it is using in this proceeding to define the system as transmission (and therefore Enbridge’s sole basis for the use of EBO 134) is that it had no direct customer connections. For example⁸⁹,

MS. NEWLAND: Thank you, Mr. Murray. So, I will just repeat my question. How does Enbridge define a transmission pipeline?

MR. GILLET: So, in the case of this application, how we have defined a transmission project is one in which distribution customers do not directly connect, and if you go back to the presentation that we made at the beginning of the day, this is a similar definition that we use for other transmission projects that we have within our franchise.

This premise was proven to be false⁹⁰ and under the OEB guidelines, the system could clearly be defined as distribution given the amount of direct customers connected to the pipeline. It is counterproductive to spend time arguing about semantics and conjecture. What is important is the treatment the Project should receive.

There has been debate on which economic test to use for this Project, more specifically EBO 134 and/or EBO) 188. If just one needed to be selected, the evidence indicates that it should be EBO 188. However, the OEB has the authority, freedom and responsibility to make a decision that is in the public interest given all the facts available. The OEB had the authority to set guidelines for EBO 188/134 and has the ability to apply either guidance, both, or none⁹¹. The facts confirm that there are direct customers already connected to the large diameter pipeline system, which indicates that EBO 188 is applicable⁹². Even if the OEB were to narrowly apply EBO 134, Enbridge has confirmed that there is nothing in EBO 134 that would exclude consideration of a CIAC⁹³. In fact contributions have been applied even in cases where EBO 134 has been used⁹⁴. Enbridge’s resistance to even share the CIAC information with the customers

⁸⁸ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 211, lines 8-9.

⁸⁹ Final Transcript EB-2022-0157 Enbridge LTC Hearing Vol 1, Page 114, lines 8-17

⁹⁰ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 2, line 14 to page 3, line 7 and Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 3, line 6 to Page 4, line 6

⁹¹ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 188, lines 4-11.

⁹² Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference Day 2, Page 2, line 14 to page 3, line 7 and Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 3, line 6 to Page 4, line 6

⁹³ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 1, Page 175, lines 8-10

⁹⁴ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 2, Page 40-44.

that have requested it seems to suggest that Enbridge knows that there is really no incremental demand to support the Project.

Enbridge suggests that the Project would spur the total direct capital investment in excess of \$4.5 billion and 6,900 jobs also identified. However, those ancillary benefits are high level theoretical benefits not specifically dependent on the Project and have not been supported by substantive facts and evidence. In fact, some of the benefits math Enbridge has applied assumes benefits increase the more capital Enbridge spends. Formula modeling in spreadsheets unfortunately does not create real benefits that do not exist in reality. Enbridge indicated that it has no independent evidence to support the economic benefits to customer groups like the greenhouse sector and it has relied on the evidence of the Ontario Greenhouse Vegetable Growers (OGVG)⁹⁵. OGVG confirmed that their evidence was meant to be a high-level overview and that they do not represent directly or indirectly most of the greenhouse contract customers that Enbridge has identified as potentially requiring more gas⁹⁶ on the Panhandle system.

The Project has a NPV of negative \$150 million and a PI of 0.48⁹⁷. Other stakeholders have indicated that they intend to include a more detailed summary of the EBO 134 and/or EBO 188 stages and calculations, Therefore, Pollution Probe does not intend to duplicate that here. Simply put, the Project fails both the EBO 188 and EBO 134 tests when realistic assumptions are applied, rather than abstract assumptions that do not specifically relate to the Project. The fact that the Project is so significantly uneconomic runs contrary to Enbridge's suggestion that this will be a significant area of future growth. In the recent Rebasing proceeding Enbridge⁹⁸ and other stakeholders have proposed decreasing the economic time horizon for capital pipeline projects like this to align more appropriately with reality we are all seeing with the Energy Transition. This decrease would make the Project economics even worse⁹⁹.

Pollution Probe recommends that Leave to Construct be denied based on the lack of need and economics for the Project. However, if the OEB were to grant Leave to Construct it should be subject to collecting a CIAC from all contract customers in proportion to their forecasted incremental demand (see examples in Appendix A). The Project should also only proceed once Enbridge has firm CIAC commitments for 94% or more of the Project costs. The same CIAC treatment should be applied to any new or existing contract customers requesting incremental demand for a period of 5 years. This

⁹⁵ Final Transcript EB-2022-0157 Enbridge LTC Vol 3, Page 83, lines 24-27

⁹⁶ Final Transcript EB-2022-0157 Enbridge LTC Oral Hearing Vol 3, Page 137 lines 2-28.

⁹⁷ Exhibit E, Tab 1, Schedule 5

⁹⁸ EB-2022-0200 EGI_ReplyARG_2024 Rebasing_20231011, paragraph 285.

⁹⁹ Exhibit I.EP.15

would ensure that the Project will not be built if the demand is not real and ensure it is paid for by those receiving the benefits.

The OEB and stakeholders have recognized the inherent conflict of interest that incents Enbridge to promote incremental capital projects¹⁰⁰. This not only incents more capital pipelines and capital spending, but also incents Enbridge to avoid customer CIAC as well. Contributions have the effect of reducing the rate base addition¹⁰¹.

The OEB and stakeholders requested that Enbridge provide information on a CIAC¹⁰² with customers and Enbridge refused to do so. Enbridge has taken significant effort to withhold simple contribution estimates from contract customers, Intervenor and the OEB. The purpose of a contribution is to ensure there is no cross subsidization between rate payers for facilities constructed for the dedicated use of a customers. CIACs are a simple, fair and transparent approach to allocate project costs to the group of customers who would receive the benefits. The calculation is far less complicated than what Enbridge would like the OEB to believe. In the end, Enbridge has confirmed that it can apply the CIAC if the OEB requires it, like it has done many times before. Pollution Probe has included examples in Appendix A to demonstrate how simple and straightforward the CIAC approach really is.

Should the OEB grant Leave to Construct, Enbridge should retain the risk if the actual project does not perform as suggested by Enbridge in its evidence and testimony. There is no requirement for the OEB to transfer that risk to rate payers. If this Project was commissioned in 2024, it would require collection from rate payers out to 2079 based on the 55 year amortization period¹⁰³ as proposed by Enbridge. Even under Enbridge's most optimistic Diversified Scenario all customers except potentially the largest industrial customer (if they can install carbon capture and sequestration or CCS) will no longer be using natural gas before the project is fully recovered.

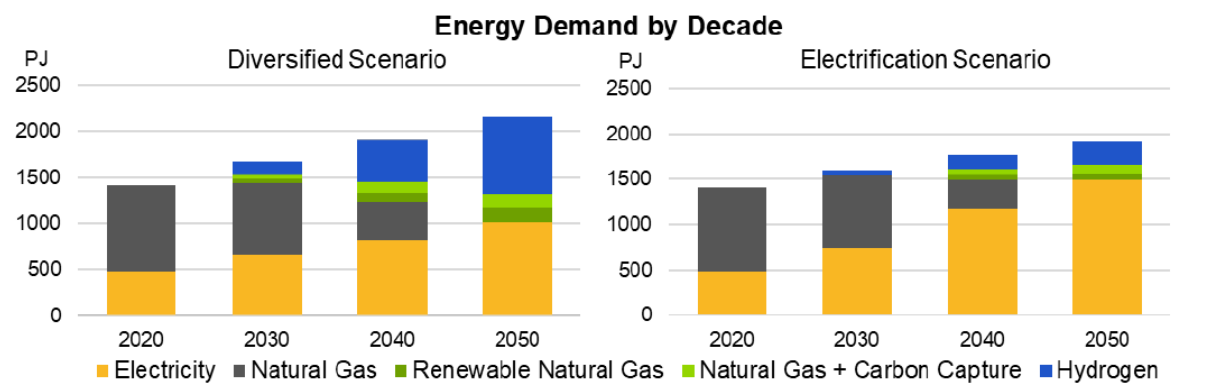
¹⁰⁰ Examples: Final Transcript EB-2021-0002 EGI DSM Vol 3 March 30 2022, Page 157 line 6-12 and Final Transcript EB-2020-0002 EGI DSM Vol 5 April 01 2022. Page 182 lines 16-23

¹⁰¹ Exhibit I.EP.10f

¹⁰² Various letters on Abeyance request and po6_Amended Notice_EGI Panhandle LTC_20230728_signed

¹⁰³ Exhibit I.PP.45b

Figure 1: Pathways to Net Zero Emissions for Ontario ¹⁰⁴



Enbridge has confirmed that there is no consideration in its application for use of hydrogen in the proposed pipeline¹⁰⁵. There is currently no support to show that any of the gas system will be compatible with hydrogen in the future and the Hydrogen Blending Grid Study will not be available until 2026 at the earliest¹⁰⁶. Building a costly pipeline that has not certainty for future use is not a prudent action.

Alternatives, IRP Requirements, Options and Considerations

Enbridge’s 2022 application suggested that this application was exempt from IRP assessment, but during the oral hearing Enbridge confirmed that the project is not actually exempt and required full and proper IRP assessment. The Project was assessed as part of the Enbridge Gas’s 2021-2025 Asset Management Plan which indicates “Integrated Resource Planning (IRP) impacts have not explicitly been reflected in this asset management plan”¹⁰⁷. The IRP analysis provided by Enbridge during the proceeding is cursory and incomplete. There is a long list of credible IRP alternatives that Enbridge never even considered, despite stakeholders requests for better engagement and discussion.

The criteria Enbridge used to rule out Project options appears to have been simply created to support an option for more incremental capital pipelines, not objectively assess IRP alternatives¹⁰⁸. Once Enbridge determined its position to support building the new capital assets, it took a myopic approach which limited providing customers with the information they really need to make decisions¹⁰⁹. Even the Environmental

¹⁰⁴ EB-2022-0200 Exhibit 1.10.5.2_Pathways to Net-Zero Emissions for Ontario_BLACKLINE_20230421

¹⁰⁵ Exhibit I.PP.44b

¹⁰⁶ Exhibit I.PP.44c

¹⁰⁷ EB-2022-0200, Exhibit 2, Tab 6, Schedule 2, Appendix A, Page 48

¹⁰⁸ Exhibit I.PP.17, PP.15 and Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference, Day 2, Page 44 line 21-22

¹⁰⁹ Exhibit I.PP.17

Report created by the third party consultant was only allowed to include options already pre-screened by Enbridge, rather than perform its own option analysis¹¹⁰. It is interesting to note that Enbridge's Updated Project even fails the criteria that Enbridge developed.

IRP alternatives were not adequately developed and were excluded from Enbridge Project consideration and approval process¹¹¹. Enbridge did not conduct any of the OEB required IRP consultation for the Project and refused to do customer outreach as requested by stakeholders. In short, "Enbridge Gas did not discuss integrated resource planning with customers"¹¹².

Enbridge also did not provide any information related to the Panhandle project on the OEB mandated IRP website¹¹³. This is not compliant with the IRP OEB requirements and one of the reasons for the recent unanimous stakeholders flagging of these persistent IRP issues¹¹⁴. In fact, Enbridge did not even discuss Panhandle system demand or pressure challenges with customers¹¹⁵. It is well recognized that if Enbridge were to provide adequate information on the benefits, incentives and programs related to IRP alternatives, that their take-up rate for those technologies increases¹¹⁶.

The scope of the Posterity analysis consisted of only limited general service market calculations, missing more than half the customer information¹¹⁷ and also did not include any customer or stakeholder feedback¹¹⁸. Parties were surprised that Enbridge did not include a Posterity witness on the hearing panel to provide details on the validity of their analysis. So little was done on IRP assessment and options that Enbridge did not even file the May 24, 2023 Posterity Report with its Updated Evidence on June 16, 2023. It was not provided until October 3, 2023 when stakeholders requested it¹¹⁹. If Enbridge had done a proper analysis of IRP alternatives, this simply would have been included in the Updated application filed June 16, 2023 and highlighted as an attempt at complying with OEB IRP requirements.

Enbridge is continuing to avoid proper IRP analysis and stakeholder consultation which is resulting in IRP effectively being scoped out of all capital projects including this

¹¹⁰ Exhibit I.PP.17 and Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference, Day 2, Page 44 line 26 to page 46, line 10

¹¹¹ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference, Day 1, Page 71 line 14 to page 72, line 4 and Exhibit I.PP.15

¹¹² Exhibit I.PP.37

¹¹³ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Day 2, Page 34, lines 18-28 and Exhibit I.PP.37

¹¹⁴ EB-2022-0133, Exhibit N1, Tab 1, Schedule 1, Page 12

¹¹⁵ Exhibit I.PP.37

¹¹⁶ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Oral Hearing, Day 1, Page 58, lines 8-13

¹¹⁷ Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Technical Conference, Page 173, lines 2-6

¹¹⁸ Exhibit I.PP.37 and Exhibit I.PP.40

¹¹⁹ Exhibit I.PP.36 Attachment 1

Project¹²⁰. Despite over 3000 projects being assessed in Enbridge's Asset Management Plan, there are zero IRP solutions proposed in lieu of more capital pipelines¹²¹. You can't get worse than a 0% success rate on IRP results. This trend will not change unless the OEB applies its IRP requirements and expectations more stringently. Approving projects that ignore proper IRP is the best way to undermine IRP in Ontario.

The fact is that there are significant IRP alternatives that were simply dismissed by Enbridge without proper assessment. These do not just related to targeted DSM and newer energy technologies¹²², but include a broad range of options such as proper customer communication on a CIAC (validates and reduces demand), Interruptible rates¹²³, and other customer specific options such as onsite compression at Brighton Beach Generating Station. Pollution Probe and others recommended that Enbridge consult with customers on DSM and IRP options and Enbridge refused to do so¹²⁴. How can IRP advance in Ontario when it is systematically undermined in favour of additional capital pipelines?

¹²⁰ Exhibit I.PP.15

¹²¹ Day 2 Tr Page 214 lines 6-14 and EB-2020-0091 EGI_AMP_Addendum_20231031

¹²² Which includes geothermal even for greenhouses where there is a high water table - Final Transcript for EB-2022-0157 Enbridge LTC Panhandle Oral Hearing, Day 1, Page 96.

¹²³ Required by the OEB per EB-2020-0091 dec_order_EGI_IRP_20210722, Page 35

¹²⁴ PollutionProbe_Ltr_Abeyance_20221212 and po6_Amended Notice_EGI Panhandle LTC_20230728 and Exhibit I.PP.37

APPENDIX A – CIAC Examples

CIAC Example 1: Example Calculation for CIAC [Includes Indirect O/Hs]
Enbridge Contract Customer Demand Assumption Per EB-2022-0157 Exhibit
I.STAFF.24

Status	Customer	Sector	TJ/Day			% of Demand	CIAC \$ millions
			2024	2025	Total		
Underpinned							
	1	Power	57.4	0	57.4	43.8%	147.23
Total Underpinned by Firm Distribution Contract			57.4	0	57.4		
In Negotiation							
	2	Power	0	6.3	6.3	4.8%	16.16
	3	Power	0	25.1	25.1	19.1%	64.38
	4	Greenhouse	0.5	3.1	3.6	2.7%	9.23
	5	Greenhouse	2.4	0	2.4	1.8%	6.16
	6	Greenhouse	0	2.4	2.4	1.8%	6.16
	7	Greenhouse	2.2	0	2.2	1.7%	5.64
	8	Greenhouse	0	2.1	2.1	1.6%	5.39
	9	Greenhouse	1.6	0	1.6	1.2%	4.10
	10	Greenhouse	0	1.4	1.4	1.1%	3.59
	11	Greenhouse	1.3	1.6	2.9	2.2%	7.44
	12	Greenhouse	1.3	1.3	2.7	2.1%	6.93
	13	Greenhouse	0	1	1	0.8%	2.56
	14	Greenhouse	0	0.9	0.9	0.7%	2.31
	15	Greenhouse	0.4	0	0.4	0.3%	1.03
	16	Greenhouse	0.2	0	0.2	0.2%	0.51
	17	Greenhouse	0	4.5	4.5	3.4%	11.54
	18	Greenhouse	0	3.1	3.1	2.4%	7.95
	19	Greenhouse	0	2.2	2.2	1.7%	5.64
	20	Greenhouse	0	1.6	1.6	1.2%	4.10
	21	Greenhouse	0	1.3	1.3	1.0%	3.33
	22	Food and Beverage	0	0.1	0.1	0.1%	0.26
	23	Greenhouse	0	0.9	0.9	0.7%	2.31
	24	Greenhouse	0	1.1	1.1	0.8%	2.82
	25	Greenhouse	0	1.7	1.7	1.3%	4.36
	26	Greenhouse	0	0.8	0.8	0.6%	2.05
	27	Greenhouse	0	1.3	1.3	1.0%	3.33
Total In Negotiation			9.9	63.8	73.8		
Total Underpinned by Firm Distribution Contract			67.3	63.8	131.2	100%	336.52

Note: Total Project Cost = \$358 million [includes Indirect O/Hs of \$68.8 million]
= \$336.52 million (94% Contract Demand) + \$21.48 million (6% Other Demand which could be incremental Contract Demand and/or non-Contract Demand)

CIAC Example 2: Example Calculation for CIAC [Excludes Indirect O/Hs]
 Enbridge Contract Customer Demand Assumption Per EB-2022-0157 Exhibit
 I.STAFF.24

Status	Customer	Sector	TJ/Day			% of Demand	CIAC \$ millions
			2024	2025	Total		
Underpinned							
	1	Power	57.4	0	57.4	43.8%	118.93
Total Underpinned by Firm Distribution Contract			57.4	0	57.4		
In Negotiation							
	2	Power	0	6.3	6.3	4.8%	13.05
	3	Power	0	25.1	25.1	19.1%	52.01
	4	Greenhouse	0.5	3.1	3.6	2.7%	7.46
	5	Greenhouse	2.4	0	2.4	1.8%	4.97
	6	Greenhouse	0	2.4	2.4	1.8%	4.97
	7	Greenhouse	2.2	0	2.2	1.7%	4.56
	8	Greenhouse	0	2.1	2.1	1.6%	4.35
	9	Greenhouse	1.6	0	1.6	1.2%	3.32
	10	Greenhouse	0	1.4	1.4	1.1%	2.90
	11	Greenhouse	1.3	1.6	2.9	2.2%	6.01
	12	Greenhouse	1.3	1.3	2.7	2.1%	5.59
	13	Greenhouse	0	1	1	0.8%	2.07
	14	Greenhouse	0	0.9	0.9	0.7%	1.86
	15	Greenhouse	0.4	0	0.4	0.3%	0.83
	16	Greenhouse	0.2	0	0.2	0.2%	0.41
	17	Greenhouse	0	4.5	4.5	3.4%	9.32
	18	Greenhouse	0	3.1	3.1	2.4%	6.42
	19	Greenhouse	0	2.2	2.2	1.7%	4.56
	20	Greenhouse	0	1.6	1.6	1.2%	3.32
	21	Greenhouse	0	1.3	1.3	1.0%	2.69
	22	Food and Beverage	0	0.1	0.1	0.1%	0.21
	23	Greenhouse	0	0.9	0.9	0.7%	1.86
	24	Greenhouse	0	1.1	1.1	0.8%	2.28
	25	Greenhouse	0	1.7	1.7	1.3%	3.52
	26	Greenhouse	0	0.8	0.8	0.6%	1.66
	27	Greenhouse	0	1.3	1.3	1.0%	2.69
Total In Negotiation			9.9	63.8	73.8		
Total Underpinned by Firm Distribution Contract			67.3	63.8	131.2	100%	271.848

Note: Total Project Cost less Indirect O/Hs = \$289.2 million [\$358 million less \$68.8 in Indirect O/Hs] = \$271.848 million (94% Contract Demand) + \$17.352 million (6% Other Demand which could be incremental Contract Demand and/or non-Contract Demand)